Internal Ex-Post Project Evaluation 2012

Evaluation Report

May 2023

Japan International Cooperation Agency

（JICA）

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List of Internal Ex-post Evaluation

Type of Assistance	Project Start Year*	Type of Evaluation	Country	Sector/Theme	Project Name	Project Number
G	2003	Ex-post Evaluation	Republic of North Macedonia	Water Supply	The Project for Improvement of Water Supply in Skopje Outskirts	0402500
G	2005	Ex-post Evaluation	Indonesia	Government / General	The Project for Capacity-building of the Indonesian National Police	0503600
G	2004	Ex-post Evaluation	Ecuador	Water Supply	The Project for Groundwater Development in the Province of Chimborazo	0507300
G	2005	Ex-post Evaluation	Saint Christopher and Nevis	Fisheries	The Project for Artisanal Fisheries Development	0508500
G	2005	Ex-post Evaluation	Madagascar	Health / Health Care	Project for Development of Maternal and Child Health Complex in Mahajanga Province	0511900
G	2006	Ex-post Evaluation	Jordan	Health / Health Care	The Project for Improving Medical Equipment of Southern Region's Hospitals and Al-Bashir Hospital	0514900
T	2003	Ex-post Evaluation	Indonesia	Environment Issue	Gunung Halimun Salak National Park Management Project	200600341
T	2004	Ex-post Evaluation	Indonesia	Agriculture / General	The Project for Institutional Support for Food Security	200600350
T	2006	Ex-post Evaluation	Indonesia	Public Utilities / General	The Institutional Revitalization Project for Flood Management in JABODETABEK	200600388
T	2005	Ex-post Evaluation	Philippines	Agriculture / General	The Project on the Development and Promotion of Location - Specific Integrated High - Yielding Rice and Rice-Based Technologies	200600881
T	2005	Ex-post Evaluation	Philippines	Health / Health Care	Maternal and Child Health Project	200600894
T	2003	Ex-post Evaluation	Cambodia	Health / Health Care	The Project for Human Resource Development of Co-medicals	200601311
T	2006	Ex-post Evaluation	Cambodia	Transportation / Traffic / General	The Project for Traffic Improvement in Phnom Penh City	200601330
T	2006	Ex-post Evaluation	Cambodia	Government / General	Project on Improvement of Local Government Administration	200601331
T	2005	Ex-post Evaluation	Timor-Leste	Roads	The Project for the Capacity Building of Road Maintenance	200601593
T	2004	Ex-post Evaluation	Viet Nam	Health / Health Care	The Project for Strengthening Health Service Provision in Hoa Binh Province	200601703
T	2005	Ex-post Evaluation	Viet Nam	Forestry / Forest Preservation	Project on the Villagers Support for Sustainable Forest Management in Central Highland	200601734
T	2005	Ex-post Evaluation	Viet Nam	Government / General	Support for the Capacity Building of Vietnam ODA Management	200601744
T	2006	Ex-post Evaluation	Myanmar	Water Resources Development	The Project for Rural Water Supply Technology in the Central Dry Zone	200601831
T	2004	Ex-post Evaluation	Myanmar	Health / Health Care	Community-Oriented Reproductive Health Project	200601858
T	2004	Ex-post Evaluation	China	Forestry / Forest Preservation	Sino-Japan Forest and nature conservation Ecology Training Center Project	200602023
T	2006	Ex-post Evaluation	China	Health / Health Care	HIV/AIDS Control Project	200602030
T	2004	Ex-post Evaluation	China	Government / General	Economic Legal Infrastructure Development Project	200602055
T	2005	Ex-post Evaluation	China	Weather / Earthquakes	Japan-China Cooperation Center for meteorological disasters	200602066
T	2005	Ex-post Evaluation	China	Agriculture / General	The Village-based Integrated Poverty Alleviation Model Project in Daozhen County and Leishan County, Guizhou Province	200602067
T	2005	Ex-post Evaluation	China	Human Resources / General	The Project for Business Human Resource Development	200602071
T	2006	Ex-post Evaluation	Bangladesh	Government / General	Project for Enhancing Capacity of Public Service Training in Bangladesh	200602323
T	2003	Ex-post Evaluation	India	Health / Health Care	Project for Prevention of Diarrheal Diseases （Phase2）	200602340
T	2006	Ex-post Evaluation	India	Environment Issue	Conservation and wise-use of natural resources of Chilika lagoon through Community Participation	200602358
T	2003	Ex-post Evaluation	Nepal	Primary Education	Communty-based Alternative Schooling Project	200602442
T	2006	Ex-post Evaluation	Pakistan	Health / Health Care	The Tuberculosis （TB） Control Project	200602523
T	2005	Ex-post Evaluation	Sri Lanka	Primary Education	Improving School Management to Enhance Quality of Education with Special Reference to Science and Mathematics	200602654
T	2006	Ex-post Evaluation	Solomon Islands	Health / Health Care	The Project for Strengthening Malaria Control	200602812
T	2004	Ex-post Evaluation	Dominican Republic	Health / Health Care	Strengthening of the Primary Health Care in the Province of Samana	200602979
T	2005	Ex-post Evaluation	Dominican Republic	Forestry / Forest Preservation	The Sustainable Watershed Management Project in the Upper Area of the Sabana Yegua Dam	200602991
T	2005	Ex-post Evaluation	Guatemala	Urban Sanitation	Capacity Development of Water Environment Conservation in the Metropolitan Area	200603063
T	2004	Ex-post Evaluation	Mexico	Health / Health Care	Project for Prevention and Control of Uterine Cervical Cancer in the Southern States	200603174
T	2006	Ex-post Evaluation	Mexico	Environment Issue	Coastal Water Quality Monitoring Network Project	200603176
T	2005	Ex-post Evaluation	Mexico	Environment Issue	Project for Strengthening of Air Monitoring Program in the United Mexican States	200603178
T	2005	Ex-post Evaluation	Nicaragua	Population / Family Planning	Project to strengthening Adolescent Reproductive Health	200603223
T	2006	Ex-post Evaluation	Panama	Environment Issue	The Project for Improvement of Solid Waste Management in the Municipality of Panama	200603267
T	2005	Ex-post Evaluation	Brazil	Forestry / Forest Preservation	Sustainable Use of Forest Resources in Estuary Tidal Floodplains in Amapa	200603456
T	2006	Ex-post Evaluation	Paraguay	Education	Quality improvement of school management	200603653
T	2005	Ex-post Evaluation	Palestine	Environment Issue	The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley	200604022

Type of Assistance	Project Start Year*	Type of Evaluation	Country	Sector/Theme	Project Name	Project Number
T	2006	Ex-post Evaluation	Turkey	Agriculture / General	Improvement of Livelihood for Small-Scale Farmers in Eastern Black Sea Region	200604279
T	2005	Ex-post Evaluation	Algeria	Environment Issue	Capacity Development of Environmental Administration	200604322
T	2005	Ex-post Evaluation	Morocco	Fisheries Processing	The Project on Improvement of Value Adding Method Fisheries Product	200604429
T	2005	Ex-post Evaluation	Ghana	Health / Health Care	The Project for HIV/AIDS Prevention through Education	200604653
T	2005	Ex-post Evaluation	Ghana	Basic Healthcare	Scaling up of Community Based Health Planning and Services （CHPS） Implementation in the Upper West Region	200604668
T	2006	Ex-post Evaluation	Kenya	Health / Health Care	Blood Safety Project	200604719
T	2005	Ex-post Evaluation	Malawi	Agriculture / General	Development of Smallholder Irrigation Schemes Technical Cooperation Project	200604838
T	2006	Ex-post Evaluation	Madagascar	Population / Family Planning	Project for Improvement of Maternal,Newborn and Child Health Service	200605329
T	2006	Ex-post Evaluation	Senegal	Public Utilities / General	Project on the Safe Water and the Support on Community Activities Phase 2	200605459
T	2004	Ex-post Evaluation	Bulgaria	Development Planning / General	The Kazanlak Area Revitalization Project	200605529
G	2005	Ex-post Evaluation	Algeria	Fisheries	Project for Improvement of Training Equipment for the Institute of Technology of Fisheries and Aquaculture of Alger	0607900
G	2006	Ex-post Evaluation	Dominican Republic	Trade	The Training Center for Development of Foreign Trade and Investment Project	0609600
G	2006	Ex-post Evaluation	China	Environment Issue	The Project for the Establishment of the Monitoring Network for Acid Deposition	0613000
G	2006	Ex-post Evaluation	Suriname	Fisheries	Project for Construction of Small-Scale Fisheries Center in Paramaribo	0614100
G	2006	Ex-post Evaluation	Laos	Roads	The Project for the Construction of Hinheup Bridge	0700300
G	2006	Ex-post Evaluation	Bangladesh	Social Infrastructure / General	The Project for the Improvement of the Storm Water Drainage System in Dhaka City （Phase II）	0700500
G	2007	Ex-post Evaluation	Egypt	Agricultural Machinery	The Project for Modernization of Agricultural Mechanization Center in Damanhour	0700600
G	2006	Ex-post Evaluation	Ethiopia	Water Supply	The Project for Water Supply in Afar Region	0700700
G	2007	Ex-post Evaluation	Honduras	Health / Health Care	Project for improving San Felipe Hospital	0701700
G	2007	Ex-post Evaluation	Honduras	Roads	The Project for Reconstruction of Guaymon Bridge	0702700
G	2007	Ex-post Evaluation	Indonesia	Water Supply	The Project for Rural Water Supply in the Province of Nusa Tenggara Barat and Nusa Tenggara Timur	0704000
G	2006	Ex-post Evaluation	Egypt	Water Resources Development	The Project for Rehabilitation of Floating Pump Stations in Upper Egypt （Phase IV）	0704800
G	2006	Ex-post Evaluation	Bolivia	Agricultural Engineering	Project of Rehabilitation of Irrigation System in Cochabamba	0706400
G	2007	Ex-post Evaluation	Timor-Leste	Agricultural Engineering	The Project for Rehabilitation and Improvement of Maliana I Irrigation System	0707500
G	2007	Ex-post Evaluation	Cape Verde	Fisheries	The Project for Extension of the Facilities at Mindelo Fishing Port	0709200
G	2007	Ex-post Evaluation	Sri Lanka	Weather / Earthquakes	The Project for Improvement of Meteorological and Disaster Information Network	0709300
G	2007	Ex-post Evaluation	Laos	Culture	The Project for the Construction of Lao-Japan Budo Center	0709500
G	2007	Ex-post Evaluation	Madagascar	Agricultural Machinery	Project of extension and improvement of equipment of the Center of Training and Application of Agricultural Mechanization in Antsirabe	0710400
G	2007	Ex-post Evaluation	Peru	Education	Reconstruction of Earthquake-Affected Areas in the Ica Region	0716400
G	2007	Ex-post Evaluation	Djibouti	Water Transport / Ships	The Project for the Reinforcement of Maritime Transportation in Tadjoura Bay	0801200
G	2008	Ex-post Evaluation	Bhutan	Communications / Broadcasting / General	The Project for Improvement of Equipment of Bhutan Broadcasting Service Corporation	0802400
G	2008	Ex-post Evaluation	Madagascar	Health / Health Care	Project for Reinforcement of Expanded Programme on Immunization	0804400
G	2008	Ex-post Evaluation	Gambia	Fisheries	Project for Construction of Brikama Fish Market	0804700
G	2008	Ex-post Evaluation	Saint Lucia	Fisheries	The Project for Improvement of Fisheries Infrastructure in Anse La Raye	0804900
G	2008	Ex-post Evaluation	Nepal	Education	The Project for Construction of Primary Schools in Support of Education for All （Phase II）	0805800
G	2007	Ex-post Evaluation	Guinea	Fisheries	Project for Improvement of Boulbinet Small Fishing Port	0806200
G	2008	Ex-post Evaluation	Papua New Guinea	Fisheries	The Project for Construction of Wewak Market and Jetty	0806300
G	2008	Ex-post Evaluation	Cambodia	Others	The Project for Improvement of Equipment for Demining Activities （Phase V）	0868480

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Balkan Office：November, 2012

Country Name	The Project for Improvement of Water Supply in Skopje Outskirts
Former Yugoslav Republic of Macedonia	

I. Project Outline

Project Cost	E/N Grant Limit：750 million Yen (1)53 million Yen (2)697 million Yen *(1)Detailed Design (2) Implementation	Contract Amount: 745 million Yen (1)53 million Yen (2)692 million Yen
E/N Date	(1) January, 2004 (2) June, 2004	
Completion Date	June, 2006	
Implementing Agency	Ministry of Transport and Communication（MTC）	
Related Studies	Basic Design Study：March, 2003 – August, 2003 Detailed Design Study：February, 2004 – June, 2004	
Contracted Agencies	Consultant	Pacific Consultants International
	Contractor	Taisei Corporation
	Supplier	－
Related Projects (if any)	Japan's cooperation ・The Study of Integrated Water Resources Development and Management Master Plan in the former Yugoslav Republic of Macedonia1997-1998, Technical Cooperation） Other donors' cooperation ・Support for Public Communal Enterprise by Austria ・Commercialization of Municipality Public Enterprises by GTZ	
Background	In Macedonia, the rate of population served by public water supply in 2000 was 100% in urban areas and 28% in rural areas. In non-piped-water served rural areas, water supply was poor condition in quantity and quality, since the shallow wells as their water source for domestic use was prone to be contaminated by sewer water, etc. Under the circumstances, the Government of Macedonia put high priority on water supply and wastewater treatment sector to improve living conditions. In the short-term investment plan formulated in 2002, "Public Investment Program of the Republic of Macedonia, 2002-2004" (PIP), the water resources development and construction of water supply facilities based on the proposition of "Water Resources Development and Management Master Plan" which was carried out with the support from Japan in 1999 were presented as investment items. 46 water supply and sewerage projects were proposed in PIP. The Government of Macedonia requested a grant aid cooperation project to the Japanese government in rural areas outside Skopje where the water volume was insufficient due to the deterioration of the water supply facilities and the rate of water served population were lower than the other areas.	
Project Objectives	Outcome To ensure safe and stable water supply in 20 villages in seven municipalities in Skopjie outskirts (Cucer Sandevo、Butel、Gazi Babe、Petrovec、Ilinden、Studenicani、Zelenikovo) by constructing water supply facilities	
	Output (s) Japanese side ・ Development of 8 water supply facilities in 20 villages in seven municipalities (Water intake facilities, Disinfection facilities, Transmission Pump facilities, Distribution reservoir, and Transmission/distribution pipes) Macedonian side ・ Installing primary wiring to supply electric power, and constructing fences around reservoirs, pump facilities ・ Individual house connection facilities (diversion cocks, water supply pipes, water meters, and etc.) (the cost is borne by residents) ・ Training of staff of Public Communal Enterprises (PE), which are responsible for the operation and maintenance of the water supply facilities	

II. Result of the Evaluation

Summary of the Evaluation
Macedonia needed rehabilitation of infrastructures after the conflict. Development of water supply infrastructure in rural areas of outskirt Skopje was urgently needed where the water supply facilities were in poor conditions. Especially, the rate of population served by public water supply in the target areas was extremely low with 7%. In addition, the water source for domestic use was prone to be contaminated by sewer water in those areas. This project has somewhat achieved its objectives "To ensure safe and stable water supply in 20 villages in seven

municipalities in Skopjie outskirts (Cucer Sandevo、Butel、Gazi Babe、Petrovec、Ilinden、Studenicani、Zelenikovo) by constructing water supply facilities". The project did not reach the targets of served population, the rate of population served and water volume, however, impact on the decrease in the workload of collecting water, improvement of the living environment, and hygiene awareness/behavior and the quality of water was observed. As for sustainability, some PEs have problems in the current situation of operation and maintenance, however, most of the facilities are in good condition and operational. Some PEs have problems in their financial aspect.

For relevance, the project has been relevant with Macedonia's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly consistent with Macedonia's development policies (Developing water supply facilities as set in PIP 2002-2004, and 2009-2010), development needs (improving water supply in rural areas, especially in Skopje outskirts where the facilities are less developed), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has somewhat achieved its objectives of "To ensure safe and stable water supply in 20 villages in seven municipalities in Skopjie outskirts (Cucer Sandevo、Butel、Gazi Babe、Petrovec、Ilinden、Studenicani、Zelenikovo) by constructing water supply facilities". The project did not reach the targets of served population, the rate of population served and water volume. Among the targeted 18 villages[1], the individual pipe connection in one village (Ognjanci in Petrovec), is being implemented at the time of ex-post evaluation. The targets of water service population and the rate of population served were not attained partly because individual house connection delayed, which is to be carried out by the responsibility of the Macedonian side. In addition, according to PEs, there are people who prefer existing wells or existing water supply facilities because people themselves operate and maintain those wells and facilities, and senior citizens are relatively conservative and do not try new systems easily. Moreover, the actual population growth has been below the forecast due to the young population's migration to urban areas, which might affect the actual results of the quantitative effects. Quantity of water supply volume per person per day in the part of the village is calculated based on the annual water supply volume, however, we were not able to obtain a clearer explanation of the figures from the implementing agency. With respect to the water quality and the hours of water supply, the target have been achieved in the villages which provided the data.

As to impact, according to interviews with residents, the workload of collecting water has decreased, the living environment has improved, and hygiene awareness/behavior including an increase of number of bathing and washing has improved. In addition, people perceive that the quality of water has improved. On the other hand, development of sewage systems in accordance with the increase of water supply has not progressed in some target areas[2].

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

	Actual value in 2002 (BD)	Target value in 2008	Actual value in target year (2008)	Actual value in 2012 (The year of Ex-post evaluation) (Part of values is in 2011)
Indicator 1: Served population and the rate of population served	2,274 (7%)	31,920*1 (100%)	12,106*2	17,254 (67%) (Data of 14 villages is available among the target 18 villages)
Indicator 2 Water supply volume	30 - 10 0 liters/person/day	60 - 150 liters/person/day	50-150 liters/person/day	38 liters/person/day in average (Data of 5 villages is available)
Indicator 3 Water quality	17 villages do not meet the standard	20 villages meet the standard	The standard is met	All 11 villages which answered the questionnaires meet the standard.
Indicator 4 Number of hours for water supply	24 hours in part of the target areas (with many no water period)	24 hours	24 hours (No water period in the part of the target areas in summer. *3)	24 hour water supply in all 15 villages which answered the questionnaires.

(Source) PEs

[1] Although the project targeted 20 villages, it was found out before the detailed design study that the Government of Macedonia already developed water supply facilities in two villages, and there these two villages were excluded from this project.

[2] Among five municipalities which answered the questions, one municipality answered environment impact assessment is required, but whether any measure is taken is not answered. There is no resettlement in five municipalities.

*1 In accordance with the changes in the number of target villages (from 20 to 18 villages), the target of total number of the population supplied has changed accordingly.

*2 Among the target villages, individual house connection to 5,467 people（target number）in four villages in Petrovec did not start as of 2008 due to the delay in the construction. The water supply started officially in January 2011 except one village. Due to the delay in the construction of a reservoir to lowland in Butel (Former Cair), the water supply in Butel started in January, 2011. However, the individual house connection was still in progress.

*3 There was a water supply restriction in Kucevistein in summer. The amount was not sufficient partly because water leaked consistently from the common faucet (no tap), and partly because more than anticipated amount of water was used as people used the water for vegetable fields. During the defect inspection, consultants instructed to take measures, and at the time of ex-post evaluation, it was found that the situation has improved as the PE has taken measures for water leakages, carried out awareness activities and fines residents for unintended usage of water.

A reservoir in Radishani

A water faucet in Petrovac

A water faucet in Radisani

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 99%), the project period slightly exceeded the plan (ratio against the plan: 124%) because it took longer to negotiate the contract between contractors and manufacturers as a result of the sharp increase of the construction material price, and therefore, the construction delayed (approximately 3.5 months). Besides, the construction delayed because land owners in some areas did not consent, and therefore, the project had to change the rout design (approximately 2 months). Outputs by Japanese side were produced as planned. However, Macedonian side had problems in producing outputs as construction of reservoirs, primary pipes, and individual house connection delayed.

Therefore, efficiency of this project is fair.

4 Sustainability

The implementing agency of the project is the Ministry of Transport and Communication (MTC) who implements and manage water supply and sewage projects in Macedonia, however, the facilities after the construction are operated and maintained by 5 PEs of each municipality (Skopje、Ilinden Cucer、 Sandevo、Studenicani、Zalenikov).

There are some problems in the institutional aspect of the project. 5 PEs were supposed to operate and maintain the water supply facilities. However, Studenicani PE does not carry out water supply services, and Skopje PE provides the services instead. The water facilities in Cvetova, Studenicani are maintained by the residents themselves, but the operation and maintenance activities are not fully carried out as planned. Other 4 PEs have no problem as the institutional structures is sustained what it was considered desirable at the time of ex-ante evaluation. Although the number of staff has not increased as planned, the current experienced staffs are able to carry out the operation and maintenance appropriately. Although the training for operation and maintenance is not carried out fully, the PEs have basically no problem in the technical aspect.

Financially, there is no maintenance budget in Studinicani PE. In addition, some PEs have problems as the revenue is not sufficient to cover the expenses and rate of revenue water is low. As to the current situation of operation and maintenance, facilities are maintained well and fully operational based on the questionnaires and interviews with PEs and direct observation. Among 4 PEs except Studenicani PE, 2 PEs carry out regular inspection and maintenance in accordance with the maintenance schedule, or manual and rule books, however, the other 2 do not carry out scheduled periodic maintenance.

As there are some problems in institutional, financial aspects as well as the current situation of operation and maintenance, sustainability of the project effect is fair.

III. Recommendations & Lessons Learned

Recommendations:

- Petrovec PE should complete the individual house connection in Ognjanci as soon as possible.
- The water facilities of Cvetovo are maintained by the residents themselves, whereas they were supposed to be carried out by Studenicani PE at the time of ex-ante evaluation. Therefore, the institutional setup and technical support for maintenance of the water facilities of Cvetovo need to be strengthened. Studenicani Municipality is recommended to take measures such as strengthening the function of Studenicani PE or contracting out the maintenance activities to Skopje PE.

- As the population served by water supply as percent of total population did not reach the target of 2008, MTC, municipalities and PEs need to take measures for further promoting individual house connections including PR activities.
- Fences around the water reservoir have not been constructed. Since the construction was supposed to be carried out by the responsibility of the Macedonian side, MTC should construct the fences as soon as possible.
- PEs are recommended to equip various data, and utilize the data for making operation and maintenance plans, as well as monitoring and evaluation of the operation. As a result, the implementation capacity will be strengthened.

Lessons Learned :

- Delays in construction which should be carried out by the Macedonian side affected the achievement of the project objectives. In a case that there is a concern that the non-fulfillment of output by a recipient country may cause a problem in producing project objectives, thorough review of implementing capability of the recipient country is needed and the review should be incorporated in a project design at the time of ex-ante evaluation.
- At the planning stage, JICA needs to confirm whether or not the residents are willing to connect to a newly developed water supply system.
- When this project was implemented, decentralization was in progress in Macedonia, and the function of operation and maintenance of the facilities under the project was transferred to municipalities. It was difficult to monitor the project in case the implementing agency and the operation and maintenance institutions are different entities. Therefore, when JICA implements a project in a country where decentralization is in progress, JICA needs to pay attention to measures for decentralization such as establishing a monitoring mechanism at the planning stage.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Indonesia Office: February, 2014

Country Name	The Project for Capacity-building of the Indonesian National Police
Republic of Indonesia	

I. Project Outline

Background	The Government of Indonesia was actively promoting the organizational and functional enhancement of the Indonesian National Police (INP) that was separated from the National Armed Forces in 1999, based on the recognition that the development of democratic police administration services was essential. Japan implemented technical cooperation and grant aid projects mainly for the Bekasi Police Resort under the Program for Supporting Reform of the National Police. However, the still insufficient facilities and equipment were affecting the police activity. In INP, the major organ of counter-terrorism measures, the headquarters and provincial police were working together mainly through the special counter terrorism squad (Special Detachment 88 or Densus 88). However, equipment and knowledge that were essential to reinforce the fundamental criminal investigation capacity remained insufficient. Although INP had received assistance in enhancing its anti-terrorism skills through training, etc. from Australia and the United States, it was facing a serious shortage of equipment to support criminal investigation, especially those for criminal identification and scientific criminal investigation that were necessary for collecting evidence following a crime.
Objectives of the Project	The project aims to enhance the criminal investigation capacity of the Indonesian National Police (INP) and to enable swift police action by procuring equipment related to counter-terrorism investigation for its headquarters and provincial police stations across the country and by developing KOBAN facilities and related equipment within the jurisdiction of the Bekasi Police Resort, thereby contributing to the improvement of the public security.
Outputs of the Project	1. Project Site: The headquarters (Jakarta) and provincial police stations of INP. The KOBAN facilities were developed in Bekasi Prefecture. 2. Japanese side 1) Construction of the following facility(s): KOBAN buildings in 11 locations in Bekasi Prefecture (within the jurisdiction of the Bekasi Metropolitan Police Resort and the Bekasi Prefecture Police Resort) 2) Procurement and installation of the following equipment(Note): Equipment related to counter-terrorism investigation: radio communications system (radio communications vehicle and small radio communications system); equipment for criminal identification (magnifier with CCD camera, fingerprint collection sets, field photograph sets, etc.); and equipment for criminal scene investigation (X-ray inspector and fiberscope). The fingerprint collection sets and field photograph sets were provided to all provincial police stations, and all the other equipment were installed in either of the INP headquarters or the Jakarta Metropolitan Police. Within the jurisdiction of the Bekasi Police Resort: KOBAN set (radios, testing equipment, patrol car, etc.) (Note) The followings are the changes from the original plan: the quantity of the small radio communication system was reduced from the planned 10 sets to 3 sets; a fingerprint photography (crime identification equipment) was planned but cancelled; within the KOBAN set, some specification was modified and items (e.g. furniture) were added. These changes were made as a result of the discussions with related ministries before the Exchange of Notes as well as the consideration of operation and maintenance and other aspects in the detailed design study. 3. Indonesian side: Securing place to install the procured equipment; cost and procedures of custom clearance; etc.
E/N Date	September 15, 2005 / Completion Date: February 13, 2007
Project Cost	E/N Grant Limit: 449 million yen, Contract Amount: 448 million yen
Implementing Agency	Indonesian National Police (INP)
Contracted Agencies	Yachiyo Engineering Co., Ltd.; Kanto Bussan Co., Ltd.
Related Studies	Basic Design Study: December 2004 – May 2005
Related Projects (if any)	Japan's Cooperation: The following projects were implemented under the Program for Supporting Reform of the National Police: - Advisor to the Chief of Indonesian National Police (technical cooperation (dispatch of expert), 2001-) - Advisor in the field of on-site criminal identification and anti-drug measures (technical cooperation (dispatch of expert), 2002-) - Acceptance of trainees (2002-) - Support Program for Reform of Indonesian National Police (technical cooperation, 2002-2007) - Project on Enhancement of Civilian Police Activities (Phase 2) (technical cooperation, 2007-2012) Other donors' Cooperation: Exchange of information, training and provision of investigation equipment in the field of anti-terrorism

	measures; training and provision of investigation equipment in the fields of crime identification and anti-drug measures (United States, Australia, Germany, United Kingdom, New Zealand, China, Singapore, etc.)

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Indonesia's development policy, such as "establishment of a law-abiding country" and "realization of security, peace and integration" as set in the National Development Plan (2000-2004) and the National Medium-Term Development Plan (2010-2014), development needs for reinforcement of counter-terrorism capacity, as well as Japan's ODA policy such as the Japan-Indonesia Joint Statement (2003) that promotes active assistance in anti-terrorism measures, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has achieved one of its objectives (outcomes), namely, enabling swift police action by developing KOBAN in Bekasi, as shown in the fact that the population per KOBAN has been significantly decreased and that the police has become able to respond to requests from the local residents promptly and in a sincere manner through the establishment of patrol and communication by police officers trained under the technical cooperation project. Also, an external survey found that the residents' degree of recognition of KOBAN increased from 3-8% in 2007 to 10-15% in 2011.

However, the other objective, i.e. enhancement of counter-terror investigation capacity, has been achieved to a limited extent: although there are certain results such as the response to the Marriott Hotel bombing in 2009, in which some of the equipment provided under this project was used, the overall frequency of utilization of the provided equipment is low. According to Densus 88 of INP and the Security Department of the Jakarta Metropolitan Police, the reasons for the low utilization included that the equioment was (i) attracting too much attention and too big in size (the radio communications vehicle and the equipment for criminal scene investigation), (ii) less convenient than motorcycles due to many traffic jams (the radio communications vehicle), and (iii) broken and thus not usable since 2010 (the magnifier with CCD camera). In particular, the original plan on the radio communications vehicle was to use it in investigations after the incidence of a terrorist attack, but at present it is deployed only occasionally for a security purpose to prevent terrorist attacks (at international conferences, etc.). On the other hand, use of the equipment for criminal scene investigation provided to all provincial police stations of the country was observed at the time of ex-post evaluation in Central Java Province and Bali Province where experts of the technical cooperation project visited. Replenishment of consumables by INP was confirmed, too.

The expected impact has been observed in Bekasi Prefecture: the numbers of both recognized cases of and arrests for criminal offences have been increasing. In some cases, effective utilization of the criminal identification and command communication skills transferred under the technical cooperation project and the facilities and equipment developed under this project led to the arrest of the criminals. In addition, according to the above-mentioned external survey, the function of KOBAN that was most highly rated by the residents was "contribution to maintenance of public peace". As for counter-terrorism investigation, however, the contribution of this project to resolution of terrorist cases is limited due to low frequency of use of the provided equipment. Therefore, effectiveness/impact of this project is fair.

Quantitative Effects (Effectiveness)

Indicator	2004 (before the project) Actual value	2007 (target year) Planned value	2007 (target year) Actual value	2012 (ex-post evaluation year) Actual value
Indicators related to the investigation communications system (special counter-terrorism squad (Densus 88) and the Intelligence and Security Agency (Baintelkam) of INP)				
Indicator 1: Number of times the radio communications vehicle is dispatched	(not mentioned)	(not mentioned)	Densus 88: several times/year Baintelkam: several times/year	Densus 88: several times/year Baintelkam (Note 1): several times/year
Indicator 2: Number of investigators per subscriber radio	117 persons	1 persons	Densus 88: unknown Baintelkam: unknown	Densus 88: the radios not used Baintelkam: unknown
Indicators related to the equipment for criminal identification (the Criminal Identification Agency (Bareskrim) under the Criminal Investigation Department of INP and the total of provincial police stations)				
Indicator 3: Number of items seized as evidence	(not mentioned)	(not mentioned)	Bareskrim: unknown Total provincial police stations: unknown	Bareskrim: unknown Total provincial police stations: unknown
Indicator 4: Number of evidential matters analyzed	(not mentioned)	(not mentioned)	Bareskrim: 13 Total provincial police stations: unknown	Bareskrim: 10 (Note 2) Total provincial police stations: unknown
Indicators related to the equipment for criminal scene investigation (Densus 88)				
Indicator 5: Number of times the investigation equipment was used	Around 1-2 times/ month in Jakarta	(not mentioned)	X-ray inspector : unknown Fiberscope: unknown	X-ray inspector : unknown Fiberscope: unknown
Indicator 6: Number of suspicious objects detected	(not mentioned)	(not mentioned)	Unknown	Unknown
Indicators related to KOBAN (within the jurisdictions of the Bekasi Metropolitan Police Resort and the Bekasi Prefecture Police Resort)				
Indicator 7 (Note 3): Number of times of patrols by police officers	(not mentioned)	(not mentioned)	Bekasi Metropolitan Police: 10,212 Bekasi Prefecture Police: 15,748	Bekasi Metropolitan Police: 6,370 Bekasi Prefecture Police: 13,857
Indicator 8: Number of matters resolved at KOBAN	(not applicable)	(not mentioned)	Unknown	Bekasi Metropolitan Police: 80 Bekasi Prefecture Police: 8

(* Replaced from the original indicator "the number of consultations")				
Indicator 9: Population per KOBAN	Approx. 1,100,000	Approx. 240,000	Unknown	Bekasi Metropolitan Police: 29,003 Bekasi Prefecture Police: 45,959
(Supplementary indicator) [Note 4] Response time to notification to the police stations (minutes)	(not applicable)	(not mentioned)	Bekasi Metropolitan Police: 15 Bekasi Prefecture Police: 5-15	Bekasi Metropolitan Police: 15 Bekasi Prefecture Police: 5-15

Quantitative Effects (Impact)

Indicator	Before the project Actual value	2007 (target year) Planned value	2007 (target year) Actual value
Improvement of the public security (within the jurisdictions of the Bekasi Metropolitan Police and the Bekasi Prefecture Police)			
(Supplementary indicator) Number of recognized cases of criminal offences	(not applicable)	Bekasi Metropolitan Police: 3,183 Bekasi Prefecture Police: 2,788	Bekasi Metropolitan Police: 4,276 Bekasi Prefecture Police: 1,570
(Supplementary indicator) Number of arrests for criminal offences within the jurisdiction of the concerned police stations	(not applicable)	Bekasi Metropolitan Police: 1,491 Bekasi Prefecture Police: 570	Bekasi Metropolitan Police: 1,543 Bekasi Prefecture Police: 814

Sources: Information provided by and interviews with INP, Bekasi Metropolitan Police Resort, Bekasi Prefecture Police Resort, and experts of the technical cooperation project.

Notes: (1) The equipment was originally provided to Baintelkam but moved to the Security Department of the Jakarta Metropolitan Police in 2010 since there would be more occasions of use.

(2) Since the magnifier with CCD camera provided under this grant aid project was broken, the figure represents the usage of the equipment that the Indonesian side purchased separately.

(3) The number of police officers assigned immediately after the opening of KOBAN could be said rather excessive. Over time, it was gradually reduced to the minimum number (appropriate number). Accordingly, the number of patrols decreased during the period from 2007 to 2012.

(4) The "supplementary indicators" are the ones that had not been envisaged in the original plan as indicators for evaluation but were newly set for this ex-post evaluation.

3 Efficiency

The outputs of the project were produced as planned except the partial cancellation or decrease in quantity and the partial modification in specification or increase in quantity of some of the Japanese-side outputs due to design changes mainly to save operation and maintenance cost (see "Outputs of the Project"). Although both the project cost and the project period were within the plan (ratio against the plan: 100% and 90%), the project cost was slightly higher than it could have been considering the decrease of the output. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance of the facilities and equipment developed under this project has been carried out by the headquarters, provincial police stations and/or the Bekasi Metropolitan Police Resort and the Bekasi Prefecture Police Resort (in relation to KOBAN) of INP, the implementing agency. The operation and maintenance structure for KOBAN in Bekasi has no problem as the sufficient number of personnel is assigned. Also, the organization and human resources for counter terrorism measures have been strengthened. In the technical aspect, while no problem is found in relation to KOBAN, no one is currently capable of operating the equipment for criminal scene investigation due to the transfer of the officers who were trained on the operation method immediately after the provision of the equipment. In the financial aspect, the overall INP budget is rapidly increasing, and there is no particular problem in terms of operation and maintenance cost for KOBAN. The budget arrangement for maintenance of the counter-terrorism equipment could be possible as well, though the budget as such is not needed due to the low degree of utilization of the equipment as mentioned above. As for the current status of operation and maintenance, among the equipment for counter-terrorism investigation, the whereabouts of one of the three sets of the small radio communication system is unknown (the other two sets are managed by Densus 88 and the Criminal Investigation Department, respectively). In addition, the magnifier with CCD camera has been left broken since 2010 reportedly because it could not be repaired in Indonesia.

In this way, there are some problems in the technical and financial aspects of the implementing agency and in the current status of operation and maintenance, especially regarding the counter-terrorism equipment. Therefore, sustainability of the effects of this project is low.

5 Summary of the Evaluation

This project has partially achieved its objective, "to strengthen the criminal investigation capacity of the Indonesian National Police (INP) and to enable swift police action". Through the development of KOBAN in Bekasi Prefecture, the population per KOBAN has been significantly decreased and the police has become able to respond to requests from the local residents promptly and in a sincere manner through the establishment of patrol and communication by police officers trained under the technical cooperation project. However, the degree of achievement of the objective of enhancing counter-terrorism measures is limited due to the low degree of utilization of the provided equipment. With respect to impact, the number of arrests and other indicators show an increasing trend, and the local residents highly appreciated that the KOBAN contributed to public peace of their area. However, the contribution of the provided equipment for counter-terrorism investigation to resolution of terrorist cases is quite limited. As for sustainability, no problem is observed in the overall structure and financial situation of INP. Operation and maintenance of KOBAN developed in Bekasi is also good in terms of the technical and financial aspects as well as its current conditions. However, some problems are found in the technical and financial aspects and the current status of operation and maintenance of the counter-terrorism-related equipment due to the unknown whereabouts of some equipment provided, no need

for operation and maintenance budget due to low degree of utilization of the equipment, lack of human resources capable of operating certain equipment due to personnel transfer, and some equipment that is left broken because repair is impossible.

In light of the above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

With regard to the equipment related counter-terrorism investigation that is not frequently used, consideration within INP should be made on possibility of utilization of such equipment for the originally-intended purpose of “counter-terrorism measures” and on necessary measures toward utilization (e.g. training by the manufacturer/supplier on operation methods one more time). If it becomes clear, in the process of such consideration, that the concerned equipment could be utilized more effectively for other purposes, INP should take the necessary procedure for change of use.

Lessons learned for JICA:

INP had had no or quite limited experience in using the equipment related to counter-terrorism investigation, especially, the radio communications system (radio communications vehicle and small radio communications system) and the equipment for criminal scene investigation (X-ray inspector and fiberscope). Therefore, it could not be denied that the specific use of such equipment in counter-terrorism activity may not have been well understood in the planning and implementation stages. It is inferred that the equipment could have been used more frequently if the Japanese side made more thorough explanation from “the way of thinking” and thus better ensured the effective use of the equipment before selecting it, and if it provided instructions not only on how to operate the equipment right after the procurement but also on how to use it in actual counter-terrorism operations as well as recommendations on what the counter-terrorism operations with the use of the concerned equipment should be. In order for a grant aid project to significantly affect the improvement of efficiency and effectiveness of the flow of operations in the concerned country, it is important to give the implementing agency details of the project in the planning stage to enhance their understanding. Assistance through a soft component and technical cooperation project should also be actively considered. Closer monitoring of the status of utilization of the equipment after provision is necessary as well.

Radio communications vehicle (outward appearance)

Radio communications vehicle (inside)

Magnifier with CCD camera

Fiberscope

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Equador Office: Febrary 2014

Country name	The Project for Groundwater Development in the Province of Chimborazo
Republic of Ecuador	(El Proyecto de Desarrollo de Aguas Subterráneas en la Provincia de Chimborazo)

I. Project Outline

Background	In Chimborazo province, one of the poorest provinces in the Republic of Ecuador (hereinafter called as "Ecuador"), the main sources of drinking water were surface waters. However, the water volume in these sources had declined because of the tendency of shortage of rainfall in recent years. Although the rate of water served population with individual connection (65.80% in 2002) was almost the same level as the national average of 67.49%, the rate of use of rivers and springs was twice as high as the national average (24%). In addition, the hygienic conditions were poor in rural areas, because of the water contamination by livestock, insufficient number of toilets installed and other reasons. As a result, infant mortality rate of 55 to one thousand births (from 1989 to 1999) in the province was much higher than the national average of 33, and many cases of waterborne disease were reported including acute diarrhea and parasitic diseases. Under this circumstance, the provincial government of Chimborazo was preparing a groundwater development plan to utilize the safe and sanitary groundwater as a new water resource to improve living conditions in the rural areas. Under the plan, the government of Chimborazo aimed to drill 80 deep wells in 90 villages, however, the government was in a difficult situation to implement the plan due to the lack of drilling machines and equipment as well as the insufficient financial resources and therefore, needed technical and financial support to implement the plan.		
Objectives of the Project	To improve the access to safe and stable drinking water of people in the rural areas in the Chimborazo by constructing water supply facilities, establishing water committees, and procuring drilling machines with accessories and construction materials in 13 villages in 14 cantons in the Chimborazo province, and thereby contributing to the decrease in waterborne diseases.		
Outputs of the Project	1. Project site: 13 villages in 4 cantons in the Chimborazo province (Riobamba, Guamote, Guano,and Cumandá) 2. Japanese side: 1) Construction of wells water supply facilities：9 deep wells and other water supply facilities (10 well administration buildings, installation of a 9.9 km pipeline, 10 distribution reservoirs (10-50m^3), spring intake, a water pump, and 11 disinfection facilities) 2) Procurement of equipment and materials：1 set of well drilling machines and equipment、examination equipment, materials for 13 wells, pipeline materials (PVC, copper pipe) and others 3) Technical guidance for well drilling: OJT for well drilling, soft component (technical geophysical prospecting / hydrogeology, hygiene education, strengthening of well operation and maintenance system in the villages) 3. Ecuadorian side 1) Securing lands for construction 2) Construction of wells and water supply facilities: 5 deep wells and other waters supply facilities (5 well administration buildings, ：installation of a 2.9 km pipeline, 3 distribution reservoirs(10～50m^3), 4 disinfection facilities) 3) Installation of protective fences for wells and distribution reservoirs, supply of power to the wells, securing places for storing equipment and spare parts 4) Awareness and education activities for the beneficiaries, organizing workshops for hygiene education, and administrative support for water committees		
E/N Date	Phase 1: 30 August, 2004 Phase 2: 5 July, 2005	Completion Date	15 February, 2007
Project Cost	E/N Grant Limit: Phase 1: 520 million yen Phase 2: 270 million yen	Contract Amount: Phase 1: 516 million yen Phase 2: 268 million yen	
Implementing Agency	Department of public works, the provincial government of Chimborazo（Formerly known as Directorate of public works of the provincial council of Chimborazo. Currently, the department of groundwater development, which was established after the project completion, is in charge.）		
Contracted Agencies	Kyowa Engineering Consultants Co., Ltd., Tone Engineering Corporation, and Mitsubishi Corporation		
Related Studies	Basic Design Study: January, 2004 – July,2004		
Related Projects	Japan's Cooperation: Rual Water Supply Project in Ascos, the Province of Chimborazo (1999, Grant assistance for grassroots projects) Other donors' cooperation: PRAGUAS Project by Ministry of Urban Development and Housing (2002-2012), Development of water supply and sanitation facilities by Social Emergency Investment Fund, Hygiene education to children by Plan International (NGO)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant to Ecuador's development policies, such as universal access to safe water under the national development plan (2000-2003), the Chimborazo provincial development plan (2002), the national development plan for good life 2009-2013, and the Chimborazo provincial development plan "Chimborazo Province territorial development plan

(2011)" at the time of both ex-ante and ex-post evaluation. The project also has been highly relevant to development needs of supplying safe potable water in Chimborazo where the rate of water served population has been lower than the national average and thereby improving hygiene conditions, as well as Japan's ODA policy prioritizing hygiene environment and water and sewage service including water supply facilities. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has somewhat achieved its objectives of "to improve the access to safe and stable drinking water of people in the rural areas in the entire Chimborazo province by constructing water supply facilities, establishing water committees, and procuring drilling machines with accessories and construction materials in 13 villages in 14 cantons in the Chimborazo province."

Among the wells constructed by Japanese sides (5 sites in 4 villages in the urban areas and 8 sites in 6 villages in the rural areas), wells at 4 sites do not function partly due to the breakdown of control panels[1]. Water supply volume per day per person (indicator 1) of the sites who answered the questionnaire survey is 90-100ℓ/day/person in the urban areas and 10-51ℓ/day/person in the rural areas, which has not reached the target, especially in the rural areas[2]. Since the water is distributed to each individual house, the time required to collect water (indicator 2) has become zero at the sites in both urban and rural areas where the wells function. Therefore the target of collecting water in less than 30 minutes has been achieved at those sites.

On the other hand, among 2 sites in 2 villages in the urban areas where wells were supposed to be constructed by Ecuadorian side, a well is now under construction in one site while the other site has not started drilling. As to 3 sites in 3 villages in the rural areas, a well is under construction at one site while the other two have not started drilling. Thus, none of the planned well construction at 5 sites in 5 villages has been completed, and therefore, it is not possible to evaluate the effects in terms of water supply volume and time required for collecting water. The situation happens because 1) although the city governments are responsible for basic services including water supply under the constitution proclaimed in 2008, the city government did not have sufficient budget to implement the project, 2) there are some breakdown of the hydraulic system in drilling equipment, and 3) the budget for implementing the project allocated to the provincial government allowed the drilling of only four wells per year.

【Quantitative Effects】

1) 13 sites in 10 villages where facilities were constructed by the Japanese side

Indicators	2004 (before the project) Actual value	2009 (Target year) Target value	2009 (Target year) Actual value	2013 (Year of ex-post evaluation) Actual value
Indicator 1 Water supply volume per day per person (ℓ)	Urban areas (5 sites in 4 villages) 20-40ℓ/day/person	100ℓ/day/person	unanswered	80～100ℓ/day/person(The degree of achievement: 80-100%) (The actual values of 2 sites which answered the questionnaire)
	Rural areas (8 sites in 6 villages) 5-15ℓ/day/person	40-60ℓ/day/person	unanswered	10～50ℓ/day/person (The degree of achievement:25-83%) (The actual values of 5 sites which answered the questionnaire)
Indicator 2 Time required to collect water	1-3 hours	Less than 30 minutes	unanswered	0 minutes /day/person (In the 7 sites referred above)

Source: Questionnaire survey to water committees

2) 5 sites in 5 villages where facilities were constructed by the Ecuadorian side

Indicators	2004 (before the project) Actual value	2009 (Target year) Target value	2009 (Target year) Actual value	2013 (Year of ex-post evaluation) Actual value
Indicator 1 Water supply volume per day per person (ℓ)	Urban areas (2 sites in 2 villages) 20-40ℓ/ day/person	100ℓ/day/person	unanswered	A well is under construction at one site while the other site has not started drilling.
	Rural areas (3 sites in 3 villages) 5-15ℓ /day/person	40-60ℓ/day/person	unanswered	A well is under construction at one site while the other two sites have not started drilling.
Indicator 2 Time required to collect water	1-3 hours	Less than 30 minutes	unanswered	NA

Source: Questionnaire survey to water committees

【Qualitative effects】

Currently functioning six wells and other water facilities which were drilled and constructed by the province of Chimborazo utilized the equipment procured by the project effectively. However, a tooth drill bit (12¼ inches) did not match the geographical condition at the sites and therefore has not been used. The equipment for DTH method (compressors, drivers and others) had not been well used due to the capacity shortage of a large size compressor and lack of technical capacity on the DTH method. As the consultant bought a large size air compressor at its own expense in 2012, and the training on DTH method was carried out, the equipment is currently used for drilling at the time of ex-post evaluation. As to the effect of a soft

[1] The panels are scheduled to be repaired/replaced by the water committees, however, the exact schedule is unknown.

[2] Some sites confines the water supply volume in order to maintain the aquifer, even though the wells are functioning.

component, an engineer of the provincial council of Chimborazo acquired all skills necessary for groundwater development and is still involved with development projects as an engineer of the provincial government. Another engineer acquired skills of land surface exploitation and development of hydrogeological prospect maps, however, resigned in September 2009. Among the 13 target sites of the project, water committees were established at 10 sites and have been engaged in the maintenance of the wells.

As to impact, the groundwater development department to whom the technical transfer was carried out under the project was expected to plan and implement groundwater development projects in the entire province. The province has drilled 10 wells by its own so far, and 6 wells (at 2 sites in urban areas and 4 sites in the rural areas) among them were completed by 2009 and have functioned since then. The drilling of the other 4 wells (in rural areas) was completed after 2009, and currently water supply facilities are being constructed (indicator 3). Regarding the water supply volume per day per person of those wells, a site in the urban areas which answered the questionaire survey reported the volume 156 ℓ/day/person which achieved the target. On the other hand, the average water supply volume at 4 sites in the rural areas is 15-20 ℓ/day/person and did not reach the target (indicator 4). The time required for water collection is 0 minutes (indicator 5).

Impact

Indicators	2004 (before the project) Actual value	2009 (Target year) Target value	2009 (Target year) Actual value				2013 (Year of ex-post evaluation) Actual value
			2009	2010	2011	2012	
Indicator 3 (Entire province) Number wells drilled by the province (*)	0	6/year	3/year	0/year	0/year	0/year	1/year
Indicator 4 (Entire province) Water supply volume per day per person(ℓ)	Urban areas: 20-40ℓ /day /person	100ℓ /day /person	unanswered				156ℓ/day/person (The actual values of 1 site which answered the question)
	Rural areas: 5-15ℓ /day /person	40-60ℓ /day /person	unanswered				15-20ℓ/day /person (The actual values of 4 sites which answered the question)
Indicator 5 (Entire province) Time required to collect water	1-3 hours	Less than 30 minutes	unanswered				0 minutes

Source: Questionnaire survey to water committees (*) The number indicates those which were constructed after 2009. Other than this number, another 6 wells and facilities was completed before 2009.

As to other impact, people use the water supply facilities regularly and currently do not have to go to springs to collect water, and therefore, the burden of women who are responsible for water collection has decreased. In addition, according to the questionnaire survey to the water users, 8 villages out of 11 villages said the number of waterborne diseases has decreased. No negative impact on the natural environment was found and there is no case of land acquisition/involuntary resettlement.

Therefore, effectiveness/impact of this project is fair.

3 Efficiency

The outputs of the project were produced as planned and both the project cost and the project period were within the plan (ratio against the plan: 99%, 98%). Therefore, efficiency of this project is high.

4 Sustainability

In Chimborazo province, after the transfer of the water supply services from the province to city governments in accordance with the constitution proclaimed in 2008, the drilling of wells is implemented by the province (contracted from city governments), and the construction of wells and water supply facilities is implemented by the city governments. As a result, the current institutional setting is set as follows: (1) drilling of wells by utilizing the equipment procured by the project is implemented by the province, (2) water supply services are carried out by the city governments, and (3) the constructed wells are operated and maintained by the water committees.

As the responsibilities of the provincial government are limited to the well drilling on a contract basis, the current institutional setting of 7 staff members who are responsible for groundwater development sufficient in the quality control/ engineering geology/ experiment section of the public works department. On the part of the city governments, 5-12 staff members are allocated, although the number varies depending on the size or financial conditions of cities. Institutional setting of water committees is not stable as there were problems over water tariff collection in the past. In terms of technical aspect, the provincial government has one engineer who has the technical capacity of electrical prospecting and another engineer who can utilize hydrogeological technology. One person is allocated to each water point who is in charge of operating water pumping, reading meters and distributing water from the water storage tank. The provincial government has a minimum number of staff to continue well drilling and the technical level is maintained to a certain extent. One engineer to whom the technical transfer was carried out implements training to water committees with the Ministry of Urban Development and Housing. Additional engineer is scheduled to be recruited in the next fiscal year.

As for the financial aspect, the provincial government is expected to secure a certain amount of the budget, however, the city governments who are also responsible for construction in addition to the well drilling cannot secure the budget stably. Many water committees have problems for securing maintenance budget due to the problem of water tariff collection and others, and there are problems of securing stable budget allocation in the future. The drilling equipment owned by the provincial government is generally maintained well. The broken equipment items are repaired and currently function properly. The equipment is expected to be maintained by the provincial government by its own effort. The maintenance of the wells is carried out mainly by the water committees, but not necessarily stably. Some water committees have the problem of water tariff collection, and therefore are unable to purchase necessary equipment.

Thus, as there are problems in institutional aspect (water committees), financial aspects (city governments and water committees) as well as the current status of operation and maintenance, sustainability of the project effect is fair.

5 Summary of the Evaluation

This project has somewhat achieved its objectives of "to improve the access to safe and stable drinking water of people in the rural areas in the entire Chimborazo province by constructing water supply facilities, establishing water committees, and procuring drilling machines with accessories and construction materials in 13 villages in 14 cantons in the Chimborazo province." People utilize the water supply facilities regularly, and therefore the people's access to safe water in the target areas is continuously secured. However, some wells and water supply facilities do not function, and therefore, some sites have not reached the target of water supply volume per day per person. On the other hand, some favorable impacts are found. As people do not have to go to springs to collect water thanks to the project, the burden of women has decreased. In addition, according to the interviews with the water users, the number of those who have waterborne diseases has decreased.

As for sustainability, a certain level of technical capacity is secured, however, there are problems in financial and institutional aspects as well as the current status of operation and maintenance as some sites cannot purchase equipment necessary for maintenance as a result of water tariff collection problems.

In the light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

−Although the water committees have maintained functions to some extent, the provincial government and Ministry of Urban Development and Housing are recommended to extend support to the committees to strengthen their technical capacity.

Lessons learned for JICA:

−The tooth drill bit (12¼ inches) procured by the project has not been used due to the geological reason. In selecting equipment, while cost effectiveness is important, a procurement plan needs to pay attention o the environment for the equipment usage in order to achieve project objectives.

Engineers who gave instructions at a well drilling site.

Drilling equipment procured by the project.

A well administration building constructed by the project

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Dominican Republic office: March, 2014

Country Name	
Saint Christopher and Nevis	The Project for Artisanal Fisheries Development

I. Project Outline

Project Cost	E/N Grant Limit:617 million yen		Contract Amount: 616 million yen
E/N Date	July, 2005		
Completion Date	December, 2006		
Implementing Agency	Department of Fisheries, Ministry of Housing, Agriculture, Fisheries and Consumer Affairs(Currently, Department of Marine Resources Ministry of Agriculture, Marine Resources and Constituency Empowerment)		
Related Studies	Basic Design Study: August, 2004-May, 2005		
Contracted Agencies	Consultant(s)	ICONS Inc.	
	Contractor(s)	Toa Corporation	
	Supplier(s)	-	
Related Projects (if any)	Cooperation by Japan ・The Project for Construction of the Basseterre Fisheries Complex (Grant, Phase I: 2000, Phase II: 2001) ・The Project for Construction of Fishermen's Warehouse (Grant, 2006) ・The project for Construction of Fishermen's Warehouse (Grassroots Grant, 2006)		
Background	Fishery is one of the major industries in Saint Christopher and Nevis. However, the main marine products, such as dried cod, have been imported because the traditional artisanal coastal fishery brought about unstable supply and variation of freshness and quality. The government of Saint Christopher and Nevis elaborated a basic policy to promote artisanal coastal fishery, to supply marine products as food in order to improve nutrition of the people in the country as well as to realize sustainable use of marine resources. One of the action plans in the policy was consolidation and construction of landing sites, which have been scattered in the island. Therefore, the government requested the government of Japan, which had supported construction of fisheries complex in Basseterre, the capitol of the country, and dissemination and trainings of fishery skills, to support construction of St. Kitts Island		
Project Objectives	Outcome To increase efficiency landing and discharge works by construction of the Old Road Community Fishery Centre (CFC-OL) in Old Road of St. Kitts Island.		
	Outputs(s) Japanese Side ・Construction of Facilities: Boat yard, slipway, Community fishery center building, Fishermen's locker building ・Equipment: Insulated boxes, Truck with crane Saint Christopher and Nevis Side ・Securement of construction site for marine products and water area for jetty		

II. Result of the Evaluation

Summary of the Evaluation
1. In Saint Christopher and Nevis, the main actor of the fishery industry of the country is artisanal coastal fishery which limited to the annual production of about 550 tons (2001). In addition, effective and sustainable use of marine resource in the exclusive economic zone was a main issue for the country and construction of facility to provide intensive landing and sales of marine products was an urgent matter. On the other hand, the country had only one fisheries complex in Basseterre (St. Kitts Island) and no other landing site in other fishing village. The situation brought about inefficient distribution of marine products in the Island. Based on the request by the government of Saint Christopher and Nevis, the Project was implemented to develop Old Road, one of the major landing sites in the Island, in order to increase efficiency of landing and discharge works as well as to promote the artisanal coastal fishery by linkage with the Basseterre Fisheries Complex.
2. For relevance, despite that the Project is consistent with the background referred as above as well as the Japan's ODA policies, the project design is not sufficiently appropriate. Therefore, its relevance is fair.
3. For effectiveness/impacts, a decreased time for preparation and landing per day contributed to improvement of efficiency of landing and discharge works. However, since the number of fishery boats landing and the volume of catch fish to be handled at CFC-OL are below the target, its effectiveness is low. On the other hand, some positive impacts, such as improvement of marine product quality by using ice, dissemination of using ice to the consumer public, as well as secured safety of fish boats and equipment, have been observed.

4. For efficiency, since the both of the project cost and the project period were within the plan. Therefore, its efficiency is high.
5. For sustainability, there are some problems such as poor drainage from the complex as well as drains behind the fisherman locker and malfunctioning concrete hatches for the jetty, difficulty of using the jetty due to the large difference in height between the jetty for landing and the sea surface, in particular, at the east side of jetty on windy days. Since the maintenance conditions of the facilities have not been sufficient, its sustainability is fair.
6. In the light of above, this project is evaluated to be unsatisfactory.

1 Relevance

This project has been highly relevant with Saint Christopher and Nevis's development policy to consolidate and develop landing sites by construction of marine product facilities, a Japan's ODA policy to Saint Christopher and Nevis for supporting promotion of fishery industry as well as the basic framework for cooperation with the Caribbean Community and Common Market (CARICOM) countries of "the New Framework for Cooperation between Japan and CARICOM in the 21st Century" prioritizing development of tourism, fishery and agriculture at the time of both ex-ante and ex-post evaluation. However, landing at Basseterre where purchase and sales of marine products is better for the fishermen and the number of landing boats and catch fish at CFC-OL has been limited due to the jetty with difficulty for prolonged time berthing. All indications are that the project design has not been sufficiently appropriate to the development needs of the fishermen. Therefore, its relevance is fair.

2 Effectiveness/Impact

1) This project has limitedly achieved the target number of the fishing boats landing at CFC-OL: the number of fishing boats in 2009 and 2012 at the time of ex-post evaluation was 6-10 boats which was considerably below the target. Since the jetty is unable to serve the expected number of boats, some boats have been moved to Basseterre. As a result of this, the catch of some boats need to be transported back to CFC-OL via road using pick-up trucks, which makes the cost of their operations higher. The causes are difficulty to berth at the jetty for long hours due to the constant high waves, comparative disadvantage of CFC-OL in terms of landing catch fish against the Basseterre Fisheries Complex where the catch fish are purchased and sold, the concrete hatches removed and not reinstalled due to the rust causing difficulty in appropriate detachment (The follow-up project in the financial year of 2013 has been fixing the problem of the malfunctioning hatches.)
2) According to the Japanese experts engaged in the JICA technical cooperation in the fishery sector, all the boats except one boat using dragline fishing achieved the target of the necessary hours per day for preparation and landing.
3) The volume of catch fish handled at CFC-OL limited to 116 kg in 2012 which was below the target value since the number of the fishery boats landing at CFC-OL was below the target as mentioned in 1).
4) The volume of ice production increased from 0.34 tons in 2009 to 0.39 tons in 2012, but it was below the target of 0.6 tons. In terms of the proportion of the iced catch fish handled at CFC-OL, it was difficult to obtain accurate data. However, according to the interview with the officer of the Department of Marine Resource, the landed marine products are processed on site and carried them out from CFC-OL and the iced marine products with freshness are sold to the local hotels and restaurants. For the general consumers, when the marine products are sold at the side of CFC-OL just after the landing, the products are also iced. Some landed products are temporarily stored in the refrigerator or freezer of CFC-OL then sold to customers. The ice production made understanding of not only fishermen but also the general consumers on advantages of iced marine products. Such understandings promoted utilization of ice for marine products as an indirect effect of the Project.
5) According to the interview with the fishermen organization, the fishermen enable to procure necessary ice before going fishing and they acquired knowledge about freshness control through technical guidance by the Japanese expert dispatched by JICA. The marine products with freshness can be landed at CFC-OL. As a result, the Project brought about quality improvement of marine products landed at CFC-OL.
6) Also, according to the interviews with the officer of the Department of Marine Resources and the member of the Old Road fishermen organization, the Project enabled repair and maintenance works for fishing boats in the safe space within CFC-OL and provision of safety by evacuation of fishing boats to the protected space by the tetrapod for hurricanes. In addition, since the lockers were installed by the Japan's glass roots aid in the fishermen's locker building constructed by the Project, the fishing equipment can be securely stored. The fact can be also considered as positive impacts of the Project.
7) At the disposal space of the marine products building, there are some problems in sanitation, such as odor caused by a structural failure and inadequate cleaning. However, the follow-up project by JICA has dealt with those issues in addition to the repair of the jetty.
8) Although no resettlement has been required for the Project because of no resident on the project site, the land acquisition has not been completed since the land owners have been requesting compensation by cash instead of equivalent exchange of land which has been proposed by the government of Saint Christopher and Nevis.
9) In the light above, despite of incidental impacts by the reduction of landing hours and the ice production, the facilities constructed by the Project have not been fully utilized. Therefore, effectiveness/impact of this project was low.

10) Quantitative Effects

	Actual (2004, BD)	Target (2009)	Actual (2009)	Actual Ex-Post Evaluation (2012)
Indicator 1: The number of boats to land catch fish at CFC-OL	(Actual) -	(Plan) 24 boats	(Actual) 6-10 boats	(Actual) 6-10 boats
Indicator 2: Hours per day for preparation and landing at CFC-OL	(Actual) 60-90 minutes	(Plan) About 20 minutes	(Actual) 20 minutes in average	(Actual) 20 minutes in average
Indicator 3: The volume of catch fish handled at CFC-OL	(Actual) -	(Plan) 300kg/day in average 87.5 tons/year	(Actual) N.A.	(Actual) 116kg/day in average*
Indicator 4: The volume of ice production (daily)	(Actual) -	(Plan) 0.6 tons/day	(Actual) 0.34 tons/day**	(Actual) 0.39 tons/day***
Indicator 5: The proportion of iced catch fish landed at CFC-OL	(Actual) 0%	(Plan) 100%	(Actual) N.A.	(Actual) N.A.

(Source) Statistical data and information provided by the Department of Fisheries, Ministry of Housing, Agriculture, Fisheries and Consumer Affairs for ex-post evaluation

(Note 1) *The actual data of the volume of catch fish handled at CFC-OL in 2012 is the average for the period between January to June, 2012.

(Note 2) **The actual data of the ice production at CFC-OL in the target year is estimated by the sales of ice (12,293 EC$) in 2010.

(Note 3) *** The actual data of the ice production at CFC-OL in 2012 is estimated by the sales of ice (7,058 EC$) for the period between January to June, 2012.

A fishery boat mooring at the west side of the jetty

A fisherman taking ices for fishing

Constant ice making at CFC-OL

3 Efficiency

The outputs were produced as planned and the project cost and period were within the plan (the ratio against the plan: 99%, 98%). Therefore, efficiency of this project is high.

4 Sustainability

1) The facilities of CFC-OL constructed by the Project have been operated and maintained by staff of the Department of Marine Resources of the Ministry of Agriculture, Marine Resources and Empowerment, the executing agency of the Project. At the planning stage, it was planned that the organizational structure including the Business Department in charge of purchase and sales of catch fish landed at CFC-OL and 8 staff including the Manager would have been assigned. However, since no purchase and sales of catch fish landed at CFC-OL has been implemented, there is no problem to operate the facilities by the 5 existing staff. The support staff is not permanent staff but the officer of the Department of Marine Resources who comes to the office of CFC-OL for the hours in the afternoon to administrative works such as recording landing data and management of CFC-OL. Also the maintenance staff and the cleaning staff are double as the staff of the Basseterre Fisheries Center.

The malfunctioning hatch due to rusts on the metal part

2) At the planning stage, the operation and maintenance of the facilities of CFC-OL had been planned to be transferred to the fishermen's organization. However, the Department of Marine Resources judged that the organization has not been fully functioned and did not cover all fishers who would use the facility and had difficulties in management capacity. Thus, at the basic design stage, it was designed that the Department of Marine Resources was in charge of operation and management of the facilities by the government budget. All the expenses of CFC-OL, including electricity tariff and payrolls of the staffs, have been covered by the government budget and it is expected that the government budget for CFC-OL will be continuously allocated in future (The expenses for the fiscal year of 2011 amounted 46,130 EC$.) The annual revenue of CFC-OL is 14,543 EC$ (about 480,000 JPY) from ice sales and rental fee of lockers.

3) There is no problem on the current conditions of the equipment in CFC-OL, such as ice making machine, since the staff trained in Japan is assigned for maintenance and those equipment has been functioning. However, the rusty concrete hatch of the jetty induces difficulty in detaching of the hatches (currently fixing the troubles by the follow-up scheme in the financial year of 2013 by JICA) and poor drainage from the complex as well as drains behind the fisherman locker was confirmed. All the situations indicate that the maintenance system for a part of the facilities of CFC-OL has not been inadequate. In addition, there is a problem for utilization of the jetty. The large difference in height between the jetty and the surface water is at risk for fishing boats hitting the jetty at the time of berthing. In particular, the east side of the jetty has more problem of difficulty to use because it is on the windward.
4) The Project has problems in the maintenance situation for the part of the facilities. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

In order to increase effectiveness and impacts of project as well as to ensure sustainability, the Department of Marine Resources needs to make efforts to let local fisher organization be functional and introduce the management system with reflecting local needs more effective way to the organization.

Lessons learned for JICA

The less comparative advantage of CFC-OL against the other fishery complex and the failure of the jetty for landing, which were observed by the ex-post evaluation, brought about the limited number of fishery boats using CFC-OL. At the time of basic design, it is necessary to appropriately assess natural conditions as well as the needs of beneficiaries, to sufficiently consider difficulty level of operation and maintenance of facilities and an institutional system of the executing agency and to examine and propose to fishermen a system to promote safe and sustainable use of the facilities (including implementation of the soft component to promote implementation of the proposed system).

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Madagascar Office: September, 2013

Country Name	Project for Development of Maternal and Child Health Complex in Mahajanga Province
Madagascar	(Le Projet d'Amenagement du Complexe Mère et Enfant de la Province Mahajanga)

I. Project Outline

Background	The Mahajanga University Hospital Center (CHUM: Centre Hospitalier Universitaire de Mahajanga) is one of the top referral hospitals in Madagascar. Japan supported CHUM through grant aid and technical cooperation projects in order to enhance its functions as a top referral hospital in the region. These cooperation contributed to improvement of the referral system as well as health services in the region. On the other hand, the needs to improve health services focusing on perinatal care were identified through the implementation of the technical cooperation projects to enhance capacity of CHUM.		
Objectives of the Project	To improve perinatal care* in Boeny Region by construction of maternal and child healthcare facility (CME) at CHUM and installation of medical equipment at CHUM and three health centers** in Boeny Region, there by contributing to improve maternal and child health in Boeny Region. *Perinatal care: Comprehensive and integrated neonatal care, including care for mother's body during the period from late pregnancy to early neonatal period, as well as for unborn and newborn baby in order to protect maternal and child health. ** Target health centers: Basic Health Center of South Mahavoky (CSB: Centre de Santé de Base Mahavoky-sud de Mahajanga), CSB Mahabibo de Mahajanga, and CSB Tamanao-Sotema de Mahajanga.		
Outputs of the Project	1. Project Site: Boeny Region 2. Japanese side 1) Construction of the following facilities: CME, including emergency section, delivery section, surgery section, intensive care section, maternity ward, training section, administration and service section 2) Procurement of the following equipment: <u>66 items for CHUM</u> Sonogram, monitor, delivery tables, examination table, incubators, infant warmers, anesthesia apparatus, beds, etc. <u>9 items for 3 CBSs</u> Bandage sets, delivery apparatus sets, weight scale for new born baby, height scale for new born baby, examination and treatment apparatus sets, and thermal sterilizers. 3. Malagasy side: Land preparation, work of electricity in-line, water pipe connection, planting, and procurement of office appliances.		
E/N Date	January 13, 2006	Completion Date	March 23, 2007
Project Cost	E/N Grant Limit: : 514 million yen, Contract Amount: 502 million yen		
Implementing Agency	Implementing Agency : Ministry of Health and Family Planning (Ministère de la Santé et du Planning Familial) Operating Agency : CHUM and CSB Mahavoky-sud, CSB Mahabibo, and CSB Tanambao-Sotema		
Contracted Agencies	JV of Matsuda Consultants International Co., Ltd. and International Techno Center Co., Ltd, Daiho Corporation, Ogawa Seiki Co., Ltd.		
Related Studies	Basic Design Study: March 2005 – August 2005		
Related Projects	Japan's Cooperation: ・The Project for the Improvement of Mahajanga University Hospital Center (Grant Aid, 1999-2001), The Project for the Improvement of Mahajanga University Hospital Center (Technical Cooperation, 1999-2004) ・The Improvement of Provincial Mother and Child Health by Utilizing the Function of Mahajanga University Hospital Center (Technical Cooperation, 2005-2006) ・Project for Improvement of Maternal, Newborn and Child Health Service (Technical Cooperation, 2007-2010) Other Donors' Cooperation: ・Dispatch of Expert to CHUM (France, 2004-2005) ・Project for Strengthening Health Services in Mahajanga Province (GTZ, 1993-2007) ・Technical cooperation (Institut Régional de Coopération Développement Alsace, 2005-2011)		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with the Madagascar's development policy, such as improvement of maternal and child health specified under "the National Health Policy (1999) (PNS: le Politique National de Santé) and "the Madagascar Action Plan (2007-2012)", and development needs to reduce infant mortality and maternal mortality as well as to increase accessibility of the population to health services in Mahajanga Province, as well as Japan's ODA policy to prioritize the Basic Human Needs (BHN) by assisting improvement of healthcare including mother and child health. Therefore, relevance of this

project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to improve perinatal care in Boeny Region" as a result of establishment of CME and procurement of necessary medical equipment to CHUM and 3 CSBs.

Department of Neonatology

At CME/CHUM, the number of deliveries increased 983 cases in 2003 to 1,457 cases in 2012. Also, the number of caesareans increased from 144 to 533 for the same period. In addition, the perinatal care at CME/CHUM was improved: the number of cases of treatment for diseased newborn babies went up 244 in 2007 to 405 in 2012 whereas the number emergency obstetric care expanded from 183 to 496. Also, the number of cases of treatment for high risk pregnancy at CME/CHUM reached to 518 cases in 2012. At the target CSBs, the number of normal deliveries at Mahabibo increased to 722 in 2012. The number of normal deliveries at Mahavoky and Tanambao kept mostly same level since 2007. The number of cases referred to CME/CHUM from the target CSBs tended to decrease since the perinatal care activities, including the Evidenced-Based Medicine and the Humanized care introduced by the technical cooperation project supported by JICA, at the target CSBs were improved. According to the CME/CHUM, it was because the number of inadequate referral cases from the target CSBs caused by the CSB staff's inaccurate diagnoses tends to go down due to the improved perinatal care by the JICA's cooperation for improvement of medical facilities and equipment as well as capacity of the medical and health staff. In fact, not only the medical and health staff of CME/CHUM and the target CSBs but also the mothers[1] interviewed for the field survey of this ex-post evaluation have been highly satisfied with improved facilities and equipment by this project. Furthermore, the project contributed to human resource development of health staff. The practical trainings utilizing the facilities and equipment of CME/CHUM have been delivered for student of the University Mahajanga and a nurse school. As a result of improvement of perinatal care in Boeny Region, the project also contributed to improvement of infant mortality rate at CSBs and District Hospital (Centre Hospitalier de District) in the region from 62.74 per 1,000 live births in 2007 to 36.57 per 1,000 live births in 2012[2].

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicators	(Before the project) 2003 Actual	(After the project) 2007 Planned	2007 Actual	(Ex-post Evaluation) 2012 Actual
Indicator 1 No. of deliveries at CME/CHUM	983	Increase	756 (from June to December)	1,457
Indicator 2 No. of caesareans at CME/CHUM	144	Increase	378 (from June to December)	533
Indicator 3 No. of normal deliveries at the target CSBs	(2004) Mahabibo:180 (May-September) Tanambao-Sotema: N.A. Mahavoky: 385	Increase	Mahabibo:623 Tanambao-Sotema: 435 Mahavoky: 306	Mahabibo:722 Tanambao-Sotema: 404 Mahavoky: 411
Indicator 4 No. of cases referred to CME/CHUM from the target CSBs	5,547 cases in total at CHUM*	Increase**	221 (only pregnant women)	147 (only pregnant women)

Note : * The number of hospitalized patients included at both of the Obstetrics and Genecology Section and the Pediatric Section.

** It should be noted that the increase in the number of referral cases from the target CSBs to CME/CHUM does not necessarily indicate improvement of the perinatal care at the target CSBs because the Basic Design Study Report mentioned the number of referral cases to CHUM included normal deliveries and low risk symptoms.

Source : Basic Design Report, Monthly reports from CME/CHUM and from CSBs

3 Efficiency

The outputs of the project have been changed at minor portions but were appropriate, and both the project cost and the project period were within the plan (ratio against the plan: 97.7%, 94.1%). Therefore, efficiency of this project is high.

4 Sustainability

The operation and maintenance of facilities and equipment in CME/CHUM installed by the project have been carried out by CME/CHUM, the operating agency.

[1] Since it was difficult to directly contact with mothers who had delivered at CHUM and the target CSBs, the interviews were conducted with hospitalized or outpatient mothers at CHUM and the target CSBs at the time of site visit for this ex-post evaluation. Due to the time constraint, the number of samples for the interviews was as follows: 6 hospitalized mothers at CME/CHUM and 9 outpatients mothers at the CSBs.

[2] The data in 2007 refers "Annuaire des Statistiques du Secteur de Santé (Annual Health Sector Statistics) and the data in 2012 refers Gestion du Système des Informations Sanitaires (Health Information Management System)

The organizational structure for health care system has not been so much changed in Boeny Region: CHUM is a top referral medical institution and CBSs are primary healthcare institutions. In terms of the perinatal care, the referral system between CME/CHUM and the target CBSs has been well-established through the installation of facilities and equipment for CME/CHUM and 3 CSBs as well as the technical cooperation project to introduce the humanized care. In addition, CME/CHUM enhanced their function through the establishment of the integrated Perinatal Care Unit composed of the Clinical Research Unit and the Training Unit. As for the technical aspect, the perinatal care at CME/CHUM and the target CBSs using the facilities and equipment installed by the project have been delivered by the medical and health staff of CME/CHUM and the target CSBs with sufficient knowledge and technical skills. The technical cooperation project supported by JICA ("Project FAMI"[3]) contributed to improvement of capacity for the adequate perinatal care through delivering trainings for the health staff of CBSs in Boeny Region. Even after the Project FAMI, the trainings of perinatal care including the humanized care and the Evidence-Based Medicine (EBM) for the health staff in Mahajanga I, Mahajanga II and other districts have been delivered. On the other hand, the maintenance staff of CHUM may not have sufficient skills to repair equipment because some equipment (e.g. doppler auscultation, air conditioner) have not been adequately repaired or not been repaired despite that the technical manuals and the trainings were delivered to the technicians. In addition, the malfunctioning or break down of the equipment may attribute to the insufficient knowledge of health staff about how to carefully utilize the equipment, including preventive maintenance. Although the budget has been allocated to CHUM by the Ministry of Health and CHUM has own revenue source including payment from the patients for the medical services, the budget has not been sufficient to cover the operation and maintenance cost. Therefore, CME/CHUM has not been able to purchase sufficient spare parts. As a result, although most of the facilities and equipment installed in CME/CHUM have been in good conditions, some equipment have been malfunctioning or broken down. Also, equipment such as doppler auscultation provided for the target CBSs remain broken down. Furthermore, some equipment of CME/CHUM and the target CSBs have been utilized even after their expected lives expired due to the insufficient budget for replacement.

The Maternal and Child Health Complex at CHUM constructed by the project

Therefore, there are some problems in the technical and financial aspects as well as the current status of operation and maintenance and the sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to improve perinatal care in Boeny Region" by constructing facilities for CME and providing medical equipment to CHUM and 3 CSBs, as the number of deliveries at CME/CHUM and the target CSBs and the number of cases of treatment for high risk pregnancy and emergency obstetric increased, and the referral cases from the target CSBs to CME/CHUM has been improved. Positive impacts were also identified, such as the quality of perinatal care at CME/CHUM and the target CSBs and contribution to improvement of infant and maternal mortality in Boeny Region.

As for sustainability, the CME/CHUM has no problem in the structural sustainability due to the well-established referral system between CME/CHUM and the target CSBs. However, there are some minor problems observed in terms of the technical skills of the maintenance in CHUM, the budget for the operation and maintenance of the facilities and equipment as well as some malfunctioning or broken equipment.

In light of the above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations to operating agency:

[for CHUM and the target CSBs]

It is necessary to consider training seminars for maintenance staff in order to enhance their skills for proper maintenance and repair of equipment. Also, for preventive maintenance of medical equipment, trainings for health staff at the CBSs should be organized for adequate use of medical equipment such as doppler auscultation. In addition utilization of existing manuals is need to be promoted,

[for CHUM and the Regional Direction of Boeny]

Sufficient budget allocation to CME/CHUM and the target CSBs is essential for timely and adequate maintenance of the equipment.

Lessons learned for JICA:

- Synergy effects of grant aid and technical cooperation project enables to establish a model of perinatal care including adequate referral system between the top referral medical institution and primary health institutions through effective utilization of facilities and equipment installed by grant aid project with appropriate knowledge and skills of medical and health staff enhanced by technical cooperation project.
- For further improvement of sustainability, it is better to address not only technical capacity of maintenance staff but also capacity of preventive maintenance of medical equipment including adequate use of equipment by medical and health staff by the project.

[3] "The Improvement of Provincial Mother and Child Health by Utilizing the Function of Mahajanga University Hospital Center" (2005-2006)

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Jordan office: November, 2012

Country Name	The Project for Improving Medical Equipment of Southern Region's Hospitals and Al-Bashir Hospital
Jordan	

I. Project Outline

Project Cost	E/N Grant Limit: 523 million yen		Contract Amount: 481 million yen
E/N Date	May, 2006		
Completion Date	March, 2007		
Implementing Agency	Responsible Agency: Planning and Development Affairs, Ministry of Health, Implementing Agencies: Al-Bashir Hospital, Karak Hospital, Ma'an Hospital		
Related Studies	Basic Design Study: August 2005- March 2006		
Contracted Agencies	Consultant(s)	Fujita Planning Co., Ltd.	
	Contractor(s)	—	
	Supplier(s)	Marubeni Corporation, Sojitz Corporation	
Related Projects (if any)	[Japan's Cooperation] ・Integrating Health and Empowerment of Women in the South Region Project (TC, Sep. 2006 – Sep. 2011) [Other Donors' Cooperation] ・Medical system enhancement program (2004-2009, USAID) ・Health Sector Reform Project (2005-2007, USAID) ・Improvement of Al-Bashir Hospital (2005-2007, Saudi Arabia)		
Background	In Jordan, along with the economic growth, their disease pattern had become similar to that of developed countries. While, there still remained many problems of the quality of basic health services, such as in the field of the infectious disease control (ex. acute respiratory infections) and mother and child health. Medical equipment at those hospitals which provide appropriate health care services to many residents at the secondary and tertiary level, was often broken and obsolete. As a result, hospitals could not provide appropriate health care services for outpatients, neither carry out surgical operations. Al-Bashir Hospital, a leading hospital at the tertiary level in the Amman metropolitan area, could not provide a tertiary level health care services, because of basic equipment being obsolete and damaged. As the most of private hospitals were located in the metropolitan area, it was urgently needed to improve medical facilities in regional areas for the provision of equitable public health services. However, at the Karak and Ma'an Hospital located in the southern region where there are many poor population, could not provide the health care services in secondary level because of limited diagnostic capacities with obsolete and damaged equipment. Thus they had to transfer patients to the higher level hospitals in the metropolitan area. The Government of Jordan, in view of the afore-mentioned circumstances, requested the Japanese government a grant aid for renewal and improvement of basic medical equipment at the secondary and tertiary-level hospitals, which had played major roles of medical service delivery.		
Project Objectives	Outcome To restore appropriate functions and to improve medical services by providing the standard medical equipment to target hospitals, such as those Al-Bashir Hospital, tertiary level hospital in the Amman metropolitan area, and Karak and Ma'an Hospitals, secondary level hospitals in the southern region of Amman.		
	Outputs(s) Japanese Side To provide following medical equipment to be used for imaging diagnosis, surgical operation, intensive care unit and obstetrics and gynecology at those selected hospitals. Al-Bashir Hospital: Fluoroscopic X-ray Machine, General X-ray Machine, Mobile X-ray Machine, Ultrasound Apparatus, Ultrasound Intraoperative, Laparoscope, Operating Table, Anesthesia Machine, Operating Light, Electrosurgical Unit, High Pressure Steam Sterilizer, Surgical C-arm X-ray Machine, Patient Monitor, Infant Incubator, Ventilator, Infusion Pump, Blood Gas Analyzer, etc. Karak Hospital: General X-ray Machine, Vital Sign Monitor, Surgical C-ram X-ray Machine, Operating Table, Ventilator, Electrocardiograph, Patient Monitor, Blood Gas Analyzer, Suction Unit, Infant Incubator, Cardio Tocograph, Clposcope, etc. Ma'an Hospital: Fluoroscopic X-ray Machine, General X-ray Machine, Operating Microscope, Operating Table, Surgical C-arm X-ray Machine, Operating Instruments Set, Ventilator, Blood Gas Analyzer, Mobile X-ray Machine, Cardio Tocograph, Clposcope, Cryosurgery Unit, Operating Light, Ultrasound Apparatus, Delivery Table, etc. Jordanian Side To secure places for equipment (including the removal of existing equipment)		

	To provide electricity, water and drainage for the procured equipment

II. Result of the Evaluation

Summary of the Evaluation

In Jordan, along with its economic growth, people's standard of living has been improved. This has also reflected on the improvement of basic health care indicators. However, there still remained many problems in basic health services in the field of infectious disease control, mother and child health and reproductive health, etc. Under these circumstances, three hospitals targeted by the project, which were expected to function as a secondary and tiertiary level hospitals, have not provided medical services of such levels due to the obsolescent and deteriorated basic medical equipment.

This project has largely achieved its objectives to improve medical services by providing the standard medical equipment to target hospitals in both tertiary and secondary levels. In spite of the drastic increase of number of outpatients and inpatients as a consequence of scale-up medical services after the project, the waiting time for X-ray diagnosis and operations basically remained unchanged in 2012 compared with before the project (2008) at Al-Bashir Hospital.

At Karak and Ma'an Hospitals, the number of X-ray diagnosis and the number of operation were increased in 2012 compared with those before the project. Practical trainings provided at Al-Bashir and Ma'an Hospitals have highly evaluated because trainee can make use of those advanced equipment. Furthermore, both secondary level hospitals, Karak and Ma'an Hospitals came to be able to deal with cases which used to refer to the tertiary level hospitals and consequently, their capacity as hub medical institutions in the region has been increased.

As for sustainability, the current status of operation and maintenance was confirmed as appropriate as anticipated at the ex-ante evaluation. There was no problem observed in the project in terms of institutional, technical, financial aspects and the current status of operation and maintenance. It was identified that there was an already established system of operation and maintenance As for relevance, the project has been highly relevant with Jordan's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be highly satisfactory.

1 Relevance

This project has been highly relevant with Jordan's development policy "enhancement of efficiency and quality of health services" and "improvement of emergency healthcare" as set in the National Development Plan (2006-2015) and Comprehensive Development Program (2011-2013). It has also relevant with the development needs, such that the qualitative and quantitative improvement of basic health services and the equitable provision of health services, as well as Japan's ODA policy to qualitatively improve the medical facilities in the non-metropolitan regions at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved its objectives to restore the appropriate function and to improve medical services by providing the standard medical equipment to target hospitals in both tertiary and secondary levels.As for the Al-Bashir Hospital, a tertiary level hospital, the waiting time for X-ray diagnosis was shortened at the time of ex-post evaluation in 2012, compared to that of 2008. Much change has not been identified for the waiting time for operations. This is due to that the scale of medical services by the hospital has been substantially expanded after the project with the drastic increase of the number of outpatients and inpatients. According to interview with the Planning and Development Division of the Ministry of Health, the Al-Bashir Hospital has substantially increased its capacity as the top referral hospital among all hospitals in Jordan with the enhancement of doctors' medical technology related to diagnosis and treatment.

As for the Karak Hospital, a secondary-level hospital, the number of X-ray diagnosis and the number of operation were increased respectively by 40% and 22% in 2012 compared to those before the project. Likewise, at Ma'an Hospital, also a secondary-level hospital, the number of X-ray diagnosis and the number of operation were increased respectively by 8% and 5% in 2012 compared to those before the project. In case of Ma'an Hospital, these numerical values were decreased respectively 20% and 32% in 2008, it was due to that the hospital was partially closed for some time for extension and reconstruction of facilities. At Karak Hospital, a foreign body can now be removed by a bronchial endoscope and at Ma'an Hospital, an uterine polyp can be diagnosed through a uterine mirror, and General X-ray Machine can make it possible for the precise diagnoses. As such, both secondary level hospitals are able to deal with cases which used to be referred to the tertiary level hospitals and consequently, they are now recognized as hub medical institutions in the region.

Both of the Al-Bashir Hospital and Karak Hospital also serve as the educational institutions that have conducted practical trainings for medical staff. According to interview with the hospitals' personnel, those trainees who received trainings have highly evaluated the training program in which they can use those advanced equipment. In addition, it was also identified through the interview that the hospitals have gained the respects and trust among patients because there has been no increase of patient's claims in spite of drastic increase of outpatients. Furthermore, it was identified that the equipment provided by the project has produced a synergistic effect on the facilities of these hospitals which have been renovated by the governmental budget and other donors' supports, thus to enhance the improvement and efficiency of medical services, especially in treatment and diagnosis.

In the light of above, the target hospitals have restored appropriate functions as well as its size of service volume,and enhanced medical services as secondary- and tertiary-level hospitals .Therefore, effectiveness/impact of this project is high.

＜Quantitative effects＞

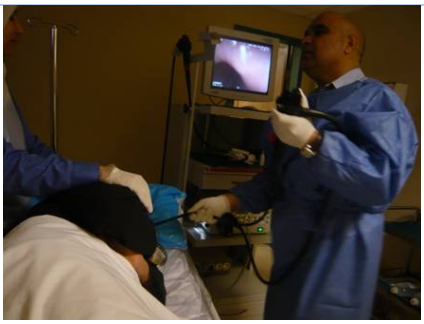
Al-Bashir Hospital	baseline value (2004)	target value (2008)	actual value(2008) (target year)	actual value (2012) (at ex-post evaluation)
Indicator:	2-3 days in	To be shortened	1-3 days in average	1-3 days in average

waiting time for X-ray diagnosis	average			
Indicator: waiting time for operations	5-7 days in average	To be shortened	5-7 days in average	5-7 days in average
Karak Hospital	baseline value (2004)	target value (2008)	actual value(2008) (target year) (% against baseline value in 2004)	actual value(2012) (at ex-post evaluation) (% against baseline value in 2004)
Indicator: Number of X-ray diagnosis	36,165 cases	To be increased	40,259 cases(+11%)	50,701 cases(+40%)
Indicator: Number of operations	2,452 cases	To be increased	2,351 cases(-4%)	2,996 cases(+22%)
Ma'an Hospital	baseline value (2004)	target value (2008)	actual value(2008) (target year) (% against baseline value in 2004)	actual value(2012) (at ex-post evaluation) (% against baseline value in 2004)
Indicator: Number of X-ray diagnosis	27,075 cases	To be increased	21,565 cases (-20%)	29,140 cases (+8%)
Indicator: Number of operations	1,068 cases	To be increased	731 cases (-32%)	1,123 cases (+5%)

(Sources: target hospitals)

(Photos)

Al-Bashir Hospital
Fluoroscopic X-ray



Al-Bashir Hospital
Laparoscope set (upper part)

Karak Hospital
Infant Incubator

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 92%, 82%). Therefore, efficiency of this project is high.

4 Sustainability

The facilities/equipment provided by the project are maintained by the medical equipment maintenance department under Ministry of Health.

As for the institutional aspect, although there has not been substantial changes in the organization as well as the medical fee collection system as opposed to those at the time of ex-ante evaluation, three (3) target hospitals, have considerably increased the number of their staff such as doctors and nurses in order to cope with the expanding medical services.

Regarding the technical aspect, operation and management of equipment have been properly carried out and operation manuals have been effectively utilized. Repair of equipment has been carried out by those technical engineers dispatched from the medical equipment maintenance department under Ministry of Health and their technical level has been highly evaluated, so that they can even provide technical assistance for neighboring countries.

As for the financial aspect, the operation and maintenance costs of those medical equipment are borne by the Ministry of Health. Maintenance fee paid for outsourced venders has increased by 50% in 2012 compared to that of 2004 and it is confirmed that the budget for consumables is properly secured.

Biomedical engineers dispatched from the Ministry of Health to Al-Bashir Hospital, Karak Hospital and Ma'an Hospital have regularly inspected the status of operation and maintenance and the results of inspection are to be shared with directors and the staff of the medical equipment maintenance department under Ministry of Health. The current conditions of the procured equipment were basically good with a few exceptions, and damaged equipment have been under repair and the cause of damages were properly examined.

In the light of above, this project has no problem in institutional, technical and financial aspects, and the current status of operation and maintenance of the Implementing agency. Therefore, sustainability of this project is high.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

None

Lessons learned for JICA:

In case of equipment provision, it is important to make sure at the time of ex-ante evaluation whether recipient countries have a proper system to carry out the maintenance of such equipment, so that those equipment can be utilized to generate the intended effects.

High level of sustainability of this project is largely attributable to the already established system of equipment maintenance under the Ministry of Health which can provide a set of maintenance services including regular inspections.

Internal Ex-Post Evaluation for Technical Cooperation Project

Conducted by Indonesia Office: March, 2014

Country Name	Gunung-Halimun-Salak National Park Management Project
Indonesia	

Ⅰ Project Outline

Project Cost	573 million yen
Project Period	February 2004 – January 2009
Implementing Agency	Directorate General of Forest Protection and Natural Conservation, Ministry of Forestry (PHKA) Natural Conservation Information Center (NCIC)
Cooperation Agency in Japan	Ministry of Environment
Related Projects	Japanese Assistance: 【Technical Cooperation Projects】: Biodiversity Conservation Project Phase I (1995-1998) Biodiversity Conservation Project Phase II (1998-2003), Strategy for Strengthening Biodiversity Conservation through Appropriate National Park Management and Human Resources Development (2009-2012) 【Grant Aid Projects】: Construction of animal research laboratory for Research Center for Biology at the Indonesian Institute of Sciences (LIPI) in Bogor province in Cibinong, Establishment of the Nature Conservation Information Center (NCIC) and Construction of a national park management office and research center in Gunung-Halimun-Salak National Park（GHSNP）(1997) 【JICA Partnership Program】:Nature Resource Management Project in Gunung Halimun-Salak National Park, Lebak District, Banten Province 【JOCVs】: In the field of environmental Education for three national parks
Background	Indonesia is known as a high-biodiversity country. However, the rapid population explosion and industrial development have led to deforestation and biodiversity loss. The Gunung Halimun-Salak National Park (GHSNP), established in 1992, is a conservation area on the Java Island with an area of 113,000 hectares that contains precious species such as Java Leopards and Java Hawk-eagles. GHSNP has suffered from persistent forest degradation and conflict between local communities since the area is designated as the conservation area in 1992 and largely expanded with its area in 2003. JICA has provided with the Indonesian Governmnet technical cooperation on biodiversity conservation since 1995. Gunung-Halimun-Salak National Park Management Project was implemented from 2004 to 2009 in order to promote biodiversity conservation and sustainable natural resource utilization in GHSNP.
Inputs	Japanese Side: 1. Experts: 6 Long-term Experts, 12 Short-term Experts 2. Trainees received: 29 persons 3. Third-Country Training in Malaysia: 15 persons 4. Equipment: Approximately 37.7 million yen 5. Local Cost: 114 million yen Indonesia Side: 1. Staff allocated: 19 persons 2. Land and facilities: Provision of spaces for the Project Offices 3. Local Cost: Approximately 14.5 million IDR (Indonesia Rupiah)
Project Objective	Overall goal: Biodiversity conservation and sustainable natural resource utilization are promoted in national parks in Indonesia. Project Purpose: 1. Biodiversity of Gunung Halimun-Salak National Park (GHSNP) is properly conserved and sustainable natural resource utilization is promoted in GHSNP. 2. Useful lessons and experiences on national park management obtained through Biodiversity Conservation Project (BCP) and this project are shared with park managers, staff members of other national parks and officials of the Ministry of Forestry. Outputs: 1.1 The management framework of GHSNP is strengthened with involvement of all stakeholders, and the policy/strategy for the management of GHSNP are shared by majority of the stakeholders. The management framework of GHSNP is strengthened with involvement of many stakeholders such as local governments, local communities and the policy/strategy for the management of GHSNP are shared by the stakeholders. 1.2 Information systems and media prerequisite to the management of GHSNP are developed. 1.3 Researches on biodiversity of GHSNP are encouraged, and monitoring and protection of endangered species, particularly the three endangered species: Leopards, Java Hawk-eagles, Java Gibbons, are strengthened. 1.4 Conservation activities with local communities' participation and their sustainable natural resource utilization are encouraged in strategic locations of GHSNP, and these experiences are introduced to their villages in and around GHSNP. 1.5 Function of GHSNP to ecotourism, environmental education (EE) and promotion is strengthened. 2.1 Institutional and individual capabilities on managing GHSNP are strengthened. 2.2 Useful knowledge, skills/techniques that are methodologies on national park management obtained

	through BCP and this project are diffused to other national park management.

Ⅱ Result of the Evaluation

Summary of the Evaluation
This project has developed long and medium-term park management plans/system, strengthened capacity of the staff, and established collaborative management with local communities, and shared those experiences with other national parks, for the project purposes of (1) conserving biodiversity of the GHSNP and (2) obtaining lessons and experiences on national park management. The GHSNP was selected as one of the model national parks by the Ministry of Forestry, and other national park staffs have visited the GHSNP to observe the good practices of national park management. Some of them have started Conservation Model Village (MKK) programs, the participatory conservation activities introduced by this project. However, progress of biodiversity conservation and sustainable natural resource utilization could not be measured objectively at the ex-post evaluation, since objective indicators were not defined at the planning stage. Efforts made by GHSNP and other national parks abovementioned are supposed to have contributed to the overall goal of the project: promotion of biodiversity conservation and sustainable natural resource utilization in national parks in Indonesia. However, the extent of contribution of this project to the achievement could not be measured because the overall goal is indeed quite high. As for sustainability, a problem has been observed in terms of the implementation agency's financial aspect due to insufficient budget of the GHSNP to fully undertake biodiversity conservation activities. For relevance, the project has been highly relevant with Indonesia's development policy, development needs as well as Japan's ODA policy. For efficiency, the project cost significantly exceeded the planned budget. In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance
This project is highly relevant with Indonesian development policy (e.g. urgent coping with extreme threats to biodiversity, illegal logging, and unsustainable forest management and deforestation) as set in the 5 Year's Development Plan of the Ministry of Forestry, development needs on biodiversity conservation especially in conservation area including national parks, as well as Japan's ODA policy toward Indonesia, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.
2 Effectiveness / Impact
This project has achieved some extent of the project purposes and the overall goal. The project purpose: (1) "Biodiversity of the Gunung Halimun-Salak National Park (GHSNP) is properly conserved and sustainable natural resource utilization are promoted in GHSNP", was somewhat achieved by the end of the project, through: 1) development of the strategic / management plans (20 years, 5 years, and annual), 2) development of the park management system, 3) capacity building of national park staff, and 4) promoting collaborative management with local communities. The activities regarding biodiversity conservation and sustainable natural resources utilization have been continuously conducted by GHSNP after the project completion. GHSNP has monitored the endangered species in collaboration with the universities and research institutions. Data for more than 200 umbrella species and all animal, 500 species, have been collected annually. GHSNP has monitored the illegal logging and mining using the national park management system. Local communities have participated in conservation activities through the Conservation Model Village (MKK) program as a means of collaborative management. The MKK program involves local communities in conservation activities as well as provide alternative livelihood for eradicating illegal activities in the park. The Program was started in two villages during the project in order to establish a dissemination model in GHSNP, and it is implemented in 26 villages in the GHSNP area at the time of ex-post evaluation. 63,047 people visited GHSNP for the eco-tours in 2012. The favorable achievement of the project has called in several private companies as their CSR activities. Those funds through CSR have been utilized for conservation activities of GHSNP. However, progress of biodiversity conservation and sustainable natural resource utilization could not be measured clearly at the ex-post evaluation, due to lack of objective indicator or measurable target value such as decreasing the number of people engaging in illegal deforestation and slowing down the speed of deforestation. The project purpose (2): "Useful lessons and experiences on national park management obtained through Biodiversity Conservation Project (BCP) and this project are shared with park managers, staff members of other national parks and officials of the Ministry of Forestry", was achieved by the end of the project through seminars and trainings. Since GHSNP was selected as one of the model national parks in Indonesia by the Ministry of Forestry (Decision of the Director General of Forest Protection and Natural Conservation (PHKA) Number SK.128/IV-Sek/HO/2006 dated 25 July 2006), other national park staff have visited GHSNP to observe the progressive examples of national park management with community participation. Some national parks have introduced the Conservation Model Village (MKK) programs. The project is aiming at the Overall Goal: "Biodiversity conservation and sustainable natural resource utilization are promoted in national parks in Indonesia", based on the achievement of the project purposes and continued efforts by the Ministry of Forestry, GHSNP and other national parks (note1). However, the extent of contribution of this project to the achievement could not be measured because the overall goal is indeed quite high. Therefore, effectiveness/impact of this project is fair

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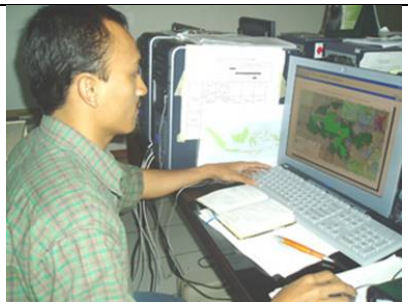
		
Collaborative conservation activities by national park staff and local communities		National park staff who is operating the information system for the park management

3 Efficiency

Although the project period was within the plan (ratio against the plan:100%), some inputs were not appropriate to produce the outputs. During the project, assignment of some C/Ps was delayed for several months at the beginning of the project. The assigned C/Ps were not be able to participate fully in the project activities because all C/Ps had own duties in their positions. The number of the Japanese long-term experts was insufficient for the planned project activities.

The project cost was significantly exceeded the plan (ratio against the plan: 164%) because of additional inputs such as hiring of local consultants to support the project activities. Therefore, efficiency of this project is fair.

4 Sustainability

There are likely no critical challenges in policy, institutional, and technical aspects of the implementing agencies and GHSNP for promoting biodiversity conservation in GHSNP. The project scope is consistent with the current Strategic Plan of the Ministry of Forestry (2010-2014), which the national park conservation is targeted as one of the strategic areas. Capacity development of national park staff has now been successfully carried out by the Center for Forestry Education and Training (CFET) of MoF. Most of the guidelines, manuals, maps, and equipment for biodiversity conservation in GHSNP, which were developed by the project, have been utilized in their daily work.

As for the financial aspect, lack of budget of GHSNP for necessary activities on biodiversity conservation is observed. In order to secure financial sustainability, GHSNP has tried to seek opportunities to collaborate with private companies (e.g. CSR) or NGOs. Some activities have been conducting to utilize external fund. (e.g. the Keidanren nature conservation fund supports Environmental Education in the Gunung Halimun Salak national park.)

Therefore, the sustainability of this project is fair.

Ⅲ Recommendations & Lessons Learned

Recommendations for the Implementing Agency：

1. The results of this project, such as development of the mid- and long-term park management plans/system, the park management system, capacity building of national park staff, and promoting of the collaborative management with local communities should be continuously shared with other national parks.
2. The necessary budget for biodiversity conservation activities in GHSNP should be secured. Other financial resources besides the budget from MoF such as funding through CSR should be sought continuously..

Lessons learned for JICA：

1. The overall goal should be appropriately set with the realistic targets which is achievable after 3-5 years of the project termination as well as measurable indicators.
2. In order to fully achieve its outcomes, a project should be logically designed with setting of appropriate indicators that can objectively monitor the actual progress of project purpose.
3. The necessary input, such as sufficient number of Japanese experts, should be secured considering activities toward the project purpose.

Note1: The subsequent project, “Strategy for Strengthening Biodiversity Conservation through Appropriate National Park Management and Human Resources Development Project (2009-2012)” has contributed as well to extend the project results to other national parks through the capacity building of trainers of the Center for Forestry Education and Education and Training (CFET) and national park staff.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Indonesia office: March, 2014

Country Name	The Project for Institutional Support for Food Security
Indonesia	

I. Project Outline

Project Cost	282 million yen	
Project Period	March 2005 – February 2008	
Implementing Agency	Agency for Food Security (AFS), Ministry of Agriculture	
Cooperation Agency in Japan	Ministry of Agriculture, Forest and Fisheries	
Related Projects (if any)	Japan's cooperation: ・ The Follow-up Activities for the Food Supply and Demand Policy Simulation Model Activity (March 2 to March 10, 2010) Other donors' cooperation: ・ FAO: National Program for Food Security (2004-2005), Special Program for Food Security (2001-2005) ・ WFP: Food Insecurity Atlas (2003) ・ IFAD: Participatory Integrated Development in Rain-fed Area (2001-2004) ・ USAID: Macro Policies for Food Security (July 1999-July 2004)	
Background	Indonesia, with the population of over 200 million, aimed to achieve self-sufficiency of food, especially by producing rice. In 2001, AFS was established in the Ministry of Agriculture for the purpose of preparation, implementation and coordination of the food security policies, and research on food security in the nation. In the same time, National Food Security Council (NFSC), chaired by the President of Indonesia and comprised of members from 15 government authorities including the Ministry of Agriculture was established. The NFSC aimed at formulation of national food security policies, and coordination of relevant actions of the ministries. The AFS acted as the secretariat of NFSC. However, because of the complicated structure of the related government organizations, Agency for Food Procurement (BULOG) and other ministries/agencies had their different own policies apart from AFS. In addition, due to insufficient capability of data collection and analytical work on food demand/supply, effective policy making and implementation based on objective data/information was far beyond realization.	
Inputs	Japanese Side	Indonesia Side
	1. Experts: 3 for Long term, 7 for Short term 2. Trainees Received in Japan: 29 persons 3. Equipment: network servers and software, etc. 4. Local Cost: cost for training, workshops and seminars 5. Others: cost for local consultants	1. Personnel assigned: 14 persons from AFS 2. Local Cost 3. Land and Facilities: 3 offices for Japanese experts and local consultants with utilities in both central and provincial AFS
Project Objectives	Overall goal Policies on food security are effectively planned.	
	Project Objective(s) Institutional capacity in establishing food security is strengthened.	
	Output(s) ・ Food supply and demand policy simulation model is developed and utilized. ・ Food Security Management Information System with Web bases is improved and operated. ・ Ability in food security policy planning is enhanced. ・ Stakeholder perception on Food Security is improved. ・ Methodology and mechanism for monitoring survey of food security is improved.	

II. Result of the Evaluation

Summary of the Evaluation
AFS, as an agency to prepare, implement and coordinate food security policies and conduct research on food security, was facing a need to enhance its capacity of data collection and analytical work on food demand/supply and policy making based on such data. This project achieved to some extent the development of the three tools for AFS's food security administration and training for AFS staff on use of those tools and food security planning, for the project purpose of strengthening institutional capacity in food security, and part of the tools have been modified and used after project completion. However, the food supply and demand policy simulation model has rarely been used due to factors such as their too complicated and

difficult-to-use nature. Accordingly, the project partially contributed to more effective planning of food security policies of the overall goal. As for sustainability, while there was no major problem in terms of the implementing agency's system to support Indonesia's food security in general, several problems have been observed in terms of policy background and the technical and financial aspects for this particular project as the implementing agency has little intention to use the model developed under this project.

For relevance, the project has been relevant with Indonesia's development policy, development needs as well as Japan's ODA policy. For efficiency, both the project cost and project period were within the plan.

In light of the above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Indonesia's development policy "food security" and "establishment of the food security system" as set in the Indonesian Agricultural Development Plans (2000-2004 and 2005-2009), development needs for further comprehensive and high-integrity food security operation tool to promote food security, as well as Japan's ODA policy to improve food security and nutrition status as set in the JICA's country-specific development plan toward Indonesia (2001), at the times of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project somehow achieved the project purpose of strengthening institutional capacity in food security by the time of project completion, as it developed three tools for AFS's food security administration, (i) food supply and demand policy simulation model, (ii) food security management information system, and (iii) food supply and demand monitoring system, and trained AFS staff on use of those tools and on food security planning. After the project completion, AFS has been using part of those tools with some modification based on needs and data availability. Regarding (i), although the training provided by this project improved capacity of the trainees at individual level, the model is no longer used and AFS has developed a new system instead. According to the implementing agency, difficulties in data collection (the model required huge amount of data collection and input, which was not completed by the end of the project) and complicated operation of the model were reasons for not using the model in the end. As for (ii), AFS still running the system developed by the project with the modification and up-grading by AFS's own effort and they utilized the system for collection of food availability, distribution and consumption data. Further, as to (iii), a monitoring format developed by the food supply and demand monitoring system has been utilized with modification in monitoring activities which are regular tasks for AFS staffs.

With respect to the overall goal, policies on food security have become planned more effectively since NFSC's policy formulation was conducted based on the data collected by AFS who applied part of the systems as mentioned above . Regarding AFS's contribution to effective policy planning, AFS collects weekly and monthly rice prices at each village, prefecture, state level and they submit these data to Ministry of Agriculture and Economic Adjustment Minister. These data are important sources for policy makers to decide on the implementation of price interventions. Further, AFS collected the data of rice consumption and yields at provincial and state level and created analysis report based on these data. This report is utilized by NFSC on forming import policies for rice.

In this way, the project purpose was partially achieved and sustained to some extent, and the overall goal set by its target indicator was achieved. However, contributions of this project to such improvement are limited to providing data, and the model and systems introduced by the project were not fully used after the completion of the project.
Therefore, effectiveness/impact of this project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Institutional capacity in establishing food security is strengthened.	Proposed policies related to the project on food security are drafted in AFS[1]	(Project Completion) The project developed 3 tools and capacity of AFS staff were strengthened through training. (Ex-post Evaluation) AFS is using a model that it developed after project completion (not the one developed under this project), but using part of the project-developed tools with some modification.
(Overall goal) Policies on food security are effectively planned.	Policies on food security are proposed.	(Ex-post Evaluation) NSFC has proposed policies with support from AFS. The contribution of this project is AFC's providing data to support NSFC to form food security policies.

Sources : Terminal Evaluation Report, Interviews with counterparts

3 Efficiency

The project cost and the project period were within the plan (ratio against the plan: 94% and 100%), Therefore, efficiency of this project is high.

4 Sustainability

AFS, the implementing agency, has no major problem in its policy background as well as institutional, technical and financial aspects of planning and implementing food security policies in general: the food security policy of the new Food Law (2012) of the government of Indonesia and the role of AFS have not been changed even though there was some organizational reforms, and AFS developed and operates the current food security administration system with allocation of

[1] The terminal evaluation questioned the appropriateness of this indicator that was set in the planning stage, and alternatively used the development of tools for AFS's food security administration and capacity building on those tools. The ex-post evaluation followed this idea and checked if the capacity building based on such tools has been practiced /institutionalized.

budget, though not sufficient in general, to support provincial and district governments.

However, concerning sustainability of this particular project, there are several issues. In the policy background, the use of the model developed by this project has not fully gained policy support. In the technical aspect, most of ex-counterpart personnel have still remained in AFS and execute their duty in AFS with general planning capacity which was improved partly by the project implementation. However, while they could modify and use part of the management information system and monitoring format, difficulties in data collection and in operation of the models were observed. Further, there is no training related to the utilization of the systems developed by the project. In the financial aspect, whole budget for AFS is mostly secured, but specific budget for enhancing the project effect (e.g. reintroduction of the model developed by the project) or the system training is not allocated.

Therefore, sustainability of effectiveness of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

None

Lessons learned for JICA

- In the project that introduced a highly technical model, difficulties in data collection and in operation of the models were observed as the personnel in charge are not capable of operating and updating the project models/systems. Therefore, the appropriateness of the technical level required for the counterpart side after the project completion should be carefully considered in the planning stage, and the assignment of experts or other inputs from the Japanese side should be sufficient to that required level.
- Based on the fact that the whole set of the model or part of systems introduced by the project were not utilized after the project completion, implementing agency and JICA should prepare workable and attainable exit strategy during the project period and if necessary both sides should agree upon post-project plan as a mutual commitment to the project for strengthening project sustainability.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Indonesia Office/ December, 2013

Country Name	The Institutional Revitalization Project for Flood Management in JABODETABEK
Republic of Indonesia	

I. Project Outline

Background	In Jakarta, the topographical conditions of having 10 rivers running on the flat alluvial fan repeatedly caused flood damage for long time. Also, the recent concentration of population and unregulated formulation of overcrowded residential areas increased the city's vulnerability to floods. While river and drainage improvement would take long time, studies such as by JICA pointed out several urgent issues related to non-structural measures including lack of record and data on current situation of rivers and related facilities, underutilization of existing river structures and drainage, ambiguity of probable flood area and criteria for flood alert, and insufficient consideration for prevention of runoff increase.		
Objectives of the Project	1. Overall Goal: Non-structural flood mitigation measures are planned and implemented to reduce flood damage in JABODETABEK (Jakarta, Bekasi, Bogor, Depok and Tangerang). 2. Project Purpose: Institutional capabilities for flood mitigation in JABODETABEK are improved by taking non-structural measures. 3. Assumed steps for achieving the project goals[1]: This project develops draft manuals and guideline on non-structural measures through data collection and analysis in the pilot area and training. The drafts are verified and revised after actual flooding, and then finalized. By utilizing the manuals and guideline in all river water systems in JABODETABEK, including non-pilot areas, non-structural measures ((i) management of river and operation of drainage structures, (ii) provision and communication of flood information and evacuation, and (iii) prevention of runoff increase) are planned and implemented, and consequently, flood damage is reduced.		
Activities of the project	1. Project site: Whole JABODETABEK area, including the Ciliwung river basin (including the western banjir canal) and Central Jakarta as the pilot area. 2. Main activities: Collection and analysis of basic data (including OJT), development of textbooks, training/seminars/workshops based on the textbooks, presentation and discussions at various meetings, and development of guideline and manuals by the counterpart personnel. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 10 persons 2) Trainees received: 4 persons 3) Equipment: vehicles, office equipment, survey equipment, etc. 4) Cost for hiring local consultant Indonesia Side 1. Staff allocated: 62 persons 2. Land and facilities (project office) 3. Others (project operation cost)		
Project Period	March 2007 to March 2010	Project Cost	326 million yen
Implementing Agency	Directorate of River, Lake and Reservoir, Directorate General of Water Resources, Ministry of Public Works		
Cooperation Agency in Japan	Ministry of Land, Infrastructure, Transport and Tourism, Yachiyo Engineering, Co. Ltd.		
Related Projects (if any)	Japan's cooperation: The study on comprehensive river water management plan in Jabotabek (Development Study, 1997), Ciliwung-Cisadane River Flood Control Project (Japanese ODA Loan, 1998-2007), the Urgent Study on Flood Damage in JABODETABEK (Development Study, 2002), Project for Capacity Development of Jakarta Comprehensive Flood Management (Technical Cooperation, 2010-2013; hereafter "the subsequent (technical cooperation) project") Other donors' cooperation: Western Java Environmental Management Project (World Bank, 1999-)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Indonesia's country development policy "reduction of damage caused by natural disaster" as set in the National Medium-Term Development Plan (2004) and "reduction of floods and non-structural measures" as set in the , National Medium-Term Development Plan (2010-2014), development needs "development of data related to flood control", "good utilization of existing river structures", "determination of probable flood area and flood warning criteria", "consideration of prevention of runoff increase" and "reduction of floods through non-structural flood mitigation measures in the Ciliwung river basin", as well as Japan's ODA policy, Country Assistance Program (2004) at the time of both ex-ante and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

Under this project, seven draft manuals and one draft guideline for non-structural measures (hereafter "the (draft) manuals") were developed by the counterpart personnel who received technical transfer. To fully achieve the project purpose

[1] Reviewed at the time of the ex-post evaluation.

“improvement of institutional capabilities for flood mitigation”, the project planned to finalize the draft manuals through verification of adaptability and revision after actual flooding situations. However, there was no flooding during the project implementation period. When a flood occurred after project completion in January 2013, the draft manuals were not brought to the field as urgency and mobility were given higher priority, and adaptability of those documents were not verified, either. Nonetheless, Director General of Water Resources signed and approved the draft manuals as the ones that could be utilized in operation. Therefore, the project purpose was achieved to a certain extent.

With respect to the overall goal, hydrological data of the pilot area have been continuously collected, analyzed and used for integrated flood control planning under the subsequent project. The above-mentioned manuals have been distributed to relevant organizations. Cooperation among those organizations for prevention of runoff increase[2] has also been promoted under the subsequent project that took over this task. Updating of the Inventory of Rivers and River Structures and maintenance of river structures have been carried out mostly in accordance with the manual. On the other hand, the models developed such as the flood runoff model and the comprehensive flood analysis model have not been used for flood control operation as effectiveness of those models has not been fully recognized. Also, review of the criteria for alert operation based on analysis of river capacity and water level has not taken place in current operation because it would need more facility investment and human resource development. As for flood damage, the implementing agency explained that the same amount of rainfall would not always cause damage, and thus it would be difficult to assess whether damage has decreased.

Therefore, effectiveness/ impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Institutional capabilities for flood mitigation in JABODETABEK are improved by taking non-structural measures.	Status of utilizing inventory database system	(Project completion) The draft Inventory of Rivers and River Structures was developed through On the Job Training(OJT). The draft Manual for Inventory of Rivers and River Structures (Manual 1) was developed by counterpart personnel. (Ex-post evaluation) Ciliwung-Cisadane River Basin Office (BBWSCC) has revised the Inventory with use of the manual. Although the manual was not verified/revised in actual flooding events, it was used for integrated flood control planning in the subsequent project.
	Improvement of management of rivers and operation	(Project completion) Data analyses were carried out through OJT, and the draft Maintenance Manual on River Structures (Manual 2), the draft Manual of River Facility Evaluation (Manual 3) and the draft Operation Manual on Gates and Pumps (Manual 4) were developed by counterpart personnel. (Ex-post evaluation) BBWSCC and Special State Capital of Jakarta (DKI Jakarta) have used the manuals for operation and maintenance of their facilities.
	Status (frequency) of utilizing flood risk map and criteria for alert operation	(Project completion) Activities such as GPS survey in the Ciliwung river basin, development of the comprehensive flood analysis model and application of this model to flooding simulations, development of the flood risk map, and recommendation on criteria for flood alert operation were carried out through OJT. The draft Manual of Drawing up Probable Flood Area (Manual 5), the draft Manual for Post Flood Survey (Manual 6), the draft Flood Alert Manual (Manual 7) and the draft Runoff Control Guideline (Guideline 1) were developed by counterpart personnel. (Ex-post evaluation) BBWSCC (in charge of flood alert operation in JABODETABEK) sometimes refers to the manuals, but the existing criteria for alert operation is used.
(Overall goal) Non-structural flood mitigation measures are planned and implemented to reduce flood damage in JABODETABEK.	The damages for life and property caused by flooding will be reduced in JABODETABEK area.	(Ex-post evaluation) The flood in January 2013 caused 41 deaths and evacuation of 45,000 people. 98 out of 267 sub districts in DKI Jakarta were flooded. In lower areas along the coast, flooding lasted for one week. However, the same amount of rainfall would not always cause damage, and thus it would be difficult to assess whether damage has decreased.
	(Alternative indicator) The manuals developed under this project are utilized by relevant organizations including local government units as official operational directions.	(Ex-post evaluation) The draft manuals were approved by Director General of Water Resources and distributed to relevant organizations. BBWSCC and DKI Jakarta have referred to them for operation and maintenance of drainage facilities. Also, they have been referred to by BBWSCC in providing flood information and by DKI Jakarta (Disaster Department) in evacuation operation. In an event of flooding, an emergency response team consisting of relevant organizations is formed, and ex- counterpart personnel of this project join the team and utilize the knowledge they gained from the project.

Sources：Project Completion Report and response to the questionnaire by the implementing agency.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was as planned, the project cost was slightly higher than the plan (ratio against the plan: 116%) because of the revision of the project implementation structure and dispatch of an additional long-term expert. Therefore, efficiency of the project is fair.

4 Sustainability

[2] The necessity for prevention of runoff increase was mentioned in the draft Water Resources Management Strategic Plan that is to be approved within 2013, and the plan will be developed into the Basin Water Resources Management Plan to be developed within 2015.

In the policy aspect, this project is still given importance in Indonesia as non-structural measures are instructed in existing government regulations related to rivers and natural resource management. Also, the draft Water Resources Management Strategic Plan for the Ciliwung-Cisadane river basin (to be approved within 2013) mentions the integrated flood control plan focusing on prevention of runoff increase that were handled by this project. On the other hand, there is no policy or regulation that gives official status to the manuals. Institutionally, cooperation among organizations related to the Ciliwung-Cisadane river basin has progressed: the Coordination Team of Water Resources Management for Interprovincial River Basin (TKPSDA), consisting of 58 organizations including Directorate General of Water Resources, related provincial government organizations, NGOs and the private sector, was officially launched in June 2013. By this, the system of implementation, monitoring and evaluation of integrated flood control was developed. In the technical aspect, while many ex-counterpart personnel were transferred, other staff can follow most contents of the manuals that are on the knowledge they use in their daily operation. However, without a system of extending the transferred knowledge from ex-counterpart personnel to other staff, there is uncertainty in continuity of more advanced knowledge transferred under this project. In the financial aspect, non-structural measures are implemented using national budget but without specific expense item as they are part of the government's routine operation. Therefore, it cannot be confirmed whether sufficient budget is allocated.

From these findings, it is considered that the project has some problems in the policy background as well as technical and financial aspects of the implementing agency; therefore, sustainability of effectiveness of the project is fair.

5 Summary of the Evaluation

For the project purpose of improving institutional capabilities for flood mitigation in JABODETABEK by taking non-structural measures, a series of draft manuals was developed by counterpart personnel who received technical transfer, while the planned verification of adaptability and revision of those documents based on actual flooding occurrence did not take place. For the overall goal, Ciliwung-Cisadane River Basin Office and DKI Jakarta have referred to the manuals in operation and maintenance of river structures and other work. Some non-structural measures such as prevention of runoff increase have been taken over to the subsequent technical cooperation project, but some others proposed by this project have not been adopted. As for sustainability, some problems were observed in the policy, technical and financial aspects such as lack of policy back-ups to the manuals, transfer of ex-counterpart personnel and concerns on securement of budget. On efficiency, project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory while the expected results have been attained to a certain extent in terms of effectiveness/impact and sustainability.

III. Recommendations & Lessons Learned

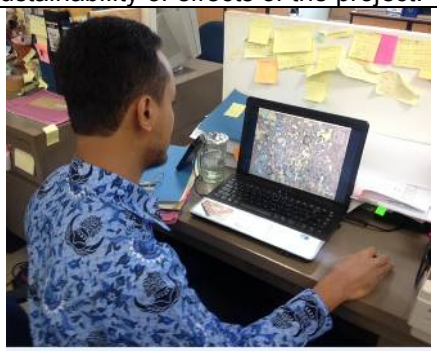
Recommendations for Implementing agency:

Recognition of the necessity for non-structural flood control measures has been further enhanced among relevant parties thanks to the subsequent technical cooperation project. As a result, it was agreed that non-structural measures handled by the projects would be reflected in the Water Resources Management Strategic Plan (POLA) and the Basin Water Resources Management Plan (RENCANA) that are to be planned. The Indonesian side is required to formulate POLA and RENCANA based on this agreement and to ensure a steady promotion of non-structural measures. In addition, it is desirable that application of the models developed under this project to flood prediction, which has not taken place in current operation, be considered in terms of cost effectiveness.

Lessons learned for JICA

The subsequent project was successful in further enhancing recognition of non-structural measures but did not follow-up some uncompleted tasks of this project such as verification of the draft manuals. When planning a new project, particularly the one in the same field of cooperation as the precedent project, it is desirable to take over the idea (overall goal) of the precedent project and include activities to follow-up the items that were implemented as much as possible. Also, as flood control needs to involve many organizations but transfer of staff is inevitable, it is important to propose a system to disseminate the outputs of technical transfer to those other than the counterpart personnel of the project. Selection of counterpart personnel is important, too. In this respect, the selection made in this project – a balanced mix of senior and junior personnel of relevant organizations – was appropriate in that it enabled smooth decision-making and in view of sustainability of effects of the project.

Manuals prepared by the Project



Flood simulation modeling utilized by the staff

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Philippines Office/ January, 2014

Country Name	The Project on the Development and Promotion of Location-Specific Integrated High-Yielding Rice and Rice-Based Technologies.
Republic of the Philippines	

I. Project Outline

Background	In the Philippines, rice is the key crop accounting for about 40% of the agricultural outputs. The Philippine Rice Research Institute (PhilRice) was established in 1985 for research and development of rice and extension support. Japan has been continuously supporting PhilRice mainly focusing on basic research of rice cultivation technologies and capacity development of researchers. Since there was a concern about shortage of rice in future due to the limited cultivated areas, increases in productivity of rice became a critical issue. Also, improvement of agricultural productivity is important sincemore than 70% of the poor population is engaged in the agriculture sector. Therefore, practical application and dissemination of technologies developed by PhilRice was essential for improvement of rice productivity as well as income of poor farmers.		
Objectives of the Project	1. Overall Goal: 1) Productivity of rice in the target areas is increased 2) Agricultural income of farmers in the target areas is increased. 2. Project Purpose: Rice productivity of participating farmers is improved. 3. Assumed steps for achieving the project goals[1] The project implemented development of technical manuals, trainings for extension staff and farmers, joint experiment activities at Technology Demonstration Farms (TDFs) by researchers of PhilRice, extension staff and farmers and development of TDF in order to introduce location-specific technologies, including high-yield variety of rice, double cropping technology, vegetable and upland crops. Through these activities, the project aims at improving rice productivity of farmers participating in TDF trainings and farmers in the target area and thereby rice productivity and agricultural income of the farmers in the target areas are improved.		
Activities of the project	1. Project site: 7 municipalities (Rizal, Cabanatuan and San Antonio in Central Luzon, Currimao and Cabugao in Northwest Luzon, and Bayugan and Butuan in Northern Mindanao) 2. Main activities: Development of technical manuals, trainings of extension staff and farmers, establishment of TDF committees, development of TDFs in the target areas, experiment and evaluation of location-specific technologies, and development of Demonstration Farms (DFs) by Local Government Unit (LGUs) 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 17 persons 2) Trainees received: 16 persons 3) Equipment: Laboratory equipment, including Nitrogen Analyzer, microscopes, vehicles, PCs, etc. 4) Local Cost: Construction of training center, administrative cost, etc. Philippine Side 1. Staff allocated: 30 persons 2. Land and facilities: project offices at PhilRice Central Experimental Station (CES), PhilRice Batac, and PhilRice Agusan 3. Local Cost: Construction of training center, onsite demonstration cost, cost for improvement of varieties, administration cost, etc.		
Project Period	November, 2005 to November 2009	Project Cost	455 million yen
Implementing Agency	Philippine Rice Research Institute (PhilRice)		
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries, National Agriculture and Food Research Organization		
Related Projects (if any)	Japan's cooperation: Project for Improvement of the Central Experiment Station of the Philippine Rice Research Institute (GA, 1989-1991), The Philippine Rice Research Institute Project (TC, 1992-1997), The Research and Development Project on High Productivity Rice Technology (TC, 1997-2002), Rice-based Farming System Training and Support Program for ARMM (TC, 2005-2010), Rice-based Farming Technology Extension Project for the Autonomous Region in Muslim Mindanao (TC, 2012-2017)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with the Philippines' development policy to target "promotion of rice-based technologies for improvement of productivity and income of farmers" as set in policy documents including Key Crops Production Promotion

[1] Reviewed at the time of the ex-post evaluation.

Plan (GMA: Ginintuang Masaganang-Ani) and the Agri-Pinoy Rice Program and the Food Staples Sufficiency Program (FSSP), development needs of "improvement of productivity and promotion of appropriate technologies", as well as Japan's ODA policy to support poverty alleviation and improvement of regional gaps including agriculture and rural development at the time of both ex-ante and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

Training facility at Agusan

The project focuses on improvement of rice productivity in the target areas through practicing location-specific technologies developed by the project. During the project, 851 farmers were trained at TDFs. Almost 100% of the participating farmers in TDF activities (PFs) adopted at least 3 components of the location-specific technologies by the time of terminal evaluation. According to the survey of the ex-post evaluation, all the PFs have been continuously practicing the technologies. In terms of productivity, only Currimao municipality had achieved the target (at least 70% of PF increase their productivity of rice by 1 ton/ha) at the terminal evaluation. 4 municipalities had achieved the target at the time of ex-post evaluation through the application of the high-yielding variety. In addition, 31 DFs were established by the LGUs during the project period in order to disseminate the location-specific technologies. DFs have been continued in Rizal, Cabanatuan, Currimao, Bayugan. In particular, in Currimao, the number of DFs has been increased from 3 at terminal evaluation to 9 at the time of ex-post evaluation. Therefore, the Project Purpose has been largely achieved. As for the overall goal, according to the impact assessment survey by PhilRice, the productivity of rice cultivation in the 3 municipalities of Rizal, Cabanatuan and San Antonio, increased by around 1 ton/ha despite the floods caused by typhoon in 2011. Also, despite of no available quantitative data on overall rice production in target municipalities including sales volume of rice, the agricultural income of the farmer in the target areas considerably increased from the baseline year of 2004 to 2011 or 2012. Since the increment of agricultural income (more than 75%) was higher than the escalation of selling price of rice (67-76%), the real income growth of the farmers could be attributed to the increases in agricultural productivity by the location-specific technologies.

According to the PFs, the location-specific technologies reduced their production costs due to the less use of inputs such as seeds, fertilizers and pesticides. In addition, more varieties of rice for tolerance to low solar radiation which were tested by PhilRice were released and promoted to rice farmers after the project. In Currimao, some technology packages were modified and adopted for vegetable production. The improved technologies increased income from vegetable production as well. Furthermore, the organization of cooperatives through the project activities facilitated access to government programs such as production loan and farm machinery grant.

Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improvement of rice productivity of the participating farmers	At least 70% of participating farmers adopt at least 3 components of location-specific technologies.	(Terminal Evaluation) Achieved. 100% in Rizal, Cabanatuan, San Antonio, Currimao, Cabugao, more than 90% in Bayugan and Butuan. （Ex-post Evaluation）Achieved. All the 85 PFs surveyed by the ex-post evaluation have been continuously practicing at least three components of location-specific technologies developed by the project.
	At least 70% of participating farmers increase productivity of rice by 1 ton/ha	(Terminal Evaluation) Partially achieved. Only in Currimao, 81% of PFs achieved the increase in rice productivity by 1 ton/ha in average. (Ex-post Evaluation) According to the questionnaire survey by the ex-post evaluation, 80% of PFs increased more than 1 ton/ha compared to the baseline year in Rizal, Cabanatuan, Currimao and Bayugan (2004).
	Income of participating farmers in TDFs from rice-based farming increased by average of 15%	(Terminal Evaluation) Achieved. [Change of income of PFs from 2004 to 2006] Rizal (63%), Cabanatuan (136%), San Antonio (54%), Currimao*(180%), Cabugao (78%), Bayugan (95%), Butuan (N.A.) (Ex-post Evaluation) See the Overall Goal 2. The Baseline Year for Currimao is 2005 due to the drought in 2004.
	Municipal LGUs establish at least 2 Demonstration Farms in their respective municipalities.	(Terminal Evaluation) Achieved. Rizal (9), Cabanatuan (8), San Antonio (5), Currimao (3), Cabugao (2), Bayugan (2), Butuan (2) (Ex-post Evaluation) Rizal (9), Cabanatuan (7), San Antonio (N.A.), Currimao (9), Cabugao (N.A.), Bayugan (2), Butuan (N.A.)
(Overall goal) 1. Increase in rice productivity in the target area	Productivity in the target municipalities increased by average of 1ton/ha.	(Ex-post Evaluation) Mostly achieved. [Change in rice productivity in the 3 target municipalities surveyed by PhilRice] Rizal (0.94ton/ha), Cabanatuan (1.19ton/ha), San Antonio (0.83ton/ha)
2. Increase in agricultural income of farmers in the target areas	Income of participating farmers in TDFs and DFs increased by average of 15%.	(Ex-post Evaluation) Achieved. [Changes in income of PFs from 2004 to 2012]* Rizal (84%), Cabanatuan (102%), Currimao (394%), Bayugan (77%), [Changes in income in DF farmers from 2004 to 2011]** Rizal (116%), Cabanatuan (140%), San Antonio (134%)

Source : Terminal Evaluation Report, The Impact Assessment Survey in Nueva Ecija by PhilRice (2011), Questionnaire Survey for 5 farmers per municipality for a total of 20 farmers. (5 x 4) in the target areas conducted in July, 2013, Interviews with counterparts

Note: * Data are not available in San Antonio, Cabugao and Butuan.
** Data are not available in Currimao, Cabugao, Bayugan and Butuan

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were as planned (ratio against the plan: 100%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

In the policy aspect, the development and the promotion of high-yield rice and rice-based technologies was incorporated in the Rice Sufficiency Program launched in 2009 and the Food Staples Sufficiency Program (2011-2016) (FSSP). There is no change in the main function of PhilRice to develop and promote rice and rice-based technologies including location-specific technologies. PhilRice maintains the sufficient number of researchers (295 permanent staff and 1,029 contract-based staff) and most of the trained staff by the project continue their work at PhilRice. LGUs are primarily responsible for agricultural extension by the Agricultural Technologists (AT, extension staff) while the Agricultural Training Institute (ATI) prepares an integrated plan for publicly funded training programs and guidelines for national extension programs, assists the local government units for extension service as well as provides technological transfer including trainings. Extension supports including farm inputs are provided by the Regional Field Units of the Department of Agriculture (DA-RFUs).

In the technical aspect, the researchers of PhilRice have adequate technical knowledge and skills for development of new varieties of rice and rice-based technologies. The ATs of LGUs in the target areas also have sufficient technical knowledge and skills to disseminate the location-specific technologies to farmers. The technical manuals and guidelines developed by the project were distributed to the ATs and the Rice Sufficiency Officers, who are contractual workers hired and trained by PhilRice to implement the Rice Sufficiency Program (RSP) from 2009 to 2011, and have been utilized by them. PhilRice continues to deliver trainings for ATs to promote the location-specific technologies. In addition, at least once a month, the training facilities in PhilRice Agusan station constructed by the project have been utilized for trainings and workshop for farmers, seed growers, government personnel and NGO staff. The PFs also maintain their knowledge and skills to practice the location-specific technologies to increase their productivity and income.

As for the financial aspect, sufficient budget has been allocated to PhilRice by the national government. The budget for PhilRice increased from 393 million pesos in 2009 to 532 million pesos in 2013. Also sufficient budget had been allocated from the DA to RFUs for development, promotion and extension of the location-specific technologies under FSSP. The budgets for RFUs also expanded from 4.3 billion pesos in 2011 to 6.2 billion pesos in 2013. The budget of RFUs include support for LGUs to cover the operation cost for extension service (2,000 pesos per month per AT and specialists conducting technology transfer in farmers' field school). Also LGUs offer subsidies for seeds and fertilizers to farmers. From these findings, there is no problem in policy, institutional, technical and financial aspects, therefore, sustainability of the project is high.

5 Summary of the Evaluation

The project has largely achieved the project purpose and overall goal. PFs adopted the location-specific technologies and have been continuously practicing the technologies. Through the application of the high-yield variety, PFs successfully increased their rice production. Also, through the establishment of DFs in the target areas, the location-specific technologies have been disseminated and have contributed to the increase in productivity of rice in the target area. In addition, the improved rice productivity increased the farmers' income. As for sustainability, the promotion of the farm technologies introduced by the project has been supported by the national policy and the enhanced extension system of PhilRice and LGUs. The necessary knowledge and skills have been maintained by the researchers of PhilRice, ATs and PFs through utilization of the manuals and guidelines developed by the project as well as the continuous delivery of technical trainings and workshops. Also, the budget for those activities has been ensured. In the light above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- PhilRice should monitor results/impact of the project in all seven (7) municipalities, since, currently, PhilRice has data on three (3) target municipalities only.

Lessons learned for JICA:

- Construction of training facilities by the project at PhilRice Agusan Station contributes to continuation of technical trainings to disseminate the location-specific technologies. Furthermore, it provides opportunities for sustaining network and information-sharing among key stakeholders including, farmers, ATs, and PhilRice even after project completion. In the case of the project aiming at dissemination of technologies, support for development of training facilities can be effective to ensure sustainability of project effects including continuation of technical trainings and maintaining network for extension service since the training facilities can be a focal point of technical transfer.
- Since the local government units (LGUs) are one of key players to disseminate agricultural technologies, the project activities to address improvement of capacity of LGUs at the beginning stage enabled not only smooth implementation of the project but also continuation of extension services after the project completion through clear commitment and participation of the LGUs in the project. Therefore, in the case that the local government entities are one of the main body of extension service, it is essential to design a project component for capacity development of local government entities at early stage of project implementation.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Philippine office: December, 2013

Country Name	Maternal and Child Health Project (SIKAT: Strengthening, Integration, Knowledgeable, Accessible, Team-work)
Republic of the Philippines	

I. Project Outline

Background	In the Philippines, the maternal mortality ratio (MMR) and the infant mortality rate (IMR) had been steadily decreasing for past decades. However, degree of the improvement has been slower than in the neighboring countries. The key issue was quality of maternal and child health care (MCH) services, such as knowledge and skills of health service providers, facilities for emergency obstetric and newborn care, functionality of referral system for high risk pregnancy, number of skilled birth attendants (SBAs) in remote areas and technical trainings of Emergency Obstetric Care (EmOC) for SBAs. Also, the limited public awareness of maternal and child health care is related to low rate of delivery attended by SBAs and delay in seeking for treatment in case of emergency. Under the situation, the Department of Health had been promoting the health sector reform under the decentralization policy in order to improve maternal and child health care in the country.		
Objectives of the Project	1. Overall Goal: In the framework of National Goal of Improving Women and Child Health, the central and provincial levels organizational capacity to implement effective MCH strategies is strengthened; and the quality and quantity of MCH services is enhanced. 2. Project Purpose: In the project target areas, the health and safety of mothers and neonates during the pre-natal, delivery and postpartum periods is improved by ensuring the quality of care and increasing the utilization of services provided. 3. Logical flow of how the project responses to development issues: The project strengthens EmOC system (note 1), enhances skills and knowledge of the target health service providers on MCH (note 2), and develops community support mechanism for maternal and newborn care. By implementing the improved EmOC system and practicing the improved MCH skills, the project aims at improvement of quality of perinatal care in the target provinces. Through the dissemination of good practices and findings of the project, organizational capacity to implement effective MCH strategies and quality of MCH services are strengthened at national level. (note 1) The system to cope with emergency at perinatal period, including the caesarean sections and blood transfusion at higher medical institutions, vacuum extraction at lower medical institutions, the referral system at community and so on. (note 2) SBAs, Health Volunteers (HVs) and Traditional Birth Attendants (TBAs)		
Project Information	1. Project site: Biliran Province and municipalities of Alfonsolista, Mayoyao and Aguinaldo (AMADHS Inter Local Health Zone) in Ifugao Province 2. Main activities: Delivery of trainings of trainers and for the health stafffor Community Managed Maternal and Newborn care (CMMNC), provision of equipment, dissemination of MCH related materials, establishment of Women's Health Team (WHT) and community based multi-sectoral group as well as management and supportive supervision mechanisms for WHT, and reactivation of MCH Technical Working Group (TWG) 3. Inputs: Japanese Side 1) Experts: 4 for Long term, 5 for Short term 2) Trainees received: 18 persons 3) Equipment: Ambulance, vehicles, medical equipment and apparatus, PCs, projectors, etc.. Philippine Side 1) Staff allocated: 33 persons 2) Land and facilities: project office, electricity and water supply 3) Local cost, salaries to counterpart personnel, upgrading of healthcare facilities, cost of meetings		
Project Period	March, 2006 – March, 2010	Project Cost	372 million yen
Implementing Agency	Department of Health (DOH), Biliran Provincial Government, Ifugao Provincial Government, Biliran Provincial Health Office, Ifgao Provincial Health Office, municipal governments and municipal health offices in the 2 target provinces		
Cooperation Agency in Japan	TAC International		
Related Projects	Japan's cooperation: (Technical Cooperation: TA, Grant Aid: GA) ・Family Planning and Maternal and Child Health Project I/II (TC, 1992-2002) ・Development of training materials for EmOC (Dispatch of Long-term Expert of Maternal and Child Health, 2005) ・Project for Strengthening Maternal and Child Health Services in Eastern Visayas (TC, 2010-2014) ・Project for Cordillera-wide Strengthening of the Local Health System for Effective and Efficient Delivery of Maternal and Child Health Services (TC, 2012-2017) Other donors' cooperation: ・BEmOC and CMMNC training development (UNFPA, UNICEF, WHO, and Plan International)		

II. Result of the Evaluation[1]

1 Relevance

This project has been highly consistent with the Philippines' development policy, such as reduction of MMR and IMR specified under "the Integrated Woman's Health Service Initiative (2004)" and "the Philippine Development Plan (PDP) 2011-2016", and development needs to improve maternal and child health care and promotion of safe maternity particularly in the rural areas, as well as Japan's ODA policy to support reduction of poverty and regional disparities, including the health sector. Therefore, relevance of this project is high.

2 Effectiveness/Impact

[Achievement of the Project in the Project Design Matrix] The project focuses on improvement of maternal and newborn care in the target provinces through trainings of basic EmOC (BEmOC) for SBAs and health staff, improvement of health facilities to accommodate normal delivery and to provide BEmOC, establishment of WHT or AYOD (in Ifugao local language) for community activities and strengthening local health administration including elaboration of Emergency Preparedness Plan. As a result, the Project Purpose was mostly achieved by the increases in health facility deliveries and deliveries assisted by SBAs, both in Biliran and Ifugao. As for the overall goal, the national target of health facility deliveries has not been achieved, but the proportion of deliveries assisted by SBA in the country reached 92.2% in 2011. The proportion of pregnant women having more than 4 times of prenatal checkups at national level was still limited: 34% in 2011. The gap of MCH service delivery level of each region hampered improvement of those indicators at national level.

[Dissemination of the good practices, findings and positive impacts of the project] Good practices for MCH, including adaption of local setting for community involvement in MCH such as AYOD, maternal death reviews, and layered monitoring system, have been disseminated through study tours from other provinces, trainings, seminars and workshops at national and regional levels. In addition, the training materials such as CMMNC delivered by the Project have been still utilized. Furthermore, in the target province, MMR reduced in the both provinces: in Ifugao, MMR 67 per 100,000 live births in 2008 to 28 in 2012, and in Biliran, 157 in 2008 to 51 in 2012. Improvement of the neonatal mortality rate cannot be verified due to the limitations on the reliability and accuracy of available data. Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improvement of maternal and newborn health and safety during the perinatal period in the target provinces	(Indicator 1) % of health facility deliveries in the target provinces. [Target Value] Ifugao:80%, Biliran:80%	Terminal Evaluation: Achieved in Biliran (90.2%) but not achieved in Ifugao (49%). Ex-post Evaluation: Further improvement in Biliran (95.35%) and in Ifugao (70.75%) since the project completion.
	(Indicator 2) % of deliveries assisted by SBA in the target provinces. [Target Value] Ifugao 75%, Biliran: No target	Terminal Evaluation: Mostly achieved in Ifugao (73%). (92% in Biliran). Ex-post Evaluation: Further improvement in Ifugao (85.29%) and Biliran (96.55%)
	(Indicator 3) % of pregnant women received prenatal care at least 4 times during pregnancy in the target provinces. [Target Value] 80% (Note 1)	Terminal Evaluation: Mostly achieved in Ifugao (65%) and Biliran (69%). Ex-post Evaluation: Decreased in Ifugao (40.89%) and increased in Biliran (73.5%).
	(Indicator 4) % of pregnant women who received prenatal care in the 1st trimester in the target provinces.	Terminal Evaluation: Data not available in Ifugao and 31% in Biliran. Ex-post Evaluation: N.A.
(Overall goal) Strengthening of organizational capacity at the central and provincial levels to implement effective MCH strategies and for enhancement of quality and quantity of MCH service	(Indicator 1) % of health facility deliveries in the country [Target value] 80%	Ex-post Evaluation: Not achieved. (57.07% in 2011)
	(Indicator 2) % of deliveries assisted by SBA in the country [No target]	Ex-post Evaluation: 92.2% in 2011.
	(Indicator 3) % of pregnant women who received prenatal care in the country (Note 2) [No target] (Note 2)	Ex-post Evaluation: 34.38% in 2011.

Source : Terminal Evaluation Report, Biliran Annual Health Report, Ifugao MNHCN (Maternal, Newborn, Child, and Nutrition) indicators, the Field Health Service Information System (FHSIS)

Note 1: The numbers of both provinces have been affected by the modification of DOH's definition of "% of women who received prenatal care" in 2008. Before 2008, the number of prenatal care was defined as 3 times or more but DOH made it 4 times or more in 2008 and years thereafter.

Note 2: It is verified by % of pregnant women having more than 4 times of prenatal check-ups, with her first check-up in 1st semester of pregnancy.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period with in the plan (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 109%).

[1] MMR and NMR in the target provinces and in the country are set to verify achievements of the Project Purpose. However, the indicators cannot directly verify improvement of quality of MCH care. In addition, for example, since MMR shows the estimated number of female death during pregnancy, child birth and post-pregnancy period per 100,000 live births. Therefore, in the limited size of area with the limited number of births, change of MMR can be greatly changed by a single death case. Therefore, these data should be utilized not as indicators but as reference to assess impacts of improvement of MCH care by the Project.

Therefore, efficiency of this project is fair.

4 Sustainability

In the policy aspect, the improvement of MCH care services has been continuously prioritized in PDP 2011-2016. In addition, the provincial and municipal governments in the target areas have strong commitment and support to the MCH activities introduced by the project. For the institutional aspect, the multi-layer coordination mechanism of health sector administration and local administration for the MCH service delivery has been sustained. Also, the sufficient number of Rural Health Midwives (RHMs) and SBAs has been deployed and trained on BEmOC and CMMNC in the target provinces. The number of WHTs increased to 386 in Biliran and 185 in Ifugao in 2012. The facilities and equipment for MCH have been maintained in the target provinces as well. From the technical aspect, textbooks and training materials have been utilized as technical references in the target provinces and in other region. In addition, trainings of BEmOC for SBAs have been continued in the target provinces. However, trainings for CMMNC were suspended because some inconsistencies with the concept of BEmOC were found in the training contents. On the other hand, the trainings for WHT members have been hampered by the lack of training plan and inadequate budget allocation by the municipal governments. As for the financial aspect, DOH has been allocated sufficient budget for the MCH-related activities. Also, the governments of the target provinces have allocated 20-30% of their total budget to the health sector and the municipal governments in the target provinces have allocated around 10% of their budget as well. However, the budget for continuous trainings for WHT members and RHM has not been secured. In addition, since most BHSs are not yet accredited for Maternity Care Package (MCP) by the Philippine Health Insurance Corporation (PhilHealth), they cannot receive reimbursements to cover the maintenance cost of facilities and the payroll of health staff. It is difficult for the BHS to obtain accreditation due to several paper works and the yearly renewals. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has mostly achieved the project purpose to increase deliveries at health facility and deliveries attended by SBAs in the target province. Also, the good practices of the project have been disseminated to other regions. As for sustainability, the MCH activities is endorsed by the health sector policy and the institutional mechanism providing MCH-related services in the target provinces has been well-functioning despite some problems in technical and financial aspects (e.g. limited training opportunities for WHT members and the uncertainty of the training budget). As for efficiency, the project cost was slightly exceeded the plan. In the light above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

[MHOs and PHOs in Biliran and Ifugao]

- It is recommended to facilitate the formulation of training plans for SBAs and RHMs and W/CHT or AYOD members to ensure continued updating of knowledge and skills on MCH care at provincial and municipality level. The formulation of training plans may start with a training needs assessment and analysis at the BHS level, the results of which shall become the basis for formulating the training plans. The training plans shall then be the basis of budget allocation by the municipal government. DOH Center for Health Development (CHD) shall technically guide PHO to formulate and realize training plan.

[DOH and CHDs]

- It is also recommended that the DOH through the CHDs continues to secure necessary budget for the training requirements of PHOs and MHOs
- It is further recommended that a dialogue between PhilHealth representatives and PHOs, MHOs (RHUs) and RHMs (BHS) be organized and conducted to solve issues about continuity of MCP accreditation of RHUs and BHSs. This dialogue may be led or convened by the CHD-Provincial Health Teams.

Lessons learned for JICA:

- Organizing and empowering community-based mechanisms like the WHT or AYOD teams in culturally appropriate way is an effective strategy in implementing central government programs on MCH in rural areas
- In planning similar projects in the future, it is important to clarify the project's intended contributions to expected national level outcomes especially if project activities are aligned with the activities of the implementing agency and other donors. It is likewise important to clarify and establish indicators that directly link the Project Purpose and the Overall Goal thus avoiding unrealistic targets at the outcomes and impact levels.

Birthing equipments in Capinahan BHS (Naval, Biliran)

Ubao BHS, Aguinaldo, Ifugao

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Cambodia Office: March, 2014

Country Name	The Project for Human Resource Development of Co-medicals
Kingdom of Cambodia	

I. Project Outline

Background	In Cambodia, education for co-medicals was provided at University of Health Sciences (UHS), Technical School for Medical Care (TSMC), and four Regional Training Centres (RTCs). TSMC was the only public school to develop Laboratory Technologist (LT) and Physiotherapist (PT) in Cambodia. There was no school to develop Radiological Technologist (RT) despite many cases of tuberculosis in Cambodia. Students who passed the exit examination were awarded medical license, but no one failed the examination and the examination was not standardized across schools, so it did not guarantee the quality of the graduates. Besides these schools, private funded International University opened the nursing department without clear definition of the contents of teaching and qualification of teachers. There were no national guidelines on approval of schools for co-medicals and the contents of education of such schools. TSMC itself also had many issues to solve, such as insufficient curriculum, teachers' capabilities and school management.		
Objectives of the Project	1. Overall Goal: Public and private co-medical schools are able to produce graduates who are capable to perform as qualified co-medicals (State Registered Nurse; SRN, LT, RT, and PT) and the Ministry of Health (MoH) employment status improved. 2. Project Purpose: TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard. 3. Assumed steps for achieving the project goals[i]: The project (i) develops criteria and guidelines for school approval and curricula and syllabi of pre-service training for co-medicals as national standard, (ii) develops training materials and conducts training of trainers, and monitors school management of TSMC, and thereby better education for co-medicals (training in accordance with the developed or revised curricula and syllabi; strengthening of examinations) becomes possible at TSMC and four RTCs. As a result, qualified graduates from improved education are properly assigned to health institutions. At other schools including private, criteria, guidelines, curricula and syllabi are applied, and qualified graduates are developed.		
Activities of the project	1. Project site: TSMC and four RTCs (Battambang, Kampong Cham, Komport, and Stung Treng) 2. Main activities: (1) Development of School Approval Criteria (SAC) and Guidelines for Accrediting Schools (GASs) by the Working Group and getting approval of MoH, (2) Development of curricula and syllabi by the Working Group and getting approval of MoH; development of training materials, (3) Planning, implementation and evaluation of training for teachers and instructors, (4) Formation of "Improvement Committee" within TSMC and monitoring of schools managed by the committee. 3. Inputs (to carry out above activities) Japanese Side 1. Experts: 32 persons (Long-term: 6, Short-term: 26) 2. Trainees received : 21 persons (counterpart training in Japan) 3. Third-country training: total 3 persons (Thailand) 4. Equipment: teaching equipment and books Cambodia Side 1. Staff allocated: 40 persons 2. Land and facilities: project office 3. Others: purchase of equipment, local cost for training and maintenance of project office		
Project Period	September 2003 – September 2008	Project Cost	513 million yen
Implementing Agency	Technical School for Medical Care (TSMC), Human Resource Development Department (HRDD) of Ministry of Health (MoH) Cambodia, and Regional Training Centre (RTC)		
Cooperation Agency in Japan	St. Mary's Hospital, International Medical Center of Japan, etc.		
Related Projects (if any)	Japan's cooperation: Project on Promotion of Medical Equipment Management System (Technical Cooperation, 2006-2008), Project for Improving Maternal and Child Health Service in Rural Areas (Technical Cooperation, 2007-2010); Third Country Training on teaching method in nursing in Malaysia (15 counterparts of this project were trained) (2003-2005) Other donors' cooperation: Health Sector Support Program (HSSP) (sector-wide program funded by the World Bank and others)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Cambodia's development policy, "improving quality of health personnel and

[i] Reviewed at the time of the ex-post evaluation.

reforming human resource development system" as set in the Health Sector Strategic Plan (HSP1) 2003-2007 and HSP2 2008-2015, and National Health Workforce Development Plan (NHWDP) 1996-2005 and the second NHWDP 2006-2015, development needs of improvement of quality of teaching and school management and increase of productivity of co-medical professionals, as well as Japan's ODA policy: Country Assistance Program to Cambodia (2002) both at the time of ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

(1) Attainment of Project Purpose and continuity of project effects

The project achieved the project purpose at the time of completion. The education at TSMC and four RTCs were being properly delivered, according to the annual class schedules in line with the new standard curricula. The development and approval of SAC and GASs was fully achieved in this project for quality control and enhancement of co-medical pre-service educations. The RT course at TSMC was newly established in Cambodia by the project. This accomplishment was a crucial achievement and significantly contributed to setting a foundation for pre-service educations for RT and improvement of RT services in Cambodia.

After the project completion, the project effects continued as TSMC and four RTCs have improved pre-service education for co-medicals professionals by using the revised curricula and syllabi and education materials developed by the project. The courses have been delivered according to annual class schedules. The continuous increase in the number of enrolled students and graduates is the concrete evidence of this improvement (See tables 1 and 2). Some parts of the curricula and syllabi have been updated, and TSMC/UHS, RTC and HRDD are working and discussing together to further update curricula but the progress is slow due to the limited technical and financial resources. Same applies to the update of the education materials. In the meantime, there is a plan to review and revise the curriculum for the laboratory course to be a bachelor course with supports from the U.S. Centers for Disease Control and Prevention, while an Australian NGO supports TSMC to review the contents of each course curriculum and check the status of training materials.

According to an interview with TSMC, the way of teaching and school management has been improved as follows: (1) delivery of courses based on standard curriculum developed, (2) school regulation has been established, (3) the detail duties of each division have been prescribed, (4) student information system has been developed, and (5) ability and capacity of planning has been improved. Through interviews and the observation at RTCs, it was confirmed that the quality of teaching has improved in terms of improvement of teaching methodology, lesson plan preparation and others and the level of understanding of students have been much improved due to visual aids and handouts prepared by trainers.

(2) Overall Goal

The overall goal has been somewhat achieved. SAC and GASs are effective and adopted as national regulations for both public and private schools. Although precise data about the result of the exit examination was not obtained completely, the exit examinations for LT, RT, and PT were carried out in 2010, 2011 and 2012 and the number of examinees who passed has increased. According to the director of TSMC, a large proportion of graduates from TSMC enter into public and private sector because TSMC is a school of established reputation in the health sector of Cambodia and both public and private health care institutes give more value to TSMC graduates, which is the evidence of the high quality of services of co-medicals who graduated from TSMC.

Thus, the expected effects are found to be produced from the information collected, and therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard.	(Indicator) Education in TSMC and four RTCs are implemented according to Educational plan based on developed or revised curriculum and syllabi. .	(Project Completion) The education at TSMC and four RTCs were being properly delivered according to the annual class schedules in line with the new standard curricula. (Ex-post Evaluation) TSMC and four RTCs have improved pre-service education by using the revised curricula and syllabi and education materials developed by the project, as evidenced by the increase of the number in enrolled students and graduates (see tables 1 and 2) .
(Overall goal) Public and private co-medical schools are able to produce graduates who are capable to perform as qualified co-medicals (SRN, LT, RT, and PT) and the MoH employment status improved.	(Indicator 1) Public and private co-medical schools follow the regulations which are established by output 1.	(Ex-post Evaluation) SAC and GASs are effective and adopted as national regulations for both public and private schools.
	(Indicator 2) Passing rate of the first trial of graduation examination (of SRN) for public and private co-medical schools is increased.	(Ex-post Evaluation) No data are obtained.
	(Indicator 3) Employment of graduates is increased	(Ex-post Evaluation) No precise data are obtained, however, according to director of TSMC, a large proportion of graduates from TSMC enter into public and private sector such Calmette and Kuntha Bopha Hopsital that have high reputation in the country and some international and local NGOs.

Sources : Terminal Evaluation Report, Questionnaires & Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly exceeded the plan (ratio against the plan: 105%) because the number of experts increased and the counterpart training in Japan was implemented although it was not planned at the time of ex-ante evaluation. Therefore, efficiency of the project is fair.

4 Sustainability

The project is still given importance in the current development policy as SAC was launched as a sub-decree, and SAC and GASs have been effectively used and maintained.

Institutionally, there is a problem in the number of staff. The current organizational status of TSMC has been changed and TSMC is now under UHS. This change has affected TSMC's operation in terms of slow progress in decision-making because TSMC needs to get approval from the operational committee of the UHS. However, under the umbrella of government structure, TSMC/UHS is under the technical supervision of MOH, and TSMC/UHS and HRDD are cooperating together to improve training quality. The current organizational status of RTCs is now under technical supervision of HRDD. In the future, RTCs will be promoted and become a public administrative enterprise (semi-autonomous organization) as same as TSMC/UHS. Financial management of RTCs will be done independently but they are under technical supervision of MOH. The number of teaching and management staff at TSMC is sufficient, except insufficient number of teachers in RT course. TSMC is requesting UHS and MOH to supply more qualified and skilled staff. The number of the teaching and management staff at RTCs is not sufficient compared to the designated number of staff for each organization.

There is no problem in the technical aspect of TSMC. The technical level for school management and up-to-date teaching for co-medicals is maintained. Some trainers have been sent overseas to obtain higher educations and certificates. Task descriptions and operational functions of the divisions of TSMC were reviewed and revised to reflect the needs at the time of ex-post evaluation. The technical level of human resources at RTCs is partly insufficient in the field of clinical practices.

Financially, the budget for TSMC is sufficient for school operation with the income from admission fees and subsidy from the government. The current budget does not cover the additional expenses required for updating curricula, syllabi and education materials, however, with the capacity of TSMC to raise its own revenue, TSMC could use the SAC and GASs as direction for promoting the quality of education in the future. The four RTCs have bigger challenges even in implementing courses. Donors basically provide technical supports only.

Thus, as there are problems in institutional, technical and financial aspects, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

This project achieved the project purpose "TSMC and four RTCs are able to provide appropriate education of SRN, LT, PT and RT based on the national co-medical standard" as TSMC and four RTCs have improved pre-service education for co-medicals professionals by using the revised curricula and syllabi and education materials developed by the project. Overall goal has been somewhat achieved. Although the precise data for overall goal are not obtained, the effects are found to be produced from the information collected, since SAC and GASs are effective and adopted as national regulations for both public and private schools, and most of the TSMC graduates have been employed with the public institutions. Therefore, effectiveness/impact of the project is high. As for sustainability, there are some problems in terms of institutional, technical and financial aspects. The number and technical level of staff is partly insufficient, especially at RTCs. The RTCs also have a problem of insufficient budget. For efficiency, the project cost slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

Both the HRDD and MOH are recommended to reinforce and review SAC and GASs that has been applied at both public and private training institutions. As for the maintaining of the quality training, especially HRDD should review and revise the national curricula and education materials regularly in collaborating with stakeholders based on the needs and try to obtain technical supports from donors for such activities.

Table 1: Basic statistics of TSMC

Course title (No. of students/No. of graduates)	2010	2011	2012
Bachelor of science in Nursing	550/0	678/49	708/448
Associate degree in nursing	360/141	311/128	386/87
Associate degree in midwifery	338/0	453/178	458/148
Bachelor of science in Nursing/ Midwifery(*)	84/35	100/40	0/40
Associate degree of LT	130/40	172/54	216/35
Associate degree of RT	53/20	76/19	96/15
Associate degree of PT	84/29	68/27	69/24
No. of teachers	618	721	788

(Source: TSMC)

(note):*The course was cancelled both in 2012 and 2013 due to the applicants for admission were less than 30 students.

Table 2: Basic statistics of four RTCs

	2010	2011	2012
Total no. of students	1,349	1,465	1,794
Total no. of graduates	848	1,149	1,174
No. of teachers	688	728	794

(Source: HRDD)

Clinical Activities of Nursing Course in Kg Cham RTC

Class Activity of Nursing Course in Stung Treng RTC

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Cambodia Office: March 2014

Country Name	The Project for Traffic Improvement in Phnom Penh City
Kingdom of Cambodia	

I. Project Outline

Background	In accordance with the economic growth, the number of auto fleet in Phnom Penh had increased by 5% annually and reached approximately 800,000 in 2005. Traffic conditions in Phnom Penh had worsened, and traffic congestion and traffic accidents had become social problems in Phnom Penh. At the same time, there was a need for drivers education as a new traffic law which requires the motorcycle drivers to obtain licenses was expected to be enacted. Since the traffic was not controlled well in Phnom Penh, the capacity of the police officers for traffic control/law enforcement needed to be strengthened.		
Objectives of the Project	1. Overall Goal: To improve urban traffic condition by reducing traffic congestion and accidents through the implementation of appropriate traffic management in Phnom Penh Municipality 2. Project Purpose: (1) To improve the capacity of Department of Public Works and Transport, Municipality of Phnom Penh (DPWT, MPP) to improve intersections, (2) To improve the capacity of Department of Land Transport, Ministry of Public Works and Transport (DLT, MPWT)[1] to educate drivers, and (3) To improve the capacity of Phnom Penh Municipal Police (PPMP), MPP to enforce traffic law 3. Assumed steps for achieving the project goals[2]: This project implements pilot projects and training, which enables concerned agencies to improve traffic management (i.e. DPWT to improve intersections, DLT, MPWT to conduct drivers education, and PPMP to enforce traffic laws) and lead to more observance of traffic rules, thereby reducing traffic congestion and traffic accidents in Phnom Penh.		
Activities of the project	1. Project site: Phnom Penh City 2. Main activities: (1) Implementation of pilot projects on 2 intersections (Pet Lok Sang and Toul Kork intersections) and one corridor management, (2) Development and implementing a pilot program of motorcycle education upon license issuance, implementing the traffic safety campaign, and (3) training for trainers, development of manuals and guidelines, and technical training for police officers on traffic enforcement. Japanese Side 1. Experts:85.5MM (5 persons in 5 fields) 2. Trainees received : 3 persons (counterpart training in Japan) 3. Equipment: Equipment for improvement of intersection, signal installation and others 4. Local cost for civil engineering work of improvement of intersection and others Cambodia Side 1. Staff allocated: 16 persons 2. Land and facilities 3. Local cost for improvement of intersections		
Project Period	March 2007 – March 2010 (Extended period: March 2009 – March 2010)	Project Cost	398 million yen
Implementing Agency	(1) Department of Public Works and Transport, Municipality of Phnom Penh (DPWT, MPP) (2) Department of Land Transport, Ministry of Public Works and Transport (DLT, MPWT), and (3) Phnom Penh Municipal Police (PPMP), MPP		
Cooperation Agency in Japan	(1) Ministry of Foreign Affairs, National Police Agency, Ministry of Land, Infrastructure, Transport and Tourism, (2) Contract Agency: Mets Research & Planning Inc.		
Related Projects	Japan's cooperation: "The Transport Master Plan of the Phnom Penh Metropolitan Area In the Kingdom of Cambodia" (Technical Cooperation, 2000-2001), A Senior Volunteer (Traffic Education, and Traffic Law Enforcement, 2010)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Cambodia's development policy "developing safe and efficient traffic networks" as set in National Road Safety Action Plan (2006-2010), The Urban Transport Master Plan of the Phnom Penh Metropolitan Area (2001-2015), New Road Traffic Law (2009) and other documents, development needs of "improving traffic conditions and reducing traffic accidents in Phnom Penh", as well as Japan's ODA policy "promoting smooth transportation of people and goods in Phnom Penh" in JICA's Country Program (2005) both at the time of ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project somewhat achieved the project purpose at the time of completion, as (i) the DPWT was able to plan, implement and complete intersection improvement (such as improvement of traffic signal phasing, setting traffic lane for left-turning and others) and corridor management (such as road marking) through the public experiments of the project, (ii) 48,286 motorcycle drivers licenses were issued under the pilot education program, and (iii) the capacity of traffic law enforcement improved

[1] DLT delegated the authority and responsibilities of driver license issuance and drivers education to the Division of Drivers License and Traffic Safety (DDLTS) of DPWT during the project implementation. Thus, the project also aimed at strengthening of DDLTS's capacity development.

[2] Reviewed at the time of the ex-post evaluation.

through on-the-job training (OJT) during the traffic safety campaign and traffic law enforcement campaign.

After the project completion, (i) DPWT has implemented 4 intersection improvements since project completion which include installation of traffic signal and road geometric improvement. According to DPWT, the project contributed a lot to DPWT's capacity in terms of knowledge and skills of how to make a proper plan for intersection improvement, intersection design and implementation. (ii) Regarding the drivers education program for motorcycle license issuance, the program was terminated at the end of 2012[3], and instead, the driver safety education is carried out by private driving schools (16 hours) since 2010 in accordance with the traffic law[4] and by public secondary schools (grade 7-9, 10 hours at each grade) as a driving education program ("life skills program[5]"). At the time of ex-post evaluation, DDLTS still carries out its mandated tasks of issuing drivers license. Applicants for the license have to submit certificate from private driving school or a letter from their school director. The contribution of the project's knowledge/ materials in the private driving schools and the public secondary schools are limited, as they are nothing but a part of the current materials/text books for providing training to motorbike drivers[6]. The system for refresher safety education, which was expected to be developed by the time of project completion, is not established by DLT due to its low priority among other law enforcement issues. (iii) PPMP has carried out the traffic law enforcement activities in Phnom Penh every day. PPMP occasionally implements traffic campaigns with NGOs or other cosponsors before the national events. PPMP was expected to develop training curriculum/programs on capacity development for traffic law enforcement by the project completion but has not developed yet, while it provides one-off training sessions (e.g. the 9-day course for "Skills and traffic law improvement" in March 2013).

For overall goal, the project dealt with only part of the traffic issues in Phnom Penh city and the traffic condition remains the same. But according to the interviews, the project activities and the government's self-efforts to construct flyovers might have contributed to the betterment of the situation. The number of accidents and casualties has slightly decreased in the past few years despite the increasing number of the city population (almost 24% increase from 2008 to 2012) and the registered automobiles (more than 50% increase from 2009 to 2013) and the significant increase of motorcycle.

Therefore, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) (1) To improve the capacity of DPWT, MPP to improve intersections, (2) To improve the capacity of DLT, MPWT to educate drivers, and (3) To improve the capacity of PPMP, MPP to enforce traffic law	(Indicator 1) The public experiments planned for the second year is implemented by the counterpart personnel	(Project Completion) The public experiments (intersection improvement and corridor management) were implemented by DPWT. (Ex-post Evaluation) After the project completion, DPWT has improved another 4 intersections.
	(Indicator 2) Drivers education is implemented when a new road traffic law becomes effective.	(Project Completion) Drivers education was conducted in the license issuing pilot program, which issued 48,286 licenses at a pace exceeding the plan (target of 20,000 licenses by March, 2010). (Ex-post Evaluation) Drivers education is conducted by private driving schools and public secondary schools, and DDLTS issues driving licenses. The number of drivers educated is not obtained. (61,729 licenses were issued cumulatively until 2012)
	(Indicator 3) The campaign for traffic law enforcement is periodically implemented	(Project Completion) OJT was carried out during the traffic safety/law enforcement campaign, and intensive trainings were conducted for 5 selected police officers. (Ex-post Evaluation) PPMP has occasionally implemented the traffic safety campaigns (58 times in 2011 and 31 times in 2012). Training curriculum/programs on capacity development for traffic enforcement has not developed.
(Overall goal) To improve urban traffic condition by reducing traffic congestion and accidents through the implementation of appropriate traffic management in Phnom Penh Municipality	(Indicator 1) To improve the level of obedience to traffic rule by road users.	(Ex-post Evaluation) No data available (According to PPMP, drivers are generally more observant after the project completion due to the continuation of either traffic law enforcement or awareness raising.)
	(Indicator 2) To improve the traffic condition in Phnom Penh City	(Ex-post Evaluation) No data available (The condition in the part of the project target intersections has improved by the project and the government's self-efforts. However, the overall traffic condition in Phnom Penh has not much improved due to the increase of traffic volume.)
	(Indicator 3) To increase the traffic volume in intersections and roads	(Ex-post Evaluation) General traffic volume in Phnom Penh, especially those passing Pet Lok and Toul Kok intersections, has been steadily increasing to 94,035 in 2010, 121,488 in 2011 and 154,768 in 2012 against the backdrop that the number of registered vehicles and motorcycles has increased.
	(Indicator 4) To decrease 1) number traffic accidents per vehicle and 2) road	(Ex-post Evaluation) The number of traffic accidents, casualties and fatalities dropped in 2010 and has maintained the same level in spite of the increasing number of vehicles and motorcycles dramatically. (See Figure 1).

Source : Project Completion Report, Terminal Evaluation Report, Questionnaires & Interviews with counterparts, Annual reports

3 Efficiency

[3] The program was expected to continue until 2015 but terminated due to the budget constraint and the stagnant number of applicants for motorcycle driver license. Drivers are discouraged to apply for the license partly because (a) law enforcement by traffic police for motorcycle drivers is not strict; (b) the fee for the examination determined by the Prakas (ministerial order) is high.

[4] The traffic law designates private driving schools as a provider of drivers education.

[5] The life skills program was approved by Ministry of Education, Youth and Sports (MoEYS) and was put into implementation just before the project started. The actual teaching of road safety education (one of the topics in life skills program) depends on each school's decision, as the life skill program is not a compulsory subject and is just encouraged by MoEYS. Since no monitoring activities were conducted by MoEYS and DLT, the number of schools that have been implementing/teaching the road safety education is unknown.

[6] The text books were published in 2003 for private driving schools and in 2007 for public schools.

While the inputs were mostly appropriate for producing the outputs of the project, both the project period and the project cost exceed the plan (ratio against the plan: 153%, 150%), because the project period was extended as a new traffic law became effective during the implementation period which required more time for implementation of the project to incorporate the new traffic law. Therefore, efficiency of the project is low.

4 Sustainability

The project is still given importance in the current development policy. The National Road Safety Policy (2011-2020) is being drafted and waiting for approval from the Council of Minister which includes action plans for road safety management, road infrastructure, law enforcement, and driving license. A comprehensive urban transport master plan is also under formulation to respond to traffic demand in Phnom Penh City including the improvement of intersections.

Regarding the intersection improvement, the Public Works Office at DPWT and the staff from relevant offices work together in planning, designing and implementing when intersection improvement needs to be implemented. According to the interview, DPWT has sufficient number of staff for intersection improvement. For drivers education, the institutional framework has changed after project completion according to the traffic law: DDLTS is still responsible for motorcycle license issuance, but driver safety education is carried out by private driving schools and public secondary schools. DLT/MPWT provides trainings to and certifies the teachers regarding technical aspect of road safety. As to the traffic enforcement, the number of the traffic enforcement officer at PPMP is considered insufficient compared to increasing number of motorcycles and automobiles. Therefore, PPMP plans to recruit new officers every year.

Currently, there are no any technical problems in implementing the intersection improvement, drivers education, and traffic enforcement. However, since those institutions do not have any internal system for technical transfer, there are uncertainties for the future prospect.

In terms of financial aspects, the budget allocation for DPWT maintains the same level, while detailed information was not obtained about DDLTS and PPMP. According to the interviews, budget of DPWT and DDLTS is not sufficient to handle increasing traffic volume.

Thus, as there are problems in technical and financial aspects, sustainability of the project effect is fair.

5 Summary of the Evaluation

This project somewhat achieved the project purpose of (1) To improve the capacity of DPWT, MPP to improve intersections, (2) To improve the capacity of DLT, MPWT to educate drivers, and (3) To improve the capacity of PPMP, MPP to enforce traffic law, at the time of project completion. At the time of ex-post evaluation, the intersection improvement work continued and traffic enforcement campaign was conducted. Drivers education continues at private driving schools and public secondary schools, but the project's contribution to the current education program is limited. Traffic enforcement campaign has implemented occasionally but training curriculum/programs on capacity development for police officers has not been developed. Overall goal has been somewhat achieved in terms of the decreasing number of accidents, casualties and fatalities despite the increasing number of vehicles and motorcycles. As for sustainability, there are uncertainties in terms of technical and financial aspects, as each organization lacks technical transfer mechanism, and at least DDWT and DDLTS has insufficient budget. For efficiency, the project cost and period exceeded the plan to incorporate the new traffic law in the project activities.

In the light of above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

1. Establishing the regular training curriculum/programs on the police officers' capacity to enforce traffic law is very important for internal transfer of the skills and know-how acquired during the project.

Lessons learned for JICA:

1. A project should carefully study the relevant institutions who may be involved in traffic issues, i.e. private driving schools for drivers education in the project, so that the project can understand more about the concerned actors and involve them through project activities.
2. Projects should set specific timeframe for activities to be done by counterparts and ensure the implementation after the project finished. In the project, the system for refresher education which was agreed by the counterpart to be established by the end of the project has not been established.

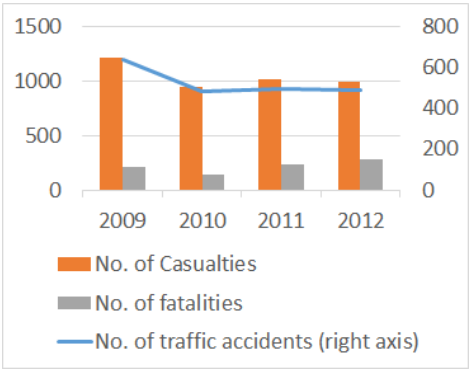


Figure 1: The number of accidents, casualties and fatalities

Toul Tompong Intersection after improvement

Road attached to Toul Tompong Intersection

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Cambodia Office: February 2014

Country Name	Project on Improvement of Local Government Administration (PILAC)
Cambodia	

I. Project Outline

Background	The Cambodia Government promoted the decentralization and deconcentration (D&D) reform, for which Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans (Organic Law, 2008) was prepared. The decentralization and transfer of functions to Sub-National Administrations was expected, but the capacity development of officials at the provincial and district level was limited. Also, the capacity of officials in General Department of Local Administration (GDLA) of Ministry of Interior (MOI), the implementing body of the reform, needed to be strengthened to manage the training to provincial and district officials for improving the knowledge of local administration and newly introduced the Organic Law.		
Objectives of the Project	1. Overall Goal: Human resource involved in local administration will be developed through training. 2. Project Purpose: (1) Officials of GDLA will improve the capacity of training management. (2) Officials in charge of local administration at national level and provincial level will improve the knowledge of local administration. 3. Assumed steps for achieving the project goals[1]: (1) GDLA Task Force is formed; (2) core trainers of GDLA Task Force and provincial trainers of model provinces are trained; (3) All of GDLA officials are trained by core trainers; (4) GDLA manages trainings for (i) selected central ministry officials, (ii) provincial governors and vice governors, (iii) selected provincial and district officials, and (iv) provincial councilors and senior council personnel; (5) The trainees (i)-(iv) improve their understanding of D&D policy and local administration; (6) Provincial trainers at all provinces are trained by GDLA, and the provincial trainers train provincial and district officials.		
Activities of the project	1. Project site (Model provinces): Phnom Penh, Kampong Cham, Siem Reap, Battambang, Sihanoukville 2. Main activities: Situation surveys, Formation of GDLA Task Force, Trainers Training (TOT), Conduct of training, Monitoring and evaluation of training 3. Inputs (to carry out above activities) Japanese Side 1. Experts: 9 persons (75.59MM) 2. Trainees received : 39 persons (counterpart training in Japan) 3. Equipment: PCs; software; printers; audio-visual equipment for training; photocopier; etc. 4. Others: Cost for training and workshops/seminars; translation fees Cambodia Side 1. Staff allocated: more than 13 persons including GDLA Task Force members 2. Land and facilities: project office, electricity, water supply 3. Others: office space and necessary furniture; cost for utilities		
Project Period	January 2007 to January 2010	Project Cost	383 million yen
Implementing Agency	General Department of Local Administration (GDLA) of Ministry of Interior (MOI)		
Cooperation Agency in Japan	Local Administration Bureau and Local Autonomy College of Ministry of Internal Affairs and Communications; City of Higashi Hiroshima; Hiroshima University		
Related Projects	-Japan's cooperation: "Local Government Administration for Cambodia" (Country-focused Training Course, 1999-2003); Capacity Development of Provincial Rural Development in Northeastern Provinces (Technical Cooperation, 2007-2011); "Urban Planning Management Advisor for the Municipality of Siem Reap" (Individual Expert, 2008-2010); "The Project for Capacity Development for Implementing the Organic Law at Capital & Provincial Level" (Technical Cooperation, 2010-2015) -Other donors' cooperation: Administration Reform and Decentralization Project (GTZ); Commune Council Development Project II (ADB); Project to Support Democratic Development through Decentralization and Deconcentration (UNDP, SIDA, DfID); assistance in formulation of the National Program (World Bank); District Strategic Development Planning (UNCDF); dispatch of advisors in governance (EC-UNDP); other capacity development activities by UNDP, France, USAID; etc.		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Cambodia's development policy "Promoting decentralization for improving public services and human resource development for local administration" as set in Rectangular Strategy (2003-2008), Strategic Framework for Decentralization and Deconcentration Reforms (2005), and National Program for Sub-National Democratic Development (NP-SNDD[2]), development needs, "capacity development of provincial and district officials for implementing local administration reform and of GDLA officials for training management", as well as Japan's ODA policy "improvement of public service" as set in Country Assistance Program to Cambodia (2002) and JICA's Country Implementation Plan (2006). Therefore, relevance of this project is high.

2 Effectiveness/Impact

[1] Reviewed at the time of the ex-post evaluation.

[2] NP-SNDD was formulated as a 10-year national program (2010-2019) for promoting D&D and has 5 program areas including (1) Sub-National Administration Organization Development, (2) Human Resources Management and Development Systems, (3) Transfer of Functions, (4) Budget, Fina ncial and Asset Management Systems, and (5) Support Institutions for D&D.

The project has achieved the project purpose at the time of completion. The training management capacity of GDLA staff, as well as the capacity and knowledge on the Organic Law, related guidelines, rules and regulations of officials in charge of local administration at the national and provincial level including councilors and executive officials of the model provinces were improved.

At the time of ex-post evaluation, GDLA has no explicit mandate of the training on local administration and the Organic Law. The succession of the roles and responsibility of GDLA Task Force[3], which was formed by gathering selected members across the boundary of departments under GDLA and was dissolved after the project completion, was failed in the transition period of D&D reform. Currently training management on local administration is performed by the Department of Personnel and Vocational Training (DPV) and the Department of Local Administration (DOLA) under GDLA, but it does not solely focus on the district/provincial officials' knowledge about D&D policy and local administration.

As a consequence, the overall goal "Human resource involved in local administration will be developed through training" has been achieved at a limited level. GDLA has not conducted the project developed TOT for provincial trainers in both model provinces and other provinces since the project completion. Although GDLA has conducted TOT as activity under Sub-Program 2(SP2) of Implementation Plan 3 (IP3)[4], the training focus is limited on institutional development rather than the legal and institutional framework of D&D reform and the training has not covered all provinces. Some GDLA core trainers have participated in the TOT under SP2/IP3 and the DPV's trainings for newly-employed civil servants as trainers and partly utilize the skills and knowledge from the project, e.g. the knowledge of Organic Law and other related regulations, as well as its training materials, modules and curriculum with some adjustments.

Among the model provinces, Siem Reap proves to be the best model province in continuing the training activities and training management capacity regarding local administration and the Organic Law. Key contributing factors include leadership of the provincial governor, utilization of the human resource (core trainers and provincial trainers) trained by the project, and the high budget priority given to the capacity development. In 2010, the governor issued a decision to establish the provincial committee on training management to all civil servants, and the training has been regularly conducted[5] by applying the project developed curriculum that was updated following the approved Organic Law and regulations. In contrast, continuation of the project effect was not found in Battambang and Phnom Penh, due to budget constraint and lack of commitment of the top management.

In light of the above, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) (1) Officials of GDLA will improve the capacity of training management. (2) Officials in charge of local administration at national level and provincial level will improve the knowledge of local administration.	(Indicator 1-1) GDLA Task Force is able to manage the training by themselves. (Indicator 1-2) Training management of GDLA is evaluated at more than 8 out of 10 (full grade) in the evaluation system.	(Project Completion) Self-evaluated as "able to manage training by themselves without support". (1-1) Self-evaluation: 2.8 against full grade of 3.0, and (1-2) average score: 8.7 (against the target of 8) (Ex-post Evaluation) According to the former project director and core trainers, GLDA is still able to manage the training by themselves. The former core trainers have participated in the training activities under SP2/IP3 and in the trainings for newly-employed officials as trainers and partly utilize the knowledge and tools developed by the project.
	(Indicator 2-1) The average grade of satisfaction of trainees is more than 8 out of 10 (full grade) in the evaluation system. (Indicator 2-2) Knowledge on local administration of officials improves.	(Project Completion) Knowledge of the Organic Law, related guidelines, rules and regulations were improved. (2-1) average score of 8.67 (against the target of 8), and (2-2) average improvement level: 31.6%. (Ex-post Evaluation) n.a. (The project developed trainings on D&D policy and local administration do not continue after the project completion.)
(Overall goal) Human resource involved in local administration will be developed through training.	(Indicator) The number of provincial and district officials trained under the newly developed training system for local administration.	(Ex-post Evaluation) GDLA continues the management of trainings on local administration for GDLA officials and provincial councilors and officials under sub-program 2 of IP3. However, The current TOT under SP2/IP3 for national and provincial trainers has different training focus and only covers in 24 provinces.

Source : Project Completion Report, Terminal Evaluation Report, Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 128%) because the number of experts increased, and the cost for training and workshop/seminars, which was not planned at the time of ex-ante evaluation, also increased. Therefore, efficiency of the project is fair.

4 Sustainability

The project is still given importance under the policy framework of NP-SNDD (2010-2019) and its IP3/ SP2 carried out by MOI. Institutionally, there is no change in organizational structure of GDLA, expect the dissolution of the project's Task Force. Trainings on local administration are maintained under SP2/IP3 as mentioned in effectiveness/impact, but it is observed that GDLA has no clear organizational mandate for training on D&D policy and local administration focused in the project. The technical capacity of the core trainers has been improved by learning by doing and by sharing among their colleagues. According to the interviews, they have constantly provided training and updated their knowledge to catch up with the changes in

[3] GDLA Task Force was responsible for training management including development, implementation and monitoring and evaluation of trainings on D&D policy and local administration by core trainers/provincial trainers using training materials. The former Task Force members returned to their original departments or changed the positions and responsibilities after the project.

[4] IP3 is a 3-year further elaborated implementation plan (2011-2013) in order to achieve the 10-year NP-SNDD. IP3 consists of six Sub-programs, among which SP2 focuses on institutional and human resources capacity development for Sub-National Administrations.

[5] All training activities have been supported by the provincial budget in "three-year rolling of provincial investment".

the relevant laws and regulations for local administration. The former project director hopes their skills would be maintained, however, there is no clear institutional setup at GDLA to maintain the skills. The training for local administration is currently carried out by budget of IP3 and by national budget of MOI. IP3 will be completed in 2014, and no information about the successor funding sources is provided.

At the provincial level, Siem Reap province has clear organizational structure and mandate of the trainer team, effective plan to implement the trainings on local administration and the Organic Law, and own provincial budget for the next three years (2014-2016), while no such setting were found in Battambang and Phnom Penh.

As there are uncertainties in institutional, technical and financial aspects, sustainability of the project effect is fair.

5 Summary of the Evaluation

This project has achieved the project purpose of (1) Officials of GDLA will improve the capacity of training management and (2) Officials in charge of local administration at national level and provincial level will improve the knowledge of local administration, at the time of project completion. However, at the time of ex-post evaluation, overall goal has been achieved at a limited level, as the mandate of GDLA for capacity development on D&D policy and local administration is not clear, and the project's contribution to the current training activities is limited. As for sustainability, there are uncertainties in terms of institutional, technical and financial aspects as a result of the unclear mandate of GDLA and future budget resource after the completion of IP3. For efficiency, the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. MOI should set up a clear organizational structure under GDLA through a regulation aiming unified management of trainings for Sub-National Administrations, such as establishment of managerial or administrative posts with mandate and responsibility for the training management across the departments under GDLA. Such organizational body at GDLA should also be responsible for updating the project developed curriculum and manuals and enhancing future expansion to the sub-national level.
2. MOI should plan and allocate budget for the training on local administration in the long-run perspective. The utilization of the project outputs, e.g. the core trainers' knowledge on D&D policy and local administration, is not sufficient as it is partly continued under the trainings with different focus including SP2/IP3, which also has the limitations in implementation period and budget.
3. MoI should study or conduct the analysis on the best practice in model provinces for sustainable implementation of the trainings on D&D policy and local administration in addition to addressing the budget allocation issue. Such analysis will help MOI, which does not conduct monitoring after the project completion, to search key information to sustain the project effects in on-going activities. Indeed, Siem Reap province clearly shows that the sustainable implementation of the trainings can be achieved by integration into provincial planning and budget.

Lessons learned for JICA:

1. When a project forms a new Task Force for the project, it should make sure the Task Force function would be institutionalized as regular work of its members. Such institutionalization failed in the project. This failure undermined the sustainability of the project effects including establishment of GDLA's mandate to provide trainings for D&D policy and local administration and increasing the number of officials who gain the knowledge at the national and provincial levels.
2. For securing sustainability of the training system introduced by a project, it is desirable that the training contents/activities would be continued independently rather than be entrusted to other development assistance programs. The project's effects are utilized partially as trainings under IP3 have different focus from the project. Also, in consideration of the fact that development assistance programs have limited budget and period of cooperation, the national ownership should be strengthened for ensuring clear organizational structure, budget allocation and self-efforts to maintain or make adjustment to the project developed training activities.

"Top Management Seminar on Decentralization and Leadership Towards Local Needs and Changing Society" conducted under the succeeding JICA project[6] (2013)

6 Technical Cooperation "The Project for Capacity Development for Implementing the Organic Law at Capital & Provincial Level" (2010-2015)

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Timor-Leste office: September 2013

Country Name	The Project for the Capacity Building of Road Maintenance
Timor-Leste	

I. Project Outline

Project Cost	278 million yen	
Project Period	Originally-planned period: 21 June 2005 – November 2007. Extended period: November 2007 – 18 March 2008. (The project was suspended during the period from May to November 2006 due to political unrest)	
Implementing Agency	Directorate of Road, Bridge and Flood Control (DRBFC) and Directorates of Equipment and Material (DEM) of Ministry of Transport Communication and Public Works (MTCPW) (the infrastructure-related function of MTCPW was reorganized to Ministry of Public Works (MPW) in July 2005, then to Ministry of Infrastructure (MOI) in September 2007, and again to MPW in August 2012. DEM was renamed to Institute of Equipment Management (IGE) in September 2007.)	
Cooperation Agency in Japan	None	
Related Projects (if any)	Japan's cooperation: ・ The Project for Improvement of Roads between Dili and Cassa (Grant Aid, 2004) ・ Road Policy Advisor (dispatch of individual experts, till May 2006) ・ Infrastructure Policy Advisor (dispatch of individual experts, till May 2006) ・ The Project for Capacity Development by Training and Preparation of Guidelines and Manual for Roads (Technical Cooperation, 2006-2008) ・ The Project for the Capacity Development of Road Works (Technical Cooperation, 2010-2013) Other donors' cooperation: ・ Infrastructure Sectors Capacity Development Project and Core Roads Master Plan (ADB) ・ National Infrastructure Plan (AusAID)	
Background	Road transport was the only means of transportation in Timor-Leste where there was no railways and underdeveloped marine transportation. However, due to steep geographic features and rainfall during rainy seasons, roads were prone to collapse and traffic was hindered. International development partners as well as Japan (including the dispatch of the Self Defense Forces for Peacekeeping Operations) rehabilitated the roads and bridges, and the construction machinery used for it were handed over to the government of Timor-Leste. JICA dispatched experts to the country for effective utilization of such machinery, but it was still a challenge for MTCPW to carry out systematic operation and maintenance of the roads given insufficient financial resources, technical personnel and system. DRBFC was responsible for road maintenance administration, and IGE was the only organization in a position to operate and maintain heavy machinery for road maintenance. However, they urgently needed to develop their capacities in planning and implementation of road control and management and operation and management of construction machinery, respectively.	
Inputs	Japanese Side	Timor-Leste Side
	1. Experts: Total 7 persons (6 subjects, total 75.62MM) 2. Trainees Received: 1 person (trained in Japan) 3. Equipment: 1,023 thousand yen (US$89,121) 4. Local Cost: 43,304 thousand yen	1. Personnel assigned: 71 persons in Year 1, 65 persons in Year 2, and 65 persons in Year 3 2. Land and facilities: Project office (Dili and Tacitolu) 3. Local Cost: US$146,514 (construction cost for the implementation of the case study)
Project Objectives	Overall goal Arterial roads in Timor-Leste are always maintained.	
	Project Objective(s) Capability on daily and periodic maintenance/ repair of arterial roads and restoration against disaster on arterial roads are strengthened.	
	Output(s) Output 1: Appropriate works for maintenance and repair of arterial roads are planned by DRBFC of MTCPW (currently MOI). Output 2: Road management system, which DRBFC and regional road offices cooperate each other, is formulated. Output 3: The staff members of DRBFC and DEM (currently IGE) of MTCPW (currently MOI), who are responsible for the maintenance and repair works of arterial roads, are trained. Output 4: The case studies of management plan on the maintenance and repair works of arterial roads are appropriately planned, designed and implemented by MTCPW (currently MOI).	

	Output 5: The operation system for construction equipment and repair equipment/ tools is appropriately maintained and managed by MTCPW (currently MOI).

II. Result of the Evaluation[1]

Summary of the Evaluation

In Timor-Leste, international development partners and Japan were engaged in rehabilitation of roads and bridges. However, in order to carry out daily maintenance and post-disaster restoration of roads and bridges systematically and efficiently, the capacities of DRBFC (in charge of road maintenance) and IGE (in charge of operating and maintaining heavy machinery for road maintenance) were not sufficient.

This project has partially achieved the project purpose of strengthening capability on daily and periodic maintenance/ repair of arterial roads and restoration against disasters. The construction machinery has become utilized for restoration of roads after disasters to some extent, through the implementation of a series of works of operation and maintenance of the machinery and repair equipment/tools, partly thanks to the succeeding technical cooperation project. However, road maintenance works have not yet been systematically-planned and sufficiently-executed due to the low level of standard and quality of construction of existing roads in the country. Therefore, the overall goal, sustainable maintenance of arterial roads, have not been sufficiently achieved, either. As for sustainability, some problems have been observed in the implementing agency's financial aspect due to concerns on operation and maintenance budget.

For relevance, the project has been highly relevant with Timor-Leste's development policy, development needs as well as Japan's ODA policy. For efficiency, although both the project cost and the project period were within the plan if not counting the suspended period due to the political unrest, a fair amount of inputs from the succeeding technical cooperation project was also used.

In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Timor-Leste's development policy "capacity development in repair and maintenance of roads" as a prioritized issue of the National Development Plan (NDP: 2002-2007), development needs "identification, repair and improvement of damages through daily and periodic maintenance" and "prompt and appropriate road rehabilitation works", as well as Japan's ODA policy "road maintenance" as one of the three targeted sub-sectors of the "infrastructure development", the top priority area of assistance set out in the Country Assistance Program, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

A part of the project purpose, namely, strengthening of capability on restoration against disaster on arterial roads, was achieved to a certain extent. The project made a work flow of operation of construction machinery and repair equipment/tools through the development of a machinery operation system and technical transfer. The Project for the Capacity Development of Road Works, the succeeding technical cooperation project, consolidated the implementation of the system. Consequently, IGE has become able to mobilize the construction machinery for repair of damaged parts of roads, though the speed of mobilization could be improved .

However, the other part of the project purpose, i.e. strengthening of capability on daily and periodic maintenance/ repair of arterial roads, has not reached the level where road maintenance works are systematically-planned and sufficiently-executed, for the standard and quality of construction of existing roads in the country was very poor. Since the databases developed under this project, such as the road inventory database and the road maintenance database (a database of damaged parts of roads) were not fully utilized after project completion, the succeeding project updated and improved the databases and promoted planning and execution of road maintenance plans. Nevertheless, such plans often have to be put off after ad hoc responses to unexpected damages. Even only regarding the periodic maintenance, the demand is too high for DRBFC with its current manpower and budget to sufficiently respond to it. It would take more time for DRBFC to be able to focus on daily and periodic maintenance and repair based on the road inventory database and other databases, and therefore the overall goal "arterial roads in Timor-Leste are always maintained" has not been achieved yet.

In this way, there has been an improvement from the situation before this project where the implementing agency had been incapable of maintaining and repairing roads for itself, and it is significant that the road inventory database, which gives a comprehensive view of the entire situation of the country's arterial roads, was developed in the inception phase of road maintenance in Timor-Leste. However, the achievement of this project has not yet reached the expected level. Therefore, its effectiveness/impact is fair.

3 Efficiency

Although both the project cost and the project period were within the plan, appropriateness of the inputs for producing the outputs should be somehow discounted, because, even at the time of project completion, urgent repair of damages due to weak design and standards of roads had to be done before consolidating daily and periodic repair that the project had intended. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy background, this project is consistent with the development policy of Timor-Leste in an ongoing manner: the

[1] This evaluation could not clearly show the sole effectiveness/impact of this particular project because the succeeding technical cooperation project (the Project for the Capacity Development of Road Works) and assistance from other development partners were on-going in the same area of cooperation.

Strategic Development Plan (2011-2030) regards roads as the most important infrastructure to be developed to support economic development. In the institutional aspect, despite the changes of its superordinate organization, the structure of the implementing agency has been sustained in more or less a similar manner with the implementation period but with the increased number of staff. In the technical aspect, the implementing agency's technical level has been strengthened partly as a result of the activities of the Project for the Capacity Development of Road Works. With respect to the financial aspect, although budget for the road sub-sector as well as operation and maintenance budget have been increased compared to the project implementation period, the huge demand for road maintenance requires constant efforts to increase budget (in the fiscal year 2012, the implementing agency estimated the necessary budget based on the information from the databases with technical support from ADB, and requested an increase in budget allocation accordingly).

In this way, the project has some problems in the financial aspects, and therefore, sustainability of the effects of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

A full-fledged rehabilitation of major arterial roads is being planned, which will enable the extensive use of the outputs of this project, i.e. execution of daily and periodic maintenance and repair based on the road inventory database. Therefore, periodic updating of the database as well as estimation and request of operation and maintenance budget based on the database are recommended.

Lessons learned for JICA

In Timor-Leste where there is no other means of land transport than roads and progression of road damage is seen everywhere, road maintenance is a pressing issue and therefore relevance of this project is high. However, in a newly-independent and vulnerable country such as Timor-Leste, everything must start from zero, and this project alone cannot achieve its overall goal "arterial roads in Timor-Leste are always maintained" but a more continuous and step-by-step approach is needed. Also, the standard and quality of construction of existing roads required repair of frequent unexpected road damages before daily and periodic maintenance and repair. Therefore, in the formulation of a project such as this project that would tackle an urgent but very large and hard issue, it is important to plan the project from a long-term perspective, envisage an orientation of cooperation that could improve the job performance and capacity of the implementing agency on a step-by-step basis, clearly define the position of the project in that orientation, and thoroughly assess the feasibility.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: January, 2014

Country Name	The Project for Strengthening Health Services Provision in Hoa Binh Province
Socialist Republic of Viet Nam	

I. Project Outline

Background	In Vietnam, District Hospitals (DHs) and Commune Health Center (CHCs) are mainly responsible for the primary health care, and Provincial General Hospital takes care of secondary healthcare services. Hoa Binh is located in the mountainous North West region, where health conditions are poorer than other areas in the country. In Hoa Binh, the referral system among Hoa Binh Provincial General Hospital (HBHGH), DHs and CHCs was not working properly and there was a disparity of the quality of medical services between the city and rural areas. Also, due to a shortage of human resource and facility, limited capacity of DHs and CHCs in responding to the needs of local people was a critical issue.		
Objectives of the Project	1. Overall Goal: Medical system in Hoa Binh Province which has its effectiveness verified will be introduced and spread throughout other provinces in Northern Vietnam. 2. Project Purpose: Medical system in Hoa Binh Province is strengthened thorough the establishment of Direction Office of Healthcare Activity (DOHA) at provincial and lower levels and patient referral system. 3. Assumed steps for achieving the project goals: The project implements training and technical guidance activities. Through these activities, the project improves the management capacity of Hoa Binh Provincial Health Department (HBDOH), enhances training support of HBHGH to DHs, establishes DOHA at provincial and lower levels, and develops the patient referral system. By realizing the above project outputs, the project aims to strengthen the medical system in Hoa Binh Province. Then, good practices (Note 1) of the medical system in Hoa Binh Province are disseminated throughout other provinces in Northern Vietnam. Note 1: These practices were consolidated into the Guidebook on DOHA and Referral System in Hoa Binh (hereinafter: the Guidebook)		
Activities of the project	1. Project site: Hoa Binh Province 2. Main activities Training for the management officers and medical staff of HBDOH, HBHGH and DHs for development of DOHA and referral system, and other training in clinical fields such as emergency, pediatrics, Intensive Care Unit (ICU). 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 15 persons (4 for Long term, 11 for Short term 2) Trainees received in Japan: 16 persons 3) Equipment: Medical equipment, training facilities and equipment Vietnamese Side 1) Staff allocated: 9 persons 2) Land and facilities: project office 3) Local cost: salaries to counterpart personnel, training cost		
Project Period	December 2004 – December 2009	Project Cost	255 million yen
Implementing Agency	Ministry of Health (MOH) Hoa Binh Province, Department of Health (HBDOH)		
Cooperation Agency in Japan	National Center for Global Health and Medicine (NCGM) (former International Medical Center of Japan)		
Related Projects	Japan's cooperation: • The Bach Mai Hospital Project for Functional Enhancement (Technical Cooperation, 2000-2005) • Project for the Improvement of Hoa Binh General Hospital (Grant Aid, 2005-2007) Other donors' cooperation: • Improvement of the Quality and Utilization of RH Service Project (UNFPA, Grant, 2002-2004) • Rural Health Project (strengthening mainly District Health Centers in 8 provinces) (ADB, Grant and Loan, 2004-2009) • Upgrading of Community Health Services in Hoa Binh Province (Belgian Technical Cooperation (BTC), Technical Cooperation, 2004-2009)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Vietnamese development policy ("improvement in accessibility and quality of health care services" in the National Strategy on People's Healthcare and Protection 2001-2010 and the Health Sector Development Plan of Vietnam 2005-2010), development needs ("improvement in the health care services of public medical institutions in Hoa Binh Province"), as well as Japan's ODA policy for Vietnam with the priority area of improvement of

lifestyle and social aspects including health and medical care, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on establishment of effective referral system and the DOHA technical guidance system in the public health facilities in Hoa Binh. In order to assess achievement of project purpose and overall goal appropriately, modified indicators are applied to the ex-post evaluation (Note 2). Those for project purpose are as follows: (i) the results of annual evaluation of medical institutions conducted by MOH, (ii) variation of referral data, (iii) status of functioning technical guidance system with DOHA and referral system, (iv) status of support and advice from Bach Mai Hospital to HBHGH, and (v) status of patients' satisfaction. As to (i), the number of hospitals in Hoa Binh Province which were given the highest rate by the MOH's annual evaluation increased from three (3 DHs) in 2006 to eight (HBHGH and 7 DHs) in 2008. In 2012, five hospitals (HBHGH and 4 DHs) remained in the highest rating. Regarding (ii), most of the referral data indicates the positive effects (shown in the box below). According to HBHGH staff, after the improvement of infrastructure and equipment of HBHGH by the Japanese grant Aid in 2007, the capacity of HBHGH was further improved, creating a great motivation to hospital staff because they have had a better working condition. The status of HBHGH was upgraded from grade 2 to grade 1 in 2012 by MOH (Note 3). However, HBHGH is getting overload (currently, actual bed occupation ratio is about 140%), and this situation brought a great burden for HBHGH staff. As for (iii) and (iv), it is confirmed that after the project completion, HBDOH continuously manages and supervises the technical guidance system with DOHA and referral system with the technical support from Bach Mai Hospital and other central hospitals. As for (v), Annual Patient Satisfaction survey conducted by HBHGH and DHs indicates that their medical services were evaluated as "highly satisfactory" by the patients, including the following points such as better communication skill with patients, publicized information on drug, and less complicated administrative procedures.

As for overall goal, its modified indicators are: (i) number of provinces that introduced a technical guidance system and patient referral system based upon the Guidebook, (ii) status of formalization of the Guidebook as an official document of MOH, and (iii) degree of promotional activities for dissemination of good practice of Hoa Binh to other provincial hospitals, provincial DOH and DOHA related departments of the central hospitals undertaken by MOH. As for (i), no province has been applying the same practice of Hoa Binh at the time of the ex-post evaluation. This is because the Hoa Binh practices have not been officially certified by MOH, and therefore official application is not yet carried out in other provinces. Regarding (ii), as stated above, the Guidebook has not been certified by MOH as the standardized guidebook in the country because MOH needs more experimental evidence in other provinces before institutionalizing the Guidebook of Hoa Binh Province as standardized guidebook. As for (iii), since 2009, Hoa Binh Province started receiving the numerous delegations from other provinces and the experience and outcome of the project have been shared widely with them.

In addition, some Project's outcomes have been consolidated to other donors' supported projects. For example, the technical guidance system and patient referral system developed by the project have been integrated to CHCs in the field of new born and emergency obstetrics in UNFPA Project. Also, a referral system among DHs and CHCs has been introduced at 3 districts (Mai Chau, Tan Lac and Kim Boi) of Hoa Binh Province within a framework of the Belgian Technical Cooperation Project (BTC).

In this way, the project has mostly achieved the project purpose. However, the overall goal, dissemination of the project outcome to other provinces, has not been realized yet at the time of the ex-post evaluation. Therefore, effectiveness of the project is fair.

Note2: Since the project purpose is understood as a synonym for project outputs 1-4, the same indicators of project outputs is proposed as additional indicators for the project purpose. Moreover, because the first indicators of overall goal "The MOH and Hoa Binh Province disseminate project's outputs and experiences to relevant organizations and other provinces" is not concrete, alternative indicator is proposed to replace the original indicator. PDM (Version 3) revised on May 24, 2007 is used for ex-post evaluation.

Note3: There are 4 grades of hospital rating system in Vietnam: "Superior",>"grade 1",> "grade 2" and> "grade 3". These are defined in terms of human resource, technique, scope of bed etc.

Reference data

	2005	2006	2007	2008	2009	2010	2011	2012
Referral cases from DHs to HGH	1,265	2,040	3,303	5,436	8,412	8,383	10,276	12,320
Referral cases from HGH to CHs*	2,935	3,196	4,137	4,493	4,498	3,770	3,698	3,925
No. of out-patient examination at HGH	118,023	136,783	136,702	166,674	167,040	124,950	133,166	121,092
No of in – patients to HGH	N.A.	N.A.	N.A.	25,150	29,179	25,236	27,081	27,404
Emergency cases from DHs to HGH with prior information	N.A.	4	152	339	360	420	395	430
Patients from communities to HGH without reference**	N.A.	373	951	2,547	4,275	1,081	5,735	5,470

*CHs: Central Hospitals responsible for tertiary health care (for example, Bach Mai Hospital in Hanoi).

** From 2011, there was a change in health insurance policy, requiring all citizens to go to the DHs first. As a result, some of patients do not wait until receiving the reference note, but go directly to HBHGH because of their better economic condition and better access.

Achievement of project purpose and overall goal

Aim	Indicators	Results

(Project Purpose) Medical system in Hoa Binh Province is strengthened thorough the establishment of DOHA at provincial and lower levels and patient referral system.	11 District Hospital (DHs) and HGH are all graded as "excellent" on the criteria related to the project (Note 4) by annual evaluation of medical institutions conducted by the Ministry of Health.	(Project completion) In 2006, three hospitals (3 DHs) were rated as excellent, and in 2008, eight hospitals (HGH and 7 DHs) were rated as excellent. (Ex-post Evaluation) Based upon the new rating system (Note 5), five hospitals (HGH and 4 DHs) were rated as good (the best title) in 2012.
(Overall goal) Medical system in Hoa Binh Province which has its effectiveness verified will be introduced and spread throughout other provinces in Northern Vietnam.	The MOH and Hoa Binh Province disseminate project outputs and experiences to relevant organizations and other provinces.	(Ex-post Evaluation) The Guidebook was shared with other provinces in the North (e.g. Ninh Binh, Phu Tho, Tuyen Quang, Vinh Phuc, Lang Son, Thanh Hoa, and Yen Bai)
	Project's important outputs such as guideline or referral system are used as guide and referral by other provinces to strengthen their DOHA activities.	(Ex-post Evaluation) No province has introduced the same practices of Hoa Binh in its medical institutions yet because the Guidebook has not been certified by MOH as the standardized ones.

Source: Terminal Evaluation Report, Interviews with counterparts.

Note 4: The criteria include "examination and treatment", "training", "referral guideline", "diagnosis, hospitalization, department transference, hospital transference and discharge", "nursing and total care", "medical ethics and professional culture", "emergency department", medical equipment management", "Nosocomial infection control" and "hospital management".

Note 5: The rating system of annual evaluation by MOH has been changed from 2011, in which there was no more "excellent", the best title was "good".

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were as planned (ratio against the plan: 87%, 100%). Therefore, efficiency of the project is high.

4 Sustainability

In policy aspect, this project is still given importance in the current development policy such as the Health Sector Development Plan of Vietnam (2011-2015) and Socio Economic Development Plan of Hoa Binh Province (2011-2015). Currently, MOH is finalizing the Circular on Referral and JICA's technical cooperation project "Strengthening Medical Service in Northwest Province" (March 2013 ~ March 2017), is being implemented in order to disseminate the Hoa Binh experience to other Northern provinces. Regarding the institutional aspect, the DOHA network is sustained among HBDOH, HGH and DHs and most of staff who received training by the project continues to work at their respective hospitals. However, a shortage of human resource (medical staff) is observed in DHs in Hoa Binh, which is though a common issue in the whole health sector in Vietnam. Regarding the technical aspect, the training on DOHA and referral system has been continuously conducted with utilization of the Guidebook, and it has become a routine work in HBDOH, HBHGH and DHs. HBHGH continuously receives the technical support and advice from Bach Mai Hospital, which serves as the top referral hospital of the country, and other central hospitals. Regarding financial aspect, despite limited budget condition, HBDOH, HGH and DHs put great effort to maintain the operation of established systems and allocate the necessary budget in the annual plan .From these findings, there are some issues in institutional and financial aspects, therefore, sustainability is fair.

5 Summary of the Evaluation

The project has mostly achieved the project purpose, but overall goal has not been realized at the time of ex-post evaluation. HBHGH and several DHs were given the highest rate by the MOH's annual evaluation. A series of referral data indicates that the referral system and the DOHA technical guidance system introduced in Hoa Binh Province by the project have been still well functional at the time of the ex-post evaluation. The capacity of HBHGH was further improved by the Japanese grant aid in 2007, which resulted in the upgrade of HBHGH's status from grade 2 to grade 1 in 2012 by MOH. The medical services of HBHGH and DHs were evaluated as "highly satisfactory" by the satisfaction survey to the patients. However, the experience and outcome of the project in Hoa Bin Province has not been disseminated to other northern province in Vietnam as expected mainly due to delay in institutionalization process of the guidelines by MOH. Regarding efficiency of the project, both the project cost and the project period were within the plan, thus its efficiency is high. As for sustainability, there are some issues in institutional and financial aspects, therefore, sustainability is fair.

In the light of above, this project is evaluated to satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- In order to sustain and further develop the project outcome, it is strongly recommended Hoa Binh Province to continuously promote the experience sharing with other provinces, as well as with MOH, so that MOH could make sound decision on the institutionalization of the DOHA and referral activities. Once it is institutionalized by MOH, the issues on limited allocation of staff and budget would be improved than current situation. In this respect, MOH is expected to closely collaborate with the on-going JICA's technical cooperation project "Strengthening Medical Service in Northwest Province" to accelerate this institutionalization process.

Lessons learned for JICA: None

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: July, 2013

Country Name	The Project on the Village Support for Sustainable Forest Management in Central Highland
Vietnam	

I. Project Outline

Project Cost	258 million yen	
Project Period	June 2005 – September 2008	
Implementing Agency	• Ministry of Agriculture and Rural Development (MARD) • Division of Forestry, Department of Agriculture and Rural Development (DARD) of Kon Tum Province • Kon Tum Province Forestry Project Management Board	
Cooperation Agency in Japan	Forestry Agency, Ministry of Agriculture, Forestry and Fisheries (MAFF)	
Related Projects (if any)	Feasibility Study on the Forest Management Plan in the Central Highland in the Socialist Republic of Viet Nam (JICA)	
Background	The Central Highlands in Vietnam was recognized as having higher potential for forestry development because the area sustained large scale natural forests. The region plays important roles for conservation of bio-diversity, conservation of water resource, livelihood of ethnic minorities and so on. However, the expansion of agricultural land, especially by slash and burn shifting cultivation practice, mainly caused by the growing population, had been causing deforestation and forest degradation. This had been resulting in the decrease of agricultural productivity of those lands, as well as decrease of forest production. Under these circumstances, the Feasibility Study on the Forest Management Plan in the Central Highland in the Socialist Republic of Viet Nam had been conducted by JICA for 35 months from 2000, targeted to Kon Tum Province, and concluded the need of decreasing slash and burn shifting cultivation to realize forest protection in the region.	
Inputs	Japanese Side	Vietnamese Side
	1. Experts: 7 persons (Long-term: None, Short-term: 7) 2. Trainees received in Japan: None 3. Third-Country Training: 16 persons in Thailand 4. Equipment: 13.8 million yen 5. Local Cost: 60.2 million yen 6. Others: (including dispatch of missions): 176 million yen	1. Staff allocated: 13 persons 2. Equipment: None 3. Local Cost: 2,192 million VND 4. Land etc. provided: Project office by Kon Tum
Project Objectives	Overall goal • The livelihoods of villagers in the 5 model villages are improved. • Successful model developed in the model villages are expanded to other villages located in the two districts (Kon Plong District and Kon Ray District)	
	Project Objective Agriculture, forestry, animal husbandry, and agroforestry activities are improved in model villages of (i) Kon K Tau (Po E Commune), (ii) Vi Chiring (Hieu Commune), (iii) Nuoc Not (Ngoc Tem Commune), (iv) Kon Tuc (Dak Pne Commune), and (v) Tu Ro Bang (Dak Koi Commune) in Kon Tum Province.	
	Outputs • Villager's knowledge and skills in agriculture, forestry, animal husbandry, and agroforestry are improved. • Capacity of government staff in implementation and management of livelihood improvement projects is strengthened. • Villagers' capacity in marketing agricultural, forestry, and livestock products is strengthened. • Knowledge of villagers and government staff on sustainable use of forest and land is improved. • Preparations are made for extending results of project activities to other regions.	

II. Result of the Evaluation

Summary of the Evaluation
Kon Tum Province, a target area of the project, was one of the localities that faced deforestation and forest degradation and attempted to promote alternative production activities in order to avoid and/or mitigate further deforestation and forest degradation. However, the administration bodies of the Province lacked technical and human resources due to limited experiences in supporting the development of such alternative production activities. The project has achieved the project purpose of improving the agriculture, forestry, animal husbandry, and agroforestry activities in the model villages, and somewhat achieved the overall goals of (i) improvement of the livelihoods of villagers in the 5 model villages and (ii) expansion of the successful models developed in the model villages to other villages located in the two districts (Kon Plong District and Kon Ray District). As for sustainability, the project has some problems in structural, technical and financial aspects because of the weak monitoring and follow-up capacity of the project by DARD of Kon Tum Province due to limited financial and human resource. Therefore, the sustainability of the project is fair. For relevance, the

project has been highly relevant with Vietnam's development policy, development needs, as well as Japan's ODA policy. For efficiency, the project cost exceeded the plan.

In the light of the above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Vietnam's development policy ("increase in forest areas" in the Vietnam Forestry Development Strategy (VFDS) 2001-2010, and VFDS 2006-2020), development needs ("conservation of natural forests in Kon Tum province by reducing slash and burn cultivations"), Japan's ODA policy "Improvement in life and social dimensions including improvement of agriculture and rural development and environment" at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved the project purpose of improving the agriculture, forestry, animal husbandry, and agroforestry activities in the model villages. At the time of terminal evaluation, 95% of households that participated in the project had continued their diversified agricultural activities. It can be assumed that the participating households have increased the amount of products, at least, for the model activities they have introduced.

The overall goals were partially achieved. According to the interview results with farmers, the average income of households in the 5 model villages increased and the number of poor households in the 5 model villages decreased by 44% from 247 in 2006 to 137 in 2010, which mostly met the target value of 30% in 2011. Knowledge and skills concerning the agriculture, forestry, animal husbandry, and agroforestry activities applied in the model villages are disseminated to approximately 16% of all households in Kon Plong District and Kon Ray Districts, which meets its target value of 10%.

However, the mechanism for the successful models introduced by the project; i) Assignment of Community Facilitators (CFs)*,ii) Establishment of Village Development Boards (VDBs)**, iii) Introduction of Animal Bank System, iv) Monitoring and Supervising of the Project by using Periodical Workshop/Meeting, and v) Introduction of Participatory Monitoring & Evaluation, were limited in their function and have not extended to other villages. Also, since the project terminated before the actual implementation of Community Forest Management (CFM) Plan in the pilot village (Vi Chring village), the project was not able to assess the applicability of the CFM plan, and the implementing agency was not able to fully acquire the required capacity to continue and expand such model.

According to the interview results to the counterparts and villagers of the target villages at the time of ex-post evaluation, the project has enhanced the participation of the ethnic minorities and women to the communities and also contributed to the improvement of participants' nutrition through introduction of improved agricultural practices for their self-consumption.

No negative environmental impact by the project was observed. The forest area of Kon Ray District and Kon Plong District remains stable since the project completion in 2008. The project did not involve any land acquisition and resettlement of the people. Therefore, effectiveness/impact of this project is fair.

* Community Facilitators (CFs): CFs are the temporary staff hired by the project dispatched to five pilot villages by DARD in order to support villagers to prepare the participatory planning, to organize workshops as well as to monitor the project implementation.

** Village Development Boards (VDBs): VDBs are established in each model villages to (i) assist villagers in implementing and maintaining project activities in the villages, (ii) identify and resolve problems, etc,. for the effective progress of the project, (iii) monitor and evaluate project activities, and (iv) manage the animal bank system.

<Interview to the villagers>

<Fruits tree supported by the project>

Outcome	Indicator (Target Value)	Actual
Overall Goal: 1. The livelihoods of villagers in the 5 model villages are improved.	• Average income of households in the 5 model villages is increased by 20% compared to the time of project initiation (by 2011).	(At the time of ex-post evaluation in 2012) • According to the interview results to the farmers group, average income of households in the 5 model villages is increased compared to the time of project initiation. But no quantitative data is available.
	• Number of poor households in the 5 model villages is decreased by 30% compared to the time of project initiation (by 2011).	• The number of poor household in the 5 model villages has decreased by 44% from 247 in 2006 to 137 in 2010 (no data available for baseline year of 2005 and 2011).
2. Successful models in model villages are expanded to other villages located in the two districts (Kon Plong District and Kon Ray District)	• Knowledge and skills applied in the model villages are extended to 10% of all households in two districts.	• Knowledge and skills applied in the model villages are expanded to 873 households in the five communes (Poe, Hieu, Ngoc Tem, Dak Pne and Dak Koi) in two districts, which is about 16% of all households in two districts.
Project Purpose: • Agriculture, forestry, animal	• At least 70% of the households that participated in the project increase the	(At the time of project completion in September 2008) • No baseline and result data available. However, it can

husbandry, and agroforestry activities are improved in the 5 model villages.	amount of the products form agriculture, forestry, animal husbandry and agroforestry.	be assumed the participating households had increased the amount of products, at least, for the model activities they have introduced.
	• At least 70% of the households that participated in the project diversify their production activities.	(At the time of terminal evaluation in June 2008) • 95% of households (i.e. 172 out of 181 households) had continued their diversified agricultural activities. • Over twenty (20) types of farming activities were implemented in the model villages.
	• At least 70% of the households that participated in the project continue their activities introduced by the project.	(At the time of project completion in September 2008) • 77% of households (i.e. 167 out of 218 households) have continued at least one of the agricultural activities introduced by the project.

Source: Terminal Evaluation Report and information provided by DARD of Kon Tum Province.

3 Efficiency

Although the project period was within the plan (100%), some inputs were not appropriate for producing the outputs as the project could not monitor the result of implementation of CFM Plan in the pilot village, due to the limited project period. And the project cost exceeded the plan (144%) because of increase in inputs of Japanese experts to substitute the local experts due to miss-match between the project strategy and the competency of the local resources. Therefore, efficiency of the project is fair.

4 Sustainability

The sustainable forest management has been promoted under the Vietnam Forestry Development Strategy 2006-2020 together with related government decrees and decisions and the Vietnamese government as well as foreign donors has been supporting this area. After the project completion, five Community Facilitators (CFs) are no longer working and the Village Development Boards (VDBs) established in each model village have been only functioning in a limited scope mainly due to lack of financial incentives to the VDB members after project completion. In this regard, DARD of Kon Tum Province assigned agricultural extension workers of communes to take over the roles of CFs and supplement the limited function of the VDBs, and the extension workers have continued to disseminate the knowledge and skills of successful farming activities to other villages to some extent through daily extension works. However due to the limited number of extension workers, technical capacity of extension workers and the limited budget, the implementing agency is still weak in monitoring and follow-up activities in the model villages, including implementation of CFM Plan in Vi Chring village, and organizing technical seminars to disseminate the successful farming practices to other villages.

The project has some problems in structural, technical and financial aspects, therefore, the sustainability of the project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

- MARD and DARD of Kon Tum Province are required to make efforts to monitor and follow up the activities in the pilot villages such as the agriculture, forestry, animal husbandry, and agroforestry activities as well as to disseminate the knowledge and skills of successful farming activities in the pilot villages to other villages in the Province together with extension guidelines.
- In this regard, MARD and DARD of Kon Tum Province should consider sharing the project outcome with the on-going projects in similar sectors such as “Integrated Rural Development Sector Project in the Central Provinces (ADB)” and “Forest for Livelihood Improvement in the Central Highlands (ADB)” and to make use of available resources of the on-going projects for further dissemination of successful farming activities in the Province.

Lessons learned for JICA

- This project trained five Community Facilitators (CFs) who were the temporary staff hired by the project and dispatched to five model villages. CFs were expected to continue to monitor and support the project activities in the model villages after project completion. However, due to budgetary constraints, Kon Tum Province could not continue to mobilize the CFs to the model villages after the project completion. This affected the function of Village Development Boards (VDBs). For similar projects in the future, it is important to fully utilize the existing system and organization rather than to establish a new system and organization to ensure the sustainability of the project. For example, it should be considered that CFs be selected from the motivated villagers. In this case, the roles of CFs are mainly coordination with agricultural extension workers and supporting their activities.
- There were some overlaps between the extension guidelines developed by the project and the existing Vietnamese guidelines. If the project is to develop new guidelines, it must avoid overlaps and be developed as a supplementary material consistent with the existing guidelines. This may strengthen the usefulness of the guidelines as well as avoid confusions for the users.
- The CFM plan was added during the course of the project implementation; however, the project period to complete the plan was too short. Therefore, it is necessary to make sure whether project period is sufficient enough to complete additional plans before implementing them.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: January, 2014

Country Name	Support for the Capacity Building of Vietnam ODA Management
Socialist Republic of Viet Nam	

I. Project Outline

Project Cost	260 million yen	
Project Period	October 2005 – October 2008	
Implementing Agency	Foreign Economic Relations Department (FERD), Ministry of Planning and Investment (MPI) and other relevant agencies	
Cooperation Agency in Japan	PADECO	
Related Projects (if any)	Cooperation by Japan • Long-term JICA expert to FERD/MPI (Aid Coordination, 2001 -) Cooperation by Other Donors • Vietnam-Australia Monitoring and Evaluation Strengthening Project (VAMESP) Phase I and Phase II (AusAID, Technical Cooperation, December 2003 - December 2010) • Comprehensive Capacity Building Programme for ODA Management in Vietnam (CCBP) (World Bank, Technical Cooperation, December 2005 - December 2010)	
Background	Official Development Assistance (ODA) to Vietnam has been increasing over the last decade. Although ODA had contributed to promoting economic growth and improving the quality of people's lives, issues still remained on how to utilize ODA effectively. In order to improve aid effectiveness, the Vietnamese Government and donors were jointly taking several measures including the Partnership Group for Aid Effectiveness (PGAE), Vietnam-Australia Monitoring and Evaluation Strengthening Project (VAMESP) and Comprehensive Capacity Building Programme for ODA Management in Vietnam (CCBP). Topics to be addressed include alignment to the country system, simplification and harmonization of ODA related procedure, capacity building of project formulation, implementation of monitoring and evaluation, improvement of the regulatory framework and so on. Under these circumstances, the Vietnamese Government requested Japan for assistance to enhance the capacity and efficiency of ODA management at the Foreign Economic Relations Department, Ministry of Planning and Investment (FERD/MPI) and Line Agencies (LAs) with focus on the project formulation/ screening stage.	
Inputs	Japanese Side	Vietnamese Side
	1. Experts: 11 experts of 4 areas for short-term 2. Trainees received in Japan: 36 trainees 3. Equipment: 14.5 million yen	1. Staff allocated: 4 persons from FRED/MPI and 8 persons from LAs 2. Land etc. provided: Project office in MPI 3. Local Cost: Necessary expenses, including travel expenses for MPI staff and training courses/ workshops
Project Objectives	Overall goal Quality of ODA in Vietnam is improved.	
	Project Objective(s) The capacity of ODA Management (on project formulation) is developed among the staff in charge of ODA in the Vietnamese Government (FERD/MPI and eight pilot LAs) Note: Eight (8) pilot LAs are Ministry of Transport (MOT), Ministry of Health (MOH), Ministry of Agriculture and Rural Development (MARD), and People's Committees of Hanoi City, Hoa Binh Province, Nghe An Province, Thua Thien–Hue Province, and Ho Chi Minh City (HCMC).	
	Output(s) • Project management and implementing mechanism are established. • Working environment for ODA management at FERD/MPI is improved by the usage of IT. • Knowledge on ODA procedures and basic skills on project formulation are enhanced among staff of LAs.	

II. Result of the Evaluation

Summary of the Evaluation
MPI is the key agency in mobilizing, coordinating and performing the Vietnam State management of ODA as well as in guiding Line Agencies (LAs) in preparation and formulation of ODA-funded programs and projects. However, several problems in the project formulation stage were observed in MPI and LAs such as (i) inefficient work practice and utilization of unformed document, (ii) limited information sharing within the organization, (iii) unfamiliarity with ODA procedures and preparing overlapped documents for Vietnamese government and donors, (iv) low quality of proposal documents, and (v)

work culture in Vietnam, which led to a prolonged project formulation in LAs and screening process in MPI.

The project has somewhat achieved the project purpose of developing the ODA project formulation capacity for the staff of FERD/MPI and eight (8) pilot LAs at the time of project completion. However, IT system (ODA-MIS) has not been sustained after the project completion. Regarding the overall goal, it was partially achieved since the quality of project proposals and handling speed seem to be improved at time of ex-post evaluation. However, it is difficult to say the result clearly reflects the project contribution to overall goal where other donors have been also involved. As for sustainability, the project has some problem in technical aspects and a major problem in financial aspect due to lack of budget and experts to sustain the IT system in MPI. For relevance, the project has been highly relevant with Vietnam's development policy, development needs, as well as Japan's ODA policy. For efficiency, the project period slightly exceeded the plan.

In the light above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Vietnam's development policy ("improvement of aid effectiveness and efficiency" in the ODA Strategic Framework 2006-2011 and 2011-2015), development needs ("capacity development of the Vietnamese government at central and provincial levels on planning of ODA projects/programs) as well as Japan's ODA policy ("institutional development through capacity development of government officers"), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has somewhat achieved the project purpose and its overall goal. For the project purpose, the capacity development of ODA Management on project formulation for the staff of FERD/MPI and eight (8) pilot LAs was achieved at the time of project completion in October 2008. All of FERD/MPI interviewees perceived saved time of screening after introduction of the ODA Management and Information System (ODA-MIS) (Note 1) to some extent. LAs also became able to apply the skills and knowledge acquired through the project's seminars and activities to the formulation of new project proposals. At the time of ex-post evaluation, however, there is a fact that the ODA-MIS has not been functioning since 2010 due to the lack of budget and maintenance manpower in MPI. While it hinders proposal screening work within FERD/MPI to some extent, training materials developed by the project, face-to-face consultation and information sharing through the department's periodical reporting (such as regular meeting within FERD) have partially brought about the expected outcome of improvement of proposal screening. For example, the training materials by the project have been integrated into the existing training modules of MPI Training Centre and MOT Training College and further disseminated to central ministries and provincial government through the ODA management training conducted by five government training institutions (Note 2). Further, according to the interview with FERD/MPI staff, they still recognize that reference information for proposal formulation became more easily accessible and that their obtained knowledge and skills from the Project were helpful in improving their work quality. In practice, they transfer these knowledge and skills to their colleagues whenever necessary through meetings and consultations. The staff has a perception that these knowledge and skills led to better quality of the proposals and higher speed of handling documents in comparison with the situation before the project implementation.

For the overall goal of improving the quality of ODA in Vietnam, the interview with the major donors indicates that they perceive the quality of proposals submitted by the Vietnamese government has been considerably improved. However, it is difficult to say the result clearly reflects the project contribution to overall goal where other donors have been also involved. Moreover, considering the fact that one of the project components, ODA-MIS, is not working after the project completion, project objective is not fully achieved at the time of ex-post evaluation. Therefore, the effectiveness/impact of this project is fair.

Note 1: ODA-MIS was developed based upon integration of the existing systems in MPI such as Development Assistant Database and IT systems developed by VAMESP II.

Note 2: The training materials developed by this project were integrated into the training textbook named "the Manual for ODA Project Management" developed by CCBP which covers comprehensive skills and knowledge for ODA management including the topics of project planning/formulation, implementation, monitoring and evaluation. After termination of CCBP, the ODA management training has been carried out and the same textbook is utilized, by the five government training institutions (MOT' Training Center; MARD's Training Center; MOF's Financial Institutes in Hanoi and HCMC; Cadre's Training School of HCMC People's Committee)

Outcome	Indicator (Target Value)	Actual
Overall Goal: Quality of ODA in Vietnam is improved.	Projects with substantial benefits are implemented effectively in Vietnam.	(At the time of ex-post evaluation in 2012) Results of interviews with a number of active donors in Vietnam such as World Bank, ADB, KOICA, AusAID, GIZ show that the quality of proposals submitted by the Vietnamese government has been considerably improved, which has resulted in the increased rate of proposals accepted by donors. However, the indicator for overall goal was abstract, and thus the degree of its achievement remained unclear.
Project Purpose: The Capacity of ODA Management on project	**[FERD/MPI]** (1) More than 70% of the FERD/MPI staff at regional divisions complete screening	(At the time of project completion in 2008) Results of interview with FERD/MPI show that all of respondents feel saved time of screening after introduction of

formulation is developed among the staff in charge of ODA in the Vietnamese Government (FERD/MPI and eight pilot LAs)	work and prepare designated documents by spending less time than before the ODA Management and Information System (MIS) introduction. (2) More than 70% of the FERD/MPI staff fell that the quality of proposal screening work has been improved as a result of the introduction of ODA-MIS and IT maintenance system and website upgrade.	ODA MIS to some extent. Also all respondents feel ODA-MIS's usefulness of (i) collecting information on historical projects and other proposed projects, (ii) communicating and sharing information with other FERD/MPI divisions and LAs, and (iii) helping avoiding duplication of projects and consolidating effective projects in ODA Requesting List. However, since 2010 the ODA-MIS has not been functioning due to the lack of budget and maintenance manpower in MPI.
	[LAs] (1) Some LAs submit project proposals by using acquired skills and knowledge and apply them to other practical work.	7 out of 8 LAs responded that the skills and knowledge acquired from the project were useful and could be applied to their practical work including the formulation of new project proposals.
	(2) The Vietnamese side sets necessary arrangement to continually launch training course and workshops.	The training materials developed by the project were used by CCBP as a module on project formulation and planning in CCBP's training toolkit which has been transferred to MPI's Training Center and MOT Training College after the completion of CCBP.

Source: Terminal Evaluation Report (Sep. 2008), Project Completion Report (Oct. 2008) and information provided by MPI and donors.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan (100%), the project cost was slightly higher than the plan (104% against the plan) because of the increase in the number of nation-wide seminars. Therefore, efficiency of the project is fair.

4 Sustainability

As for the policy aspects, the improvement of ODA management is one of the priority areas in the ODA Strategic Framework 2011-2015. As to the structural aspect, the structure of implementing agencies has been sustained in a similar manner even after the project and it is presently confirmed that there would be no changes in the structural aspects of the implementing agencies. Regarding the technical aspect, the Japan's ODA Procedures Manual developed by this project has been widely in use in LAs as their key reference for project formulation. Besides, this manual was integrated to the training textbook of the ODA management, which has been utilized as a key training material by the five government training institutions. However, Nghe An Province and Hoa Binh Province have limitation in maintaining knowledge and skills transferred from the project in their organizations due to difficulties in organizing the internal training continuously by the trainers from the project. Regarding the financial aspects, a lack of budget to maintain and update the ODA-MIS and organize the training courses was observed. From these findings, there are some issues observed in technical and financial aspects. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

- Since IT-related components often get out-dated quickly and surely requires certain budget for operation and maintenance, it is suggested that Vietnamese agencies thoroughly consider possibility of securing appropriate O&M budget for the post-cooperation period.
- As for the ODA-MIS developed by the project, FERD is recommended to consider incorporating outputs of these components into the new ODA Database that MPI is now working on.

Lessons learned for JICA

- Whereas, the problem of lacking budget by Vietnamese side for sustaining the ODA project outputs is quite common, especially for the project components relating to the development of software, database, IT-network. Thus, assistance to these kinds of activates should be carefully considered at the time of project formulation.
- In this project, there were issues regarding PDM setting, such as problems of logical causal relation between the project purpose and overall goal, and abstract indicators set for overall goal. The overall goal, "improvement of ODA quality in Vietnam", is a broad notion and there are many factors (e.g. other donors) that contribute to the goal. In addition, indicators for overall goal were too vague to judge the achievement. As a result, difficulties are observed in terms of evaluating the contributions of the project. Therefore, at the planning stage, it is strongly recommended to assess and clarify the role of Japan in case there are similar projects implemented in the focus area, and to set expected outcomes accordingly which are in line with project purpose and overall goal. Moreover, it is likewise important to establish indicators that properly measure the Project's effect for project purpose and overall goal respectively.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Myanmar office: March, 2014

Country Name	The Project for Rural Water Supply Technology in the Central Dry Zone
Republic of the Union of Myanmar	

I. Project Outline

Background	The central dry zone of Myanmar is a subtropical semi-arid zone. Its annual rainfall is 400-800 millimeter and most of the rain is concentrated from May to October. The residents of many villages in the zone depend on reservoirs where rain was collected for daily water use and when the water level of the reservoirs fell very low in the middle of the dry season, they have to go to wells several Kilometers away to fetch water (at the time of ex-ante evaluation). To overcome such a situation, thousands of wells were formerly constructed by the Myanmar Government and international organizations. However, many of the wells constructed in the past have already been broken. Therefore, rehabilitation of the existing wells as well as new construction of wells was priority issues.		
Objectives of the Project	1. Overall Goal: The number of villages in the Central Dry Zone with access to safe drinking water is increased. 2. Project Purpose: Capacity for construction, repair and maintenance of water supply facilities in the Central Dry Zone is strengthened. 3. Assumed steps for achieving the project goals: The project implements technical training to staff of Department of Development Affaires (DDA) (current Department of Rural Development (DRD)). By realizing this training, the project aims to strengthen the capacity of DDA (current DRD) for construction, rehabilitation, maintenance and monitoring of rural water supply facilities. DDA (current DRD) promotes new construction and rehabilitation of deep tube wells in the Central Dry Zone. As a result, the accessibility to safe drinking water of villages in the Central Dry Zone will increase.		
Activities of the project	1. Project site: Sagaing, Magway and Mandalay Divisions 2. Main activities: Training to DDA (current DRD) staff, preparation of the manual on the management and maintenance of water supply facilities, and provision of equipment/materials for the well rehabilitation training. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 14 persons(3 persons for Long term, 11 persons for Short term) 2) Trainees received: 9 persons 3) Equipment: mono pump, tricone bit, boring nod, casing, screen, diesel engine, borehole camera, etc. Myanmar Side 1) Staff allocated: 76 persons 2) Land and facilities: project office, electricity 3) Others: Procurement of materials for field work and construction of maintenance workshop in Nyaung-U in the Mandalay Division		
Project Period	November 2006 – October 2009	Project Cost	589 million yen
Implementing Agency	Department of Rural Development (DRD), Ministry of Border Affairs (MOBA) (Former Department of Development Affaires (DDA), Ministry of Progress of Border Area and National Races and Development Affair)		
Cooperation Agency in Japan	Kokusai Kogyo Co., Ltd. Bridge Asia Japan (BAJ)		
Related Projects	Japan's cooperation: • The Study on Water Supply Systems in Mandalay City and in the Central Dry Zone (Development Study, 2001-2003) • The Provision of Equipment for Rural Water Supply Project in the Central Dry Zone (Grant Aid, 2012-2014) • Expert on Reinforcement of Maintenance Workshop for Rural Water Supply Facilities in the Central Dry Zone (Technical Cooperation, 2010-2011) Other donors' cooperation: (project name) • Secure Water Supply Programme in the Central Dry Zone (Bridge Asia Japan (BAJ)) • Water Supply Project (UNICEF)		

II. Result of the Evaluation[1]

[1] Constraint of Evaluation: The ex-post evaluation reexamined the appropriateness of the indicators for project purpose and overall goal, and modified their indicators by adding and replacing to alternative indicators in order to assess their achievement appropriately.

1 Relevance

This project has been highly relevant with Myanmar's development policy ("improvement of rural water supply system" in the Ten Year Plan for Rural Water Supply by Development Committees of Sagaing, Magway and Mandalay Divisions (2000/01-2009/10) and the Five Year Plan for Rural Water Supply Development in the Central Dry Zone (2011/12-2015/16)), development needs ("improvement in accessibility safe drinking water in the central dry zone "), as well as Japan's ODA policy for Myanmar with the priority area of humanitarian assistance with urgency through improvement in accessibility of safe drinking water, at the time of both ex-ante evaluation and project completion.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on strengthening of DRD's capacity for construction, repair and maintenance of water supply facilities in the Central Dry Zone. At the final test conducted in June 2009 for evaluation of comprehension and achievement of trainees on 6 fields (geophysical survey, hydrogeology, well drilling, well rehabilitation, maintenance and monitoring, and maintenance workshop), 63 out of 73 counterparts (about 86% of counterparts of DRD) successfully achieved a passing score of either grade A (more than 80% of score) or grade B (60-80% of scores). The performance of three drilling teams was also evaluated as grade A. Several counterparts were able to act as supervisors in the respective fields, and the maintenance workshop could function as the backstopping for other teams by the project. Regarding the new construction of deep wells, total 25 new deep wells were constructed during the project period and 3 wells were found not to meet the WHO water quality standards. As a result, 22 wells were identified as successfully constructed wells. Regarding the rehabilitation of wells, after diagnosis of existing 40 wells, total 34 wells were rehabilitated or replaced during the project period, yet 6 wells did not meet the WHO water quality standards. As a consequence, 28 wells were identified as successfully rehabilitated wells. Among the wells mentioned above(25 and 34 wells), 10 wells were developed by DRD independently by utilizing the advanced technology transferred from the project and 8 out of 10 wells were successful wells that satisfied the WHO water quality standards. This demonstrates the capacity improvement of DRD in well development. At the time of ex-post evaluation, it was confirmed that 16[(Note 1)] newly constructed wells and 26 rehabilitated wells are still functional in good condition. The reasons for non-functional 3 wells are water quality problem especially high contamination of Fluoride or Nitrate which significantly affects the safety of drinking and Iron which damages the well facilities and availability of water volume at water source and colors laundry and smells rusty. Regarding this issue, DRD as well as City Development Committee (CDC) and Township Development Committee (TDC)[(Note 2)] plans to construct the new wells as replacement of problematic wells in accordance with their strategic plan for 2013-2016.

As for overall goal, activities for development of rural water supply such as development of deep wells, shallow wells, hang-dug wells, water reservoir, gravity water supply facility and pond renovation were conducted in the Central Dry Zone by DRD and TDC. Owing to this, the number of villages in the Central Dry Zone which does not access to safe drinking water[(Note 3)] was reduced from 8,042 (51% of total number of villages) in 2001 to 2,398 (16% of total number of villages) in 2013. According to the interview results to 5 Village Water Committees (VWC) in the project target area, the positive impacts such as reduction in water drawing time, reduction in incidents of waterborne diseases, and improvement in hygiene condition are observed. Getting the well facilities nearby, the villagers could reduce the time of water drawing, and the saved time by this reduction are utilized for agricultural activities for adults as well as studying at schools for children. Since safe drinking water with sufficient volume are available, villagers wash the body every day in all seasons and utilize safe water for cooking and drinking, hence their hygiene condition was improved. Furthermore, after establishing VWCs at each village, water fund was created and the fund was utilized for village electrification and micro-credit for poor households to support their livelihood and create income generation activities.

In this way, this project has achieved the project purpose and the overall goal. Therefore, effectiveness of the project is high.

Note 1: Due to lack of the current data concerning the new 5 wells developed by DRD independently, this figure means 16 out of 17 wells developed by JICA and DRD are still functional at the time of ex-post evaluation.

Note 2: When the former DDA was reorganized to DRD in 2012, its subordinate organizations in divisional/provincial and township levers were transferred from DDA to each municipal government and their functions were integrated to each CDC and TDC.

Note 3: The villages with accessibility of safe drinking water mean that a village where at least one well satisfying the WHO water quality standards is developed for use of drinking water.

Achievement of project purpose and overall goal

Aim	Indicators[(Note 4)]	Results
(Project Purpose) Capacity for construction, repair and maintenance of water supply facilities in the Central Dry Zone is strengthened.	The report on lessons learned and Good Practices is prepared.	(Project completion) Good practice and lessons learned were incorporated in materials (textbook, manuals and data books) developed by the project. (Ex-post evaluation) The materials have been utilized continuously.
(Overall goal) The number of villages in the Central Dry Zone with access to safe drinking water is increased.	The number of villages in the Central Dry Zone which does not have access to safe drinking water is reduced by half by 2015.	(Ex-post Evaluation) The number of villages in the Central Dry Zone which does not access to safe drinking water was reduced from 8,042 (51% of total number of villages) in 2001[(Note 5)] to 2,398 (16% of total number of villages) in 2013.

Source：Project Completion Report, The Five Year Project for Rural Water Supply by DRD, Interviews with counterparts.
Note 4: The indicators for overall goal and project purpose are original ones stipulated in Project Design Matrix at ex-ante evaluation.
Note 5: These data was cited from the documents provided by counterparts at the time of ex-post evaluation.

3 Efficiency

The project period was within the plan (ration against the plan: 100%). The project cost was slightly exceeded the plan (ration against the plan: 122%) because of procurement of additional maintenance equipment. The project inputs were appropriate for producing the outputs of the project. Therefore, efficiency of this project is fair.

4 Sustainability

In policy aspect, this project is still given importance in the current development policy such as the Action Plan on Rural Development and Poverty Alleviation (2011) established by the Ministry of National Planning and Economic Development.

Regarding the institutional aspect, after reorganization of former DDA in 2012, there are two types of organization are responsible for development, operation and maintenance of rural water supply facilities, namely, DRD in the central government level and CDC and TDC in the municipal government level. However, this institutional setting is still in a transitional period, and it is planned to reintegrate the current responsibility and function of CDC/TDC regarding rural water supply into DRD as same as former DDA. Some of counterparts who received the training by the project have continued to work at DRD and CDC/TDC. On the other hand, VWCs established in each village are in charge of routine maintenance of well facilities and water bill collection. The board members such as a chairperson, a secretary, an accountant, and an auditor are elected from the members and VWCs are managed according to the rule and regulation. In addition, operation and maintenance (O&M) staff such as a pump operator and a water bill collector are employed by VWCs. The members actively participate to the activities of VWCs and generally VWCs are functioning without problems.

Regarding the technical aspect, DRD has continued to maintain and disseminate the acquired knowledge and skills by the project though provision of training for their staff as well as newly established VWCs by utilizing the 9 types of materials (textbook, manuals, and data books) developed by the project. The field staffs of DRD and CRD/TDC implement periodic monitoring and technical support to VWCs about six wells per month for maintenance of well facilities. VWCs conduct routine maintenance and minor repair of well facilities, and DRD and CRC/TDC dispatch their staff to villages in case of major maintenance that VWCs cannot to deal with.

Regarding financial aspect, in line with the Five Year Plan for Rural Water Supply Development in the Central Dry Zone (2011/12-2015/16), the O&M budget allocated to DRD have been increasing year by year, and it seems sufficient. Besides, VWCs have no problems in water bill collection and management of water fund according to interviews with five VWCs.

This project has no problems in policy, institutional, technical and financial aspects, hence sustainability of this project effect is high.

5 Summary of the Evaluation

The project has sufficiently achieved the project purpose and overall goal. About 86% of counterparts achieved a passing score of more than grade B (60-80% of scores) at the final test. During the project period, total 50 deep wells were newly constructed or rehabilitated successfully, which included 8 successful wells developed by DRD independently by utilized advanced technology transferred from the project. Activities for development of rural water supply were conducted in the Central Dry Zone by DRD and TDC, the number of villages in the Central Dry Zone which does not access to safe drinking water was reduced from 8,042 in 2001 to 2,398 in 2013. Also the positive impacts such as reduction in water drawing time, reduction in incidents of waterborne diseases, and improvement in hygiene condition were observed. Furthermore, the water fund managed by VWCs also brought about positive social impacts such as village electrification and initiatives to support poor families in the villages.

As for sustainability, there are no problems observed at the time of ex-post evaluation. As for efficiency, the project cost slightly exceeded the plan due to procurement of additional maintenance equipment.

In the light of above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is recommended to accelerate the process for reintegration of the current responsibility and function of CDC/TDC regarding rural water supply into DRD as same as former DDA in order to streamline the organizational and administrative function and responsibility for rural water supply development covering both the central and regional levels. This will strengthen the institutional, technical, and financial capacity of the implementing agency for rural water supply development.

Lessons learned for JICA:

- One of the key factors for successful realization of project effects and positive impacts is that the project fully utilized the knowledge and experience of Bridge Asia Japan (BAJ), a Japanese International development NGOs which already has experiences in rural water supply development in the Central Dry Zone and established good relationship with local people. It is suggested to make a full use of the accumulated knowledge and experiences of NGOs engaged in grass-roots or community based activities in the target area so that this promotes to understand the social and cultural characteristics in the target area.

Well drilling

Site of water supply

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Myanmar office: August, 2013

Country Name	Community-Oriented Reproductive Health Project in the Union of Myanmar
Republic of the Union of Myanmar	

I. Project Outline

Background	The reproductive health indicators of Myanmar such as Maternal Mortality Ratio (360 per 100,000 live births) and Infant Mortality Rate (71 per 1,000 live births) were high compared to other neighboring counties in the South-East Asia due to insufficient number of health service providers and health facilities, and insufficient knowledge and skill of health service providers. In addition, those issues such as lower contraceptive prevalence rate, lower percentage of deliveries attended by skilled health personnel, and high maternal mortality due to illegal abortions were serious obstacles to promote reproductive health in Myanmar. Within the country, the State of Northern Shan and Eastern Shan had the highest needs among the different districts and states, with higher MMR of 500 than national average.
Objectives of the Project	1. Overall Goal: Reproductive health status is improved in the project areas and expanded areas (Note 1) of the Union of Myanmar. 2. Project Purpose: Utilization of quality reproductive health services increases in the project areas. 3. Assumed steps for achieving the project goals: The project implements training for RH service providers (Note 2), development of guideline and materials for RH, and renovation of rural health centers. Through these activities, project improves capacity of medical/health workers including management capacity of the Department of Health (DOH), and promotes awareness and knowledge on RH issues among community people. By improved capacity of medical/health staff, the project aims to improve RH service in the target areas based on the Community-Oriented RH (CORH) approach (Note 3). Then this will improve RH status in the project areas and the CORH approach will be disseminated to the other areas in Myanmar. Note 1: Expanded area: The area where community-oriented RH approach is applied. Note 2: RH service providers includes: (i) Basic Health Staff (BHS) who are the government officers belong to DOH including Township Medical Officer (TMO), Midwife (MW) and Health Assistant (HA), (ii) Volunteer Health Worker (VHW) includes Auxiliary Midwife (AWM), Trained Traditional Birth Attendant (TTBA) and Maternal and Child Health Promoter (MCHP), and (iii) Health Volunteer includes community leaders and local NGOs who engage in health promotion activities. Note 3: Community-Oriented RH approach can be defined as combination of the following three approaches: (i) Improvement in provision of RH service through capacity development of BHS and improvement of health facilities, (ii) Improvement of awareness and knowledge on RH issues among community people and establishment of community-based supporting system for RH, and (iii) Improvement of management capacity of DOH and concerned health institutions' staff
Activities of the project	1. Project site: Kyaukme Township (approximately 184,000 populations) and Naungcho Township (approximately 120,000 populations) in Shan State 2. Main activities Training to medical/health workers and volunteers, establishment of the guideline and materials for reproductive health, and renovation health facilities and provision of basic RH equipment. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 10 persons (3 persons for Long term, 7 persons for Short term 2) Trainees received: 20 persons 3) Equipment: Equipment and materials for training and workshop, basic medical equipment and medicine, office facilities (PC, printer, photocopy machine, etc.) 4) Others: Renovation of 19 rural health centers and sub-rural health centers Myanmar Side 1) Staff allocated: 18 persons 2) Land and facilities: project office, electricity, water supply, telecommunication
Project Period	February 2005 – January 2010 / Project Cost: 461 million yen
Implementing Agency	• Department of Health (DOH), Ministry of Health (MOH) • Kyaukme Township and Naungcho Township
Cooperation Agency in Japan	Japanese Organization for International Cooperation in Family Planning (JOICFP)
Related Projects	Japan's cooperation: • Project for Primary Health of Mother and Children (JICA partnership program with AMDA, 2002-2005) • Child Health Nutrition Project (JICA partnership program with Save the Children(SCJ) Japan, 2006-2009) • Maternal and Child Health Project (Japanese Cooperation for Maternal and Child Health through

	UNICEF, 1998-2003) • Project for Reproductive Health (Japan/UNFPA Multi-bilateral Cooperation for Population and Family Planning through UNFPA, 2001-2003)

II. Result of the Evaluation[1]

1 Relevance

This project has been highly relevant with Myanmar's development policy ("improvement of reproductive health status in Myanmar" in the Fiver Year Strategic Plan for Reproductive Health 2004-2009 and 2009-2013), development needs ("improvement in accessibility to reproductive health service in the areas with highest needs"), as well as Japan's ODA policy for Myanmar with the priority area of humanitarian assistance with urgency through improvement of reproductive health status, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on improvement of quality and availability of RH service in the target areas based on the Community-Oriented RH approach. There was an improvement in Contraceptive Prevalence Rate (CPR), the percentage of women who received 4 and more times for Antenatal Care (ANC), and the percentage of deliveries attended by skilled health personnel (see the details in the table below). Meanwhile, the percentage of pregnant women referred to higher level once decreased from 7.7% (2005) to 6.4% (2009) in Kyaume as well as from 9.4% (2005) to 5.3% (2009) in Naungcho. However, they recovered to 2005 level or more in 2012. Regarding the coverage of Tetanus Toxoid (TT) vaccination among the pregnant women, there was an increased in Naungcho, but Kyaume slightly decreased it. According to the Township Medical Office (TMO) of Kyaume, some side effects of TT immunization occurred in Kyaume and community people became reluctant to take immunization after this event. According to the interview results with BHS and MCHPs in two townships, they recognized the improvement in accessibility and quality of RH services and increased awareness of community people on RH in cooperation was an important factor to such improvement. They also pointed out that support by WHO under Annual Contribution (AC) budget in the two townships may have some positive effects on improvement of RH status.

As for overall goal, although the data for MMR in the two township is not available, the number of maternal death reduced from 12 (2005) to 2 (2012) in two townships. The data for number of pregnancies with complication and number of deliveries with complication in the two townships were not available. However, it was confirmed that the CORH approach applied in Kyaume and Naungcho townships has been still well functional at present. Based on the experience of this project, MOH has introduced the CORH approach to other 30 townships nationwide (2 townships of each 16 states and regions in Myanmar except Shan State). Among them, MOH observed that two (2) Townships of Kyaung Kone and Kyone Phaw in Ayerwaddy Division are successful in introduction of the approach. In these two townships, BHS made fund by themselves by donating Ks.1000 per month from their own money and the fund are used for community on RH services such as transportation fees for MCHPs when they accompany with pregnant women for delivery at rural health centers or hospitals, and uniforms for MCHPs. MOH has taken initiatives to disseminate the good practice learned from the CORH approach to national level through on-going application of the CORH approach to other 30 townships, however, it was not identified whether the reproductive health status in other 30 townships were improved or not afterward. According to the interview results with BHS and MCHPs, the following positive impacts were observed such as: (i) reduction in illegal abortion case due to increasing awareness on concentrative, (ii) reduction in financial burden of households due to control of number of children, and (iii) increase of mothers' awareness on child care and nutrition.

Interview to Midwives

In this way, this project has sufficiently achieved the project purpose and partially achieved the overall goal. Therefore, effectiveness of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Reproductive health status improves in the project areas and expanded areas of the Union of Myanmar.	Contraceptive Prevalence Rate (CPR) is increased.	(Project Completion) Increased (Ex-post Evaluation) Increased

	2005	2009	2012
Kyaume	41.1%	56.9%	73.5%
Nauncho	41.3%	49.1%	72.6%

Aim	Indicators	Results
	No. of women who received 4 and more times for Antenatal Care (ANC) is increased.	(Project Completion) No data available. (Ex-post Evaluation) No data available. (Reference) % of women who received 4 and more times for ANC

	2005	2009	2012
Kyaume	49.0%	44.4%	55.2%
Nauncho	39.2%	50.5%	91.8%

[1] Constraint of Evaluation: The ex-post evaluation reexamined the appropriateness of the indicators for project purpose and overall goal, and modified their indicators by adding and replacing to alternative indicators in order to assess their achievement appropriately.

<table>
<tr><td></td><td>No.of deliveries attended by skilled health personnel is increased.</td><td>(Project completion) No data available.
(Ex-post Evaluation) No data available.
(Reference) % of deliveries attended by skilled health personnel<table><tr><td></td><td>2005</td><td>2009</td><td>2012</td></tr><tr><td>Kyaume</td><td>65.4%</td><td>71.6%</td><td>80.0%</td></tr><tr><td>Nauncho</td><td>65.4%</td><td>80.6%</td><td>59.87%</td></tr></table></td></tr>
<tr><td></td><td>Coverage of Tetanus Toxoid (TT) vaccination among the pregnant women is increased.</td><td>(Project Completion) It increased from 76.8% (2005) to 86.4% (2009) in Nauncho, but it decreased from 78.7% (2005) to 76.5% (2009) in Kyaume.
(Ex-post Evaluation) It increased to 94.7% (2012) in Nauncho, but it decreased to 71.3% (2012) in Kyaume.</td></tr>
<tr><td rowspan="3">(Overall goal)
Utilization of quality reproductive health services increases in the project areas.</td><td>Maternal mortality rate is reduced.</td><td>(Ex-post Evaluation) No data available. Declining trend of the number of maternal death is observed.</td></tr>
<tr><td>No. of pregnancies with complication is reduced.</td><td>(Ex-post Evaluation) No data available.</td></tr>
<tr><td>No. of deliveries with complication is reduced.</td><td>(Ex-post Evaluation) No data available.</td></tr>
</table>

Source : Baseline Survey (2005), Endline Assessment Study (2009) Project Completion Report, Interviews with counterparts.
Note: The indicators for overall goal and project purpose are original ones stipulated in Project Design Matrix at ex-ante evaluation. The data of Endline Assessment Study (2009) were considered as the results of the project completion.

3 Efficiency

The outputs of the project were produced as planned, the project cost was within the plan (ration against the plan: 83%) and the project period was as planned (ratio against the plan: 100%). Therefore, efficiency of this project is high.

4 Sustainability

In policy aspect, this project it given important in the new development policy such as the Strategic Plan for Reproductive Health (2014-2018) being prepared by MOH. Regarding the institutional aspect, most of BHS, AMWs and MCHPs trained by the project have been engaged in RH activities continuously and they back up the role of MWs despite there is a shortage of manpower in MWs. The quality management and monitoring of RH services have been undertaken by TMOs. The Township Working Group and Village Tract Working Group have been functioning and collaborating with BHS in case of necessity. Generally, the systems and institution setting necessary for the CORH approach are still maintained. Regarding the technical aspect, BHS continues to provide guidance to AMW and MCHPs for Information, Education and Communication (IEC)/Behavior Change Communication (BCC) activities on RH issues as well as to conduct health education session on RH and disease for community people every month. The refresher training for MWs, AMWs and MCHPs is organized yearly. The IEC/BCC materials and Implementation Guide for CORH Approach have been utilized by DOH, BHS, AMWs and MCHPs. The health facilities renovated by the project are still in good condition. Regarding financial aspect, although current budget allocation does not fully cover the necessary cost, the budget for the minimum training and maintenance of the major facilities are secured and it does not seriously affect to maintain the system.

This project has no problem in policy background, institutional, technical and financial aspects, hence sustainability of this project effect is high.

5 Summary of the Evaluation

The project has significantly achieved the project purpose and partially achieved overall goal. The project successfully improved accessibility and quality of RH services in two townships. For example, more people became to practice a contraceptive, pregnant women had a change to receive more antenatal care, and to be transferred to higher level medical institutions. As a result, the number of maternal death reduced from 12 (2005) to 2 (2012) in two townships. The CORH approach developed by this project was now introduced to other 30 townships in Myanmar, however, the specific improvement in the reproductive health status in other 30 townships has not been identified so far. In addition, the project brought about positive impacts such as reduction in illegal abortion case, reduction in financial burden of households and increase of mothers' awareness on child care and nutrition. As for sustainability, there is no problem in policy background, institutional, technical and financial aspects. As for efficiency, both the project cost and period was within the plan.

In the light of above, this project is evaluated to highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- BHS should explain community on side effect of immunization to avoid unnecessary misunderstanding by community.
- According to evaluation data, MCHPs are very much supportive to BHS. So should continue refresher training for MCHPS by increasing functional support on that training.
- Department of Health expanded the CORH approach to 30 Townships in Myanmar. That is partially fulfilled to Project Overall Goal. If Department of Health has exacted data of result for those expanded areas, that will be very much support to learn on difficulties, strong points and weak points for further process.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office/ Jan, 2014

Country Name People's Republic of China	Sino-Japan Forestry Ecology Training Center Project

I. Project Outline

Background	In China, policies against deforestation and destruction of the natural environment were being implemented, such as the Construction Plan for National Ecological Demo Zones. The core measures based on such policies were the Six Major Forestry Projects[1], which were planned, designed, implemented and checked by provinces. Under these projects, a total of 234,000 km^2 was afforested during the period from 2001 to the end of 2003. However, there were challenges such as low survival rate of seedlings, lack of sense of maintenance and lack of sensitization and instruction for farmers who planted trees, due to county-level forestry personnel's insufficient skills and knowledge of project management. Being aware of necessity to develop human resources to steadily implement the Six Major Forestry Projects, the State Forestry Administration (SFA) held up a policy to promote institutionalization and standardization of training for forestry personnel and to designate the State Academy of Forestry Administration in Beijing ("the Academy") under the SFA as the training base. The Academy was the only national-level in-service training institute and had conducted training for county-level forestry personnel before. As its main training courses were for management personnel and for promotion, the Academy urgently needed to upgrade the project management and technical level of, in particular, county-level forestry personnel. For this project, the Sino-Japan Forestry Ecology Training Center was to be set up within the Academy as the project implementation unit.		
Objectives of the Project	1. Overall Goal: Offer training opportunity to China's forestry personnel at the county level, upgrade their capability in project management and technical operation, and enable China's ecological construction cantering on the Six Major Forestry Projects to proceed smoothly. 2. Project Purpose: The Sino-Japan Forestry Ecology Training Center ("the Center") serves as a base for forestry cooperation between China and Japan. With the Center as the leading factor, a training system relating to China's Six Major Forestry Projects, is improved. The system aims to upgrade the county-level forestry personnel's capability in project management and technical operation. 3. Assumed steps for achieving the project goals[2]: This project develops a training system for county-level forestry personnel at the Center and implement model training courses. Then, the Center and the regional training centers ("regional centers") in the eight model provinces become able to conduct training using the course development method of this project. At the same time, the method is disseminated to regional centers in other provinces. As a result, the project management and technical operation capability of the county-level forestry personnel who received the training are upgraded and thereby contribute to smooth implementation of activity for natural environment protection.		
Activities of the project	1. Project site: State Academy of Forestry Administration (Beijing) and regional training centers in the eight model provinces (Sichuan Academy of Forestry, Heilongjiang Forestry Vocation Technical College, Fujian Forestry Vocation Technical College, Shaanxi Province Department of Forestry Training Center, Hubei Province Forest Tree Breeding Center, Guizhou Forestry School, Xinjiang Uyghur Autonomous Region Forestry School, Shanxi Forestry Technician School) 2. Main activities: Development of training programs, networking with regional centers, development/ improvement/ implementation of training courses, development of a training manual, collection/ communication/ accumulation of information, etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 44 persons 2) Trainees received: 63 persons 3) Equipment: simultaneous interpretation system, multimedia system, vehicles, etc. China Side 1. Staff allocated: 52 persons 2. Land and facilities: project offices, utilities 3. Local cost		
Project Period	October 2004 to October 2009	Project Cost	618 million yen
Implementing Agency	Department of Human Resource, State Forestry Administration (executing agency); State Academy of Forestry Administration in Beijing (implementing agency)		

[1] The Six Major Forestry Projects include: 1) natural forest resources preservation; 2) construction of a protective forest system in the Sanbei Region (northeast, north, and northwest China) and the middle and lower stretches of the Yangtze River; 3) a project to stop cultivation and plant ring forests; 4) Beijing Tianjin sandstorm improvement project; 5) protection of wild animals and plants and construction of natural reserves; and 6) construction of bases for fast-growing, high yield timber forests in priority areas.

[2] Reviewed at the time of the ex-post evaluation.

Cooperation Agency in Japan	Forest Agency; Ministry of Environment
Related Projects (if any)	Japan's cooperation: Project on Forestry Human Resource Development in Western Region (Technical Cooperation (subsequent project of this project), 2009-2013), Project on Forest Restoration after the Earthquake in Sichuan Province (Technical Cooperation, 2010-2015), Afforestation Technology Popularization Training Plan in Huangtu Gaoyuan (Country-specific Training (In-country Training), 2007-2008).

II. Result of the Evaluation[3]

1 Relevance

This project has been highly relevant with China's development policy "human resource development to steadily improve the Six Major Forestry Projects" and "institutionalization and standardization of the training system to improve quality of forestry personnel" as set in the Construction Plan for National Ecological Demo Zones (1999), the 10th (2001-2005) and 11th (2006-2010) Five-year Plans for National Economic and Social Development, and the 11th Five-year Plan for Forestry Development (2006-2010), development needs "upgrading project management and technical capability of county-level forestry personnel", as well as Japan's ODA policy, "JICA's Country Assistance Program" at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project implemented activities such as training needs assessment, development of curriculum and textbooks and development of training implementation structure in the six fields ((i) forestry administration, (ii) afforestation management, (iii) afforestation techniques, (iv) wild life protection, (v) training/human resources development, and (vi) restoration of ecosystem after earthquake[4]) at the Center. By the time of project completion, 2,315 forestry personnel (including 2,226 provincial-level personnel), which was more than planned (2,173 persons), received the model courses at the Center and the eight regional centers[5]. Relevant sections of the SFA, the Academy's superior organization, formed the consultative group for this project, and the group provided advise on course planning and undertook coordination such as for region-wide training courses involving more than two provinces.

As a result, the project purpose "improvement of the training system for upgrading county-level forestry personnel's capability in project management and technical operation with the Center as the leading factor" was achieved. Through implementation of the model courses, both the Center and the eight regional centers accumulated sufficient experience in a series of process of training needs identification, course planning/implementation and evaluation. Such process was systematized into a training manual. After project completion, this manual has been revised and utilized. The Center currently implements training courses in collective forest right system and state-owned forest reform as part of the Project on Forestry Human Resource Development in Western Region ("subsequent project"), and the above-mentioned courses developed under this project are implemented in accordance with the Academy's annual training plan. The annual numbers of trainees in those courses (developed under this project) are 1,360 persons in total at the Academy and 300-600 persons on average at each of the four regional centers from which the data were available. Among those four provinces, Sichuan Province and Shaanxi Province continues to be the model area under the subsequent project, but even in Guizhou Province and Xinjiang Uyghur Autonomous Region that are not directly assisted under that project, the courses have been continued in the same manner as well. All training centers including the ones in the rest of the model provinces responded that the output of this project has continuously been useful for implementation of high quality training courses. Trainees' satisfaction according to course evaluations has been consistently high throughout the whole period from during project implementation to present.

With respect to the overall goal, the curriculum and course development method developed under this project have been shared with other provinces on nation-wide symposia and similar occasions. They have also begun utilized by Guangxi Zhuang Autonomous Region and Ningxia Hui Autonomous Region through the subsequent project. The Academy has further developed its institutional setting for training with support from the SFA: it now provides various contents and modes of training (including on-line courses) to government personnel from state to local levels as well as the private sector. In doing so, the Academy has revised and used the method developed under this project. Therefore, the overall goal "offering training opportunity to China's forestry personnel at the county level" has been achieved. In the eight model provinces as well, the method has been widely used with necessary improvement. Furthermore, there are cases reported on the ex-trainees' contribution to natural resources protection activity including the Six Major Forestry Projects such as through dissemination of the knowledge and techniques learned from the training courses to their colleagues and farmers and utilization in the field.

Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improve the training system for upgrading	The Center becomes able to identify needs of county-level forestry personnel and develop, implement	(Project completion) Training capability of staff of the Center improved through the model courses. A series of training process was standardized and documented into the training manual.

[3] The evaluation is mainly based on information/responses provided by the implementing agency, without visits to regional centers.

[4] The original plan at ex-ante evaluation listed the five fields (i) – (v). The sixth field "(vi) restoration of ecosystem after earthquake" was added in 2008 following the occurrence of the Great Sichuan Earthquake.

[5] The counties where the Japanese government and NGOs were implementing forestry projects were preferentially covered.

county-level forestry personnel's capability in project management and technical operation with the Center as the leading factor	and improve training courses.	(Ex-post evaluation) The training manual has been revised partly through the subsequent project. The Academy is implementing courses that are standardized and with enhanced quality based on the manual.
	The eight regional training centers become able to develop, implement and improve their training courses for county-level forestry personnel, with technical support from the Center, in a manner that is responding to trainees' needs.	(Project completion) Training capability of each regional training center was improved through the model courses and courses of their own. Each regional training center developed its own "provincial forestry training manual" with reference to the Center's manual. (Ex-post evaluation) The provincial training manual has been revised at each regional training center. They are implementing courses that are standardized and with enhanced quality based on the manual.
	The number of views of the project's homepage increases every year.	(Project completion) It increased every year and reached 270,000 at the end of March 2009. (Ex-post evaluation) The homepage was closed after project completion. Forestry information was moved to the the subsequent project homepage. The Chinese side uploads information on on-going China-Japan cooperation projects to several websites. The number of views is unknown.
(Overall goal) Offer training opportunity to China's forestry personnel at county level, upgrade their capability in project management and technical operation, and enable China's ecological construction centering on the Six Major Forestry Projects to proceed smoothly	The Academy and the eight regional training centers conduct training using the development method of training curriculum and materials (include other courses at the Academy).	(Ex-post evaluation) They are continuing courses with revision and use of the training manual (also see "Ex-post evaluation" under "Project Purpose" above). The manual is also applied to other courses of the Academy than the ones developed under this project and to provincial-specific training courses. The Center is promoting the institutional development and providing training to various trainees including county-level forestry personnel in the whole country.
	Training using the development method of training curriculum and materials is conducted, with support from the Academy, in two provinces other than model provinces.	(Ex-post evaluation) The method introduced under this project was shared with other provinces, and used in Guangxi and Ningxia under the subsequent project.
	(Supplementary indicator) Cases of contribution to smooth implementation of the Six Major Forestry Projects and other natural environment protection activity.	(Ex-post evaluation) Ex-trainees have contributed to implementation of the Six Major Forestry Projects, etc. through improved on-site technical support and surveys/research, dissemination of the learned knowledge to colleagues and enhanced willingness to receive other training courses (also see Box below).

Sources : Terminal Evaluation Report; responses to the questionnaire from the implementing agency.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was as planned (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 112%) because of adjustments of the number of trainees to receive and the items of training equipment to provide based on the implementation situation of the project. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy as the 12th Five-year Plan for National Economic and Social Development (2011-2015) and the 12th Five-year Plan for National Forestry Development (2011-2015) keep mentioning continuous implementation of the Six Major Forestry Projects and human resource development in forestry. Institutionally, the organizational status of the Academy remains the same with allocation of sufficient number of staff and relationship with regional centers for training implementation. In the technical aspect, there is no problem as both the Academy and the regional centers identify needs and accordingly develop curriculum and implement training. In the financial aspect, while both the Academy and the regional centers have secured necessary budget, there are concerns on possible shortage of training budget at some regional centers due to recent hike of price and personnel cost.

From these findings, it is considered that the project has some problems in the financial aspect of the implementing agency; therefore, sustainability of effectiveness of the project is fair.

5 Summary of the Evaluation

For the project purpose "improvement of the training system for upgrading county-level forestry personnel's capability in project management and technical operation with the Sino-Japan Forestry Ecology Training Center as the leading factor", the Center and the regional training centers in eight provinces became able to develop training plans and curriculum, implement courses and evaluate/improve the training. They have continuously provided training by the time of ex-post evaluation with use and improvement of the training course development method developed under this project. For the overall goal, the regional centers in the eight provinces have widely used the method in their training including provinces' own courses. Additional two provinces started using the method that this project disseminated. Also, there were cases observed that ex-trainees utilized the learned knowledge and techniques and contributed to the Six Major Forestry Projects, etc. As for sustainability, there are concerns on possible shortage of budget at some regional centers. On efficiency, the project cost exceeded the plan. In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

The Academy should make further effort to disseminate the method developed under this project to provinces other than the model provinces of this project. For this, instructions and support from the SFA is indispensable.

Lessons learned for JICA

One of the promoting factors to high effectiveness/impact of this project is instructions and support from the SFA, the upper-level organization of the implementing agency as well as provincial forestry departments throughout the period from project implementation to post completion. As smooth implementation and dissemination of outcomes need not only efforts of the implementing agency but also support from the upper level organization, it is desirable to involve the latter organization in designing the project implementation structure.

Box: Some cases on ex-trainees' contribution to the Six Major Forestry Projects and similar activity

- Guizhou Province: Applied the learned knowledge and techniques for development of an ecological agriculture model under the environmental improvement project in the Shiqiao small river basin in Yachi Town, Qixingguan District, and contributed to outcomes such as increase in grass coverage.
- Fujian Province: Established a lily production model and promoted industrialization of forestry in Yanping District.
- Sichuan Province and Xinjiang Uyghur Autonomous Region: Disseminated the learned tree-planting and rasing seedling techniques, which enhanced survival rate.
- Shanxi Province: Disseminated the learned walnut growing techniques and information such as on preferential policies and laws/regulations related to agro-economic development, and contributed to development of walnut industry in Lantian area.
- Hubei Province: Provided in-field technical instruction and training in oil tea (low tree; oil is extracted from its seed) extension project, which increased seedling production.

Afforestation administration training

Afforestation administration training (field exercise)

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office October, 2013

Country Name	HIV/AIDS Control Project
People's Republic of China	

I. Project Outline

Background	In Gansu Province in the western part of China, the number of people with HIV and AIDS was small. Since the province was economically poor, the comprehensive measures to prevent HIV/AIDS that were required to all provinces by the state government was not fully implemented. However, with a highly mobile population and an increasing number of sexually transmitted disease cases, there was a high potential risk of HIV/AIDS spreading in the future. Measures against HIV/AIDS for such high risk groups and in-hospital infection were insufficient, and therefore actions were urgently needed.		
Objectives of the Project	1. Overall Goal: HIV/AIDS prevention measures which were carried out through the project in Gansu Province to be referred to by other provinces. 2. Project Purpose: HIV/AIDS prevention measures to be improved in Gansu Province. 3. Assumed steps for achieving the project goals[1]: The project implements training programs and various HIV/AIDS prevention activities in the model sites to improve the preventive services in the areas. Then, it develops a model (through documentation) based on the experiences in the model areas for replication in the entire Gansu Province and thereby improvement of the services. Further, it aims to have the model referred by other provinces.(Note) (Note) Since the infection status and required preventive measures differ according to region, direct application of the Gansu model in other provinces is considered difficult. Rather, the project expects that other provinces would refer to the Gansu model in developing and implementing measures that are tailored to their situation.		
Activities of the project	1. Project site: Prefecture-level cities of Lanzhou, Tianshui, Jiuquan and Baiyin in Gansu Province. 9 districts or counties in these cities were selected as the model sites, Gansu Province. 2. Main activities: Training, development of volunteers, health education/ preventive intervention, promotion of counselling and HIV tests, collection and analysis of related data, sharing of experiences/ exchanges, etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 29 persons 2) Trainees received: 37 persons 3) Equipment: Vehicles, etc. Chinese Side 1) Staff allocated: 116 persons 2) Land and facilities: Project office, vehicles, etc. 3) Local cost		
Project Period	June 2006 to June 2009	Project Cost	486 million yen
Implementing Agency	Ministry of Health, Gansu Provincial Health Department and Provincial Center for Disease Control and Prevention (CDC), Health Department and CDC of prefecture and district/county level		
Cooperation Agency in Japan	None		
Related Projects (if any)	Other donors' cooperation: HIV/AIDS prevention funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)		

II. Result of the Evaluation[2]

1 Relevance

This project was highly relevant with China's development policy "HIV/AIDS prevention", a priority issue in the Medium-long Term Plan on Prevention and Control of HIV/AIDS (1998-2010), the Action Plan on HIV/AIDS Prevention and Containment (2001–2005), the Outline of the 11th Five-year Plan for Health Sector Development (2007), the AIDS Prevention and Control Regulations (2006), and the Gansu Containment and HIV/AIDS Action Plan (2006-2010), development needs "prevention of HIV/AIDS among high risk groups in Gansu Province" (and "prevention of spreading to the general public" at the time of this ex-post evaluation), as well as Japan's ODA policy "infectious disease control" set in the China Economic Cooperation Plan (2001), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project implemented training programs and CDC-based activities such as development of volunteers and peer educators among the high risk groups[3], health education through various events for the target group, and promotion and provision of preventive intervention activities by human resources developed by the project and the Voluntary Counseling and Testing (VCT) services in the model sites. As a result, the project purpose "improvement of HIV/AIDS prevention measures in Gansu" was achieved. The number of VCT recipients and the number of HIV positive cases found through VCT have been increasing every year since before project completion, indicating the continuous progress of identification of potential patients.

[1] Reviewed at the time of the ex-post evaluation.

[2] It was a constraint to evaluation that on-site surveys were not conducted in the areas other than the model sites. Therefore, information was solely based on what was provided by the implementing agency. Nevertheless, the implementing agency was conducting periodic surveys and monitoring, including those for beneficiaries, in the entire province, and this evaluation utilized the results of those surveys.

[3] The high risk groups include males who have sex with males and female workers in sex industry. The next priority groups include mobile population and long distance truck drivers.

The increase is particularly remarkable in Lanzhou and Tianshui, where both total population and high risk population are grater than other cities. Before this project, CDCs had been passive in providing HIV-related services, namely, waiting for people to come for tests. The project introduced more active approaches, and strengthened the "Five-Entry" activities, promotion in five places - villages, schools, communities, home, and "key areas", which are considered to have increased VCT recipients. The experiences of the project were compiled in several documents: the Collection of Documents on Experiences from the Project (Revised) and the Collection of Research Papers from the Project were completed by the end of the project, and after project completion, a book on health education methods was published[4]. These documents are still utilized in human resource development. With respect to policy recommendations that the project intended to propose besides such documentation, a draft regulation on HIV/AIDS prevention in Gansu Province was submitted to the provincial government. Although it was not adopted for the reason that Gansu Province was a low HIV prevalence area, a provincial action plan related to HIV/AIDS was adopted, and a regulation on the mobile VCT vehicle provided by the project was enacted. In addition, participatory monitoring is still conducted periodically in and outside the project sites.

As to the overall goal, first, regarding the replication of the project outputs in the entire Gansu Province, activities such as health education using Information, Education and Communication (IEC), participatory monitoring and VCT services that started in the model sites were spreading to non-model sites in the four project cities even during the project implementation period. After project completion, the activities have become carried out basically in the entire province and cities. The number of VCT recipients and participants in preventive intervention activities has increased with the improvement of quality of those activities. Also, positive impacts on control of other diseases have been observed: the implementing agency applied the management method (PCM: Project Cycle Management) transferred by the project to other services than those related to this project, which increased the accuracy of qualitative and quantitative management of reporting of infectious diseases. Second, as to the reference of these practices by other provinces, the outcomes of this project have been disseminated to state government organizations (NHFPC: National Health and Family Planning Commission, China CDC, etc.) and shared with other provinces through the Conference on International Cooperation Programmes on HIV/AIDS in China, training sessions organized by other JICA projects and other opportunities such as study tours, networking events and newsletters. However, as Gansu Province has rather put its priority on extending the good practices within the province, efforts toward other provinces have been limited so far. Consequently, no cases of reference and application of the "Gansu model" by other provinces have been observed yet.

In sum, this project has significantly brought and extended good results in Gansu Province, while positive impacts on other provinces, i.e. achievement of part of the overall goal, have not been observed yet. Therefore, its effectiveness/impact is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improvement of HIV/AIDS prevention measures in Gansu Province	Increase in the number of HIV antibody tests in the project sites (identification of potential patients)	(Project Completion) Number of VCT recipients increased. (Ex-post Evaluation) It once decreased with the completion of the project, but again increased (see the graphs below).
	Reports on HIV/AIDS preventive measures (development of the model)	(Project Completion) Completed. (Ex-post Evaluation) Still utilized. A book was published.
	Reflection of recommendations from the project in HIV/AIDS preventive measures	(Project Completion) The project submitted the "Gansu Province Regulation on HIV/AIDS Prevention and Control (Tentative Title) (Draft)" to the provincial Department of Health. (Ex-post Evaluation) The draft regulation was not adopted, but a provincial action plan on HIV/AIDS was adopted. Also, the "Gansu Provincial CDC Regulation on Management of the Mobile VCT Vehicle" was enacted.
	Increase in frequency and number of participatory monitoring conducted by the provincial CDC for cities and districts/ counties	(Project Completion) Conducted periodically (2-4 times/quarter) (Ex-post Evaluation) Conducted more than biannually in the entire province (monitoring for non-project cities and districts/ counties was started after project completion).
(Overall goal) Reference of the measures in Gansu by other provinces	Number of cases where the approaches introduced through the project were referred by other provinces	(Ex-post Evaluation) No cases have been observed. Conferences and existing events organized by the state have served as opportunities of dissemination of "the model" to outside the province. However, Gansu Province gives a higher priority to dissemination in the province; thus efforts toward other provinces have been limited.

Sources: Terminal Evaluation Report (2009), Reports by Japanese Experts (2009) and questionnaire and interview responses by the implementing agency (2013).

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 135%) because, in the process of developing a model out of the experiences from the project, additional inputs for activities in the project sites were implemented. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in China and Gansu Province, for the AIDS Prevention and Control Regulations, the 12th Five Year Action Plan of China HIV/AIDS Control, Prevention and Treatment, and the 12th Five Year Action Plan of Gansu HIV/AIDS Control, Prevention and Treatment aim to strengthen and expand preventive and control

[4] *Management and Practice of Health Education Projects: How to Deploy IEC Effectively.* Lanzhou University Press, October 2010.

measures. In the institutional aspect of the implementing agency, while the volume of work has been increasing with establishment of more HIV testing laboratories and VCT centers, the number of staff and the organizational setting has not much changed. However, the current setting is considered as sufficient since effectiveness and efficiency of the services have been enhanced by application of the PCM method, and coordination with related organizations has been maintained and reinforced mainly through the Provincial Committee on Prevention and Control of HIV/AIDS (with representatives from the Department of Health and other related government organizations). Also, the technical aspect is considered to be sufficient with staff who acquired the skills and know how from the project continuously working on human resource development and on-site instruction. The financial aspect found no problem either based on an increasing tendency of the overall HIV/AIDS budget (consisting of subsidies from the state and provincial governments), more active application for projects to GFATM, and efforts to mobilize resources in other sectors. Therefore, sustainability of effectiveness of this project is high.

5 Summary of the Evaluation

This project has achieved the project purpose of improving HIV/AIDS prevention in Gansu Province: approaches such as health education using IEC and VCT services were established in the project sites including Lanzhou and Tianshui, the cities with big population. As a result, potential patients were identified through increasing numbers of VCT recipients and HIV positive cases. For the overall goal, the approaches were extended to the entire province: preventive measures are regularly practiced, and the above-mentioned indicators show improvements at the provincial level as well. However, as a priority was given to measures within the province, efforts toward other provinces (mostly low prevalence areas) was limited. Efficiency of the Project was moderate as the project cost exceeded the plan. No problems were found in Sustainability and Relevance. In the light of above, this project is evaluated to be satisfactory.

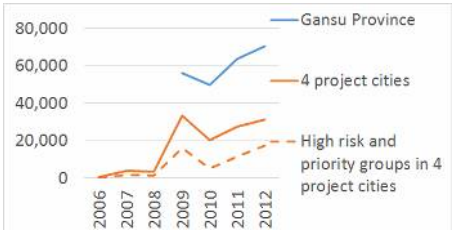
III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

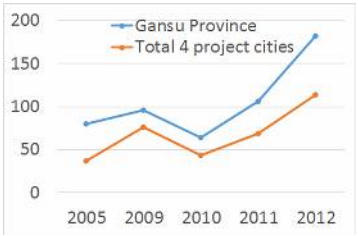
1. The increasing participants in the intervention activities, VCT recipients, and HIV positive cases found through VCT even after project completion show the progress of identification of potential patients. Although medium and long-term and comprehensive efforts are needed for having full outcomes of preventive measures, scientific verification of effectiveness of the preventive measures taken so far should be promoted, particularly focusing on verification of higher level outcomes such as an increase in early identification rates through preventive activities and control of newly infected patients.
2. The major project outcomes (constituents of the model), namely, health education methods (IEC), participatory monitoring, VCT services and the PCM, could be applied not only to HIV/AIDS prevention in low prevalence areas but to high prevalence areas as well as control of other diseases. As the involvement of the state level organizations (NHFPC, China CDC, etc.) is important for sharing the Gansu's experiences and knowledge with other province, evidence collected in Gansu should be accumulated and presented, and exchanges among provinces should be further activated by national level.

Lessons learned for JICA

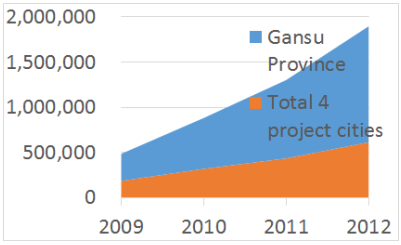
The PCM introduced to this project was found to have significantly contributed not only to effective and efficient project activities but also to the high sustainability and large positive impacts. Although intensive and repeated training and accumulation of rich experiences should be necessary to develop human resources with a good command of the PCM in projects, it is an effective method when handling themes, such as HIV/AIDS prevention, for which actions to be taken and how to measure effects are clear.



Number of VCT recipients
(Source: Implementing agency)



Number of newly found HIV positive cases reported
(Source: Implementing agency)



Accumulated number of people who received health education/ preventive intervention 2009-2012 (Source: Implementing agency)

Enlightment event on AIDS at school

Using the mobile VCT vehicle for health education class for people

Preventive education for mobile population

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office December,2013

Country Name	Economic Legal Infrastructure Development Project
People's Republic of China	

I. Project Outline

Background	In China, along with the promotion of development towards a market economy and the globalization of economy, its domestic institutional framework and policies with consciousness of harmonization of international rules were being developed at a rapid pace. Meanwhile, activity of corporate enterprises, a key agent of the market economy, was affected by the application of different laws by form of capital. The legislative system was being improved for development of economic laws, and drafting of the revised Company Law and the Anti-monopoly Law as well as comparative studies on laws of other countries were ongoing. However, there were challenges in legislation based on researching and understanding of the real situations of foreign laws and in ensuring consistency with related laws, partly due to insufficient interpretation of foreign laws in the context of the economic and social background of concerned countries. Furthermore, With a large number of personnel to be involved, fair and right law administration and execution was also an issue.
Objectives of the Project	1. Overall Goal: Companies, an important player in Chinese economy, enjoy opportunities of starting and developing their business in a sound economic order; fair and free competition of companies is promoted; and thereby, consumers' interests are protected and national economy's sound and sustainable development is realized. Besides, exchange and mutual understanding are promoted between experts and practitioners of economic law and company law in Japan and China. 2. Project Purpose: The capacities of officers in legislative organizations and law execution organizations in China are developed and the establishment of transparent economic law and company law systems is promoted, which utilize knowledge of Japan and advance harmonization with international rules. 3. Assumed steps for achieving the project goals[1]: This project supports legislation, application and execution of laws in the three sub projects (Company Law, Anti-monopoly Law and laws on market and distribution) mainly through workshops, seminars and training in Japan. As a result, it aims to realize enactment and enforcement and right execution of the revised Company Law, the Anti-monopoly Law and laws on market and distribution that incorporate knowledge from the project, thereby to contribute to protection of benefits of consumers and a healthy and sustainable development of the national economy.
Activities of the project	1. Project site: China (mostly in the City of Beijing) 2. Main activities: Introduction of Japanese law, research/analysis of the implementation statuses of relevant laws in China, recommendations on the issues, etc. through workshops, seminars, training in Japan and provision of information. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: total 141 persons (Chinese instructors to whom JICA paid honoraria: 49 persons) 2) Trainees received: 247 persons 3) Cost for seminars and consultants, etc. Chinese Side 1. Staff allocated: total 247 participants in training in Japan and total 716 participants in workshops and seminars 2. Land and facilities: rooms for workshops 3. Local cost: necessary operation cost for the project
Project Period	November 2004 to November 2009 / Project Cost: 479 million yen
Implementing Agency	Ministry of Commerce (MOFCOM); Legislative Affairs Office of the State Council The following organizations were involved as participant organizations (organizations in charge of drafting bills and execution): Legislative Affairs Commission of the National People's Congress (NPC) Standing Committee; NPC Financial and Economic Affairs Committee; Legislative Affairs Office of the State Council; Supreme People's Court (SPC); State-owned Assets Supervision and Administration Commission of the State Council; State Administration for Industry and Commerce (SAIC); China Securities Regulatory Commission; legal consultative group for each of the relevant law.
Cooperation Agency in Japan	Japan Fair Trade Commission; Ministry of Economy, Trade and Industry; Ministry of the Environment; Ministry of Justice.
Related Projects (if any)	Japan's cooperation: Anti-monopoly Law 独占禁止法 (Country-focused Training, 1998-2004); Capital Market Law Development Project 資本市場法整備プロジェクト (Country-focused Training, 2009-2012); Improvement of Civil Procedure Law and Arbitration Law Project (Technical Cooperation, 2007-2010); Project for Legislation and Implementation of the Anti-monopoly Law and Guidelines (Technical Cooperation, 2012-2015). Other donors' cooperation: Germany (human resource development in the fields of the Enterprise

[1] Reviewed at the time of the ex-post evaluation.

	Bankruptcy Law, Government Procurement Law, Foreign Exchange Control Laws, Securities Law, Property Law; etc. 1986-); United States (human resource development in intellectual property right, customs valuation, etc. for implementation of WTO and FTA); ADB (support to revision of foreign capital-related laws); cooperation in execution of the Anti-monopoly Law with competition authorities in Europe, Russia and Korea; many others.

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with China's development policy such as the legislative plan for the 10th NPC Standing Committee (2003), which classified the revised Company Law and the Anti-monopoly Law as the Category I (with most urgent priority) of the legislation list on economic law, and the 11th Five-year Plan on Foreign Capital Utilization (2006), which aimed a smooth enforcement of the revised Company Law, development of regulations and guidelines on the Anti-monopoly Law and drafting of laws on market and distribution, development needs "the revision of the Company Law, legislation of the Anti-monopoly Law, support in legislation and execution of laws on market and distribution", as well as Japan's ODA policy, the China Economic Cooperation Plan (2001), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project achieved its project purpose, "promotion of the establishment of transparent economic law and company law systems, which utilize knowledge of Japan and advance harmonization with international rules": legislation and execution officers deepened their understanding of Japanese law and used the learned knowledge as reference in drafting, enforcement and execution of the revised Company Law, the Anti-monopoly Law and laws on market and distribution. First, on the revision of the Company Law (enforced in 2006), the learned knowledge was referred to for solving the issues that the Chinese side had had before the project (i.e. express provision of (i) incorporation procedures and the capital system, (ii) structure of corporate governance, and (iii) corporate personality denial system). Since the bill was enacted in 2005, the early stage of the implementation of this project, the support related to this law was shifted to that for establishing the execution system. For example, outputs of the training and seminars were used as reference in drafting the judicial interpretation of the SPC on the Company Law[2]. Second, on the Anti-monopoly Law (enforced in 2008), although the Law itself is similar to the EU's company law system, the knowledge from this project was reflected in a series of regulations and guidelines that the MOFCOM issued for implementation, such as the Guidelines for Defining the Relevant Market (enforced in 2009), the Measures for the Undertaking Concentration Examination (enforced in January 2010), and the Interim Measures for Investigating and Handling Concentration of Undertakings not Declared Legally (enforced in 2012). Third, as for laws on market and distribution, several laws were drafted after the commencement of this project. According to the implementing agency, for example, drafting of the Administrative Measures for Fair Transactions Between Retailers and Suppliers and the Administrative Measures for the Sales Promotion Acts of Retailers (both enforced in 2006) were carried out in reference to the Designation of Specific Unfair Trade Practices by Large-Scale Retailers Relating to Trade with Suppliers and the Act against Unjustifiable Premiums and Misleading Representations of Japan. Also, the draft regulation on administration of urban commercial network 都市商業網管理条例 and part of the draft administrative measures for non-store sales 無店舗販売管理弁法 that are currently under consideration, were developed in reference to Japan's Large-scale Retail Store Act and the Act on Specified Commercial Transactions, respectively.

With respect to the overall goal, the revised Company Law, the Anti-monopoly law and the laws on market and distribution, the laws targeted for support under this project, are increasingly contributing to the protection consumers' interests and the sound development of the economy. For example, the MOFCOM mentioned the increase in the number of company registration due to the eased conditions for incorporation under the new Company Law, and the strengthening of mutual restriction between corporate organizations and legal responsibility of company managers through the development of provision on corporate governance. As to the Anti-monopoly law, the increasing numbers of declarations and cases examined on concentration of business operators, as well as actions against undeclared companies and abuse of cartels and dominant positions, indicate the increasing recognition among companies and the proper execution of the Law. In addition, the Chinese counterpart personnel have not only used the knowledge on Japanese law in law implementation but also acted as training instructors for regional organizations under the MORFCOM: between 2008 and 2012, nearly 1,500 persons were trained in a total of 16 training courses. It was observed that the relationship cultivated under this project have continued and further developed.

One of the factors that enabled such outcomes could be an important role of the project coordinator in steadily performing the complicated tasks while collecting specialized information on all aspects of the context around legal development, including legislative policies of China and Japan and actual situation of governance and staff allocation at law executing organizations, and providing the academics and experts who assisted in individual law with appropriate information. In particular, assistance in legal development in China is characterized by mutual understanding and exchanges between the Chinese and Japanese sides rather than receiving one-way assistance. Accordingly, it is important for enhancing the project outcomes to understand actual social situations and issues on law execution as background factors behind law amendment. Therefore, effectiveness/ impact of the project is high.

[2] The project planned to provide support on the company registration system and its implementation, but it was not realized due to insufficient response from the SAIC, the responsible organization. Nevertheless, the Regulations for Controlling the Registration of Enterprises as Legal Persons was largely revised at around the same time as the revision of the Company Law, which brought forward development of this field.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) The capacities of officers in legislative organizations and law execution organizations in China are developed and the establishment of transparent economic law and company law systems is promoted, which utilize knowledge of Japan and advance harmonization with international rules.	Procedures to enforce the Company Law are stipulated (Note 1)	(Project completion) Revised Company Law was enacted in October 2005 and put into effect in January 2006. Knowledge from this project was incorporated in the text and the judicial interpretation of SPC. (Ex-post evaluation) Same as above.
	Procedures to enforce the Anti-monopoly Law are stipulated.	(Project completion) Anti-monopoly law was enacted in August 2007 and put into effect in August 2008. Related regulations and guidelines were legislated as well. Knowledge from this project was incorporated to those provisions. (Ex-post evaluation) More regulations and guidelines were legislated.
	Policies to draft laws on market and distribution is clearly identified	(Project completion) Regulation on the Administration of Commercial Franchises was put into effect in May 2007. Administrative Measures for Fair Transactions Between Retailers and Suppliers was issued in May 2007. (Ex-post evaluation) 6 laws including the above were enforced, and 4 more draft laws were being discussed.
(Overall goal) Companies enjoy opportunities of starting and developing their business in a sound economic order; fair and free competition of companies is promoted; and thereby, consumers' interests are protected and national economy's sound and sustainable development is realized.	Numbers of company establishment and registrations increase	(Ex-post evaluation) Number of companies: 13,748,800 as of March 2013, showing 7.62% increase from the same period in 2012. Number of new company registrations: 393,100 during 1st quarter of 2013.
	Number of cases handled in accordance with the Anti-monopoly law increases (Note 2)	(Ex-post evaluation) Number of declarations of concentration of business operators (corporate combination) that were filed by law enforcement organizations increased from approx. 20 in 2008 to more than 100 in 2010 and to more than 200 in 2011 and 2012. There was no case of decision to prohibit the declared concentration as a result of examination in 2011 and 2012 (there was a case in 2008-2010).
	Undermining of general consumers' interests decreases	(Ex-post evaluation) Observed changes: (i) disclosure of examination results of concentration of business operators on MOFCOM website enhanced understanding of Anti-monopoly Law among private and state-owned enterprises; (ii) corporate activity in powder milk market was normalized by crackdown of cartel by National Development and Reform Commission.

	Declaration filed	Examined	Examination finished	Accepted without condition
2011	203	185	160	151
2012	201	186	154	142

Sources: Project Completion Report; responses to the questionnaire from the MOFCOM; MOFCOM website and operation progress report 2012; SAIC statistics.

Notes: 1) Although there was no clear information on whether "procedures of enforcement (legislation) were stipulated" as the indicators say, the fact that the enforcement (legislation) completed smoothly shows the existence of common understanding of the procedure among the concerned parties, and therefore no problem was found in this respect. 2) The original indicator was "anticompetitive behavior decreases". However, considering that the Anti-monopoly Law had not existed before, an alternative indicator was used to first check whether the Law has been implemented. According to the Law, when a concentration (corporate combination) such as merger meets certain criteria, declaration of concentration should be made in advance by the concerned business operator to the law enforcement organization (Anti-monopoly Bureau of the MOFCOM). The declared operator can implement the concentration if a decision not to further examine is made as a result of the preliminary examination or if the declaration is accepted as a result of the examination.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, the project period was longer than the plan (ratio against the plan: 167%) due to the extension of the cooperation period following the postponement of the legislation of the Anti-monopoly Law based on the legislation schedule of the Chinese side. Accordingly, the project cost was significantly higher than the plan (ratio against the plan: 171%) due to the additional input during the extension period. Therefore, efficiency of the project is low.

4 Sustainability

In the policy aspect, sufficient back-ups are established such as the 12th Five-year Plan the National Economic and Social Development and the 12th Five-year Plan of the MOFCOM (both 2011-2015) articulating the acceleration of legislation on market and distribution and development of competitive environment of domestic market. Institutionally, there is no change in the division of responsibility between legislation and law execution. As the number of posts of civil servants is strictly limited nowadays, the number of law execution officers has not much increased despite the large increase in the cases to be handled, e.g. examination of concentration of business operators, which has greatly raised the number of cases handled by an officer. Basically however, this has not negatively affected law execution as the capacity and efficiency of executing officers have been improved accordingly. In the technical aspect, no problem has been observed as the ex-counterpart personnel are still engaged in jobs related to economic and corporate law, and the Anti-monopoly Law execution organization has provided its own training to regional execution officers every year, besides on-site seminars for central and regional execution officers under the Project for Legislation and Implementation of the Anti-monopoly Law and Guidelines that is currently being implemented. In the financial aspect, the amount of budget was not disclosed and thus not confirmed. However, based on the progress of legislation and the large increase in the number of law execution cases, it is considered that the budget for law amendment and execution has been ensured.

Therefore, the project has no problem in the policy background and institutional, technical and financial aspects of the implementing agency, and sustainability of effects of the project is high.

5 Summary of the Evaluation

For the project purpose, ""promotion of the establishment of transparent economic law and company law systems, which utilize knowledge of Japan and advance harmonization with international rules", officers of legislation and law execution organizations deepened their understanding of Japanese law and used it as reference for the drafting and enforcement of the revised Company Law, the Anti-monopoly Law and laws on market and distribution and for development of the execution system of such laws. For the overall goal as well, these laws are being contributing to protection of consumers' interests and a sound development of the economy, which are indicated in changes such as the increase in declarations of concentration of business operators (corporate combination) and actions against cartels. As for sustainability, this project has received good policy back-ups and no problem has been found in the institutional, technical and financial aspects. For efficiency, however,both project cost and project period significantly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

Given the increasing number of cases of law execution while the number of execution officers is strictly limited, it is critical to further enhance capacity of officers and to introduce simplified procedures. For this purpose, the implementing agency is expected to absorb more knowledge from the Japanese side using the ongoing Project for Legislation and Implementation of the Anti-monopoly Law and Guidelines. Also, it is expected to maintain the trust relationship and exchange (communication) channels between concerned organizations of the Chinese and Japanese sides developed under this project.

Lessons learned for JICA:

The role of project coordinator affects success or failure of a project. Although the coordinator may not be required to have deep understanding of individual laws targeted by the project, it is utmost important that the coordinator steadily perform the complicated tasks while collecting specialized information on all aspects of the context around legal development, including legislative policies of China and Japan and actual situation of governance and staff allocation at law executing organizations, and providing the academics and experts who assisted in individual law with appropriate information.

Seminar in China

Training in Japan

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office/ Dec, 2013

Country Name	The Project for Japan-China Cooperation Center for Meteorological Disasters
People's Republic of China	

I. Project Outline

Background	China is afflicted by frequent meteorological disasters such as floods, droughts, typhoons and cold weather. In particular, floods along the Yangtze River caused large amount of damage every year. Furthermore, climatic change and weather phenomena in China was a cause of droughts, floods and localized heavy rains in East Asia including Japan. In order to explore the mechanism of heavy rains along the Yangtze River, the meteorological observation network had to be developed in the Tibet Plateau and in the upstream area of the Yangtze River. However, there were only two automated observation stations and eleven manual observation stations in Tibet, causing the low accuracy and reliability of weather forecasts and meteorological disaster predictions, e.g. deviations in the obtained data. Also, disaster prediction was difficult due to lack of modern comprehensive system such as Global Positioning System (GPS) and observation apparatuses for Planetary Boundary Layer (PBL) [1].		
Objectives of the Project	1. Overall Goal: Meteorological disaster is reduced in East Asia including China and Japan 2. Project Purpose: The operational weather forecasting system of China is strengthened through the development of numerical weather prediction models[2] importing the data obtained by the quantitatively and qualitatively improved observation systems in the Tibet Plateau and its eastern surrounding area. 3. Assumed steps for achieving the project goals[3]: This project develops the meteorological observation system and numerical weather prediction models, and thereby improves accuracy and reliability of weather forecasts and meteorological disaster predictions. Then, it aims to reduce disaster along the Yangtze River[4].		
Activities of the project	1. Project site: The City of Beijing, Sichuan Province (Chengdu), Yunnan Province (Kunming), Tibet Autonomous Region (Lhasa) 2. Main activities: Development and operational testing of observation systems and the satellite-using system; integration of the new system to the existing system; testing of online data input and transfer; planning and implementation of observation plans; joint analytical research, development of numerical weather prediction models, integration of those models to the operational numerical weather forecast; etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 15 persons (Short-term) 2) Trainees received: 12 persons 3) Equipment: Observation and analytical equipment, vehicles, etc. Chinese Side 1. Staff allocated: 95 persons 2. Land and facilities: Project office (Beijing, Chengdu, Lhasa, Kunming) 3. Local cost		
Project Period	December 2005 to June 2009	Project Cost	539 million yen
Implementing Agency	Chinese Academy of Meteorological Sciences (CAMS), China Meteorological Administration (CMA), etc.		
Cooperation Agency in Japan	University of Tokyo, Japan Weather Association (JWA)		
Related Projects (if any)	Japan's cooperation: GEWEX Asian Monsoon Experiment (GAME) (Japan-China joint research under the special program of joint research of Ministry of Education, Culture, Sports, Science and Technology,1994-2000) * GEWEX: Global Energy and Water Cycle Experiment		

[1] The layer of the atmosphere that is directly influenced by its contact with a planetary surface.

[2] Defined procedures, or more concretely, calculation programs, to compute changes of conditions of atmosphere and oceans based on physical equations.

[3] Reviewed at the time of the ex-post evaluation.

[4] This project originally intended to bring about another outcome, formulation of disaster prevention plans based on studies on water circulation mechanism in east Asia. However, given the project purpose that is to improve the operational forecasting system, this evaluation consistently focused on contributions to disaster reduction along the Yangtze River as the overall goal.

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with China's development policy "enhancement of accuracy and timeliness of forecasts through development of meteorological operations" as set in the 10th (2001-2005) and 11th (2006-2010) Five-year Plan Outlines for the National Economic and Social Development, development needs "accuracy and reliability of weather forecasts and meteorological disaster predictions through developing a special meteorological observation network in the Tibet Plateau and surrounding areas", as well as Japan's ODA policy, the China Economic Cooperation Plan (2001), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project achieved its project purpose, "strengthening the operational weather forecasting system of China through development of numerical weather prediction models". Under this project, various kinds of observation equipment were installed in total 35 locations, which enabled acquisition and transmission of meteorological observation data, such as water vapor data using GPS and ground temperature, humidity, wind direction, wind speed and precipitation using Automated Weather Stations (AWSs). Numerical weather prediction models importing such observation data were developed by the time of project completion. The models have become utilized for weather forecasting and meteorological disaster predictions at the operational level by inputting observed data.

At the time of ex-post evaluation, data acquisition and transmission are operating normally, except at one GPS station where operation stopped due to breakdown of the equipment, and another two observation points where data transmission partly fails due to a power supply problem. Repair of the broken equipment is planned using budget on the Chinese side. The numerical weather prediction models have been continuously used at the operational level. As a result, for example, the level of heavy rain forecast for downstream areas in the east of the Tibet Plateau has been enhanced. The operational data communication network of China Meteorological Administration (CMA) covers all meteorological stations that transmit all data, including those that became obtained as a result of this project, to regional meteorological administration offices for weather and disaster forecasting. Also, there are cases where the techniques introduced under the project have been further improved and thus attained higher accuracy and reliability (e.g. application of the land surface-satellite remote control assimilation technique in the operational sections. This system is planned to be a subject of further research and development). On the other hand, application to flood predictions has not been realized yet because river flow data have not been provided by the water control section.

The overall goal "reduction of meteorological disaster in East Asia including China and Japan" is twofold. First, concrete information on reduction of disaster along the Yangtze River was not available though the implementing agency provided positive comments on the contribution of the project. Second, as to reduction of meteorological disaster in East Asia, contribution of this project to meteorological research in that area was confirmed: the implementing agency has provided observed data to respective institutions in accordance with the regulations of the Asia Monsoon Year (AMY) Project. As a result, more than 50 scientific research institutions have used the provided data, and related research papers have been published in journals with international impact.

Therefore, effectiveness/ impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) The operational weather forecasting system of China is strengthened through the development of numerical weather prediction models importing the data obtained by the quantitatively and qualitatively improved observation systems in the Tibet Plateau and its eastern surrounding area	The following data for 2 years are acquired: hourly GPS data from around 80% of the new GPS stations (for calculation of accumulated amount of water vapor); and hourly data on ground temperature, humidity, wind direction, wind speed and precipitation from AWSs (5 stations).	(Project completion) 24 new GPS stations and 7 new AWSs were established and the designated data were acquired. (Ex-post evaluation) 21 GPS stations and 7 AWSs operate normally. Data acquisition and transmission is good. GPS stations that are not operating normally: Gerze (equipment was broken), Dingqing (data transmission partly fails due to power supply problem) and Lhunze (ditto).
	The following data are acquired for around 80% of warm periods from the 3 new PBL stations: per 10-minute data of vertical distribution of wind direction and wind speed; and timely data of vertical distribution of temperature and land surface flux data. The following satellite products (about 5 day average) for 2 years are acquired: atmospheric vertical structure; spatial distribution of precipitation; and soil moisture distribution.	(Project completion) PBL observation system was installed in 3 new stations and a new wind profiler (to observe vertical distribution of wind and moisture) was installed in 1 new station. Data acquisition started at all of them. (Ex-post evaluation) All of the above-mentioned 4 stations operate normally, though some sensors are broken down (repair is planned next year). Data acquisition and transmission is mostly normal.
	Reproducibility of heavy rain on the numerical weather prediction models developed under this project: to be improved to the extent that can be provided for flood prediction.	(Project completion) Improvement of accuracy of meteorological predictions at the operational level using the models developed was demonstrated. (Ex-post evaluation) The level of heavy rain forecast for downstream areas in the east of the Tibet Plateau has been enhanced. Simulation studies were conducted on flood

		models, but the results have not been applied yet.
	Progress of development of the advanced meteorological observation network such as with GPS and PBL at the operational level.	(Project completion) Regular observations started. (Ex-post evaluation) Regular observations are carried out with mostly good conditions.
	Progress of development and utilization of numerical weather prediction models with data assimilation at the operational level.	(Project completion) Application of data assimilation techniques to numerical weather predictions was widely disseminated through training. (Ex-post evaluation) The techniques are applied at Sichuan, Yunnan and Hubei meteorological administration offices.
(Overall goal) Meteorological disaster is reduced in East Asia including China and Japan	Verification examples of flood prediction and meteorological disaster reduction in China and in East Asia based on meteorological prediction information.	(Ex-post Evaluation) Damage was reduced through enhanced accuracy of forecasts.

Sources：Terminal Evaluation Report and responses to the questionnaire by the implementing agency.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 150%) due to the review of the items of the equipment to be provided and the field of expert to be dispatched. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, the 12th Five-year Plan Outlines for the National Economic and Social Development (2011-2016) that articulates “development of the systems of surveillance, early warnings and information release of meteorological disasters”. As the Government of China has emphasized the development of the observation network and operation system for the Tibet Plateau area, sufficient backups have been established to keep this project effective. Institutionally, management responsibility of the AWSs and GPS stations developed under this project was transferred from Chinese Academy of Meteorological Sciences (CAMS) under CMA and provincial meteorological research institutions to the operational observation system of CMA in 2009. The operation of those stations are managed and funded by CMA in an integrated manner based on the regulation for its operation system, and no problems have been observed. The technical capacity of the implementing agency is considered to be appropriate as activities such as operation and maintenance of each observation equipment as well as data analysis/prediction has been carried out (see “2 Effectiveness/ Impact”). Capacity building activities are also carried out following recent technological innovation. No problems are found in the financial aspect, either, as the operation and maintenance cost for the system developed under this project have been borne by CMA as part of the budget for its operational observation system.

From these findings, it is considered that the project has no problem in the policy background as well as institutional, technical and financial aspects of the implementing agency; therefore, sustainability of effects of the project is high.

5 Summary of the Evaluation

This project has achieved the project purpose of “strengthening the operational weather forecasting system of China through development of numerical weather prediction models”. Meteorological observation data became acquired and transmitted in the Tibet Plateau and upstream area of the Yangtze River, and such data were imported to the numerical prediction models. Through utilization of the models for weather forecasting and meteorological disaster prediction at the operational level, accuracy of weather forecasting has been improved. Although concrete information was not available to verify the achievement of the overall goal, it is pointed out that the enhanced forecasting accuracy has reduced damage caused by disasters. As for sustainability, no problem has been found as the institutional set-ups and necessary cost have been properly secured given the importance of the observation system in the concerned area. For efficiency, the project cost exceeded the plan.

In the light of above, This project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

The equipment provided under this project have been well maintained and effectively utilized. Although some equipment had troubles, the Chinese side has made necessary budgetary arrangement and maintenance. The information on outcomes of the project has been shared with respective local meteorological offices and presented at international research groups through research papers. The implementing agency is expected to continue extending such outcomes and maintaining the equipment so that the project could play its role for long term.

Lessons learned for JICA

In the planning stage of a project that requires high level of expertise, inputs of materials and equipment should be examined from expert (technical) point of view, and inputs of experts should be based on a more detailed personnel assignment plan so that the project could be completed within the planned period and cost.

Wind profiler radar Yunnan Dali

Automatic weather observation

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office/ February, 2014

Country Name	The Village-based Integrated Poverty Alleviation Model Project in Daozhen County and Leishan County, Guizhou Province
People's Republic of China	

I. Project Outline

Background	Guizhou Province, located in the south-western part of China, was one of poor provinces with the lowest GDP per capita. In 2002-2005, JICA implemented the Poverty Alleviation Model Project in Sandu County, Guizhou Province. The approach of that project, namely, integrated poverty alleviation consisting of activities in different fields such as improvement of living environment, family health care and ecological farming (agriculture using organic energy, etc.) with people's participation, was highly appreciated by the Chinese side. Accordingly, human resource development in such approach was progressing. However, in order to consolidate the experience and knowledge accumulated through the mentioned project at the implementing agency and to steadily extend the project outcomes to other areas of Guizhou, it was necessary to formulate model projects for poverty alleviation in typical areas of the province and to establish know-hows for extension.		
Objectives of the Project	1. Overall Goal: The village-based integrated poverty alleviation model is practiced and extended in other areas of Guizhou Province. 2. Project Purpose: A village-based integrated poverty alleviation model, consisting of family health care, strengthening of livelihood and establishment/capacity development of working organizations as main outputs, is established in Daozhen Qilao and Miao Autonomous County (hereafter "Daozhen County") and Leishan County, Guizhou Province. 3. Assumed steps for achieving the project goals[1]: This project implements sub-projects in the model villages in Daozhen County and Leishan County. As a result, living environment, livelihood and village-level organizational capacity are improved. A set of the approaches taken in such sub projects are established as a model and disseminated. Consequently, the model is practiced in the whole area of the mentioned two provinces and further in other counties of Guizhou.		
Activities of the project	1. Project site: 2 Townships (Dagan Township and Shangba Town) in Daozhen County under Zunyi City, and 1 township (Xijiang Township) in Leishan County under South-east Guizhou Miao and Tong Autonomous Prefecture, Guizhou Province, were selected as the "project townships". From them, a total of 6 villages (planned number; the actual number was 33 villages) were selected as the "key model villages", where sub-projects were implemented. Further, 26 "extension villages" were selected, where model dissemination activities were carried out. 2. Main activities: (1) Family health care: training for health officers, development of Family Planning (FP) stations (health stations), assignment of village health personnel, infrastructure development (biogas tanks, toilets, hand-wash stations at elementary schools, animals sheds, potable water facilities, etc.), public relations (PR)/education, health care services (antenatal check-ups, school health check-ups, parasite examinations, etc.). (2) Livelihood improvement: training for farmers on farming and livestock techniques, introduction of revolving funds (training and provision of initial resources), infrastructure development (village roads). (3) Capacity development for working organizations: training for villagers' organizations, study tour, trainers' training, construction of community facilities (e.g. villagers' activity rooms). (4) Consolidation of the model: seminars, development and distribution of a manual and case studies, etc. 3. Inputs (to carry out above activities) Japanese Side 1. Experts: total 5 Japanese experts and many Chinese experts 2. Trainees received: 35 persons 3. Equipment: office equipment, equipment for PR/education, equipment for health check-ups, etc. 4. Others: cost for infrastructure development, etc. Chinese Side 1. Staff allocated: 20 persons assigned on full-time basis and village-level health personnel 2. Land and facilities: development of FP stations and facilities for PR, office facilities, use of meeting rooms, use of elementary school of each village, etc. 3. Local cost: cost for infrastructure development, etc.		
Project Period	November 2005 to March 2010	Project Cost	283 million yen
Implementing Agency	National Population & Family Planning Commission (NPFPC) Guizhou Province Population & Family Planning Commission (GPFPC)		
Cooperation Agency in Japan	Japanese Organization for International Cooperation in Family Planning (JOICFP)		
Related Projects (if any)	Japan's cooperation: the Poverty Alleviation Model Project in Sandu County, Guizhou Province (Technical Cooperation, 2002-2005); Guizhou Province Environment Improvement and Education		

[1] Reviewed at the time of the ex-post evaluation.

	Project (ODA Loan, 2006-2013).

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with China's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante evaluation and project completion in the following ways. First, the relevant policy objectives include "firmly maintaining development-type poverty reduction measures", "poverty reduction in Western China", "poverty reduction measures in the state-level key poverty alleviation counties (including the two target counties)" and "promotion of new rural construction" as set in the 10th Five-year Plan (2001-2005), the 11th Five-year Plan (2006-2010), the Great Western Development Strategy (2000-), the Outline for Development-oriented Poverty Reduction for China's Rural Areas (2001-2010), etc. Second, the relevant development needs include "poverty alleviation measures in two of the counties where poverty is extremely serious in Guizhou Province (according to economic data of 2010, Guizhou Province was in the 26th place in GDP among the 31 provinces, autonomous regions and municipalities of China. Guizhou is categorized as a poverty province, with 50 state-level poverty counties including Daozhen County and Leishan County)" and "development of a model of integrated poverty alleviation approach with people's participation". Third, the project is consistent with the China Economic Cooperation Plan (2001) of Japan in terms of its assistance policy in poverty alleviation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project achieved its project purpose "establishment of a village-based integrated poverty alleviation model in Daozhen County and Leishan County". The total number of villages where sub-projects (health check-ups, awareness-raising/PR, infrastructure development, provision of goods, etc.) were implemented was 59 villages in 3 townships at the time of project completion and 146 villages in 18 townships at the time of ex-post evaluation.

The project sorted out the characteristics of the village-based integrated poverty alleviation model into the following two pillars: (1) "integrated poverty alleviation approach" that deals with family health care, a common and familiar need of people, as an entry point; and (2) "location-based implementation system" in which the family planning sector (the counterpart of this project) and related sectors such as agriculture, livestock, health, etc. work together. Based on this, the project compiled the experiences from the sub-projects into a manual and case studies, and disseminated them. According to the implementing agencies, it has been continuing its activity referring to the manual and case studies, with adjustments along with China's new rural construction needs and specific situations of each township, and while encouraging opinions and participation of residents. For example, in the field of family health care, the attendance rates at gynecological and elementary school check-ups increased as a result of sub-projects such as awareness-raising/PR and construction of hand-wash stations. The parasitization rate at elementary school children decreased from 54-74% before the project to 21-38% at the time of terminal evaluation, and further to 12-15% at the time of ex-post evaluation, which was lower than the provincial average. In the field of livelihood improvement, county Bureaus of Population and Family Planning implemented sub-projects such as farmers training and one village one product (OVOP) in coordination with Bureaus of Agriculture and Bureaus of Livestock Products, and improved farmers' farming and livestock skills. Revolving funds that were introduced with those sub-projects have been operated well, too, with high collection rate at more than 90% during the project implementation period and 100% at the time of ex-post evaluation. In Daozhen County, additional 1 million yuan fund was injected from the county budget. In both counties, it is reported that the infrastructures developed under this project have been used to date, and all of them plus the ones constructed after project completion (e.g. FP stations) have been maintained with funds from county or township governments. Villagers' organizations that the project established for such purposes as maintenance of infrastructures and implementation of OVOP are still active, and new organizations were also formed on the initiative of the county Bureaus of Population and Family Planning.

The overall goal was twofold: (1) extension of the model to other areas than the two target counties; and (2) increase in people's income in the areas including the two target counties. For (1), it was confirmed that the outcomes of the project have been disseminated to, and practiced in Guizhou Province as well as other provinces: in 2010 and 2011, the outcomes of the project were presented, and the reprinted copies of the manual and case studies were distributed, to district or county administrative officers and practitioners in Guizhou Province (other counties than the target counties), Sichuan Province, Gansu Province and Yunnan Province. Also, NPFPC (currently NHFPC: National Health and Family Planning Commission) expressed its intention to utilize the model developed through this project in its promotion of family health care under the "New Rural and New Family" Project[2] being implemented mainly in Mid-western China. Furthermore, according to an interview with the NHFPC, the model established under this project was used in implementation of the Good Service Project (aiming to improve administrative services in the field of family health care) and the Villagers Autonomy and Mutual Trust Project (aiming to enhance communication between the government and residents) in Weining County, Qianxi County, Huangping County, Sansui County and Wuchuan County under Zunyi City, Guizhou Province, particularly in studies before project implementation, villagers' meetings to hear people's opinions and incorporating such opinions in the contents of the projects.

As for (2), it was observed that annual average income in the project townships increased by around 300% during the period between 2005 and 2012. In Leishan County, for example, a certain role of the outcomes of this project in the income increase was confirmed in such cases as embroidery products, which was introduced under the project and have already been in the

[2] The "New Rural and New Family" Project is being implemented by NHFPC in Mid-western China, particularly rural areas. "New Rural" represents building a beautiful rural area with well-developed infrastructures, and "New Family" represents people building a physically and mentally healthy family under varieties of social security services (e.g. family health care services).

marketplace, and tea leaf processing in Huangli Village (one of the key model villages), which has grown to the village's main industry. Although it cannot be concluded that the income increase in the project townships is fully and directly related to this project, there observed individual cases where the project activities have led to the increased income.

In this way, it was confirmed that the project effect emerged and has sustained in the two target counties, and that the methods introduced under this project and the effect of applying such methods have been extended to other areas of Mid-western China such as non-target counties in Guizhou Province as well as Sichuan Province, Gansu Province and Yunnan Province. Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) A village-based integrated poverty alleviation model, consisting of family health care, strengthening of livelihood and establishment/capacity development of working organizations as main outputs, is established in Daozhen County and Leishan County, Guizhou Province.	Increase in the number or ratio of sub-projects implemented in coordination with relevant government sections.	(Project completion) No clear description. (Ex-post evaluation) The effect was measured using the number of villages that applied the model (the indicator shown below), for it was not clear how to count the activities carried out in villages as a sub-project, and thus it was difficult to note certain numbers.
	Increase in the number of villages in the two target counties that applied the model.	(Project completion) Total 59 villages. Sub-projects were implemented first in 33 villages (key model villages), and then in additional 23 villages (extension villages) in the 3 project townships. (Ex-post evaluation) 83 villages (14 townships) in Daozhen County and 4 villages (1 village selected from every township).
(Overall Goal) The village-based integrated poverty alleviation model is practiced and extended in other areas of Guizhou Province.	Increase in the numbers of counties and villages that applied the model.	(Ex-post evaluation) The participatory approach was applied in implementing the Good Service Project (in the field of family health care) and the Villagers Autonomy and Mutual Trust Project in Weining County, Qianxi County, Huangping County, Sansui County and Wuchuan County under Zunyi City, Guizhou Province, and people became more active. In addition to the mentioned 5 counties, the model established through this project has been disseminated, through seminars and distribution of the manual, to administrative officers in Mid-western China such as Guizhou, Sichuan and Yunnan Provinces. It is considered that the number of counties and villages applying the model may have been increased and presumably be increasing in the future.
	Increase in income per capita in villages where the model was practiced/ extended.	(Ex-post evaluation) Increased by 285% to more than 400% during the period from 2005 to 2012 in the project townships. - Daozhen County: from 1,860 yuan to 7,334 yuan in Dagan Township and from 1,416 yuan to 5,676 yuan in Shangba Town. - Leishan County: from 1,600 yuan to 4,560 yuan in Xijiang Township.

Sources: Project Completion Report and responses to the questionnaire from the implementing agency.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, the project period was longer than the plan (ratio against the plan: 129%) due to the extension of the cooperation period to respond to the need to continue assistance in villagers' organization activities, utilization of the manual and dissemination of the model. Accordingly, the project cost was significantly higher than the plan (ratio against the plan: more than 150%) due to the additional input during the extension period. Therefore, efficiency of the project is low.

4 Sustainability

In the policy aspect, sufficient back-ups are established such as the 12th Five-year Plan (2011-2015) aiming to enhance quality of FP services and promote family health care. Also, efforts to extend the project outcomes are underway such as through seminars to disseminate outcomes of China-Japan cooperation projects (2011 and 2012). Institutionally, the organizational structure of the implementing agencies is suitable for practicing integrated approaches with coordinated involvement of relevant government sections: it is arranged that the population and family planning section and the office of new rural construction (secretariat for the new rural construction programs of the Chinese side) are managed in an integrated manner. No problem is seen in the two target counties since the local governments place importance on family planning and family health care and allocate professional human resources to FP stations that were additionally constructed. In the technical aspect, administrative sections at county, township and village levels have maintained the outcomes of the project in such ways as provision of regular training courses with human resources developed under this project as instructors. In the financial aspect, no problem is seen, either, for the infrastructures developed as sub-projects are of small scale requiring small expense for maintenance, and necessary budget is allocated. Besides operation and maintenance, additional investment has been made to the further development of the infrastructure such as construction works funded by a local government to connect the inter-village road (built as a sub-project) and the main road of the area. Furthermore, the budget has been increasing to a certain extent following a merger of NHFPC to the Ministry of Health in 2013. In the two target counties as well, there is an increasing trend in budget allocation from the county governments to townships for human resources in the field of family planning and family health care and operation and maintenance of related facilities and equipment.

From above, the project has no problem in the policy background and the institutional, technical and financial aspect of the implementing agencies; therefore, sustainability of effects of the project is high.

5 Summary of the Evaluation

For the project purpose "establishment of a village-based integrated poverty alleviation model in Daozhen County and

Leishan County", this project implemented sub-projects in the fields of family health care and livelihood improvement under the cooperation between the population and family planning sections and relevant organizations, and such experiences were compiled to a manual and other documents, which have been continuously practiced/ extended to other townships after project completion. For the overall goal, the model was incorporated into programs of the implementing agencies, and is used in Mid-western China including other areas of Guizhou Province than the target counties as well as other provinces such as Sichuan and Yunnan. As for sustainability, no problem was found and there observed positive aspects such as the continuing policy back-ups, development of the organizational structure of the implementing agencies, continuation of training and increase in budget. For efficiency, both project cost and project period exceeded the plan.In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

Efforts to extend the project outcomes are underway such as through seminars to disseminate outcomes of China-Japan cooperation projects in 2011 and 2012. Also, the budget has been increasing to a certain extent following a merger of NHFPC to the Ministry of Health in 2013. Under such circumstances, securing a larger budget and further continuing efforts to disseminate the project outcomes are recommended.

Lessons learned for JICA:

In making an action plan for participatory development in China, it should be noted that a certain period of time is necessary to obtain understanding and recognition of the participatory approach to be introduced. Therefore, when introducing similar participatory development methods in other countries where the government organizations designated as the counterpart agencies do not have much experience and knowledge of participatory approaches, it is desirable to select the target location where administrative officers can communicate well with target beneficiaries. In addition, the project period and input schedule should be carefully planned with a consideration that the key factor for smooth implementation of the project activities in the later stage is whether it is possible for the counterpart agencies to deepen the recognition and establish the paticipafory method in the eary stages of theporoject .

Vegetables cultivation greenhouse constructed by revolving funds

Hand-wash stations constructed by sub-projects

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office/ January 2014

Country Name	The Project for Business Human Resource Development
People's Republic of China	

I. Project Outline

Background	The City of Dalian was on a course of development as one of the leading international commercial cities in Northeast China. Under the policy of state-owned enterprise reform in the northeastern area inviting foreign investment, Japanese companies expanded their business in Dalian, and the number of Japanese companies reached 2,900 in 2005. With such development, it was projected that there would be increasing demand for human resources with knowledge and skills of Japanese language, IT and management that would be necessary in Japanese companies and business for Japan. Establishment of a training center to respond to the demand was therefore needed. Under such circumstances, the China-Japan Friendship Dalian Center for Human Resource Development (hereafter "the Center"), a non-degree higher education institution, was established with Grant Aid. This project was to extend technical cooperation for initial operation of the Center at the time of its establishment.
Objectives of the Project	1. Overall Goal: The Center will play a vital role in developing business human resources that contribute to the economic development of Dalian and Northeast China, as well as to closer economic relations between Japan and China. 2. Project Purpose: At the Center, implementation structures will be strengthened for developing business human resources that contribute to the economic development of Dalian and Northeast China, as well as closer economic relations between Japan and China. 3. Assumed steps for achieving the project goals[1]: This project develops a training system of the Center for its clients, i.e. Japanese companies and local companies that place importance on business relations with Japan (Japan-related companies), and provides training courses that match the clients' needs, and thereby aims to narrow the demand-supply gap of human resources to contribute to business between Japan and China.
Activities of the project	1. Project site: City of Dalian 2. Main activities: Development of training plans and curricula, implementation of training courses, evaluation and improvement of training courses, support for networking with Japanese companies or others (expansion of contacts and public relations for attracting customers/marketing), etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: total 24 persons 2) Trainees received: 26 persons 3) Equipment: Simultaneous translation system, books, etc. Chinese Side 1. Staff allocated: 27 persons 2. Land and facilities: Project office, training facilities and equipment (developed by Japanese Grant Aid) 3. Local cost: Operation and maintenance cost for the Center
Project Period	March 2006 to February 2010 / Project Cost: 544 million yen
Implementing Agency	Science and Technology Bureau of the City of Dalian; Dalian Jiaotong University; Dalian University of Technology; Dalian University of Foreign Languages; Dongbei University of Finance and Economics; etc.
Cooperation Agency in Japan	The Japan Foundation; KRI International Corporation.
Related Projects	Japan's cooperation: The Project for Construction of the China-Japan Friendship Dalian Center for Human Resources Development (Grant Aid, 2004); dispatch of Japan Overseas Cooperation Volunteers and Senior Volunteers (2010-2012).

II. Result of the Evaluation[2]

1 Relevance

This project has been highly relevant with China's development policy "redevelopment of old industrial areas and reform of state-owned enterprises in Northeast China" as set in the Northeast China Revitalization Plan (2003) and the 11th Five-year Plan (2006-2010), development needs "development of human resources equipped with abilities of Japanese language and specialized skills for working at Japanese companies and business for Japan", as well as Japan's ODA policy, the China Economic Cooperation Plan (2001), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

[1] Reviewed at the time of the ex-post evaluation.

[2] The constraints to evaluation include (i) difficulties in collecting information from ex-trainees and companies that sent their staff for training, which limited the confirmation on the use of training outcomes in actual business between Japan and China; and (ii) unavailability of financial data from the Center.

This project developed training plans and curricula, and implemented training courses in the four fields, namely, (i) Business Management, (ii) Production Management, (iii) Software Development and Process Management (IT), and (iv) Business Japanese, at the Center for its clients – Japanese companies and local companies that place importance on business relations with Japan (Japan-related companies). Teachers of Dalian Jiaotong University (counterpart), who acted as the training instructors, received technical transfer from Japanese experts, and then became able to carry out training activities from identification of needs to course evaluation and improvement.

A training course

As a result, the project purpose "strengthening of implementation structures for developing human resources for business between Japan and China" was achieved. The number of trainees in the above-mentioned four fields of training courses reached nearly 8,000 persons during the 5-year project implementation period. After project completion, training courses have been continuously provided, and more than 8,000 additional persons received training in 2010-2012. Although the Center has not kept results of satisfaction surveys conducted during project implementation, the results of course evaluation by trainees, questionnaires organized by the Center after project completion, show that more than 80% of the trainees awarded over 4 point on a 5 point scale to evaluate the degree of their satisfaction. The Center has neither counted the number of companies that sent their staff for training nor conducted satisfaction surveys for those companies. Nevertheless, instructors of the Centers discuss with client companies for each training course, and develop the curriculum based on needs of the client companies as well as trainees. Also, when necessary, i.e. for subjects that the Center instructors cannot handle, the Center invites visiting lecturers from outside institutions such as Liaoning Normal University and Dalian Maritime University[3]. Continuous securement of Japanese instructors, a recommendation from the terminal evaluation, has been realized as well.

With respect to the overall goal, the number of Japanese companies in Dalian reached approximately 4,300 in 2012. The Center has responded to a certain extent to the particular needs for human resources with Japanese language abilities and specialized IT skills by training approximately 3,000 staff of Japanese companies or Japan-related companies in the above-mentioned four fields of training every year after project completion. While the Center has not conducted follow-up surveys to companies (as mentioned above), a study for this ex-post evaluation confirmed reporting from ex-trainees and their companies that they utilized the training for development of business between Japan and China. From this and the high level of satisfaction of trainees shown in the above-mentioned course evaluation, it could be concluded that trainees acquired knowledge they needed and used it for their job. Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Strengthening of implementation structures for developing human resources for business between Japan and China.	Number of trainees in each field	(Project completion) Total from 2006 to February 2010: 7,907 persons, consisting of 2,149 in Business Management, 2,660 in Production Management, 849 in Software, and 2,249 in Business Japanese. (Ex-post evaluation) Total from 2010 to 2012: 8,486 persons, consisting of 1,914 in Business Management, 878 in Production Management, 304 in Software, and 5,390 in Business Japanese.
	Number of companies that sent trainees in each field.	(Project completion) No data. 227 Japanese companies and other related companies used the Center. (Ex-post evaluation) No data.
	Trainees' satisfaction with the Center's training course they attended.	(Project completion) No data. (Ex-post evaluation) Level 4 or higher satisfaction (in 5-level choices)
	Companies' satisfaction with the Center's training course they sent their staff to.	(Project completion) Mixed results with high evaluation and need for more practical training. (Ex-post evaluation) No satisfaction survey has been conducted, but the Center has developed the curriculum for each course through discussion with the companies.
	Number of companies that newly sent their staff to the Center for training	(Project completion) No data (Ex-post evaluation) Around 10 new companies send their staff for training every year.
(Overall goal) The Center will play a vital role in developing business human resources that contribute to the economic development	Total number of trainees who finished the Center's training courses	(Ex-post evaluation) The Center trained a total of 16,122 persons by 2012. After project completion, it trains around 3,000 persons every year.
	Total number of companies that used the Center's training courses	(Ex-post evaluation) No data. (Related information: A total 7,315 persons received in-service training at the Center in 2010-2012, though the number of companies is not available.)
	Contribution of ex-trainees to	(Ex-post evaluation) According to interviews with the Center, there are some reporting from ex-trainees and their companies (Japan-related companies), such

[3] This ex-post evaluation could not confirm whether any measures have been taken to cope with the difficulties in training for practical workers by university teachers (counterpart personnel) who do not have much business experience, an issue pointed out in the terminal evaluation.

of Dalian and Northeast China, as well as to closer economic relations between Japan and China.	development of business between Japan and China (cases where ex-trainees utilized the training to their job) (Note)	as “Japanese language is very useful for daily work”, and “Japanese language is useful for negotiations with clients and communication at workplace” (Japanese courses), and “the training enhanced my willingness to learn more related knowledge”, “I’m using the learned contents at work”, and “logical level of group leaders at production site was upgraded” (Production Management courses).

Sources: Project Completion Report and responses to the questionnaire from the Center.

Note: The original indicator was “total number of unofficially-appointed workers who got employed by Japanese companies”. Since the relevance of this indicator to this project was not clear, the mentioned alternative indicator was used instead.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, the project period was longer than the plan (ratio against the plan: 133%) due to the extension of the cooperation period to fully implement intensive technical transfer to Chinese instructors in preparation for the post-cooperation period, the support for networking with companies and succession of activities to the Chinese side. Accordingly, the project cost was significantly higher than the plan (ratio against the plan: 155%) due to the additional input during the extension period. Therefore, efficiency of the project is low.

4 Sustainability

In the policy aspect, sufficient back-ups are established such as the 12th Five-year Plan for the Northeast Revitalization (2011-2015) aiming to develop the region through science and technology as well as human resource development. Institutionally, there is no change in the organizational status of the Center, and allocation of sufficient staff for conduct of training and cooperative relationship with universities have been established. In response to clients’ demand for the Center to keep involving Japanese persons in training after project completion, which was deemed necessary considering the nature of the Center and its training, the Center assigned Senior Volunteers, and after their term of cooperation ended, invited Japanese instructors on its own. In the technical aspect, no problem has been observed as the Center itself carries out identification of companies’ needs, development of curricula and implementation of training based on such needs. In the financial aspect, however, the Center commented that the budget (mainly consisting of revenues from training and other business activities) was “sufficient, but would be desirable if increased to some extent”. As further information was not available and the Center’s financial situation was thus unclear, there remains a concern on future prospects of the operation budget.

From above, the project has some problem in the financial aspect; therefore, sustainability of effects of the project is fair.

5 Summary of the Evaluation

For the project purpose, “strengthening of implementation structures for developing human resources for business between Japan and China”, the Center became able to develop training plans and curricula, implement and manage training courses and evaluate and improve training courses, and has provided courses that match needs of Japanese and Japan-related companies. As a result, for the overall goal as well, the Center has trained around 3,000 staff of Japanese or Japan-related companies annually, and therefore responded to a certain extent to the demand for human resources for business related to Japan. As an impact, it was reported that ex-trainees applied the acquired knowledge in Japanese companies and other related organizations, etc. As for sustainability, according to the information on the budget of the Center there remains a concern on future prospects of the operation budget. For efficiency, both project cost and project period exceeded the plan.

In the light of above, although certain outcomes have been achieved, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

In addition to the development of curricula and conduct of training based on demands of client companies and trainees, the Center should try to implement satisfaction surveys to client companies that sent trainees, for their feedback after training would reflect contribution of the ex-trainees and thus provide useful inputs for improvement of courses.

Lessons learned for JICA:

It is important to identify needs of potential trainees for each individual course, especially when conducting training for company employees, as such training requires dynamic and highly practical contents. In case of this project, the Center discussed with client companies in advance, tried to reflect interests and needs of the companies in the training courses, and consequently the courses were effectively provided.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Bangladesh office: January 2014

Country Name	The Project for Enhancing Capacity of Public Service Training in Bangladesh
Bangladesh	

I. Project Outline

Background	In Bangladesh, civil service reform has been a priority area of the Government of Bangladesh (GOB). The GOB identified two specific approaches to improve management capacity in public sector, namely those of Total Quality Management (TQM) and Human Relations (HR). TQM requires every individual within an organization to be involved and all activities directed to satisfy customers. TQM also encompasses Human Relations element, which could contribute to changes in attitudes of individual public servants towards customers. The knowledge and techniques of TQM was expected to help public organizations increase their managerial effectiveness, thereby improving quality of their services through organizational and individual changes.
Objectives of the Project	1. Overall Goal: Improvement of quality of services delivered by public sector organizations in Bangladesh through practicing Total Quality Management (TQM). 2. Project Purpose: Enhancing the Institutional capacity of Bangladesh Public Administration Training Center (BPATC) (note 1) to train public servants in TQM to manage public sector. 3. Assumed steps for achieving the project goals[1]: The project implements (i) development of Total Quality Management (TQM) training program (Note 2), training to faculty members (trainers) of BPATC and other 4 training institutions (NAEM, BARD, RDA, APD; hereafter referred to partner institutions) (Note 3), and (ii) demonstration of model projects (Note 4). Through these activities, BPATC is able to regularly organize TQM-SC and regular core training programs with their faculty members and to play a role for facilitating the trainees to practice TQM in their work place. The civil services who receive TQM training by BPATC and other 4 training institutions introduce TQM approach at their work place and then quality of their services is improved. (Note 1) BPATC is a central training institution in Bangladesh under the Ministry of Public Administration (MOPA), which provide the key training programs for the government officers. (Note 2) Short courses on TQM (TQM-SC) and TQM modules within BPATC's regular core training program. (Note 3) NAEM: National Academy for Educational Management, BARD: Bangladesh Academy for Rural Development, RDA: Rural Development Academy, APD: Academy for Planning and Development (Note 4) Model projects are case studies to demonstrate the application of TQM approach to the public sector services. Model projects are selected from the Action Plans proposed by BPATC and the participants of TQM-SC. The results of model projects are also feedbacked to improvement and modification of the TQM course manuals and materials.
Activities of the project	1. Project site: Dhaka 2. Main activities Development of training of a concise module on TQM for regular core training programs and short courses, development of Training of Trainers (TOT), promotion activities for TQM, and implementation of model projects. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 12 persons 2) Trainees received: 19 persons 3) Equipment: Office and OA equipment Bangladesh Side 1) Staff allocated: 6 persons and 33 resource persons 2) Land and facilities: project office, seminar room, electricity, water supply, LAN system 3) Others: Salaries to counterpart personnel
Project Period	January 2007 – January 2010 / Project Cost: 229 million yen
Implementing Agency	Bangladesh Public Administration Training Center (BPATC), Ministry of Public Administration (MOPA)
Cooperation Agency in Japan	Padeco
Related Projects	Japan's cooperation: •Dispatch of a short-term JICA expert for follow-up of the project (Technical Cooperation, 2010-2011); •Project for Improving Public Services through Total Quality Management (Technical Cooperation, 2012-2017; hereafter referred to "the succeeding project") Other donors' cooperation: •Managing at the Top 2 (MATT2) (DFID, 2005-2012); •Developing Civil Service Capacity for 21st Century Administration (UNDP, 2005-2007)

II. Result of the Evaluation[2]

1 Relevance

[1] Reviewed at the time of the ex-post evaluation.

[2] Constraint of Evaluation: The ex-post evaluation reexamined the appropriateness of the indicators for project purpose and overall goal, and added alternative indicators in order to assess their achievement appropriately.

This project has been highly relevant with Bangladesh development policy ("improvement of public service through civil service reform" in the First National Strategy for Accelerated Poverty Reduction (NSAPR)(2005) and the Second NSAPR (2009)), development needs ("improvement of BPATC's capacity in order to introduce TQM approach in the public sector organization in Bangladesh"), as well as Japan's ODA policy for Bangladesh, "the Japan's PDA Strategy to Bangladesh" (2005), with the priority area of improvement of service quality of public sector organizations, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on improvement of institutional capacity of BPATC in order to promote the introduction of TQM in the public sector organization in Bangladesh. The project developed TQM-SC course manual and TQM modules and course materials within the regular core training program. The TQM-SC and TQM modules were authorized by BPATC academic council and integrated into the official training programs for the public servant in Bangladesh. Through the TOT training, the project trained 67 faculty members of BPATC and partner institutions as qualified TQM trainers who were capable to conduct TQM training course. By the project completion, eight TQM-SC with 250 participants and six TQM courses for Upazila officials with 137 participants were organized. Therefore, this project achieved the project purpose "enhancing the institutional capacity of BPATC to train public servants in TQM to manage public sector".

As for overall goal, 269 TQM training courses (28 in TQM-SC, 235 in TQM modules within regular core training program and 6 in pilot Upazila course) were conducted cumulatively by July 2013 and the cumulative number of participants was 9,967. Around 230 action plans on improvement of service quality in Upazila level by introducing TQM approach were prepared by the trainees, and 150 action plans out of them were actually implemented successfully. Furthermore, 40 out of 150 successful action plans were presented in the seminars, workshops, newsletters, brochures etc. According to the implementing agency, these action plans brought about positive impact of application of TQM at the workplace in Upazila level such as (a) reduction of time for land mutation (change of title ownership of land) from three months to 25 days, (b) increase of primary school attendance rate from 70% to 80%, (c) increase of hygienic latrine usage rate from 30% to 50%, (d) increase in information collection rate for cattle and poultry diseases from 40% to 70%, (e) increase in Fishery Act compliance rate from 70% to 95%, (f) increase in arsenic screened tube-wells rate from 22% to 30%, and (g) increase in allowance distribution rate for old aged citizen to 100%. On the other hand, the degree of satisfaction on above mentioned improved service quality by the beneficiaries (e.g. landowners, school teachers and students, local residents, pensioners, etc.) has not been examined due to lack of the survey. As mentioned above, successful action plans that demonstrate improvement in quality of services through practicing TQM are observed in some Upazila. In addition, it is observed that number of public servants in the central level have initiated to review their individual work routine for improvement of services applying the concept of TQM. Therefore, this project somewhat achieved its overall goal "improvement of quality of services delivered by public sector organizations in Bangladesh through practicing TQM". However, realization of such outcomes remains in a limited extent in Upazila level. Therefore, the outcome of this project has not been disseminated to nationwide yet. Base on the successful outcome of this project, currently the JICA's technical cooperation named "Project for Improving Public Services through Total Quality Management (2012-2017)" is being implemented as the second phase of this project in order to further disseminate the outcome of the project to nationwide.

In this way, this project has sufficiently achieved the project purpose and partially achieved the overall goal. Therefore, effectiveness of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Enhancing the Institutional capacity of BPATC to train public servants in TQM to manage public sector.	Faculty members are able to implement TQM training courses.	(Project Completion) Total 67 faculty members (48 of BPATC and 19 of partner institutions) was trained as qualified TQM trainers. (Ex-post Evaluation) Total 77 faculty members (48 of BPATC and 29 of partner institutions) were awarded as TQM Certified Trainers.
	TQM modules are developed in the institutes.	(Project Completion) The TQM-SC course manual and TQM modules and course materials were developed by BPATC and partner institutes.
(Overall goal) Improvement of quality of services delivered by public sector organizations in Bangladesh through practicing TQM	200 Public Servants receiving training use TQM in the job.	(Ex-post Evaluation) Total 9,967 public servants received TQM training from Jan.2007 to July 2013. It is assumed that at least 150 public servants used TQM in the job because 150 action plans were actually implemented in Upazila level.
	Customer satisfaction in those organizations improves.	(Ex-post Evaluation) No information available because no customer satisfaction survey has not been conducted.

Source: Project Completion Report and BPATC/MOPA.

Note: The indicators for overall goal and project purpose are original ones stipulated in Project Design Matrix (PDM) at ex-ante evaluation.

3 Efficiency

Although the project period was within the plan (ration against the plan: 100%), the project cost was significantly exceeded the plan (ration against the plan: 159%). The project inputs were appropriate for producing the outputs of the project. Therefore, efficiency of this project is fair.

4 Sustainability

In policy aspect, this project is still given importance in the current development policy such as the Second NSAPR (2009-2011). Regarding the institutional aspect, BPATC and partner institutes have enough manpower to continue to provide TQM trainings. After the project completion, total 77 faculty members (48 of BPATC and 29 of partner institutions) were awarded as TQM Certified Trainers by the training institutes, and 75 of them continue to provide lectures on TQM training course at present. BPATC continues mentoring system (Note 1) for the TQM-SC in selected cases and to organize

dissemination seminars to the policy makers and high level government officers as well as up-dates public brief and PR material. Regarding the technical aspect, faculty members of BPATC and partner institutions disseminate and learn mutually acquired knowledge and skills on TQM as well as established manuals in order to keep them as their institutional memories. New case studies derived from model projects based on action plans have been incorporated in training curriculum as continuous process for modification of training modules. Regarding financial aspect, an appropriate budget is provided to BPATC to continue the TQM training. But there is a lack of training budget for partner institutions since the budget is not recurrent but project-based. In this regard, the succeeding project tries to sensitize high ranking officials to the successful cases which were demonstrated in several Upazila by the project and to the importance of the TQM trainings. This project has some problem in financial aspect, hence sustainability of this project effect is fair.

(Note 1) The purpose of mentoring system is to provide supports to the participants who implement the action plans in their work place.

5 Summary of the Evaluation

The project has largely achieved the project purpose and somewhat achieved overall goal. The project successfully established the institutional capacity of BPATC and partner institutions for conducting TQM training to the public services. For example, the project established the course manual of TQM-SC and developed different TQM modules in regular core-courses, which were authorized as official training program for the public sector organization offices in Bangladesh. Totally 67 faculty members were developed as TQM quality trainers and eight TQM-SC with 250 participants and six TQM course for Upazila with 137 participants were organized during the project period. After the project completion, TQM training courses have been provided by the training institutions continuously and 150 action plans for improvement in quality of public service delivered in Upazila level were implemented, which brought about positive impact in some Upazila. As for sustainability, there is some problem in the financial aspect because partner training institutions have a difficulty to continue the TQM training due to lack of training budget. As for efficiency, the project cost significantly exceeded the plan.

In the light of above, this project is evaluated to satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- The implementing agency is expected to make an effort to respond to the above mentioned issues in collaboration with on-going JICA's technical cooperation project. In particular, it is important to maintain and further strengthen BPATC's capacity as a focal point to promote the TQM approach to public servants through improving faculty members' teaching quality and motivations and reinforcing the mentoring system.
- It is recommended to develop mechanism to motivate trainees of TQM training for implementing their action plans and further improving their hands-on activities. Platform or networking for information sharing and mutual learning will be useful for ex-trainees who are minded to carry out their action plans.

An example of Before and After situation of the file management at office

A "KAIZEN" action for ensuring formalin free fish in a fish market through trainings of retailers and distribution of leaflets.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by India Office/ March, 2014

Country Name	Project for Prevention of Diarrheal Diseases (Phase2)
India	

I. Project Outline

Background	In India, the first cause of infant death was acute diarrheal disorder caused by impure water. The government of India developed a policy to tackle this issue, and implemented the Phase 1 of this project with the aims of establishing countermeasures for diarrheal diseases including a fostering plan of the human resources necessary for molecular biology/epidemiology, developing research facilities and promoting collaborative research, making the National Institute of Cholera and Enteric Diseases (NICED) as the implementing organization. As a result of the 5-year implementation of the Phase 1, the foundation was mostly established for the government of India to implement vaccine trials for cholera. However, there were other fields of research for which further technical transfer was required. Under such circumstances, this technical cooperation project and a grant aid project were officially requested.		
Objectives of the Project	1. Overall Goal: Capacities of medical institutions in India to prevent diarrheal diseases will be improved. 2. Project Purpose: To strengthen capacities and augment capabilities at NICED and to disseminate the improved techniques throughout the country for prevention and control of diarrheal diseases. 3. Assumed steps for achieving the project goals[1]: The project implements research on diarrheal diseases applying molecular biological techniques at NICED so that it could identify more kinds of diarrheal pathogens and produce more research outcomes. At the same time, NICED trains Indian and foreign doctors/scientists and sets up the constant surveillance network under this project, so that more medical institutions would apply molecular biological techniques and share information on disease case among networked institutions, first in West Bengal and then in the whole India, which are expected to lead to more accurate/reproducible diagnosis of diarrheal diseases in India.		
Activities of the project	1. Project site: Kolkata, West Bengal 2. Main activities: Laboratory research/test at NICED, production and management of diagnostic antisera, creation of surveillance network for pathogens, and training for doctors and scientists of relevant hospitals and neighbouring countries. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 44 persons 2) Trainees received: 18 persons 3) Third-country training and in-country training: total 155 (out of which 43 persons were from 12 countries) 4) Equipment: Laboratory equipment 5) Others: Training cost India Side 1. Staff allocated: 10 persons 2. Office and facilities/equipment of NICED 3. Others: Budget from NICED		
Project Period	July 2003 to June 2008	Project Cost	274 million yen
Implementing Agency	National Institute of Cholera and Enteric Diseases (NICED) under the Indian Council of Medical Research (ICMR)		
Cooperation Agency in Japan	National Institute of Infectious Diseases, International Medical Center of Japan, Osaka Prefecture University, Okayama University of Science, Sapporo Medical University		
Related Projects (if any)	Japan's cooperation: Project for Construction of Diarrheal Research and Control Centre (Grant Aid, 2004-2006); The Project for Prevention of Emerging Diarrheal Diseases (Phase 1 of this project) (Technical Cooperation, 1998-2003). Other donors' cooperation: Integrated Disease Surveillance Program (World Bank); training for NICED (WHO), provision of ORS (UNICEF); PHC (USAID and UNICEF), etc.		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with India's development policy "reduction of mortality rate caused by diarrheal diseases" as set in policy documents including the National Health Policy (2002) and the 11th 5 year plan (2007-2012), development needs "establishing countermeasures for diarrheal diseases including through molecular biology/epidemiology, developing research facilities and promoting collaborative research as well as development of surveillance", and Japan's ODA policy, including JICA country Program for India (2002) and a series of policy dialogue between Japan and India (such as the economic cooperation policy dialogue mission in March 2002) and the Okinawa Infections Diseases Initiative (2000) at the time

[1] Reviewed at the time of the ex-post evaluation.

of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project introduced to NICED new molecular biological techniques for analyzing pathogens such as polymerase chain reaction (PCR, RT-PCR), analysis of DNA base sequence, pulse-field gel electrophoresis (PFGE), gene cloning and ribotyping, with the new laboratory facilities constructed under the grant aid project of "Project for Construction of Diarrheal Research and Control Centre". As a result, the first project purpose of strengthening of capabilities of NICED was achieved, and the scale and variety of laboratory and research activities, including the number of cases examined/identified, the number of publications, the number of antisera produced, etc. have been maintained or expanded at the time of this ex-post evaluation. Permanent or regular joint research collaborations in relevant fields with research institutions in Japan also show the high capabilities of NICED.

The second project purpose of disseminating molecular biological techniques to other organizations was sufficiently achieved. From 2000 to 2007, 8 in-country training programs were conducted and 118 scientists from leading diarrheal research institutes in India were trained. After conducting training, NICED has been following up with the participating institutes in order to ensure sustainability of the training outcomes. For example, some of the trained researchers conducted trainings for other institutes in their respective regions. Further, NICED has been contributing to present new identification methods of pathogens for many laboratories because the Integrated disease surveillance program (IDSP) funded by the World Bank requires to screen the sample/strains using the molecular techniques. As a result, at the time of ex-post evaluation, the increased number of research institutions that are capable of identifying diarrheal pathogens at the molecular level was observed (see the table below for the details).

For the overall goal of improving capacity of medical institutions in India, the networked centers improved the quality of diarrheal disease diagnosis and surveillance after the training organized by the project. Many of research institutions are enrolled in the External Quality Assurance System (EQAS) [3]. NICED assists the EQAS as a main contributing institute in India and through this network, NICED has supported other institutions to ensure quality of diagnosis and research for the participating institutes by applying the in-country training programs organized by NICED and JICA. Each diarrheal case is confirmed within the network by several laboratory tests which cover about 30 enteric pathogens using different methods including molecular based techniques.

Positive impact is observed that NICED has responded to outbreaks of cholera/diarrheal diseases in India and sometimes in other countries (e.g. Zanzibar and Haiti) by dispatching its scientists for investigation. Also, rewarded for the scientific contributions and number of publications, three of NICED's scientists were placed in top 20 experts in the ICMR's "Expert finding system".

Therefore, effectiveness/ impact is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) (1) Strengthen capacities and augment capabilities at NICED.	No. of kinds of species and subspecies of diarrheal pathogens that could be identified at NICED is higher than that of 2003	(Project Completion) (Ex-post Evaluation) Increased. No. of kinds of diarrheal pathogens identified at NICED 2003: 5 / 2007: 6 / 2008: 27 / 2009: 27 / 2010: 27 / 2011: 27 / 2012: 27 Note:The number does not include some pathogens.
	No. of publication produced by NICED scientists	(Project completion) (Ex-post Evaluation) Increased. 2003: 38 / 2007: 47 / 2008: 63 / 2009: 62 / 2010: 88 / 2011: 89 / 2012: 69
	Average impact factor(*) of the publication produced by NICED scientists is higher than that of 2003	(Project completion) (Ex-post Evaluation) Increased. 2003: 2.1 / 2007: 2.56 / 2008: 3.46 / 2009: 4.75 / 2010: 3.06 / 2011: 3.06 / 2012: 3.37
(2) Disseminate the techniques throughout the country for prevention and control of diarrheal diseases.	No. of research institutions that are capable of identifying diarrheal pathogens at the molecular level	(Project completion) (Ex-post Evaluation) Increased. 2003: 4 / 2007: 40 / 2008: 48 / 2009: 53 / 2010: 55 / 2011: 58 / 2012: 61
(Overall goal) Capacities of medical institutions in India to prevent diarrheal diseases will be improved.	Results of reproducibility tests of the networked centers are higher than that of 2003	(Ex-post Evaluation) Many research organizations in India are now enrolled in the External Quality Assurance System in which reproducibility testing is conducted. NICED contributes technically as one of the main research institutes and the net worked centers improved the quality of diarrheal disease diagnosis and surveillance.

Source : Project Completion Report, Interviews with counterparts

Note: (*) Impact factor is a measure reflecting the average number of citations to recent articles published in the journal.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost slightly exceeded the plan (ratio against the plan: 110%) due to increase in the number of trainees and training cost. Therefore, efficiency of the project is fair.

[3] External Quality Assurance System is a worldwide laboratory quality control system maintained by WHO Collaborating Centre – Antimicrobial resistance, the National Food Institute, Denmark.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy as the 12th five year plan (2012-17) proposes to establish a network of laboratories across the country with capacity to handle all human pathogenic viruses as well as emerging-reemerging viral diseases and to develop tools for prevention. Institutionally, the organizational setting of NICED as a Center of Excellence of ICMR is appropriate for continuing its research and training activities and no problem was observed in the number and qualification of staffs. The surveillance network of medical institutions is also maintained while NICED still have tried to expand the surveillance network as far as possible by utilizing the focal persons of each research institutes trained by the project. As for the technical aspect, the high technical level of NICED is shown in "2 Effectiveness/Impact". The ex-counterpart and ex-trainees of this project keep working for NICED as there is no drain of the researchers after completion of the project. Also, the technical staffs are trained to carry out the routine work and getting additional training whenever they undertake a new allocation of work. In the financial aspect, the budget of NICED comes from ICMR under the direct fund of the Central Government. While the NICED's training activities had been scaled down due to availability of funds for training, NICED obtains budget that is mostly sufficient as per its budget planning.

From these findings, it is considered that the project has no severe issues in each aspect of the implementing agency therefore, sustainability of effectiveness of the project is high.

5 Summary of the Evaluation

This project has achieved the project purposes and overall goal. For the first project purpose, strengthening of capabilities of NICED, it became able to identify more kinds of diarrheal pathogens using molecular biological techniques. For the second project purpose of disseminating molecular biological techniques to other organizations, the number of institutions capable of identifying diarrheal pathogens at the molecular level increased. For the overall goal of improving capacity of medical institutions in India, the networked centers improved the quality of diarrheal disease diagnosis.

As for sustainability, no problem was found as this project is still given importance in the current development policy, and NICED has secured sufficient human and financial resources as a Center of Excellence of ICMR. For efficiency, the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be highly satisfactory.

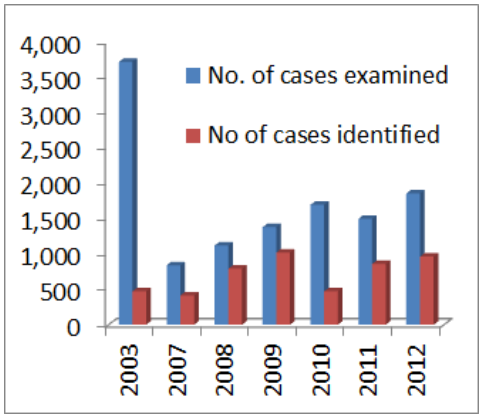
III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

-A recommendation to the implementing agency is to continue efforts in establishing the National Surveillance Network as NICED researchers are aware of more integrated research activities and advocacy efforts of the different research institutes. Consolidated policy together with experts in Health Policy Strengthening is one of the strategies to involve the central government support and thus promote the foundation of the network.

Lessons learned for JICA

-This project is a good example of the greater effects of technical cooperation and grant aid (facility development). The grant aid and technical cooperation (phase 2) projects were planned and implemented at the same time. The establishment of the new laboratory facilities of grant aid and the introduction of new molecular biological techniques by this technical cooperation resulted in strengthening capabilities of NICED. Therefore, this project, the second phase of the technical cooperation project, maximized its effects when the research facility through grant aid was incorporated. Moreover, it is assumed that planning both grant aid and technical cooperation together at the initial stage, as seen in this case, could be also a factor that led to the good collaboration of the two projects consequently.



Source: NICED

Number of diarrheal disease cases diagnosed at the molecular level at NICED

Note: a very large number of cases examined in 2003 is due to use of a different pathogen identification method than that of thereafter.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by India Office/ Dec, 2013

Country Name	Conservation and wise-use of natural resources of Chilika lagoon through Community Participation
India	

I. Project Outline

Background	The State of Odisha (formerly known as Orissa until 2011) was one of the least developed states in India, and small-scale fishers who depended on fishery resources of the Chilika lagoon for their livelihood were among the poorest population. On the other hand, the Chilika lagoon was designated as a Ramsar site in 1981, and it was an important issue to improve and stabilize the livelihood of people in and around the lagoon while simultaneously conserving the wetland. The Chilika Development Authority (CDA) was responsible for environmental conservation and development of the lagoon, and had to take a major role to establish a system of support and collaboration among stakeholders in natural resource management and livelihood improvement of fishers in and around the lagoon		
Objectives of the Project	1. Overall Goal: Sustainable rural development activities are expanded in and around Chilika lagoon. 2. Project Purpose: Strengthening the capacity of CDA to plan and carry out sustainable development of rural communities inhabiting in and around Chilika lagoon. 3. Assumed steps for achieving the project goals[1]: This project develops the fishery resource management plan (FRMP) through surveys and collaboration with fishers and concerned agencies, and implements pilot projects for alternative livelihood for fishers that would show ways to compensate fishers' losses due to the FRMP. As a result, it is expected that CDA and concerned agencies implement FRMP, and CDA implements alternative livelihood improvement activities in more villages in Chilika.		
Activities of the project	1. Project site: Rural areas in and around Chilika lagoon in the state of Odisha, with four pilot villages. 2. Main activities: Surveys and data management, sensitization of fishing communities, preparation of FRMP, implementation and monitoring/evaluation of pilot projects, preparation of manuals, etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 7 persons 2) Trainees received: 9 persons 3) Equipment: Vehicles, portable water meters, GPS data loggers, etc. India Side 1) Staff allocated: 10 persons 2) Land and facilities: project office in CDA 3) Local cost		
Project Period	October 2006 to October 2009	Project Cost	255 million yen
Implementing Agency	Chilika Development Authority (CDA)		
Cooperation Agency in Japan	None		
Related Projects (if any)	Other donors' cooperation: The India Integrated Coastal Zone Management Project (ICZMP) (World Bank, 2010-2015)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with India's development policy "poverty reduction" and "environmental conservation including measures of sustainable use of natural resources through community participation" as set in the 10th (2002-2007) and 11th (2007-2012) Five Year Plan, development needs "improved livelihood of fishers while conserving the natural environment of the Chilika lagoon", as well as Japan's ODA policy; the Country Assistance Program (drafted in 2006), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project purpose of strengthening the capacity of CDA was achieved: CDA became able to conduct fishery survey using the techniques of data collection and database management transferred by the Japanese side. Also, pilot activities for improvement of alternative livelihood, such as goat farming, dairy, dry fish and vegetable marketing and irrigation, were implemented in the four pilot villages involving 37 self-help groups (SHGs) participated by 403 individuals. Based on the results and lessons of those surveys and activities, CDA completed the FRMP and started arrangements for implementation in coordination with relevant organizations including the Department of Fisheries and Animal Resource Development (DoFARD) of the Government of Odisha by the end of the project.

After project completion, the FRMP was implemented in terms of research and livelihood improvement. CDA has continued water quality monitoring and fishery surveys, and managed the database developed under this project. It has also conducted various environmental education and awareness workshops/meetings for stakeholders including fishers. Further, a more

[1] Reviewed at the time of the ex-post evaluation.

rational approach in promoting alternative livelihood options has been taken by the World Bank assisted ICZMP after JICA project. Meanwhile, the enforcement of the fishery regulation, the remaining part of the FRMP, has not been realized yet: in 2012, the Chilika Fishery Regulation Bill with penal provisions was drafted, and draft legislation is now under active consideration of the Government of Odisha.

The overall goal, expansion of sustainable rural development activities in and around the Chilika lagoon, was achieved as well, for the alternative livelihood activities in 30 fishing villages involving 250 SHGs have been implemented under the ICZMP, with DoFARD as the nodal agency. The baseline information and the experiences learnt from this project paved the way for guiding the selection of livelihood projects for implementation under the ICZMP (e.g. dairy and dry fish marketing). In the pilot villages, about half of the SHGs have been continuing the same activities they started under this project. In the successful cases, after they received the initial financial and technical input from CDA during the project implementation, they became independent to do business by themselves. Now CDA is only supervising the activity by monitoring the SHGs in the pilot villages, as its primary mandate is not protecting the livelihood of fishers but in conservation of the lake environment (DoFARD takes care of improving livelihood).

As to the impact the environment and livelihood of fishers in the project site, assessment of the data that CDA has collected is under progress at the time of ex-post evaluation.

In this way, this project achieved the project purpose, and impacted the overall goal, which was achieved by another project based on the outcome of this project. Therefore, effectiveness/impact of this project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Strengthening the capacity of CDA to plan and carry out sustainable development of rural communities in and around the Chilika lagoon	A fishery resource management plan (FRMP) is prepared and proposed to the concerned agencies	(Project Completion) CDA completed the FRMP, and issued an instruction/started arrangements for the implementation. (Ex-post Evaluation) Part of FRMP related to research and livelihood improvement were implemented, while enforcement of the fishery regulation is under way.
	The final completion report is presented to ensure the sustainable implementation of livelihood improvement activities	(Project Completion) CDA completed relevant reports. (Ex-post Evaluation) The reports have been used in formulating the plan for alternative livelihood activities for Chilika fishers under the World Bank's ICZMP.
(Overall goal) Expansion of sustainable rural development activities in and around the Chilika lagoon	The numbers of villages in which envisaged action plans for development of rural livelihood will be implemented	(Ex-post Evaluation) With the support under the ICZMP, alternative livelihood activities have been implemented in 30 fishing villages involving 250 SHGs.

Sources: Terminal Evaluation Report, Final Report, answer from the implementing agency to the questionnaire, interviews with SHGs and NGOs in pilot villages.

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 91%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

In the policy aspect, this project is still given importance in the the 12th Five Year Plan (2012-2017), which is promoting alternative livelihoods and resource management protocols, particularly stock assessment in fisheries. Institutionally, the structure of CDA, the implementing agency, has been sustained in a similar manner with the implementation period with more full time staff currently allocated, and is considered appropriate for continuity of project effectiveness. Other key organizations also perform their roles in implementing the FRMP. As for the technical aspect, it was observed that CDA secures necessary technical level and skills of its staff for fishery resource management as there are in total 14 temporary staff/ landing surveyors in CDA at present, and they are regularly trained by CDA and the ICZMP. Also, all the equipment provided under this project are in good working condition and they are properly maintained. On the financial aspect, the budget provision and expenditure for CDA's activities related to fishery resource management were/are being made with the financial support of Finance Commission Grant (Rs 790lakhs earmarked for the period during 2010-2015 and a proposal being considered for the period thereafter) and the State Plan Scheme under the component "Fishery Resource Development". In addition, funds are also received from external agencies for the various research and developmental activities and project funding including the ICZMP funded by the World Bank.

From these findings, it is considered that this project has no problem in policy background, institutional, technical and financial aspects of the implementing agency. Therefore, sustainability of effectiveness of this project is high.

5 Summary of the Evaluation

This project has achieved the project purpose of strengthening the capacity of the Chilika Development Authority (CDA) to plan and carry out sustainable development of rural communities in and around the Chilika lagoon: using the transferred techniques, it developed the fishery resource management plan (FRMP), and the FRMP is now being implemented by CDA and other related agencies. For the overall goal, based on the FRMP and the experience of the pilot activities of this project, a World Bank assisted project expanded alternative livelihood activities to other villages in Chilika. As for sustainability, no problems were found in the policy background as well as the institutional, technical, and financial aspects of the implementing agency: fishery resource management has been supported in development policies, and CDA has maintained its organizational structure, capable human resources and budget to fulfill its mandate.

In the light of above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

CDA should not only continue to monitor the water quality, hydro-biological parameters as well as fishing activities in the Chilika lagoon but also play proactive role in conservation by coordinating with various stakeholders for reinforcement of the fishery regulation. It is further recommended that CDA effectively utilize survey data to assess the impact of various conservation activities on the natural resources in the lake as well as on the livelihood of fishermen.

Lessons learned for JICA

In the pilot villages, some of the livelihood activities that this project started were discontinued, and no new livelihood activities were started after this project, while similar activities are being implemented in other villages by DoFARD under the World Bank assisted ICZMP. Such a difference may be attributed to the fact that CDA's primary mandate is not protecting the livelihood of fishers but in conservation of the lake environment, while DoFARD is responsible for livelihood of fishers. Even though the discontinued activities played a role as pilot trials, and both CDA and DoFARD as well as other organizations concerned play their respective roles in implementation of the FRMP, a more concrete coordination mechanism between CDA and DoFARD could have created a synergy between lake conservation and alternative livelihood activities for fishermen. Therefore, in case the expected outcome of the project is to be achieved by more than two different organizations, the project should develop and establish an official coordination mechanism that can sustain after project completion.

Dry Fish Marketing

YSI Data buoy

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Nepal Office/ January, 2014

Country Name	Community-based Alternative Schooling Project (CASP)
Federal Democratic Republic of Nepal	

I. Project Outline

Background	In Nepal, access to basic education was limited with net enrollment rate of 72.1 % (in 2000). The government implemented the Alternative Schooling Programs (ASP) for out-of school children aged 6-14. However, many children remained with no access to education due to financial, physical, and social constraints, since systematic support for promotion of ASP has not been developed by involving various stakeholders: the Non Formal Education Center (NFEC) of Ministry of Education (MOE), District Education Office (DEO), the implementers of ASP, as well as parents and the community.		
Objectives of the Project	1. Overall Goal: The model developed by the Project is adopted in other areas of Nepal. 2. Project Purpose: An operational model of the community-based alternative schooling programme is developed. 3. Assumed steps for achieving the project goals[1]: The project implements pilot activities (community mobilization, improvement of schooling, networking stakeholders, etc.) for improving ASP classes (i.e. classes under School Outreach Program (SOP) and Flexible Schooling Program (FSP)[2]) in the pilot areas, and develops an ASP operational model in a form of the ASP Guideline for adoption by other areas of Nepal.		
Activities of the project	1. Project site: Districts of Dhading, Siraha and Kathmandu (pilot areas were selected from these districts) 2. Main activities: Analysing current ASP, developing strategies for improvement, implementing pilot activities to improve ASP classes, facilitating mother school (i.e. nearby formal school) - based monitoring of ASP classes, and establishing public relations by organizing workshops among relevant organizations. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 10 persons 2) Trainees received: 13 persons 3) Equipment: Vehicles, audio and visual equipment, etc. Nepal Side 1) Staff allocated: 100 persons 2) Land and facilities: project office 3) Local cost: ordinary budget for operating ASP classes		
Project Period	January 2004 to October 2009	Project Cost	522 million yen
Implementing Agency	Non Formal Education Center (NFEC), Ministry of Education (MOE)		
Cooperation Agency in Japan	IC Net Limited		
Related Projects (if any)	Other donors' cooperation: UNESCO, UNDP, World Education, Save the Children implemented projects related to ASP.		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant to Nepal's development policy "promotion and expansion of ASP" as set in policy documents including the Education for All (2004-2009), the School Sector Reform Plan (2009-2015), development needs "access to primary education by disadvantaged groups", as well as Japan's ODA policy; JICA's Country Assistance Program (2003) and related policy dialogues between Nepal and Japan, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.
2 Effectiveness/Impact
Under this project, ASP classes such as SOP and FSP in the pilot areas[3] were supported by means of various community-based approaches that then constituted the "CASP model" (see the Box below). Positive changes were observed such as the improvement of the quality of ASP classes, setting-up of separate sections for ASP in NFEC and DEOs,

[1] Reviewed at the time of the ex-post evaluation.

[2] The Nepal's ASP consisted of the following programs: (i) Out of School Program (OPS): literacy classes targeted to children aged 8-14, which was later replaced by the Program for School Dropout Children (PSDC); (ii) School Outreach Program (SOP) targeted children aged 6-8 years who live in areas with no schools (the program aims to transfer children to 4th grade of formal education after completion of SOP for three years; and (iii) Flexible Schooling Program (FSP) targeted children aged 8-14 years (the program aims to provide primary school level education equivalent to formal education).

[3] The pilot activities of this project supported 13 SOPs and 13 FSPs in the 3 pilot districts (1 SOP or FSP at each ASP center), and a total 702 children aged 6-14 (344 males and 358 females) attended those SOPs and FSPs.

encouragement of parents to send their children to school, and increased involvement of parents in schools and school management committees. Those experiences were compiled in the ASP Guideline, which was finalized by NFEC after project completion (i.e. the indicator for the project purpose was achieved) and distributed to all 75 districts in Nepal.

As to the overall goal, although NFEC started extending approaches of the CASP model to other districts even during the project implementation, the number of ASP centers that have adopted those approaches after the project completion (i.e. the indicator for the overall goal) was not available due to lack of systematic monitoring and analysis. Also, it was found that the Nepali side did not have a common understanding of the "CASP model", and "adoption of the model". In the pilot districts, part of the approaches of the CASP model has been extended to newly-started FSPs (5 FSPs in Dhading, 15 FSPs in Siraha and 30 FSPs in Kathmandu). Also, School Supporters (SS) and Resource Persons (RP) have continued monitoring to some extent. However, according to NFEC/DEOs, the quality of such activities was much lower than the project implementation period because there were not sufficient input (budget and human resource) by the Government of Nepal, community participation and regular follow-ups and monitoring supports after the project completion.

With the support by this project, SOP and FSP increased children's access to education, but the performance did not fully reach the expected level in some pilot areas. For example, although most students who attended SOP completed the three-year program, enrollment rate of children after SOP in the desired grade (Class 4) of formal school was 57% in Dhading, 100% in Siraha, and 66% in Kathmandu as against the project target of 65% by the end of the project. After project completion, the rate dropped to 53% (i.e. 53 out of 100 students under 5 SOPs) in Dhading (2011/12[4]), for some students did not pass the exam for admission. In Siraha and Kathmandu, there were no SOPs after the project completion, and in Dhading, all of the 5 SOPs were transformed to formal schools due to decisions by the central government. As to FSP, the percentage of children who completed the entire program was 68% in Dhading, 83% in Siraha, and 35% in Kathmandu, as against the project target of 75% by the end of the project, depending on several factors including poverty, working environment and caste. The data after project completion was only available about 3 FSPs in Siraha, but the rate improved to 100% in 2011/2012 – all of the 60 students completed the program. The relatively better performance in Siraha is considered to be due to a high demand for ASP (therefore more involvement in the activities) in that district (net enrolment rates in primary education (91.9% in 2011) is lower than the other 2 pilot districts (97.4% in Dhading and 97.2% in Kathmandu)).

In this way, this project achieved the project purpose, and a certain extent of positive outcomes was observed in the pilot areas after project completion, while the achievement of the overall goal was not confirmed. Therefore, effectiveness/ impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Development of an operational model of the community-based ASP	Operational Guideline for ASP based on the pilot activities is developed at the initiative of counterparts	(Project Completion) Finalization of the Guideline was on-going. (Ex-post Evaluation) Achieved. NFEC finalized the ASP Guideline in 2009 and adopted it in 2010. Copies were distributed to all districts.
(Overall goal) Adoption of the model developed by the project in other areas of Nepal (Note)	1,000 existing ASP centers adopt the CASP model by DEO/NFEC in 2-3 years after project completion	(Ex-post Evaluation) The number is not available.

Sources：Project Completion Report, Interviews with DEOs Dhading, Siraha and Kathmandu.

Note: There is no clear definition of "the CASP model" or "adopt". In this evaluation, it was interpreted that "the model was adopted" if any approaches/activities in the model (see the Box below) is applied.

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 116%) because of regular price hike as a major reason. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy, for the School Sector Reform Plan (2009-2015) clearly mentions the expansion of alternative programs to cater for the diverse needs. Based on it, the Annual Strategic Implementation Plan/ Annual Work Plan & Budget (ASIP/AWPB) for 2013-14 mentions ASP as one of its strategic priorities. The plan mentions a need for development of "appropriate models of schooling", in which the CASP model could be institutionalized more systematically. Institutionally, the ASP Guideline has been finalized by NFEC, and the distinct organizational sections to look after ASP activities have been set up at both central (NFEC) and district (DEO) levels, while the number of staff is insufficient. A positive factor is that proactive involvement of the Department of Education (DOE) of MOE in ASP and other measures for out of school children is being arranged to implement ASIP/AWPB. Also, reinforcement of monitoring of ASP activities by SS and RP is under consideration to strengthen coordination between ASP centers and mother schools. As for the technical aspect, although NFEC has confidence in delivering the CASP extension activities, there are concerns on the technical capacity at the DEO level due to no opportunity of training in the CASP approaches in particular and frequent staff transfer. Meanwhile, capacity development necessary for pursuing the strategies for out of school children are being considered by DOE and NEFC, and training for SS and RP is ongoing. On the financial aspect, certain budget, though not sufficient, was allocated to implementation of SOP and FSP after project completion (see "2 Effectiveness"). Also, budget for

[4] Nepali fiscal year from mid of July to end mid of July.

ASP is expressly allocated in AWPB 2013-14 (consisting of the governmental budget and donor funding).

From these findings, it is considered that the project has problems in, institutional, technical and financial aspects of the implementing agency; therefore, sustainability of the project is fair.

5 Summary of the Evaluation

This project has achieved the project purpose of developing an operational model of the community-based ASP. The pilot ASP activities brought some positive changes among attitudes of parents and children's access to education, though not to the expected level in some project areas. Such experiences ("the CASP model") were compiled to the ASP Guideline and distributed to all districts. For the overall goal, the number of districts that newly applied the model was not available. As for sustainability, there are some issues in terms of institutional, technical and financial aspects due to insufficient number of staff capable of extending the model and insufficient budget allocation to the model extension. For efficiency, the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is advised that MOE review and utilize the CASP model and related documents in pursuit of the priority strategy of developing alternative models for ASP in the framework of SSRP.

Lessons learned for JICA

- While the importance of ASP activities is well recognized among counterparts, solid strategies to maintain the ASP activities were not observed after project completion (though it has been taken up recently). Therefore, in order to strengthen the project sustainability, a lesson can be drawn that measures for sustaining activities or model even after the completion, such as reflection of the output in policy/sector document, should be carefully elaborated at the stage of project planning and be reminded to the counterpart agency after project completion.
- The clarification on "the CASP model" was found to be an issue. In addition, the meaning of "adoption" of the CASP model is not yet clear among the ex-counterparts either. In designing a project, the terms "model" or "adoption of the model" need to be clearly defined and making a consensus among stakeholders.

Box: Components of the CASP model

Through the pilot activities, the following approaches were found as effective, and included in the ASP Guideline:

- ✧ Needs assessment with Village Development Committee (VDC) level stakeholders
- ✧ Mass communication and education campaigns
- ✧ Provision of facility support
- ✧ Educational Volunteer (EV) provision from Community
- ✧ Strengthening Class Management Committee (CMC)
- ✧ Door-to door home visit and individual consultation
- ✧ Mother school support (monitoring by nearby formal school)
- ✧ Additional training for facilitators
- ✧ Distribution of stationary/school uniform
- ✧ Formation and mobilization of the children's club
- ✧ Interactive program between ASP children and students of mother school
- ✧ Provision of incentives and awards for ASP children

One of ASP classes supported by the project. Positive changes which were compiled in the ASP Guideline were observed.

Internal Ex-Post Evaluation for Technical Cooperation Project

Conducted by Pakistan Office: November, 2012

Country Name	The Tuberculosis (TB) Control Project
Pakistan	

Ⅰ Project Outline

Project Cost	322 million yen	
Project Period	April 2006 – March 2009	
Implementing Agency	National Tuberculosis Program (NTP), Ministry of Health, Provincial Tuberculosis Control Program (PTP), Directorate of Health Services, Punjab Province	
Cooperation Agency in Japan	Japan Anti-Tuberculosis Association	
Related Projects	Japan's Cooperation: ● Dispatch of Japanese experts in the field of DOTS* implementation in 4 districts (Faisalabad, Gujarat, Lahore and Multan)from 2002 to 2005. Other foreign donors' cooperation : ● WHO: Technical assistance and financial support on DOTS implementation, ● CIDA: Strengthening External Quality Assurance (EQA)of laboratory and enhancing the role of Lady Health Workers (LHW) in TB program. ● USAID: Strengthening the capacity of the program in terms of training and monitoring/supervision. ● GDF (Global Drug Facility): Provision of anti-TB medicine. ● GFATM (The Global Fund to fight AIDS,Tuberculosis and Malaria),DFID and World Bank: Developing the public & private partnerships ● GLRA (German Leprosy and TB Relief Association):Supporting surveillance and drug management. *DOTS (Directly Observed Treatment Short Course) DOTS remains at the heart of the Stop TB Strategy. The components are government commitment, diagnosis principally by sputum microscopy, good quality drugs supplied free to the patients, directly observed therapy and monitoring of the efficacy of the control activities.	
Background	Pakistan ranked the 8th among the 22 countries with highest burden of tuberculosis (TB) in the world (as of 2006). It was estimated that more than 200,000 persons had developed TB every year in the country. Yet only one quarter of patients were detected and treated by the public sector. These untreated or poorly treated patients had continued to be source of infection which had caused future burden to the population. Much efforts had been done to facilitate the DOTS implementation by the government. However, in the process of rapid expansion, the program had been facing constraints and challenges to improve the quality of DOTS implementation, such as the needs to strengthen the laboratory network/quality control, the resource gaps in public sector's DOTS expansion, the needs to build district capacity to consolidate/sustain DOTS and needs to enhance case detection, etc. Under these circumstances, the Government of Pakistan requested the technical cooperation to JICA in order to enhance the effectiveness and efficiency of quality of DOTS by improving its coverage and also to consolidate the quality of TB program.	
Inputs	Japanese Side	Pakistan Side
	1. Experts:11 Short-term experts in 7 subjects (90.8MM) 2. Trainees received: 6 persons 3. Equipment:30 million yen	1. Staff allocated: 35persons 2. Local cost: 22 million yen 3. Land, facility : Provision of spaces for the Project Offices in Islamabad and Lahore
Project Objectives	Overall goal: Mortality, morbidity and transmission of the tuberculosis are reduced.	
	Project Purpose: Quality National TB Control Program (NTP) is systematically implemented in close collaboration with provincial and district TB units.	
	Outputs: 1. Technical and managerial capacity of Punjab Provincial TB Control Program (PTP) unit is strengthened. 2. Technical and managerial capacity of National TB Control Program (NTP) unit and National Reference Laboratory is strengthened.	

Ⅱ Result of the Evaluation

Summary of the Evaluation

This project targeted the Punjab province, whose TB related indicators had been lower than other area. The project has achieved systematical implementation of the Quality National TB Control Program by developing the technical and managerial capacity of NTP and PTP Punjab through strengthening the TB program in selected four model districts. As a result, the Treatment Success Rate (TSR) and Case Detection Rate (CDR) of Punjab province over all had been achieved its target of 90%, 70% respectively at the time of project completion. These achievements have been maintained after the termination of the project.

As for the overall goal, "the reduction of mortality, morbidity and transmission of TB at the national level", although the pulmonary and extra pulmonary morbidity at the national level had not decreased from 2006 to 2011, the mortality rate which

had been recorded as 3.4% in 2006 came down to 2.0% in 2011. According to the Millennium Development Goal (MDG) report 2010 in terms of the prospect of achieving two TB related indicators, the incidence of TB per 100,000 population (targeted as 45 by 2015) has seemed to be far distant away as there has been 181 incidents as of 2008-09, but the percentage of TB cases detected and cured has increased to 85% in 2008-2009 and has already been met the target well before 2015.

As for sustainability, some problems have been observed in terms of implementation agency's structural, technical and financial aspects. After the devolution of the Ministry of Health in June 2011, NTP has added responsibilities being assigned to fulfill global commitments towards meeting the MDG goals, but many of the dedicated staff has been transferred to the province level. And the federal budget for the activities on TB Control Programme has been shrinking because of other pressing development issues like the Polio Eradication project and Lady Health Worker program. Budget constraints have affected the capacity development to train staff as well as for the district governments to hire human resources for continuity of smooth implementation of quality DOTS at district level.

For relevance, the project has been highly relevant with Pakistan's development policy, development needs, as well as Japan's ODA policy. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be highly satisfactory.

1 Relevance

This project has been highly relevant with Pakistan's development policy "high priorities for communicable disease control (including TB) focusing on Primary health care (PHC) system and strengthening the district health systems" as set in the existing National Health Policy (2009)*, development needs in Punjab province "to maintain recent successes and expanding TB DOTS strategy to large network of hospitals to private sector, etc.", as well as Japan's ODA policy toward Pakistan and TB control as set in Country Assistance Program for Pakistan in 2005 and the Health and Development Initiative in 2005, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

* This is still a draft version.

2 Effectiveness / Impact

This project has achieved the project purpose, "systematical implementation of the Quality National TB Control Program (NTP)" by developing the technical and managerial capacity of NTP and PTP Punjab. In addition to the technical improvement of health workers and laboratory technician with the training for those workers, the technical and managerial capacity of PTP unit as well as the NTP unit and National Reference laboratory were strengthened with supervisory trainings and formulation of guidelines.

District Tuberculosis Coordinators (DTCs) in 4 model districts, who have been trained as supervisors for DOTS activities by the Project, have conducted monthly visits to diagnostic centers and have properly done monitoring and supervision on required DOTS activities according to the checklist. And results of such monitoring and supervisions have been properly reported to the provincial level on a quarterly basis. All these diagnostic centers have received the supervisory visits by JICA experts with DTCs for further technical assistance. These activities in model districts have later been replicated with the assistance of NPOs in other 31 districts of Punjab. In this way, the project have systematically contributed to the capacity development of NTP and PTP Punjab. Furthermore, the External Quality Assurance (EQA) system for smear microscopy was established in all districts of Punjab province. And the coordination between tertiary care hospitals and PHC facilities in DOTS implementation was strengthened and the operational research design for defaulter tracing has been developed. Those activities initiated by the project have been continued after the project completion、such that with the support of other donors and local NGOs, refresher trainings for health workers and laboratory technicians have been conducted and manuals developed by the project have been widely used with the necessary revisions in on-going manner.

As a result, two primary indicators, the Treatment Success Rate (TSR)** and Case Detection Rate (CDR)***of Punjab province over all have been achieved its target of 90%, 70% respectively at the time of project completion. These achievements have been maintained after the termination of the project. However, it should be noted that in the district-wise, one of the model districts (Lahore) has not yet achieved the TSR of 90% due to the difficulties to deliver the care, especially to those urban areas of mega city, Lahore, where there are high dropouts from tertiary hospitals.

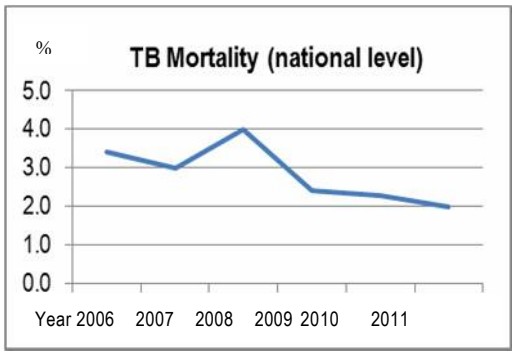
As for the overall goal, "the reduction of mortality, morbidity and transmission of TB at the national level", although the morbidity of all types at the national level had not decreased from 2006 to 2011, the mortality rate which had been recorded as 3.4% in 2006 came down to 2.0% in 2011 as shown on the below graph. According to the MDG report 2010 in terms of the prospect of achieving two TB related indicators, the incidence of TB per 100,000 population (targeted as 45 by 2015) has seemed to be far distant away as the incident still has been 181 as of 2008-09, but the percentage of TB cases detected and cured has increased to 85% in 2008-2009 and has already been met the target well before 2015. The systematic implementation of Quality National TB Program by the project has somewhat contributed to this achievement. In addition, it should be noted that the synergy effects by the collaboration with other donors, such as in EQA, District Laboratory Supervisor (DLS) day and further in the activities under GFATM have served well to achieve the target.

Therefore, the effectiveness/impact of this project is high.

*External Quality Assurance (EQA) : A program in which multiple samples are periodically sent to members of a group of laboratories for analysis and /or identification; whereby each laboratory's results are compared with those of other laboratories in the group and/or with an assigned value, and reported to the participating laboratories and (anonymously) to others.(National Committee for Clinical Laboratory Standard)

**TSR: Treatment success rate is the percentage of new, registered smear-positive (infectious) cases that were cured or in which a full course of treatment was completed.

***CDR: Case detection rate (all forms) is the percentage of newly notified tuberculosis cases (including relapses) to estimated incident cases (case detection, all forms)



Source: Data Management Section NTP

Training of DTCson sputum microscopy

Drugs and Stationary Store in Gujrat

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and project period were as planned. (ratio against the plan: 90%, 100%) Therefore, efficiency of this project is high.

4 Sustainability

NTP, in close collaboration with PTP Punjab, is responsible to implement the Quality National TB Control Program. The project has some problems in structural, technical and financial aspects of the implementing agency due to the fact that after the devolution of the Ministry of Health in June 2011, NTP was assigned additional responsibilities such as stewardship and fulfilling global commitments towards meeting the MDG goals, but many of the dedicated staff has been transferred to the province level with the change of management stipulated in the 18th Amendment in the Constitution. And the federal budget for the development has been shrinking because of other pressing development issues like the Polio Eradication project and Lady Health Worker program. Budget constraints have affected the capacity development to train staff as well as for the district governments to hire human resources for continuity of smooth implementation of quality DOTS at district level. In this regards, the district governments have made much effort to avail the opportunity to train and re-train their existing manpower who had been given ample opportunities for learning and improving their skills in order to maintain the technical sustainability. The NTP have also made efforts to look for the donors assistance for plugging gaps and this has been done to a great deal by the Global Fund in order that the program has remained functional. No problem has been observed in policy background of the implementing agency.

Therefore, sustainability of this project effect is fair.

Ⅲ Recommendations & Lessons Learned

Recommendations for the Implementing Agency：

For PTP

1) In order to achieve the MDG targets, the Provincial TB Control programme has to be expanded to involve all private practitioners in the remaining districts.
2) Much efforts should be continued to secure the funds to train staff as well as to hire human resources for continuity of smooth implementation of quality DOTS at district level.
   The federal budget for the development has been shrinking because of other pressing development issues like the Polio Eradication project, etc. The NTP should continue to make efforts to look toward external support such as donors, in order that the program has remained functional.

For PTP Punjab Lahore district,

1) Continuous efforts should be made to improve the situation of Lahore city.
   In the district-wise, those urban areas of mega city, Lahore, where there are high dropouts from tertiary hospitals, has not yet achieved the TSR of 90% due to the difficulties to deliver the care. Effective collaboration with private sectors should be considered to improve the situation of Lahore.

Lessons learned for JICA：

In order to implement the Quality DOTS, it is effective to strengthen the technical and managerial capacity such as monitoring and supervision of all concerned through parallel efforts on trainings as described below.

In this project, trainings of health workers and laboratory technicians have been carried out through activities of monitoring and evaluation and surveillance. And DTCs, trained as supervisors for DOTS activities have conducted monthly visits to diagnostic centers and have properly done monitoring and supervision on required DOTS activities according to the checklist and they have properly reported the results to the provincial level on a quarterly basis. In this way, technical and managerial capacity of all of those concerned could be strengthened in an organized way as a whole by utilizing monitoring and supervision system.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Sri Lanka Office :January, 2014

Country Name	Improving School Management to Enhance Quality of Education with Special Reference to Science and Mathematics
Democratic Socialist Republic of Sri Lanka	

I. Project Outline

Background	In Sri Lanka, quality of education was an issue especially for the subjects of science and mathematics. The results of the Examination of General Certificate of Education of Ordinary Level (GCE O/L) showed that the pass rates for science and mathematics were between 40% and 50%, which were lower than arts, and they tended to be worsening in the past several years at the time of the ex-ante evaluation of this project. JICA conducted the "Master Plan Study for the Development of Science and Mathematics in the Primary and Secondary Levels", and the study team found that the low academic performances in the subjects were caused not only by subject specific issues but also by inefficient school management. As a result, "Educational Kaizen (Improvement) activities" were introduced in several selected schools as a pilot project aiming at improving school management. This project was implemented to further develop the Educational Kaizen model for school management for wider application in the country.		
Objectives of the Project	1. Overall Goal: (1) Quality and equity of education is improved in the target zones; and (2) Sustainable system to improve school management is expanded from the target schools to the non-target schools and from the target zones to the non-target zones. 2. Project Purpose: A sustainable system to improve school management is established in the target zones. 3. Assumed steps for achieving the project goals[1]: The project introduces Educational Kaizen activities to zonal education offices (ZEOs) of the target educational zones and target schools, so that those zones and schools would incorporate Kaizen activities in their annual plans and budgets, and such activities would be applied in non-target schools as well. As a result, improvement of the quality of education and further expansion of the better school management system are expected.		
Activities of the project	1. Project site: 5 educational zones (Jaffna, Trincomalee, Kurunegals, Bandarawela, Wellawaya) in 4 provinces (North, East, Uva, and North Western) 2. Main activities: Seminars/training, monitoring and evaluation of educational Kaizen activities, development of annual plans, and formulation of QECs. During the implementation, another output (establishment of organizational linkages) was added, and activities such as formulation of the National Education Initiative for Kaizen Activities (NEIKA), and the Provincial Education Initiative for Kaizen Activities (PEIKA), etc. were implemented, accordingly. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 30 persons 2) Trainees received: 6 persons 3) Equipment: Computers, projectors, experimental equipment, etc. 4) Local cost: Block grant Sri Lanka Side 1) Staff allocated: 8 persons 2) Land and facilities: Office space for the Project Team in the Ministry of Education and 5 target ZEOs 3) Local cost: Block grant, travelling expenses for monitoring, workshops, etc.		
Project Period	October 2005 to December 2008	Project Cost	396 million yen
Implementing Agency	Ministry of Education (MOE), Provincial Ministries of Education (PME) of North East, Uva, and North Western, Provincial Departments of Education (PDE) of North East, Uva, and North Western and Zonal Education Offices (ZEOs)		
Cooperation Agency in Japan	KRI International Corp., Applied Management, Inc.		
Related Projects (if any)	Japan's cooperation: Master Plan Study for the Development of Science and Mathematics in the Primary and Secondary Levels (Technical Cooperation, 2002), Follow-up cooperation for this project (January 2009 - March, 2010), Japan Overseas Cooperation Volunteers (2007-2013) Other donors' cooperation: The Education Sector Development Project (World Bank, 2006-2010)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Sri Lanka's development policy, which stresses the importance of "school based management" and "science and mathematics education" as set in the Five-Year Plan for Primary Education 2005-2009 and the

[1] Reviewed at the time of the ex-post evaluation.

Five-Year Plan for Primary Education in Sri Lanka 2000-2004. Within such policy, MOE has been implementing the Education Sector Development Framework and Programme (ESDFP) from 2006-2010 and this project has been positioned as to achieve some of the ESDFP objectives such as to improve the quality of Primary and Secondary Level education and to strengthen the administration in education and the services of education. Also, the project has been consistent with Sri Lanka's development needs "continuation and expansion of Educational Kaizen activities", as well as Japan's ODA policy; the Country Assistance Program (2004), at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project mostly achieved the project purpose of establishing a sustainable school management system in the target zones. Educational Kaizen activities, such as formulation of Quality Education Circles (QEC), introduction of 5S which stands for Seiri(orderliness), Seiton(neatness & tidiness), Seiso(cleaning), Seiketsu(cleanliness), and Shitsuke(good manner), implementation of class observation, introduction of ImaCs (a workbook for "improving mathematical calculation skills), 100 box calculation and others) were introduced to the target ZOEs and the target schools. As a result, teachers' motivation, students' academic performance (in terms of test scores compared to those in non-target schools), and participation of parents improved by the time of project completion.

For the first overall goal, it was observed at the time of ex-post evaluation that the practice of Educational Kaizen activities and the above-mentioned satisfactory status have been maintained or relatively improved in most of the target schools except in Jaffna, where project activities were cancelled on the halfway due to the conflicts in the areas. Regular visits by ZEOs to schools for advices on management and lesson have continued, too[2]. Therefore, it is expected that quality of education at the target schools has improved. However, information on students' test results to verify such improvements was not accessible. Also, certain recesses were observed in terms of efficiency and scale of the activities at the time of ex-post evaluation due to limited budget that is specifically available for Kaizen (see "4 Sustainability").

With respect to the second overall goal, Educational Kaizen activities were expanded to non-target schools in the target zones and in other zones in all provinces with support from the follow-up cooperation for this project. Recently, MOE is promoting the national Programme for School Improvement (PSI), which is to develop school-level capacity and responsibilities. Educational Kaizen activities will be a part of or merged with school development plans under the PSI. With full implementation of this program, Kaizen will be practiced to all national schools. In addition, National Productivity Secretariat of the Ministry of Productivity Promotion has a national program to strengthen the entire school system through accreditations, and the concept of Kaizen has potential to be incorporated to the program.

In this way, this project mostly achieved the project purpose, and partially achieved the overall goals. Therefore, its effectiveness/ impact is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Establishment of a sustainable system to improve school management in the target zones.	ZEOs and target schools incorporate Educational Kaizen activities in their annual and long-term plans with budgetary allocations.	(Project Completion) Not incorporated yet. (Ex-post Evaluation) Incorporated except in Jaffna. Budget for Kaizen is part of Quality Inputs from MOE under the PSI.
	Plans to introduce school management with Educational Kaizen activities to non-target schools are formulated in the target zones.	(Project Completion) Plans were formulated. (Ex-post Evaluation) Plans were merged to the PSI that targets all national schools.
(Overall goals) 1) Improvement of quality and equity of education in the target zones	The difference of the pass rate of Grade 5 scholarship exam, O/L exam between 1AB Schools and schools of other categories in the target zones will decrease.	(Ex-post Evaluation) The information is not accessible.
2) Expansion of the sustainable system to improve school management from the target schools to the non-target schools and from the target zones to the non-target zones.	No. of schools continuously conducting Educational Kaizen activities will increase. 1) Target zones 2) Non-target zones	(Ex-post Evaluation) 1) Other than Jaffna, all target zones increased the number of schools conducting Kaizen. Trincomalee: 40 in 2009 and 2010 and 72 in 2011. 2) As of 2010, Kaizen was introduced to additional 17 zones in all 9 provinces with support form the follow-up cooperation of this project. All national level schools (9,905 schools[3]) will be covered by the PSI that incorporated Kaizen components.

Sources : Final report of the project, final report of the follow-up cooperation, and questionnaire response by MOE.

3 Efficiency

The inputs were mostly appropriate for producing the outputs of the project and the project period was as planned (ratio against the plan: 100%). Another output was added at the time of the Mid-term review in order to achieve the project goal and thus the overall goal. As a result, the extra cost was incurred, and thereby leading to slight excess of the overall project cost compared to the plan (ratio against the plan: 107%). Therefore, efficiency of the project is fair.

4 Sustainability :

[2] In Jaffna, owing to recent conflict reconciliation in year 2009, Kaizen initiatives are arranged under the PSI at present, described in the next paragraph.

[3] Source: Ministry of Education

In the policy aspect, this project is still given importance in the current development policy, for the direction of school based management is continued under the PSI. Institutionally, the specific Kaizen units that the project established at the national, provincial and zonal levels are dissolved by the time of ex-post evaluation mainly due to budgetary constraints and staff limitations. However, these are now partially substituted by incorporating educational Kaizen activities into routine works via Zonal Education Committee, Education Productivity Operations Unit of MOE. School Education Initiative for Kaizen Activities (SEIKA) is currently conducted at limited schools, where Committee of Science and Math are continuously held. As for the technical aspect, necessary skills for Kaizen activities are maintained at zonal level with training in collaboration with ZEOs and with the National Productivity Secretariat. In the financial aspect, although certain budgets are found as available under Quality Inputs (government's support funds for school operation improvement) of the PSI and the Productivity Operations Unit of MOE, a budget specially set aside for Kaizen is not allocated at the time of the ex-post evaluation.

From these findings, it is considered that the project has some problems in institutional, technical and financial aspects of the implementing agency; therefore, sustainability of effectiveness of the project is fair.

5 Summary of the Evaluation

This project mostly achieved the project purpose of establishing a sustainable school management system in the target zones and partially achieved the overall goals of improving the quality of education and expanding the system to other schools and zones: Educational Kaizen activities introduced by the project was positioned within the framework of the national Programme for School Improvement (PSI) that plans to cover all national level schools. However, project effectiveness and scale of works diverge among the target zones, and data were not fully available to verify impacts of Kaizen. As to efficiency, the project cost exceeds the plan. As for sustainability, there are some problems in terms of institutional, technical and financial aspects due to budget and staff limitations.

In the light of above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:
- To ensure steady implementation of Educational Kaizen activities within the framework of PSI,
- To disseminate the good practice of continuing Kaizen activities over the target zones and non-target zones.

Lessons learned for JICA
- Educational Kaizen activities by the Project will be merged into the national Programme for School Improvement (PSI) by MOE which is to develop school-level capacity in accordance with school development plans. Although the Kaizen activities will be maintained under the PSI, the project sustainability would be further strengthened if Kaizen units developed by the Project continued after the completion. Thus, new organizational units should not have been established exclusively for the project. Or, in case the establishment of such units was inevitable for implementation, it is advisable that they should have been incorporated into the existing structures as much as possible during the project implementation.

(School teachers discussing about the Educational Kaizen Activities)

(Students using the 100 box calculation)

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Papua New Guinea office (Solomon Field Office): Month, 2013

Country Name	The Project for Strengthening of Malaria Control
Solomon Islands	

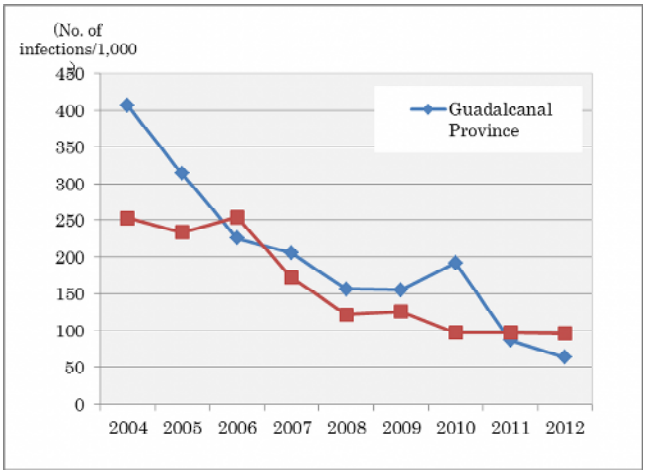
I. Project Outline

Background	Solomon Islands were malaria endemic areas and the Malaria Eradication Plan was implemented under the support of the donors, including the World Health Organization (WHO). As a result, the malaria infection rate has been in a downward tendency. However, the malaria control activities were suspended by the outbreak of ethnic conflict in 1998. Since 2000, the number of malaria infection has increased in Guadalcanal Province and Malaita Province. Also, the fiscal difficulty and the breakdown of the health system caused by the conflict as well as the large scale migrations expanded the malarial infection risk in the country. On the other hand, the low level of medical service and underdeveloped infrastructure including roads increased severity of malaria and made difficulties to cope with severe malaria patients. Therefore, control of severe malaria through adequate examination, diagnosis and care at primary medical institutions where malaria patients firstly visit was a key issue for the country.
Objectives of the Project	1. Overall Goal: Effective management system of malaria cases is established in Solomon Islands. 2. Project Purpose: Effective management system of malaria cases is established in Guadalcanal Province and Honiara City. 3. Logical flow of how the project responses to development issues: The project delivers trainings for nurses, assistant nurses and microscopists and provides necessary equipment for diagnosis and treatment of malaria. By implementing activities to utilize the Solomon Island Malaria Information System (SIMIS) and to introduce Community Based Malaria Prevention (CBMP), the project aims at establishment of a model of improved methodologies for malaria care and prevention in the target areas as well as dissemination of effective system of malaria care and prevention in the entire country.
Project Information	1. Project site: Guadalcanal Province and Honiara City 2. Main activities: Provision of medical equipment for malaria diagnosis and care, trainings for microscopists, nurses and assistant nurses, development of manuals and delivers of trainings for utilization of SIMIS, public awareness workshops for malaria prevention activities, fostering the health community volunteers, and so on. 3. Inputs: Japanese Side 1) Experts: 36 for short-term 2) Trainees received: 22 persons 3) Equipment: Vehicles, microscopes, medical equipment, PC projector, etc.. Solomon Side 1) Staff allocated: 36 persons 2) Land and facilities: project office and costs for electricity and water supply
Project Period	January, 2007 – January, 2010 / Project Cost: 274 million yen
Implementing Agency	Ministry of Health and Medical Service (MHMS), National Vector Borne Disease Control Program (NVNBDCP), Guadalcanal Province Health Office (GHPO), Honiara City Council (HCC)
Cooperation Agency in Japan	University of Kobe, IC-Net Limited
Related Projects	Japan's cooperation: (GA: Grant Aid, TC: Technical Cooperation) ・The Project for Strengthening of Malaria Control System Phase II (TC, 2011-2014) Other donors' cooperation: ・Malaria Action Plan (WHO, AusAID, Secretariat of the Pacific Community, the Global Fund for Fight AIDS, Tuberculosis and Malaria (GFATM) (2008-2014) ・The Solomon Islands Health Sector Project (World Bank, 2008-2011) ・The Malaria Control Transfer Plan (AusAID, 2012-2014)

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with the Solomons' development policy, such as reduction of malaria infection rate and mortality rate specified under "the National Health Plan (2004-2005)", "the Solomon National Health Strategic Plan (2006-2010)" and "the National Malaria Strategic Plan (2007-2016)", and development needs to control severe cases of malaria, as well as Japan's ODA policy prioritizing support for sustainable development (health and medicine, education, infrastructure and industrial promotion), including improvement of health and medical services. Therefore, relevance of this project is high.
2 Effectiveness/Impact

The project aimed at improvement of the malaria diagnosis and care system through installation of equipment for malaria diagnosis and care and trainings for nurses, assistant nurses and mirocopists as well as IEC (Information, Education and Communication) about malaria control for the local people and communities in the pilot areas. As a result, in the pilot areas of Guadalcanal Province and Honiara City, the malaria morbidity and the number of severe malaria cases considerably decreased from 2004 before starting the project to 2012. Also, the recovery rate of patients hospitalized in the National Referral Hospital (NRH) had been maintained at more than 90% for the project period. Also, according to the satisfaction survey in three regions of Guadalcanal Province conducted during the project implementation, around 70% of the patients were satisfied with almost all items of services in Honiara region and Weather Coast region and 50% of patients were satisfied in Terere region.



Graph: Trends of Malaria Infection in Guadalcanal Province and Honiara City (2004-2012)

As for the Overall Goal, the project aimed at reduction of morbidity and mortality by malaria in the country by dissemination of the effective malaria control and care system introduced by the project to the entire country. After the project completion, 20 nurses/assistant nurses and microscopists in total, who worked in areas other than the pilot areas, had trainings of the guidelines for malaria diagnosis and treatment revised by the project. In addition, all the clinics utilized "Strengthening Quality of Malaria Service", which compiled findings of the project. Therefore, the project effects have been disseminated in the country at certain level. Also, the project supported community-based malaria prevention activities, including trainings for Health Community Volunteers (HCV). After the project completion, MHMS incorporated "healthy setting"[1] in the National Health Strategic Plan. The Project for Strengthening of Malaria Control System Phase II, which has been in under implementation after this project, has been supporting the pilot activities of "the Healthy Villages", a part of "healthy setting". The HCVs trained by the project have been involved in the HV activities. On the other hand, at the time of ex-post evaluation, data of the reduction of morbidity and mortality of malaria in the entire country could not be verified.

For the malaria control in Solomon Islands, "the Malaria Action Plan (MAP) (2008-2014)" was developed under the supports by WHO, AusAID, GFATM and so forth and the various malaria control actions have been implemented in the light of MAP. In particular, while distribution of mosquito nets and indoor residual sprays (IRSs) funded by the donors including GFATM seems very effective for malaria prevention, the JICA's technical cooperation including this project complementarily contributed to enhancement of public awareness activities for the health staff and communities.

Therefore, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Establishment of effective malaria control system in Guadalcanal Province and Honiara City	Reduction of number of malaria cases in Guadalcanal Province and Honiara City (Reduction of morbidity from 2005 before starting the project)	Project Completion: Achieved. Downward trends in Guadalcanal Province and Honiara City from 2005 to 2010. Ex-post Evaluation: Downward trends in Guadalcanal Province and Honiara City from 2010 to 2012.
	Increase in cure rate of malaria in-patients at NRH	Project Completion: 90-93% from 2006 to 2009 despite of improvement in 2008 (95.5%). Ex-post Evaluation: No data available.
	Reduction of number of severe malaria cases* in the pilot areas (Reduction of the number of cases in the province from 2005 before starting the project	Project Completion: Achieved. In Guadalcanal, from 1,742 cases in 2005 to 227 cases in June, 2009. In Honiara, from 67 in 2005 to 40 in June, 2009 (172 in 2006 and 188 in 2007) Ex-post Evaluation: In 2012, 117 in Guadalcanal and 1 in Honiara.
	Improvement of results of patients' satisfaction survey** at health facilities (Improvement from 20015 before staring the project)	Project Completion: Mostly achieved. According the satisfaction survey in three regions of Guadalcanal Province (Honiara, Terere and Weather Coast), significant improvement in Honiara, slight changes both in positive and negative in other two regions. Ex-post Evaluation: No data.
(Overall goal) Establishment of	(Revised Indicator) Promotion of human resource development of health staff in	Ex-post Evaluation: Around 20 health staff trained.

[1] "Healthy Setting" is an approach for health promotion using comprehensive and multidisciplinary methodologies, in principles of community participation, partnership, empowerment and equity, based on the WHO Health for All Strategy and the Ottawa Charter for Health Promotion. It aims at maximization of disease control as a whole system. There are specific actions such as "the Healthy Cities Program".

effective malarial disease control system in Solomon Island[2]	areas other than the pilot areas.	
	(Revised Indicator) Promotion of utilization of SIMIS and the alert system for malaria epidemic control in areas other than the pilot areas	Ex-post Evaluation: No data provided.
	(Revised Indicator) Dissemination of "Strengthening of Quality of Malaria Service"[3] in areas other than the pilot areas	Ex-post Evaluation: Utilized in all clinics in the country.
	(Revised Indicator) Promotion of CBMP activities in areas other than the pilot areas	Ex-post Evaluation: No data provided.

Source : Terminal Evaluation Report, Project Completion Report and the interviews with CPs.

Note: *Severe malaria cases are defined as follows: a) death caused by malaria, b) case of refer by malaria, c) return visit to the clinic by malaria, d) case of quinine administration, and e) case of diagnosis as severe malaria.

**Survey items are as follows: a) reliance for health facility, b) satisfaction with opening hours, c) satisfaction with malaria management, d) satisfaction with explanation.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was as planned (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 119%) due to dispatch of additional expert in "Health Information System" which was not planned at the time of ex-ante evaluation and utilization of local NGO. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, efforts for reduction of malaria incidence rate and prevalence have been continuously prioritized in the National health Strategy Plan (2011-2015) and the national Malaria Strategic Plan (2006-2017). For the implementation, cooperation based on "healthy setting" between NGO/communities based organizations (CBOs) and the central government organization, including other line ministries is highlighted. The sufficient number of primary health facilities is installed and the sufficient number of health staff is deployed for implementation of malaria control activities. Also, the institutional structure has been maintained by continuous utilization of the training programs and SIMIS which were developed and reinforced by the project. For CBPM, activities to facilitate understanding of the communities about malaria prevention have been implemented. As for the technical aspect, most of the staff trained by the project have been continuing their works and sharing the knowledge and experiences with other staff. The human resource trained by the project became trainers for the trainings in other provinces. In addition, the training materials have contributed to trainings for newly recruited health staff through utilization at the nurse school. Currently, the trainings for medical technicians are delivered by the fund provided by GFATM from time to time. Also, the technical sustainability has been ensured by the second phase of the project through activities prioritizing effective and sustainable practices of skills acquired by the health staff on site such as development and dissemination of the standards of procedures (SOP) at clinic. The necessary budget for activities of malaria control has been depending on funds provided by the donors including GFATM (MAP 2008-2014). The MAP after 2014 has been under discussion. Since the donors plan to continue their supports, it is expected to ensure necessary budget for procurement of necessary equipment and medicines for malaria control and implementation of trainings. Therefore, sustainability of this project effect is high.

5 Summary of the Evaluation

The project mostly achieved the project purpose to establish effective malaria disease control in Guadalcanal Province and Honiara City. The project reduced the malaria morbidity and the number of severe cases and attained more than 90% of the cure rate of in-patients of NRH. As for Overall Goal, the malaria control and care system introduced by the project has been disseminated in the country at certain level through trainings of nurses/assistant nurses and microscopists in areas other than the pilot areas as well as utilization of the proposal compiling findings and lessons learned from the project. As for sustainability, reduction of malaria incidence and infection has been prioritized and the malaria control activities have been implemented by the sufficient institutional structure. Most of the staff trained by the project continue their work and share and disseminate their knowledge and experiences. The necessary budget for malaria prevention is expected to be ensured by the certain support by the donors in future through the budget after 2014 has been under discussion. As for efficiency, the project cost exceeded the plan due to the additional dispatch of expert.

In the light above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is necessary to conduct regular supervisions for clinics and communities and to continue trainings in order to entrench the activities for malaria control and treatment introduced by the project.

[2] For verification of the overall goal, it was redefined as "The effective malaria disease control system is disseminated in Solomon Island" (In the original PDM, it is "The system is established.") and revised the verifiable indicators for the redefined overall goal since data for the original indicators were not collected or difficult to collect.

[3] The proposal, "Strengthening Quality of Malaria Service at the Primary Medical Facilities" compiling findings and lessons learned from the project and issues for malaria control in Solomon Island was developed by the project as a manual for malaria control.

Lessons learned for JICA:

- For the project, the overall goal was set out as “The effective malaria disease control system is established in Solomon Islands” and to be verified by the indicators such as reduction of malaria cases and deaths in the country. However, it was difficult to verify casual relation between the project and reduction of malaria cases and deaths in the entire country since the project was implemented only within the limited pilot areas. Base on the logic of the expected project effect, it is necessary to set out the overall goal considering a structure to disseminate the output produced by project (c.f. methodologies to disease control of malaria) in the case of the project aiming at establishment of a model system within specific area.

Country Name	Strengthening of the Primary Health Care in the Province of Samana
Dominican Republic	

I. Project Outline

Background	In the Dominican Republic, under the principle of "giving all citizens equal access to healthcare services", the Ministry of Public Health and Social Welfare (SESPAS) was playing a central role in carrying out reforms to improve healthcare services especially for low-income citizens and those in less developed regions as well as providing free medical care through national medical institutions. In 2001, General Health Law and Social Security System Law were promulgated as the basis of such reforms. One of the objectives of these laws was to improve primary healthcare services, giving priority to promotion of health and prevention of diseases under the scheme of decentralization. However, as a result of long-time centralization, provincial health offices (DPSs) and regional healthcare units (UNAPs) lacked the ability of organizational operation. Regional healthcare organizations were not well-established, reflecting the past trend of giving priority to treatment, and healthcare workers needed to change their mentality and improve their knowledge and skills for the achievement of the new healthcare system. Under these circumstances, it was especially imperative to reinforce regional organizations and personnel.		
Objectives of the Project	1. Overall Goal: To provide high-quality preventive care services to the users by the regional healthcare units (UNAPs) through primary healthcare reinforcement activities. 2. Project Purpose: To establish a practical model[1] for regional healthcare that provides high-quality healthcare services to the residents (especially pregnant women, nursing mothers and infants) through UNAPs in Samana Province. 3. Assumed steps for achieving the project goals[2]: This project aims to enhance i) UNAP's capacity in preventive healthcare and health promotion services, and ii) DPS's capacity in supervision and instructions for UNAPs, then establish a practical model of regional healthcare between DPS and UNAPs, and thereby provide high-quality preventive care services by UNAPs both in Samana and other provinces for nation-wide dissemination of the model.		
Activities of the project	1. Project site: Samana Province 2. Main activities: - Introduce integrated services of mothers and infants healthcare to UNAPs - Strengthen coordination between UNAPs and hospitals - Conduct community diagnosis by family registration - Strengthen the functions of health committees, UNAPs to promote participation in local activities by community - Monitor UNAP functions by DPS 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 6 persons 2) Trainees received: 7 persons 3) Equipment: thermometers, sphygmomanometer, etc. Dominican Republic Side 1. Staff allocated: 25 persons 2. Land and facilities: office space in SESPAS and DPS 3. Local cost 9 million RD$ (items not specified)		
Project Period	October 2004 - October 2009	Project Cost	Total: 377 million yen
Implementing Agency	Secretariat of State for Public Health and Social Welfare (SESPAS) Samana Provincial Health Office (DPS)		
Cooperation Agency in Japan	IC Net Limited		
Related Projects	Japan's cooperation: -Project for the Expansion of Immunization Program (Grant Aid through UNICEF) -Dispatch of Japan Overseas Cooperation Volunteers (JOCVs) (Team of nurses, midwives and public health nurses, Rural Community Development Officers and Film Production (2003-present)) -The Project for Strengthening Primary Health Care for Pregnant Women and Newborns in Health Region III (Technical Cooperation, March 2013 – February 2017) Other donors' cooperation: - Fondo de Atencion Primaria: FONAP (World Bank and IDB, -2004), Programa de Reforzamiento de Sistema de Salud: PROSISA (EU, -2005)		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Dominican Republic's development policy (improvement of primary care and reduction of maternal and child mortality as set in "the General Law of Health", "the Social Security Law" as well as "the

[1] The "practical model" consists of a series of activities such as i) introduction of a reproductive health training system for assistant nurses, ii) introduction of reproductive health handbooks, iii) introduction of an appointment book and card system for checkups, iv) diagnoses of regions through family registration and enhancement of cooperation system

[2] Reviewed at the time of the ex-post evaluation.

Ten-Year Plan 2006-2015", and development needs "enhancement of primary care services that are provided by the UNAPs", and as well as Japan's ODA policy "JICA Country Assistance Programme (2002)", which specifies "the health improvement of rural poverty population" at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved the project purpose "establishment of a practical model for high-quality healthcare services by UNAPs" through i) improvement of preventive healthcare and health promotion service of UNAPs in Samana Province and ii) supervision and instructions for UNAPs by DPS. Regarding i), tools such as the vaccination card, the family record sheet and the reference and counter-reference sheet were introduced. Before the project implementation, UNAPs had no tools to monitor the situations of mothers and children and therefore could not actively ask them to visit UNAPs regularly. These tools introduced by this project have established and strengthened the linkage between UNAPs and families. As a result, unnecessary visit to hospitals decreased, and visits to UNAPs increased[3]. As for ii), the monitoring and supervision system of UNAPs by DPS was introduced. Monitoring and supervision includes such items as conditions of buildings, allocation of health care staff, electricity, water supply, sewage, etc. and the results are used to improve the conditions of UNAPs. According to some UNAPs in Samana Province, better allocation and management of health care staff, better hygienic level, etc have been attained. While there is not an official document that explicitly approves the outputs of this project as a model, the Ministry of Health has taken it as a basis for the preparation of guidelines and manuals of primary health care. In 2008, Samana was declared as a model province of the primary health care by the Ministry and it has been the reference in the health sector.

A doctor of UNAP with maternal child health handbook

Board game for health promotion

At the time of ex-post evaluation, most of those tools and monitoring system are still continuously applied in Samana and have been extended to other UNAPs in neighboring provinces that observed the effects of the project. This led to the certain degree of achievement of the overall goal "provision of high-quality preventive care services by UNAPs" since the maternal mortality ratio shows declining trend in Samana. The infant mortality rate has also been declining with the exception of 2012 and is lower than the national average 32 per 1,000 live births (2012).

Therefore, effectiveness/impact of this project is high.

Achievement of project purpose and overall goal

<table>
<tr><th>Aim</th><th>Indicators</th><th>Results</th></tr>
<tr><td rowspan="2">(Project Purpose)
Establishment of a practical model for s high-quality healthcare services by UNAPs</td><td>A practical model for regional healthcare services established through project activities has been approved by the Ministry of Health, Labor and Welfare by the end of the project.</td><td>（Project Completion）This project had dramatically improved the primary healthcare services in the region through development and introduction of the "Samana model".
（Ex-post Evaluation）While there is not an official document that explicitly approves the outputs of this project as a model, the Ministry of Health has taken it as a basis for the preparation of guidelines and manuals of primary health care.</td></tr>
<tr><td>The rate of unnecessary visits to hospital decreases from 28% to 14% by the end of the project.</td><td>（Project completion）According to a survey conducted by the project, the rate of unnecessary visits to hospital decreased from 28% in 2003 to 10% in 2008.
（Ex-post Evaluation）There is no system for measuring the unnecessary visits to the hospital after the project. However, the number of pregnant and postpartum women who visit UNAPs is larger than those who visit hospitals.</td></tr>
<tr><td>(Overall goal)
Provision of high-quality preventive care services by UNAPs</td><td>The maternal and infant mortality is reduced.

Note: The statistics are specifically for Samana.</td><td>（Ex-post Evaluation）
<table>
<tr><th>Year</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th></tr>
<tr><td>Number of Maternal Death</td><td>4</td><td>5</td><td>3</td><td>0</td></tr>
<tr><td>Maternal Mortality Rate</td><td>N/A</td><td>315/ 100,000</td><td>181/ 100,000</td><td>0</td></tr>
</table>
Information Sources: Ministry of Health, DPS, Samana Hospital
<table>
<tr><th>Year</th><th>2010</th><th>2011</th><th>2012</th></tr>
<tr><td>Number of Infant Deat</td><td>20</td><td>11</td><td>2</td></tr>
<tr><td>Infant Mortality Rate</td><td>12.6/1000</td><td>6.1/1000</td><td>15.3/1000</td></tr>
</table>
Information Sources: Ministry of Health, DPS, Samana Hospital</td></tr>
</table>

Source: DPS, Project Completion Report, Interview results

3 Efficiency

The inputs were appropriate for producing the outputs of the project. While the project period the project period was as planned (ratio against the plan: 100%), and the project cost slightly exceeded the plan (ratio against the plan: 123%). Therefore, efficiency of this project is fair.

[3] At the time of ex-post evaluation, no system exists to clearly measure the unnecessary visits to the hospital.

4 Sustainability

Regarding the policy aspect, high-quality preventive care services by UNAPs is considered as one of the most important health issues and therefore the aim of this project is politically supported. Besides the policies and strategies mentioned in "Relevance", "the National Strategic Plan for the reduction of Maternal and Child Mortality 2012-2016" was established in 2012 to improve the coverage and quality of reproductive health at all levels of care, through the strengthening of the role of the DPS. For the institutional aspect, DPS is responsible for supervising/monitoring provincial level health care, which is dealt by secondary health institutions and primary health institutions (UNAPs). UNAPs conduct medical examination before and after childbirth as well as care for newborns. The part of functions of DPS (training of health personnel) is in the process of transferring to Ministry's regional office (SRS), which is mainly in charge of the allocation and maintenance of human resources and equipment required for the implementation of healthcare programs, but separation of roles is not clearly determined at the time of ex-post evaluation. There are currently capable personnel at provincial/local level and there is no problem in the current operations, although the allocation of medical staff at 12 UNAPs in Samana Province does not fulfill the General Health Law. Health Committees have been playing a major role in the enhancement of UNAP activities and residents' health consciousness has been raised. They have also contributed to the improvement of sewerage, disposal of garbage, reduction of harmful insects and so forth. As for technical aspect, according to Samana DPS staff, they have sufficient skills and knowledge to conduct proper primary healthcare and are transferring such skills and knowledge acquired through the project to relevant personnel at DPS and UNAPs both in Samana province and other provinces without problems. In addition, the technical level of UNAPs is maintained as described in "Effectiveness/Impact". Most of equipment provided by the project, such as thermometers, sphygmomanometer, are properly working/maintained and in good shape. Thus, at the time of ex-post evaluation, no problem has been observed in policy background, technical aspect and institutional aspect of the implementing agencies. Regarding the financial aspect, one of the main budgetary items necessary to maintain the project effects is that for supervision and the instructions for UNAPs. Such budget has been allocated to the Ministry of Health, the DPS and the SRS for the last three years. However, there is no budget allocated for the extension of the Samana model to UNAPs that were not the target of the project, with the exception of budget to extend some tools developed by the project. Due to insufficient budget at the local level, some UNAPs have discontinued the reproduction of some tools, such as maternal child health handbook. Therefore, the project has some problems in terms of financial aspect of the implementing agency. Therefore, sustainability of effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved the improvement of preventive healthcare and health promotion service of UNAPs in Samana Province with supervision and instructions by DPS for the project purpose of "establishment of a practical model for high-quality healthcare services by UNAPs". With the establishment and extension of the tools and mechanism that the project introduced (now called "the Samana model"), the overall goal "provision of high-quality preventive care services by UNAPs" has been achieved and the maternal and infant mortality rates have been declining in Samana.

As for sustainability, there was no problem observed in the policy and technical aspects; however; some problems are observed in terms of institutional and financial aspects of the implementing agency because of shortage of medical staff at UNAPs and lack of budget for the extension of the Samana model to UNAPs that were not the target of the project.

For efficiency, the inputs were appropriate for producing the outputs of the project, though the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- The Ministry of Health is recommended to continue to utilize the trained people under the project in order to disseminate the model to other provinces.
- It is recommended to clarify the functions of the DPS and the SRS and foster better coordination between them, so that the results of the monitoring of UNAPs can be effectively reflected for better operations/services of UNAPs as well as for empowerment of personnel dealing with health issues.

Lessons learned for JICA

- The baseline study before implementing a project is essential in order to evaluate the Effectiveness/Impact of projects. In the case of this project, a baseline study was conducted but it did not collect the necessary data on the primary health care to measure the Effectiveness.
- As mentioned in Effectiveness/Impact, most of the tools (documents) have been extended to UNAPs in neighboring provinces. However, if these tools had been prepared from the beginning of the project in cooperation with the central level, they might have been approved more promptly and good practices using such tools might have been extended more broadly and rapidly.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Dominican Republic Office/ December 2013

Country Name	The Sustainable Watershed Management Project in the Upper Area of the Sabana Yegua Dam in the Dominican Republic
Dominican Republic	

I. Project Outline

Background	In the 1940's, about 70% of the national land of the Dominican Republic was covered by forests. The forest coverage had dropped to as low as 14% during the 1980s due to commercial felling, development of ranches, slash and burn agriculture, damage caused by a succession of hurricanes and farmland and forest fires. It was urgent to conduct the participatory watershed management aiming at stopping watershed devastation because of poverty, facilitating forest restoration and soil conservation that are compatible with local as well as national needs. In order to overcome the problem, it was essential to strengthen capacities of Secretariat of State of Environment and Natural Resources (SEMARENA currently MARENA), which was in charge of establishing watershed management system, and Sur Futuro Foundation (FSF), which was entrusted to conduct sustainable watershed management in the upper area of the Sabana Yegua Dam by SEMARENA.
Objectives of the Project	1. Overall Goal: The forest resources in the Project Area will be handled suitably by the villagers using techniques they assimilate through the technical support provided by the staff of FSF and SEMARENA. 2. Project Purpose: The staff of FSF and SEMARENA will improve their technical capacity in Watershed Management and administrative capacity in project management. 3. Logical flow of how the project responses to development issues: This project aims to improve FSF's and SEMARENA's technical capacity in watershed management through technical transfer of agroforestry and handy irrigation agriculture as incentives for villagers[1], introduction of monitoring activities and establishment of voluntary forest fire control units, and thereby forest is conserved by villagers in target villages.
Activities of the project	1. Project site: 14 villages in the Upper Area of the Sabana Yegua Dam 2. Main activities: - Formulate annual plans and technical manuals for the fields of agroforestry, handy irrigation agriculture reforestation - Establish demonstration farms for agroforestry - Organize farmers associations for handy agriculture techniques - Organize voluntary forest fire control units and conduct training for the units - OJT to C/Ps by Japanese experts and trainings to villagers by C/Ps 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 9 persons 2) Trainees received: 3 persons 3) Equipment: 8 million yen Dominican Republic Side 1) Staff allocated: 11 persons 2) Land and facilities: project office 3) Local cost (items not specified): 3 million RD$
Project Period	Original period: April 2006 - March 2009 Extended period: April 2009 – March, 2010
Project Cost	Total: 306 million yen
Implementing Agency	-Secretariat of State of Environment and Natural Resources (SEMARENA, currently MARENA) -Sur Futuro Foundation (FSF)
Cooperation Agency in Japan	Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries
Related Projects	Japan's cooperation: -The watershed management project in the upper area of the Sabana yegua Dam (Master Plan, 2000-2002) -Dispatch of individual expert of Forest Operation Technic (2001-2003) -Dispatch of JOCV to FSF (2002-2004) -Construction of Mini-hydropower at El Recodo (Embassy of Japan, 2006-2008) Other donors' cooperation: -Support to the National Reforestation Program (establishment of forestry nursery for the target area of this project) (Taiwan) -Introduction of handy irrigation agriculture (Dominican Rep., ADESJO: NGO) -Demonstrating the Sustainable Watershed Management in Sabana Yegua Dam (Global Environmental Fund (GEF) and United Nation Development Program (UNDP)) -Construction of Palomino Dam (Dominican Government and ODEBRECH Brasil)

[1] Villagers are required to plant trees in return for receiving support of agroforestry and handy irrigation.

	-Global Environment project, Kellog Foundation Project, Palomino project (Dominican Rep., El Recodo: NGO)

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Dominican Republic's development policy (environmental conservation including watershed management as set in "the General Law of Environment and Natural Resources (Law 64-00)" (2000), and the National Plan of Reforestation "Quisqueya Verde" (Green Quisqueya) (1997-present) and development needs "conservation of soil and water resources through the sustainable management in watersheds including the upper area of the Sabana Yegua Dam", and as well as Japan's ODA policy "JICA Country Assistance Programme" (2002) which specifies "support to environmental conservation including forestry recovery and water quality improvement" at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved the project purpose "enhancement of technical and administrative capacity of FSF and SEMARENA in sustainable watershed management" in terms of i) provision of better technical support for handy irrigation agriculture, ii) agroforestry, iii) reforestation, as well as iv) implementation of monitoring activities, v) forest fire prevention and control, vi) erosion control, and so forth. At the time of project completion, handy irrigation system was introduced in 44ha in 4 villages, agroforestry was introduced in 32ha (64% of the target) and a voluntary forest fire control unit was formed in the 4 villages where handy irrigation agriculture was introduced. The project assessed the technical and administration capacity level of SEMARENA and FSF by Capacity Development Sheet and it was improved by 27% compared to before the project implementation. According to the interviews with FSF, MARENA and villagers at the time of ex-post evaluation, the technical and administrative capacities, which were strengthened by the project, in watershed management are considered to have been maintained. As a result, newly planted area, which totaled 99ha during the project period, further increased to 636ha (about 33% increase since 2006) in May 2013. In addition, aforestation activities have been extended to other villages than the target ones through the extension of handy irrigation system. FSF has played a major role in promoting relevant extension activities and technical assistance. Furthermore, the minutes/report of periodical meetings among FSF, SEMARENA and community associations prove that the level of satisfaction of villagers on services of FSF and MARENA is high.
As for overall goal "the forest resources in the project area will be handled suitably by the villagers", it has been achieved since the percentage of the forest area in the project area was increased by approximately 33% between year 2010 and May 2013 through promotion of reforestation.
Therefore, effectiveness/impact of this project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Enhancement of technical and administrative capacity of FSF and SEMARENA in sustainable watershed management.	The technical capacities in watershed management and the project administration capacities of the technicians working in the FSF and the SEMARENA will be improved by 20%.	(Project Completion)Data on Capacity Development (CD) sheet, which was designed to clarify situations of CD that related to the project management capacity and watershed management skills, shows that the general capacity level was improved by 27% (from 67% in 2006 to 94% in 2009) (Ex-post Evaluation)According to the interviews of FSF, SEMARENA and villagers, the technical and administrative capacities in watershed management of the technicians of the FSF and the MARENA are considered to have been even more enhanced, which might also be justified by the enhancement of forest area.
	The satisfaction of local residents with the services offered by the technicians of the FSF and the SEMARENA will increase.	(Project completion)According to monitoring survey, villagers benefitted by the project in target area are almost 100% satisfied with the activities of FSF and the forest office. (Ex-post Evaluation)No official survey has been conducted by MARENA or the FSF however, at periodical meetings with the different community associations, villagers expressed that the level of their satisfaction with services of MARENA or the FSF is quite high, which is proved by the minutes/report of meetings.
(Overall goal) Better handling of forest resources and erosion control by villagers.	By 2014, the percentage of the forest area in the project area will increase by 3%. Note: the percentage is against the original forest area (1912 ha) at the time of the project commencement.	(Ex-post Evaluation)The forest area in the project target area was 1912ha at the commencement of the project. The forest area that was added after the project commencement increased from 99 ha in 2010 to 636ha in May 2013 through promotion of reforestation, which is approximately 33% increase against the original forest area.

Source: Project Completion Report, Interviews to counterparts

3 Efficiency

While the inputs were appropriate for producing the outputs of the project, both the project period and the project cost significantly exceeded the plan (ratio against the plan: 130%, 155%) since training for handy irrigation agriculture was delayed especially due to climate issue mostly hurricanes in the second year, which was specified as an important assumption in the PDM . Therefore, efficiency of this project is low.

4 Sustainability

FSF is a NGO established in 2001 to improve environmental deterioration and has conducted watershed management,

including reforestation and soil conservation as well as community development. The FSF has been entrusted to conduct sustainable watershed management in the upper area of the Sabana Yegua Dam by MARENA, which is continuously in charge of establishing watershed management system and currently has 27 personnel dealing with watershed management (including staff for programs of microcredit, social organization activities and environmental awareness education for the communities). In addition, MARENA and FSF agreed to jointly implement the Updated Master Plan during the period 2013-2023. FSF also has experiences of working in the field, together with internal and external organizations (e.g. MARENA/Global Environment Facility: GEF, UNDP), based on the techniques transferred by JICA. Although the number of personnel was reduced after the project to the same level as that before the project and five (5) counterparts among 11 are not working anymore, FSF has enough personnel who conduct regular watershed management activities. Regarding the policy aspect, reforestation for watershed management is considered as one of the most important environmental issues and besides the policies and strategies mentioned in "Relevance", "the Reforestation Plan in the upper area of San Juan Watershed" was officially launched in June 2013. As for technical aspect, the FSF maintains a high level of technical competence to carry out the watershed management activities, which is attributed to this project and other international cooperation projects that they have been involved in. It has been conducting several training courses for its technicians such as "soil conservation practice" using the manuals prepared by the project as well as for farmers in the field of operation and maintenance of irrigation systems, agroforestry system management and so forth, through agroforestry demonstration farms by OJT after the project. In addition, all of equipment provided by the project, such as motorbikes and cultivation equipment, are properly working/maintained and in very good shape. Regarding the financial aspect, the FSF has firmly established the financial support to maintain the promotion and watershed management activities with a reliable prospect of its continuation. However, the revolving fund for handy irrigation and agroforestry has not yet been fully functioned because currently farmers try to recover from tropical storm damage in 2011. The negotiation to restart the fund is under process, and the farmers are willing to pay the debt if the production conditions are recovered. Therefore, at the time of ex-post evaluation, no problem has been observed in policy background, institutional and technical aspects of the implementing agencies. Therefore, sustainability of this project is high.

5 Summary of the Evaluation

The project has largely achieved the provision of better technical support for handy irrigation agriculture, agroforestry, reforestation, monitoring, forest fire prevention and control, erosion control, etc. for the project purpose of "enhancement of technical and administrative capacity of FSF and SEMARENA in sustainable watershed management". With such activities, the forest cover has increased through reforestation activities by villagers not only in the target villages but also in other villages, and the overall goal "better handling of forest resources and erosion control by villagers has been achieved.

As for sustainability, there was no problem observed in the policy, institutional, technical and financial aspects.

For efficiency, the inputs were appropriate for producing the outputs of the project, though both the project period and the project cost were significantly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- Although there is no problem on technical aspect of Sustainability, it is recommended to develop adequate knowledge transfer system to maintain the institutional knowledge base and capabilities in preparation for staff attrition.
- It is important to maintain the partnership between the Official sector (MARENA) and a local NGO (FSF) with a strong presence and structure in the territory, which is a key factor to ensure the consolidation and sustainability of effects of watershed management activities.

Lessons learned for JICA

- Consensus building with communities and participation are crucial elements for democratic governance and sustainable management of watersheds. These approaches can be promoted in combination with giving incentives to villagers, such as handy irrigation and agroforestry, as well as with cultivating their ownership.

Agroforestry parcels well maintained

Production of trees is maintain for reforestation

Country Name	Capacity Development of Water Environment Conservation in the Metropolitan Area of Guatemala
Republic of Guatemala	

I. Project Outline

Background	The Guatemala metropolitan area is the socioeconomic center of the country. The discharges of untreated sewage, industrial and agricultural wastewater deteriorated water pollutions of the Motagua River basin in the northern area (flowing into the Pacific Ocean) and the Maria Linda River basin in the south (flowing into the Pacific Ocean through Amatitilán Lake). Improvement and conservation of water environment has been prioritized against the serious water pollution in the metropolitan area. The Ministry of Environment and Natural Resources (MARN), which is established in 2000, had responsibility and function of policy making and execution for water environment management. However, a comprehensive administrative function is necessary for pollutant control to prevent and improve water pollution, so that MARN needed to its capacity and institutional strengthening.		
Objectives of the Project	1. Overall Goal: Public and regulation on water environment conservation in the metropolitan area is strengthened. 2. Project Purpose: MARN's implementation capacity of public policy and regulations for water environment conservation in the metropolitan area is reinforced. 3. Logical flow of how the project responses to development issues: The project develops manuals, guidelines and training materials for the four areas of water environment management administration (note 1) as well as a database, and implements a model of Incentive for Improvement of Performance in Integrated Management of Industrial Wastewater in the Metropolitan Area. By promoting specific policies for wastewater regulations by MARN, the project aims at compliance of the wastewater regulations by the stakeholders and attainment of the target of reduction. (note 1) The four areas of strategy formulation and implementation, pollutant control/wastewater regulations, water quality monitoring, and environment education.		
Project Information	1. Project site: 9 local governments in the metropolitan area (Guatemala, Mixco, Villa Nueva, Villa Canales, Santa Catarina Pinula, Amatitilán, San Pedro Ayampuc, Chinautla and San Miguel Petapa) 2. Main activities: Trainings for policy making for water environment conservation, implementation of wastewater monitoring, development of manuals for wastewater regulations, establishment of water environment database, environmental education and public awareness for wastewater regulations, and so on. 3. Inputs: Japanese Side 1) Experts: 7 experts 2) Trainees received: 19 persons 3) Equipment: water analyzer, vehicle, office appliance, test reagent, etc.. Guatemalan Side 1) Staff allocated: 17 persons 2) Land and facilities: project office 3) Local cost: fuel cost, cost of electricity of the project office, etc.		
Project Period	March, 2006 – December, 2009	Project Cost	309 million yen
Implementing Agency	Ministry of Environment and Natural Resource (MARN: Ministerio de Ambiente y Recursos Naturales), Ministry of Public Health and Social Assistance (MSPAS: Ministerio de Salud Pública y Asistencia Social)		
Cooperation Agency in Japan	Ministry of the Environment, Ministry of Land, Infrastructure, Transport and Tourism, Division of Environment of Aichi Prefecture, CTI Engineering International Co., Ltd.		
Related Projects	None		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with the Guatemala's development policy, such as conservation and improvement of water environment specified under "Vamos Guatemala Program (2004-2008)" and "the National Plan of Water Supply and Sewerage Service for Human Development", and development needs to enhance administration function for water quality management and recovery of sources of water, as well as Japan's ODA policy prioritizing support for sustainable economic development including conservation of environment. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project aimed at enhancement of capacity of MARN to implement wastewater regulations for conservation of water environment as well as reinforcement of administration capacity for conservation of water environment in the metropolitan area. At the project completion, the capacity of MARN for wastewater regulations, including the increase in the number of staff, and its recognition improved at a certain level. Also, the agreements for water environment education, wastewater analysis, and water quality were concluded between

MARN and the related organizations. After the project completion, no capacity assessment of MARN for wastewater regulations was conducted. However, although the number of staff of MARN increased from 19 persons in December, 2009 to 22 persons in August, 2013, the capacity of MARN is not sufficient to manage water environment administration nationwide. While the strategy for effective implementation of water regulations which was elaborated by the project has been disseminated and the social participation strategy for dissemination of water environment education has been implemented in the Water Resource Unit, the number of the agreements between MARN and local government for improvement of water environment has not changed.

As for the Overall Goal, in terms of wastewater regulations targeting factories, the technical assessments for the registered factories were conducted. 44% of them, which accounted 80% of the target value of 50%, attained the reduction target of wastewater regulations, including acidity, total nitrogen, total phosphorus, hazardous substances (arsenic, cadmium, mercury, etc.). For the local government, the wastewater regulations have been less prioritized since the target year was set in 2015. Out of the nine local governments targeted by the project, only City of Santa Catarina Pinula attained the reduction target for the first stage at the time of ex-post evaluation. While the revised wastewater regulations have not been approved yet because of the change of the central government, the legislative guidelines developed by the project have been utilized. In addition, the reinforcement of the water environment administration, such as the elaboration of water regulations for Amatitilan Lake as the agreement in MARN, mandatory submission of technical assessment report for application of construction permission in Santa Catarina Pinula, has been promoted.

As for other impacts, MARN has been continuing environment monitoring jointly with the laboratory of MSPAS. After the project completion, the laboratory obtained the general requirements for capacity of ISO17025 laboratory and organization and certification as an accredited wastewater laboratory by the US Environmental Protection Agency. In addition, according to the agreement between MARN and the Ministry of Education, the environment education was incorporated in curriculums of primary and secondary schools and have been implemented nationwide as a result that the counterpart staff who participated in the training in Japan collaborated with the Ministry of Education and implemented the environment education. On the other hand, the activities of wastewater regulations targeting municipal governments and factories have not been implemented due to the luck of human resources and budget. In Santa Catarina Pinula, however, the activities of wastewater regulations involving local residents, such as consensus building before construction of sewage treatment plant and establishment of the wastewater committee according to the public hearing about the water environment conservation, have been promoted.

Therefore, effectiveness/impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Strengthening of capacity of MARN to implement wastewater regulations	The results of capacity assessment about wastewater regulations are improved from 1.08 points in November, 2006 to 3.5 points in September, 2009.	Terminal Evaluation: Achieved. 3.67 points in November, 2009 Ex-post Evaluation: No capacity assessment was conducted.
	Evaluation of MARN is improved: a) Evaluation of MARN by related organizations for wastewater regulations is improved from the base line determined in May-June, 2008 to September 2009. b) Recognition of MARN by general public is increased to 50% in September, 2009 according to the telephone interview survey.	Terminal Evaluation: Achieved. a) According to the questionnaire survey for the related organizations, improved 9.96 points in August, 2008 to 12.08 points in May-August, 2009. b) 64.5% of general public recognized MARN according to the telephone interviews in November, 2009. Ex-post Evaluation: Survey and interview were not conducted.
	The number of staff of Water Resource Unit of MARN is increased from 8 persons in July, 2006 to 16 persons in September, 2009.	Terminal Evaluation: Achieved. Increased to 18 persons in July, 2009 and 19 persons in December, 2009. Ex-post Evaluation: 22 persons.
	After 2008, agreements between MARN and local governments, or other actors are concluded.	Terminal Evaluation: Achieved. 3 agreements were concluded by February, 2009. Ex-post Evaluation: The number of agreements is the same as the terminal evaluation.
(Overall goal) Strengthening of water environment administration in the metropolitan area	50% of selected factories (at least 200) and 5 municipalities achieve the target of reduction at the first stage by 2015 for municipalities and 2011 for factories.	Ex-post Evaluation: Partially achieved. Only one municipality (City of Santa Catarina) achieved by 2011. Out of 400 factories, 176 (44%) achieved the target. .

Source：Project Completion Report and the interviews with CPs.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project, the project period slightly exceeded the plan (ratio against the plan: 105%) since the experts were not able to be dispatched due to the epidemic of the new bird flu in 2009 and the situation needed extension of the project period, and the project cost also exceeded the plan (ratio against the plan: 161%) due to the increases in the inputs for dispatch of additional experts, equipment (intensifier of server for database) and training in Japan. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, the activities related to the project have been endorsed by the national and local policies. The MARN Institutional Strategic Plan (2013-2017) (Plan Estratégico Institucional de Ministerio de Medio Ambiente y Recurusos Naturales) sets forth a goal for improvement of wastewater treatment in the country. Also, according to the order of wastewater 236-2006 and 105-2011, "the order of wastewater discharge in the Amatitilan Lake" basin was formulated and the local governments in the metropolitan area are required to comply with the wastewater regulations since 2015. In terms of the implementation structure, the Unit of Water Resource is now under the Unit of Environment Management due to the organizational reform of MARN. Despite of the increase in the number of staff of the Unit of Water Resource, there is difficulty to manage the water environment monitoring by the current number of the staff since the target of the monitoring expanded from the nine local governments in the metropolitan area to the entire country. In addition, establishment of collaboration between MARN and the local governments has not been progressed. Also, there is no progress in establishment of collaboration between MARN and the industries despite of efforts for dissemination of the wastewater regulations for the industries. The laboratory of MSPAS has conducted 300 water quality analyses per year. However, the capacity of the laboratory has difficulty to conduct more analyses and constrained further expansion of the water quality monitoring. The water environment database developed by the project was not maintained because the volume of the database exceeded the capacity of the server of MARN. Hence, the other system of the Unity of Water Resource has been utilized for the database. As for the technical aspect, the manuals and guidelines for wastewater regulations developed by the project have been utilized by the Unit of Water Resource. In terms of water quality analysis, the laboratory of MSPAS obtained ISO17025 and enhanced its capacity through continuous trainings for the staff. In terms of the financial aspect, while the budget of MARN increased from 98 million quetzal in 2009 to 191 million quetzal in 2012, the budget of the Unit of Environment Management have been 1.5 million quetzal in 2011 and 1.9 million quetzal in 2012. The budget for activities of the Unit of Water Resource has been allocated from the budget of the Unit of Environment Management. As compared to the budget of the Unit of Water Resource of 1.87 million quetzal in 2010, it was a considerable decrease which constrained the activities for wastewater regulations. In the light above, some problems have been observed in the institutional and financial aspects. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has partially achieved the project purpose to enhance the implementation capacity of MARN for the wastewater regulations by the increase in the number of staff and the dissemination of the strategic plan for execution of the wastewater regulations which was developed by the project, as well as promotion of the environment education. On the other hand, a part of the factories made efforts to attain the reduction target of wastewater but that was not sufficient. Also, no other local government than Santa Catarina Pinula implemented the wastewater regulations in an active way. Although MARN has been working with the local governments around the five main lakes in Guatemala, including Lake Amatitlan, the monitoring activities for wastewater have not been necessarily sufficient. As for sustainability, despite that all the local government will be obliged to execute the wastewater regulations since 2015, there are some problems in the institutional and financial aspects due to the luck of human resources and assessment capacity for water quality monitoring nationwide and the constraints caused by the significant reduction of the budget for the Unit of Water Resource. As for efficiency, the project period exceeded the plan due to the delay of the dispatch of the experts by the epidemic of new-type flue and the project cost exceeded the plan due to the additional inputs for dispatch of experts, procurement of equipment and the training in Japan. In the light above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is preferable to conclude agreements between MARN and the local governments in order to facilitate technical assistance from MARN to the local governments, including confirmation of wastewater regulations, wastewater monitoring as well as technical assessment reports.
- Under the cooperation with the Local Promotion Agency, an organization to provide technical assistance for rural water supply and sewage treatment, MARN needs to proactively participate meetings of the local governments organized by the National Federation of Municipal Governments (ANAM) covering 334 municipalities in the country, and to disseminate the wastewater regulations.
- Since the water environment database of MARN, which was installed in 2008, has not been utilized due to the overcapacity of the database against the capacity of the server in 2011, MARN needs to improve the environment to utilize the server, including ensuring the sufficient capacity of the server.

Lessons learned for JICA:

- The collaboration between MARN and other organizations such as MSPAS, the Ministry of Education was developed by the project and has been maintained by the time of ex-post evaluation. For sustaining the established collaboration even after the project completion, it is essential to design the project in order to conclude cooperation agreements among the stakeholders during the project and to implement it based on the agreements. In addition, in the case that a model case such as the case of Santa Catarina Pinula to promote wastewater regulations is confirmed, it is reasonable to include dissemination of the model to other neighboring municipalities under the initiative of the implementing agency from the viewpoints to disseminate of project effects.
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Discussions at the Village Development Committee for wastewater discharge control activities attended by the municipal officer of Santa Catarina Pinula	Explanation about sampling of wastewater and analysis at the laboratory of MSPAS

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Mexico office: February, 2014

Country Name	Project for Prevention and Control of Uterine Cervical Cancer (Proyecto para la Prevención y Control de Cáncer Cérvixc Uterino (CaCU)
United Mexican States	

I. Project Outline

Project Cost	327 million yen	
Project Period	October, 2004 – October, 2007	
Implementing Agency	National Gender Equity and Reproductive Health Center (Centro Nacional de Equidad de Género y Salud Reproductiva) of the Ministry of Health (Secretaría de Salud), Health Service (Servicios de Salud) of the States of Veracruz, Chiapas, Guerrero, Nayarit, Oaxaca Puebla and Yucatan	
Cooperation Agency in Japan	Okinawa Prefectural Chubu Hospital, Cancer Institute Hospital, Kyorin University, College of Life Science of Kurashiki University of Science and the Arts, Miyazaki Prefectural Miyazaki Hospital, Tokyo Metropolitan Cancer Detection Center, Japanese Society of Clinical Cytology, etc.	
Related Projects (if any)	Cooperation by Japan ・Project for Reproductive Health and Prevention of Uterine Cervical Cancer (Proyecto de Salud para Mujer en la Prevención de Cáncer cérvico Uterino) (Technical Cooperation, 1999-2004) ・Third Country Training: Uterince Canser Control (Technical Cooperation, 2007-2012)	
Background	In Mexico, malignant tumors have been the second leading cause of death amongst women. In particular, the largest number of deaths among the women aged over 25 has been caused by uterine cervical cancer (UCC). Indigenous women of poor families in the southern states of the country had constraints to have opportunities of early detection and early treatment due to inadequate cytology screening and inaccurate diagnosis as well as lack of women's knowledge about health including UCC and cultural and social factors. The federal government of Mexico has prioritized prevention of uterine cervical cancer under the national health program 2001-2006. Under those situations, JICA implemented the technical cooperation project in the State of Veracruz aiming at the increase in consultation rate of UCC and the improvement of cytology system. Due to the considerable positive effects of the technical cooperation project, it was planned to disseminate the results of the project in other southern states in Mexico where mortality by UCC had been high.	
Inputs	Japanese Side	Mexican Side
	1. Experts 2 Long term experts and 13 Short term experts 2. Trainees Received 36 persons 3. Equipment 126 million yen 4. Local Cost 29 million yen	1. Counterpart 37 persons 2. Local Cost 23 million pesos 3. Land and facilities Office space for Japanese experts, laboratories, training facilities, etc.
Project Objectives	Overall goal The mortality rate by uterine cervical cancer is decreased in the target area.	
	Project Purpose The number of detection of UCC is increased in the target areas (Chiapas, Guerrero, Nayarit, Oaxaca, Puebla, Yucatan and Veracruz).	
	Outputs ・The number of women in age between 25 and 64 who have cervical cytology is increased. ・The detection rate of Cervical Intraepithelial Neoplasia (CIN) Grade 3 and CIN 2 is increased at cytological diagnosis. ・Diagnostic techniques of cytotechnologists, colposcopists, and histopathologists are improved. ・Follow-ups for the patients diagnosed as positive are reinforced.	

II. Result of the Evaluation

Summary of the Evaluation

In the project areas including 7 states of Chiapas, Guerrero, Nayarit, Oaxaca, Puebla, Yucatan and Veracruz, the female mortality rates by UCC have been higher than the national average of 16.98 per 100,000 women. All the target states are located in the southern part of Mexico where the poor population concentrated. The Ministry of Health of Mexico needed to utilize and disseminate results and lessons learned from the model project in Veracruz supported by JICA to other southern states with higher mortality rates by UCC.

This project has partially achieved the objectives, improving detection of UCC in the target states for the project purpose, and reduction of mortality by UCC in the target states for the overall goal. As for sustainability, some problems have been observed due to the insufficient public health promotion activities and the limited coverage of medical institution with necessary medical equipment and skilled staff in order to increase early detection and early treatment in the target

states. For relevance, the project has been highly relevant with Mexico's development policy, development needs, as well as Japan's ODA policy. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

The Project has been highly relevant with the Mexico's development policy, "reduction of the moratlity rated by UCC per 100,000 women aged over 25" in the National Health Program (PRONASA: Programa Nacional de Salud), and development needs, "outreach of the model of UCC control in the southern states", as well as Japan's ODA policy to prioritize improvement of human security and efforts on poverty reduction including supports in the health sector, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved the project purpose of the increase in the number of detection of UCC in the target areas of the 7 states. In total, the number of detection of CIN3 (Cervical Intraepithelial Neoplasia) increased by 2 times during the period from 2004 to 2006. Except Yucatan, the number of detection of CIN3 in the 6 states increased by more than the target value of 1.5 times. In Yucatan, it increased by only 1.3 times due to the limited concordance rate of diagnoses by cytology and pathology. However, according to the data (2007-2010) from each state, the detection rate of CIN3 decreased in the 3 states of Guerrero, Oaxaca, Puebla while it increased in the 4 states of Chiapas, Nayarit, Veracruz and Yucatan. In Oaxaca and Puebla, the lack of health promotion activities for women constrained the improvement of women's awareness to have cytological screening that was essential for detection of UCC. Also, the decreases in the number of detection of CIN3 have been attributed to the high migration rate among the population. The migration makes it difficult to follow up the patients after the first cytological diagnosis since it takes more than 5 years until symptoms of CIN3 appear.

For the overall goal, the mortality rate by UCC in the 6 states except Yucatan decreased during the period from 2007 to 2010. The reduction of mortality exceeded the goal of 30% reduction in Nayarit, however, the goal was not achieved in the other five entities for the same period. According to health services of each entity, the actions that allowed the decrease of mortality were the intensification of strategies to improve coverage and detection. However, as the Ministry of Health suggested, the relatively lower reduction of mortality rate by UCC in the 6 target states can be attributed to the limited public awareness of importance of early detection and early treatment. For example, in rural communities of indigenous population, while the wives cannot be permitted to have cytological screening by male medical staff, women also do not want have medical checks by the male medical staff. It also notes that most women tend to think that they are healthy because they do not feel any pain associated with CCU, which limits go to health units for the detection and in consequence to the treatment. In fact, according to SICAM (the System of Women's Cancer), the number of women having cervical cytology decreased in all the 7 target states during the period between 2007 and 2010. In addition, the increased female population in the target states has brought about the larger uncovered female population by the medical services to control UCC.

As for the positive impacts of the project, more officials of the States including universities such as the University Veracruz, and NGOs now pay more attention to and are involved in the trainings of cytological diagnosis for the medical personnel. For example, in Veracruz, the Health Service of the State of Veracruz has been continuing clinical conferences to review the clinical cases every 2-3 months. Further, the effective coordination of actions in the seven target states by the National Center for Gender Equity and Reproductive Health of the Ministry of Health contributed to implementation of project activities in an extensive regional coverage.

Therefore, effectiveness/impact of this project is fair.

Outcome	Indicator (Target Value)	Actual
Overall Goal: Decrease in mortality rate by UCC in the target areas.	The mortality rate by UCC in 2012 is decreased by more than 30% compared with the time of project completion (September, 2007). *The mortality rate by UCC: the number of women dead by UCC per 100,000	(At the time of ex-post evaluation in 2012) Not achieved. The comparable data in 2007 and 2010: - Chiapas: from 21.8 to 15.6 (-28.44%) - Guerrero: from 17.2 to 13.5 (-21.51%) - Nayarit: from 16.6 to 10.6 (-36.14%) - Oaxaca: from 21.6 to16 (-25.92%) - Puebla: from 16.1 to 12.1 (-24.84%) - Veracruz: from 21.6 to 15.9 (-26.38%) - Yucatan: from 14.7 to 15.3 (+4.08%)
Project Purpose: Increase in the number of detection of UCC in the target areas.	At the end of the Project, the number of detection of CIN3 is increased by 1.5 times compared with the beginning of the Project (2004) through the follow-up surveys for the patients with CIN2 and CIN3 conducted in 2004, 2005 and 2006.	(At the time of project completion in 2007) Achieved. According to the terminal evaluation, the number of detection of CIN3 increased by 2 times: from 620 cases per 100,000 women to 1,254 cases in total of the target areas. The data for each state is as follows: - Chiapas: 3.5 times (24 to 84) - Guerrero: 2.6 times (57 to 149) - Nayarit: 3.8 times (48 to 181) - Oaxaca: 5.5 times (6 to 33) - Puebla: 2.3 times (76 to 174) - Veracruz: 1.6 times (363 to 574) - Yucatan: 1.3 times (46 to 59)

(Source) Terminal Evaluation Report and 2012 cubes/DGIS, SSA. Rate per 100,000 women of 25 and more years of age. Population CONAPO

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 93%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

For the policy aspects, reduction of mortality by UCC has been one of the priorities in PRONASA. Regarding structural aspects, diagnostic techniques of medical staff trained by the Project improved, and seven States have installed capacity and sufficient resources for covering the female population. In particular, indigenous communities in the target States of the project have support at the level of health districts to receive monitoring and healthcare service in their communities. However, obstacles of language and culture, the limited access of rural communities to the health services and the lack of awareness of people impede efficient provision of healthcare and service to rural areas. . As to the technical aspects, under the agreement between the University Veracruz and the Ministry of Health Veracruz Health Service, medical students of the University enable acquire not only theoretical but also practical knowledge and skills on cytological diagnosis. Moreover, in Veracruz, clinical conference has been continued and trainings courses and workshops have been organized by the Health Service and the University of Veracruz. In financial aspect, the Ministry of Health, has allocated permanent budget for the implementation of the actions in the prevention and Control of uterine Cervical Cancer. However, a budget constraint is observed that the number of staff who can attend the training course and workshops is limited at the time of ex-post evaluation. Overall, the project has some problems in structural and financial aspects of the medical institutions in the target states. Therefore, sustainability of the effects of this project is fair.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

[To Veracruz Health Service]

- One of the recommendations is to use the health, demographic and cultural information for the improvement of the processes and impacts on healthcare and coverage of the female population. Based on the information, it is necessary to plan actions and implement them for raising awareness of women living in rural communities.
- It is also recommended to expand the training courses at the health services of Veracruz and maintain a program of continuing education by ensuring the homogeneity of the operating personnel in the detection and treatment.
- With regard to technical aspect, maintaining the exchanges of experiences among civil associations, University of Veracruz and the Veracruz Health Service is essential to sustain the practical and theoretical knowledge and skills on cytological diagnosis. For example, inviting scholars and officials from other States or reviewing case studies can be another good method to strengthen its capacity of CACU prevention.

Lessons learned for JICA:

- The monitoring of CaÇU is extremely complex and difficult in terms of verification of the fulfillment of the goal of the project to increase the timely detection of CIN2 and CIN3 7 States, due to the nature of the disease, both socio-economic and cultural factors (migration, negligence in the follow-up of treatments; difficulties to receive an effective service, as well as by weakness in the health promotion. All the above, negatively affected the realization of the goal of the project.

CHIPAS

OAXACA

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Mexico Office/ January, 2014

Country Name	Coastal Water Quality Monitoring Network Project
United Mexican States	

I. Project Outline

Background	Mexico was facing various water-related issues and the National Water Plan (2007 – 2012) stressed the necessity of solving water contaminations as well as assuring water resources. Mexico took the 106th place among 122 countries in terms of the water quality index measured by UNDP in 2002. In addition, the progress of water contamination, for instance, caused massive death toll of fish in the Veracruz state. Consequently, it was urgent for the Government of Mexico to solve water quality problem. However, unlike freshwater, there was no nationally unified method of analysis and sampling for saltwater and National Water Commission (CONAGUA) was not able to compare the data with other organizations.		
Objectives of the Project	1. Overall Goal: The capacity of CONAGUA for monitoring and control for the coastal water quality is augmented. 2. Project Purpose: The reference functions of CONAGUA on the coastal water quality monitoring are strengthened. 3. Assumed steps for achieving the project goals: The project develop a new standard guidelines; Standard Operation Procedures: SOPs (draft NMX: Mexican Norms) for sampling and analysis, and Quality Assurance and Quality Control QA/QC system. By using the SOPs, the project strengthens the laboratory reference system for coastal water monitoring. Through the application of the new standard guidelines and improved QA/QC system, the project aims to improve coastal water monitoring and thereby conduct better control of water quality in Mexico (identification of prioritized control areas through monitoring).		
Activities of the project	1. Project site: Mexico City and Tamaulipas state, where the Manager's Office of Water Quality, and the Northern Gulf Basin Organization are located, respectively. (Laboratory reference system consists of National Reference Laboratory at its top and regional laboratories including Northern Gulf Basin Laboratory) 2. Main activities: Integrate the existing coastal and regional monitoring guidelines into uniform standard guideline. Develop a coastal monitoring plan in the Northern Gulf as well as a regional monitoring plan based on revised standard guideline. Develop and utilize a new QA/QC system after reviewing the present QA/Q operations Prepare a training master plan for coastal water monitoring Prepare an annual training plan and materials 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 6 persons 2) Trainees received: 9 persons 3) Equipment: Handy GPS Van Dorn, Type Water Sampler, Dispenser, Spectrophotometer, Standard solution, Standard Material, etc. Mexican Side 1. Staff allocated: 32 persons 2. Land and facilities: Office space at the Office of Water Quality and the Northern Gulf Basin Organization for Japanese experts 3. Local cost, 56 million peso		
Project Period	January 2007 to January 2010	Project Cost	255 million yen
Implementing Agency	CONAGUA: National Water Commission (Comisión Nacional del Agua)		
Cooperation Agency in Japan	CTI Engineering International Co.,Ltd. IDEA Consultants, Inc.		
Related Projects (if any)	Japan's cooperation: 1.- Coastal Water Quality Monitoring Network Project (Master Plan 1999-2000) 2.- The Project on capacity Enhancement for Establishing Mexican Norms of Water Quality Criteria (Technical Cooperation, 2008-2010) -3.- Improvement Project of Sewerage System in Mexico City – Nagoya City (JICA Partnership Program,2011-2014) 4.- Coastal water monitoring in the Mesoamerican region as parameters of the Climate Change (TCTP, 2012-2014)		

	Other donors' cooperation: Water Resources Management Project：PROMMA (World Bank, 1997-2005)

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Mexico's development policy "the sustainable development and environment protection by the balanced use of water" as set in the National Development Plan (2007 – 2012) and "promotion of the integrated and sustainable water management in the basins and aquifers" as set in Mexican National Water Program (2007-2012), development needs "strengthening of the measurement and evaluation of the water quality", as well as Japan's ODA policy; JICA's Country Assistance Program, "global environment issues and water supply and sanitations" at the time of both ex-ante evaluation and project completion. As CONAGUA is the only agency responsible for water quality monitoring nationwide that is entrusted by Secretariat of Environment and Natural Resources (SEMARNATA). It has been monitoring in the coastal zone of the Gulf of Mexico and Great Caribbean where water quality was deteriorated. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on capacity enhancement of CONAGUA's reference function on the coastal water quality monitoring. Indicators which measure the achievement of the project purpose are (i) Preparation of the final version of three (3) kinds of standard operational procedures (SOPs) and (ii) application of the final version of SOPs (draft NMXs) in 11 laboratories which operate coastal water monitoring including national reference laboratory. As to (i), the final version of the 3 kinds of SOPs (①sampling, ②basic analysis (16) and ③toxic parameters (11) of saline water and sediment analysis) have already been prepared and distributed to 16 laboratories of the CONAGUA, for (ii), according to the Regional Laboratory of the North Gulf and the Reference Center Specialized in Saline Waters (CREAS), all the 16 laboratories have already incorporated the SOPs into routine practices at the time of the ex-post evaluation. Therefore, the targets (i) and (ii) were achieved.

As for the overall goal, the indicators to measure the achievement level are (i) application of QA/QC system in 11 laboratories which operate coastal water monitoring including national reference laboratory, (ii) reflection of coastal water monitoring results in the National Water Statistics in Mexico, iii) establishment of NMX (Mexican Norms) for coastal water analysis method and iv) identification and design of prioritized control areas based on the monitoring data. As to (i),QA/QC system has already been introduced in all 11 target laboratories. For (ii), the quality maps based on the monitoring results were published. This statistics are revised and published every year. Regarding (iii), some of NMXs have already been approved and published, however, other drafts are still in the process of official authorization by SEMARNAT. As to (iv), Maps of the Water Quality, which show the prioritized control areas, have already been prepared based on the monitoring data. Besides the targeted 11 laboratories, capacity enhancement of personnel has been promoted at private laboratories based on SOPs prepared by the project and the number of the monitoring sites has been increasing from 1,510 at the completion of the project to 5,150 at the stage of ex-post evaluation.

Therefore, the above four (4) targets have largely been realized. Therefore, the effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) The reference functions of CONAGUA on the coastal water quality monitoring are strengthened.	Final version of three (3) kinds of standard operational procedures (SOPs) (draft NMX, such as for sampling, basic analysis (16) and toxic parameters (11) of saline water and sediment analysis) which reflect comments from regional laboratories are prepared.	(Project Completion) Already prepared. (Ex-post Evaluation) The final version of the SOPs have already been prepared and distributed to 16 laboratories of the CONAGUA.
	Final version of SOPs (draft NMX) is applied in 11 laboratories where operate coastal water monitoring including national reference laboratory.	(Project completion) Already applied. (Ex-post Evaluation) It was confirmed that all the 16 laboratories have already incorporated the SOPs into routine practices.
(Overall goal) The capacity of CONAGUA for monitoring and control for the coastal water quality is augmented.	QA/QC system is applied in 11 laboratories where operate coastal water monitoring including national reference laboratory.	(Ex-post Evaluation) QA/QC system was already introduced in 11 laboratories.
	Coto astal water monitoring results are released in the National Water Statistics in Mexico.	(Ex-post Evaluation) The Quality maps based on the monitoring results were published. This statistics are revised and published every year.
	NMX (Mexican Norms) for coastal water analysis method is established.	(Ex-post Evaluation) Some of NMXs have already been approved and published, however, other drafts are still in the process of official authorization by SEMARNAT.
	Prioritized control areas are identified and designated based on the monitoring data.	(Ex-post Evaluation) Maps of the Water Quality have already been prepared based on the monitoring data.

Source：CONAGUA

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost slightly exceeded the plan (ratio against the plan: 106%), because it took more time than expected to collect information on the levels of pollution by hazardous substances in the coastal areas of Mexico and to incorporate the information into a textbook. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy as the National Development Plan (2007 – 2012) aims at the sustainable development and environment protection by the balanced use of water and Mexican National Water Program (2007-2012) plans the promotion of the integrated and sustainable water management in the basins and aquifers. Institutionally, CONAGUA has sufficient number of staff members who are able to conduct water quality monitoring. The National Reference Laboratory has established the rules to be followed by every laboratory and the North Gulf Laboratory serves as a Reference Center specialized in saline waters as before. At the stage of the ex-post evaluation, the monitoring network is operated by a consort of laboratories at 5150 sites in operation, which drastically increased from 1510 sites at the stage of completion of the project. As for the technical aspect, many of the C/Ps have been promoted to the superior positions and transfer their skills and knowledge to new specialists in case of the North Gulf Basin Organization. The personnel have continuously been having training, at least one course per year according to the work program and at least one specialist from each one of the 16 laboratories can supports the international training courses for relevant personnel of central America. The North Gulf one and the National Reference Laboratory are playing the leading role in such international training. The equipment have properly been maintained and used for monitoring coastal zones. On the financial aspect, budget allocation for enhancing the capacity for water quality monitoring has been increasing; 13 million pesos in 2011, 108 million pesos in 2012 and 209 million pesos in 2013, which is considered sufficient to conduct the project activities.

From these findings, it is considered that the project has no problem in policy background, institutional, technical and financial aspects of the implementing agency. Therefore, sustainability of the project is high.

5 Summary of the Evaluation

This project has largely achieved the project purpose and overall goal. Regarding capacity enhancement of CONAGUA's reference function on the coastal water quality monitoring, the final version of the SOPs have already been prepared and distributed and applied to 16 laboratories of the CONAGUA. The capacity of CONAGUA for monitoring and control for the coastal water quality is augmented through i) the application of QA/QC system in 11 laboratories, (ii) reflection of coastal water monitoring results in the National Water Statistics in Mexico, iii) establishment of NMX for coastal water analysis method and iv) identification and design of prioritized control areas. As for sustainability, this project is still given importance in the current development policy and also there is no problem in terms of institutional, technical and financial aspects. Efficiency is fair since the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

None

Lessons learned for JICA

Draft NMXs were prepared before the completion of the project and some of them have already been approved and published. However, other drafts are still in the process of official authorization by SEMARNAT. The authorization usually requires a long and complicated process and it is desirable that the project monitor and supervise the process and also incorporate such monitoring and supervision into the project activity in order to accelerate the application of the NMXs.

Training of the CONAGUA specialists in the Northern Gulf Basin Laboratory

Field activities and training of the personnel of CONAGUA

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Mexico office: July, 2013

Country Name	Strengthening of Air Monitoring Program in the Mexico
Mexico	

I. Project Outline

Project Cost	457 million yen	
Project Period	October, 2005 – October, 2008	
Implementing Agency	National Institute of Ecology (INE: Instituto Nacional de Ecologia), National Center of Environmental Research and Training (CENICA: Centro Nacional de Investigación y Capacitación Ambiental), Secretariat of Environment and Natural Resources (SEMARNAT: Secretaria de Medio Ambiante y Recursos Naturales)	
Cooperation Agency in Japan	Ehime University	
Related Projects (if any)	<u>Cooperation by Japan</u> ・The National Center for Environmental Research and Training (Technical Cooperation, Phase I 1995-97, Phase II 1997-2002) ・The Joint Research Project on Formation Mechanism of Ozone, VOCs and PM2.5 and Proposal of Countermeasure Scenario (Technical Cooperation of Science Technology, 2011-15) <u>Cooperation by Other Donors</u> ・Transport Air Quality (World Bank, 1993-99) ・Environmental Program jointly implemented by USA, Canada and Mexico (North American Commission for Environmental Cooperation, 2005 -) ・Border 2012 Program (USA, 2002-12)	
Background	In Mexico, since air pollution and hazardous waste in urban areas where the population concentrate, including the Metropolitan area of Mexico City, have been deteriorating, solutions of such pollutions was the national agenda. In 1993, the government of Mexico established CENICA to cope with environmental protection. JICA supported human resource development as well as research and training capacity of CENICA through technical cooperation. Although CENICA enhanced their research and training capacity for air pollution control, further development of institutional capacity was needed to promote "the National Air Quality Monitoring Program 2003-08 (PNMA: Programa Nacional de Monitoreo Atomosférico)". Under this circumstance, the government of Mexico requested the government of Japan to support capacity development of CENICA for improving air quality monitoring.	
Inputs	Japanese Side	Mexican Side
	1. Experts 10 Short term experts 2. Trainees Received 6 persons 3. Equipment 73 million yen 4. Local Cost 30 million yen	1. Counterpart 16 persons 2. Local Cost 9.78 million pesos 3. Land and facilities Project Office
Project Objectives	Overall goal Capacity of the Mexican society to manage air quality is strengthened.	
	Project Purpose The Mexican society recognizes importance of air quality monitoring and capacity of the local governments to provide and utilize reliable air quality information for policy planning and evaluation is strengthened.	
	Outputs ・Capacity to collect reliable air quality monitoring data in Mexico is strengthened. ・The existing air quality monitoring equipment calibration system in Mexico is improved. ・Studies that complement existing air quality monitoring are carried out. ・Capacity to conduct management and analysis of air quality monitoring data in Mexico is strengthened. ・Accessibility of the general public and policy makers towards information about air quality is increased. ・The National Air Quality Monitoring Program 2007-2010 is prepared.	

II. Result of the Evaluation

Summary of the Evaluation
According to PNMA 2003-08, air quality monitoring has been promoted based on the existing system. However, since data obtained through the existing system was not reliable enough to utilize for planning for mitigation and control of air

pollution, it was necessary to build accurate Quality Assurance and Quality Control (QA/QC) and data management system for standardizing air quality monitoring.

This project has fully achieved the objectives, improving provision and utilization of reliable air quality monitoring data by the local networks for the project purpose, and promotion of air quality control and contingency plan by the local governments for the overall goal. As for sustainability, there was no problem observed since the air quality monitoring activities by CENICA has been endorsed by the national policy, the budget allocation, the technical capacity and expansion of the air quality monitoring networks. For relevance, the project has been highly relevant with Mexico's development policy, development needs, as well as Japan's ODA policy. For efficiency, the project cost exceeded the plan.

In the light of above, this project is evaluated to be highly satisfactory.

1 Relevance

The Project has been highly relevant with the Mexico's development policy ("prevention and control of pollution" in the Sector Program for Environment and Natural Resource 2007-2012 (Programa Sectorial de Medio Ambiente y Recursos Naturales)), development needs ("establishment of air quality monitoring system to mitigate and control air pollution"), as well as Japan's ODA policy to support global environmental issues including air pollution control, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The Project has achieved the project purpose of strengthening of capacity of local governments to provide and utilize reliable air quality information. More than 18 local networks, the target value of the Project, were confirmed by CENICA that they had provided reliable data through the National Information System of Air Quality (SINAICA : Sistema Nacional de Información de la Calidad del Aire) and utilized them for policy planning and evaluation. Also, the capacity to control air quality in Mexico has been enhanced through PROAIREs (Programs of improvement and management of air quality), establishment of air quality contingency plan and budget allocation for air quality monitoring as well as utilization of studies by local governments on impacts of air quality

(Working at CENICA)

After project completion, the local networks confirmed by CENICA have increased to 38, Applying air monitoring manuals developed under project framework, local networks have staff trained by CENICA and have started to implement appropriate maintenance and calibration programs of monitoring equipment, and audit on monitoring station. As a result of the air quality monitoring by the Project, the coverage of air quality monitoring in the country has been expanded. For example, a new fixed workstation for atmospheric monitoring was installed in the metropolitan area of the Valley of Puebla. Furthermore, programs for improvement of air quality have been promoted in Salamanca and Leon of the Guanajuato state. While risk of sulfur dioxide and PM10[1] were reduced in Salamanca, emission of PM10 was also reduced in León. Also, CENICA purchased a mobile station and set up 18 teams for air quality monitoring.

Therefore, effectiveness/impact of this project is high.

Outcome	Indicator (Target Value)	Actual
Overall Goal: Capacity strengthening of the Mexican society to manage air quality	The number of the local networks whose air quality monitoring data are utilized in policy planning or evaluation by the federal government is increased.	(At the time of ex-post evaluation in 2012) . PROAIREs (Management programs to improve air quality) with coordination between federal and local governments were established in 10 cities with local network, namely, Ciudad Juárez, Salamanca, León, Monterrey Metropolitan Area, Metropolitan Zone of Cuernavaca, Victoria de Durango, Región Comarca Lagunera, Mexicali, Jalisco, Metropolitan Zone of Valle de México (under development in 5 more cities with network)
	The number of research papers on health risk, impacts on ecosystems, and economic losses due to air pollution that can be utilized for policy planning or evaluation is increased.	19 studies developed for supporting local government under the PNMA 2008-12 A study paper of VOCs, two of PMs were presented respectively in European Geosciences Union General Assembly and in American Geophysical Union, and also two papers for VOCs and PM were published in Scientific Journal. These studies provide the evidence for the public development policy such as 'Mexican standard (Norma Mexicana)' draft for health risk protection focused on benzene and hydrocarbons.
	The number of local governments that have established an air pollution contingency plan is increased.	4 local governments established their air pollution contingency plan (Mexico City and Metropolitan area, Guadalajara City and Metropolitan area, Monterrey City and Metropolitan area, and Salamanca in Guanajuato State.)

[1] PM10 and PM2.5 are particulate air pollutants. PM 10 is particulate matter less than 10 micrometer (μm) and PM 2.5 is particulate matter less than 2.5μm.

	Budgets for air quality management measures at the federal and local levels are increased.	Achieved. The total budget for air quality monitoring allocated by the state governments from 2009 to 2012 was 254 million pesos.
Project Purpose: Strengthening of capacity of local government to provide and utilize reliable air quality information.	At least 18 local networks are confirmed by CENICA as providing reliable air quality monitoring data through SINAICA	(At the time of project completion in 2008) Achieved. 19 networks of Tijuana, Rosarito, Tecate, Mexicali (Baja California), Ciudad Juarez, (Chihuahua), Monterrey (Nuevo Leon), Durango, Gomez, Placio (Durango), San Luis, Potosi (San Luis Potosi), Guadalajara (Jalisco), Celaya, Salamanca, Irapuato, Silao, Leon (Guanajuato), Toluca (Mexico), Puebla (Puebla), Villahermosa (Tabasco) and Mexico City are confirmed by CENICA.
	At least 18 local networks are confirmed by CENICA as utilizing air quality monitoring data for policy planning or evaluation.	Achieved. 20 networks of Tijuana, Rosarito, Tecate, Mexicali (Baja California), Ciudad Juarez (Chihuahua), Monterrey (Nuevo Leon), Durango, Gómez Palacio (Durango), San Luis Potosi, (San Luis Potosi), Guadalajara (Jalisco), Celaya, Salamanca, Irapuato, Silao, Leon, Mexico City (Guanajuato), Tluca (Mexico), Puebla (Puebla), Cuernavaca (Morelos) and Villahermosa (Tabasco) is confirmed by CENICA.
	Awareness of those who are responsible for environmental programs of the State governments towards importance of air quality monitoring is increased.	Achieved. According to the results of the questionnaire surveys at the terminal evaluation, all the respondents have observed increase in the awareness of stakeholders in environmental programs.
	Access counts per month to SINAICA are increased.	Achieved. In average, the number of visit to the SINAICA website on monthly basis has increased from 11,514 in 2005 to 16,674 in 2007.

(Source) Terminal Evaluation Report and information provided by CENICA

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was as planned (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 118%). Therefore, efficiency of this project is fair.

4 Sustainability

The air quality monitoring and control of air pollution has been promoted under the federal program of PNMA 2008-12 and PROAIREs by the local governments. CENICA assigns 8 staff for air quality monitoring activities, including the director. The local networks cover 82 locations in 28 states of the country equipped for air quality monitoring. While 38 locations have automatic equipment, 44 locations are equipped by manual ones. For maintenance of air quality monitoring equipment, the Directorate of Research on Characterization Analysis of Pollutants and Atmospheric Monitoring (DIMACAC: Dirección de Investigación en Monitoreo Atmosférico y Caracterización Analítica de Contaminantes), prepares an annual program of inspection visits in support and by request of the local networks, In terms of air quality monitoring data, SINAICA links 28 systems of air quality monitoring in 27 cities covering the population of 37.9 million in the country. CENICA has been delivering national and regional workshops and trainings for the local networks, including the newly integrated networks in the national air quality information system through the courses at the CENICA's laboratory, on-site trainings, and on-line trainings. Owing to the enhanced capacity by the Project, CENICA has been expanding their scope of services. For example, the number of services related to dissemination of the standards which enable trace measurements of air quality by the monitoring systems in the country. Furthermore, since 2007, a program to assess technical achievement, which should lead more achievement in the next year, has been continued. Also, because of the Project, the number of monitoring systems has been continuing to expand and has been requiring more number of personnel and resources.

Also, the annual budget of CENICA increased after the Project from 13.1 million pesos in 2008 to 71.6 million pesos in 2012.

Since no problem in policy background, structural, technical and financial aspects has been observed, sustainability of the effects of this project is high.

conducted by Nicaragua office: Mar, 2014

Country Name Republic of Nicaragua	Project for Strengthening Adolescent Reproductive Health

I. Project Outline

Background	In Nicaragua, reduction of maternal and infant mortalities was the highest priority issue in the health sector due to the high maternal mortality rate (86.5 per 100,000 live births) and the high infant mortality rate (29 per 1,000 live births) as of 2006/2007 (ENDESA 2006/2007) ※. In particular, pregnancy in adolescence is a risk factor for maternal mortality and perinatal mortality: 34% of maternal mortalities and 25% of miscarriages were committed by the pregnancy in adolescence. The adolescent women aged from 15 to 19 years old who have been pregnant before accounted for 25% of the total number of the adolescent women, which was the worst level in Central America. While more the lower aged adolescent have experience of the first sexual intercourse, the limited adolescent population in the country behave in accordance with proper knowledge and utilize a health service. In addition, the sexual intercourses increased risk of the adolescent population, in particular adolescent women, to sexual transmitted infections and HIV/AIDS. In addition, it was pointed out that most pregnancies of women aged from 10 to 14 years old have resulted from sexual abuse by a family member or an acquaintance. Under those situations, lack of user friendly health service for the adolescent people was a key issue in the country. ※ The maternal mortality : 170 per 100,000 live births) and theinfant mortality : 21 per 1,000 live births (UNFPA 2005)
Objectives of the Project	1. Overall Goal: To improve adolescent reproductive health (ARH) (note 1) in target SILAIS, by reducing unwanted pregnancies among adolescents and preventing sexually transmitted diseases (STDs) and HIV/AIDS. 2. Project Purpose: Adolescents in target SILAIS take appropriate behaviors with proper knowledge on ARH and use youth-friendly reproductive health services, which will become a project model to be introduced to other SILAIS. 3. Logical flow of how the project responses to development issues: The project delivers trainings for health staff for the Youth Friendly Service (YFS) (note 2) in the target provinces, trainings for the adolescent promoters and the youth leaders as well as trainings of support for peer activities (note 3) for the local people, and establishes the adolescent clubs. By practicing YFS and pier activities for the adolescent people in the target provinces, the project aims at dissemination of appropriate knowledge and actions about ARH and prevention of unintended pregnancy, STDs and HIV/AIDS.(note 1) ARH includes prevention of adolescent pregnancy, family planning (contraception), prevention and care for STDs and HIV/AIDS, care for victims of domestic violence. (note 2) YFS is a) provision of comfortable and adequate care, b) maintenance of confidentiality, c) maintenance of privacy, d) deployment of highly sensible and well-educated health staff, e) provision of adequate information for adolescent users and their parents. (note 3) Activities based on a concept of mutual support by the people having same problems.
Project Information	1. Project site: Granada and Boaco 2. Main activities: Development of textbooks for YFS, trainings for health staff, trainings of the adolescent promoters, trainings of support for peer activities for the local people, fostering youth leaders, establishment of monitoring system, trainings of development of management tools, and so on. 3. Inputs: Japanese Side 1) Experts: 29 for Short term 2) Trainees received: 15 persons 3) Third country training in Mexico: 10 persons 4) Equipment: Vehicles, medical tools, office appliance including PCs, audiovisual equipment for IEC activities, etc.. Nicaraguan Side 1) Staff allocated: 44 persons 2) Land and facilities: project office 3) Local cost: maintenance cost of equipment provided by the Japanese side, cost for activities by CP staff
Project Period	November, 2005 – October, 2009 / Project Cost: 378 million yen
Implementing Agency	Ministry of Health, Granada Provincial Health Office, and Boaco Provincial Health Office
Cooperation Agency in Japan	Japanese Organization for International Cooperation in Family PlanninG (JOICEF)

Related Projects	Japan's cooperation: (Technical Cooperation: TA, Grant Aid: GA) ・Project for Enhancing Integrated Service Delivery for Social Risk Prevention and Attention for Families and Communities (TC, 2007-2010) ・Project for Strengthening Health Service and Referral System in Chinandega and Granada (GA, 2004-2005) ・Project for Construction to Boaco General Hospital (GA,2006-2007) ・Dispatch of Japan Overseas Cooperation Volunteer (JOCV) (midwife, 2009-2013)

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with the Nicaragua' development policy, such as improvement of quality and access of health services including reproductive health specified under "the National Health Policy (2004-2015, 2007-2012" and "the National Reproductive and Sexual Health Strategy (2006)", and development needs to reduce unintended pregnancy, STDs and HIV/AIDS of adolescent people, as well as Japan's ODA policy prioritizing the health and medical sector. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project implemented activities focusing on knowledge about RH and recognition concerning health service of the adolescents aged from 15 to 19 years old as well as activities to share the experiences in the project as model. At the time of project completion, the target value for the proportion of the adolescents having orientation about knowledge of RH (indicator 1) was achieved in both target provinces of Granada and Boaco while the ones for the proportion of the adolescents recognizing health service (indicator 2) was not achieved. At the time of ex-post evaluation, the adolescents having no orientation about RH in the both provinces accounted less than 6% ARH service by health centers and health education by the adolescent clubs have been continued after the project completion. As a result, the recognition of the adolescents about the ARH service by health centers has been considerably improved. The both provinces have not attained the target for practice of modern contraception (indicator 3) but exceeded the target for use of condom at the first sexual intercourse (indicator 4) at the time of project completion. At the time of ex-post evaluation, the data for the indicator 3 has been slightly improved in Boaco while the indicator 4 in Granada slightly decreased. For sharing the experiences of the project with other provinces, the national ARH forum was implemented in September, 2009 and health offices and organizations related to ARH in the country participated in the forum. In the forum, action plans based on the project experience as a model, such as YFS and the adolescent club, were prepared. Also, components such as YFS, ARH training, the adolescent club and so on, were incorporated in the Model of Family and Community Health (MOSAFC: Modelo de Salud Familiar y Comunitario), which was introduced during the project period. Therefore, the project has mostly achieved its project purpose.

Activity of the Adolescent Club at the Health Post in San Lorenzo, Boaco

As for the Overall Goal, reduction in adolescent pregnancy was achieved in Granada but no change from the year of 2005 in Boaco. The same trends have been observed in terms of the proportion of adolescent births in the total number of births. According to the interviews at the health centers in Boaco, the adolescent people having knowledge about RH, such as the adolescent promoters, do not want pregnancy at younger age but have education. On the other hand, the situation that surrounding people including elder people and their families want their marriage and birth at younger age are attributed to the increase in pregnancy at younger age even though the adolescent people have knowledge about RH. The adolescent HIV infection rate (per 100,000 people) in 2012 was 2.4 in Granada and 5.15 in Boaco which were far below the national average of 16.6 ※.

Besides, improved public awareness about RH in the target provinces through the project contributed to improvement of family planning and control of STDs and HIV/AIDS for the entire target provinces. In addition, health staff having ARH counselling technical training at health centers and adolescent promoters have been engaged in dissemination of ARH activities at their own initiative. Also, some youths, who had participated in the project activities as adolescent promoter, continued their education of health in order to deepen their knowledge about ARH and became health staff. Furthermore, the experience and results of the project, including YFS, ARH training, the adolescent club, ARH statistical data reporting system and so on, were referred to in the process of formulation of the National Integrated Health and Development of Adolescence (ENSIDIA: Estrategia Nacional de Salud y Desarrollo Integral de la Adolescencia) which is under preparation.

Therefore, effectiveness/impact of the project is fair.

※ Resource : SILAIS Granada and Boaco

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Behaviors based on adequate knowledge about ARH and utilization of YFS by adolescent people in the target provinces	(Indicator 1) % of the adolescents aged from 15 to 19 having no orientation about the following topics will be decreased from October, 2006 to October, 2009 Granada / Boaco Prevention of pregnancy: 26%->24% / 23%->21% Family Planning: 23%->21% / 21%->19% STDs 13%->10% / 13%->10% Domestic Violence: 41%->38% / 28%->25%	Terminal Evaluation: Achieved. Granada / Boaco Prevention of pregnancy: 15% / 12% Family Planning: 19% / 17% STDs 6% / 6% Domestic Violence: 19% / 15% Ex-post Evaluation: % of adolescents having no orientation about any of the topics above is 1.4% in Granada and 5.1% in Boaco. Not comparable with the data at the project completion because of no data available for each topic.
	(Indicator 2) % of the adolescents aged from 15 to 19 knowing that the health centers of the Ministry of Health provide health service for youth will be increased from October, 2006 to October, 2009. Granada (61%->67%), Boaco (48%->53%)	Terminal Evaluation: Not achieved. 40.2% in Granada and 42% in Boaco. Ex-post Evaluation: 77.7% in Granada and 75.9% in Boaco.
	(Indicator 3) % of the adolescents aged from 15 to 19 using any modern contraception among the ones sexually active will be increased from October 2006 to October 2009. Granada (61%->64%)*, Boaco (54%->55%)	Terminal Evaluation: Not achieved. 49.1% in Granada and 53.4% in Boaco. Ex-post Evaluation: 44% in Granada and 53.8% in Boaco.
	(Indicator 4) % of the adolescents aged 15 to 19 using condom at the first sexual intercourse among the ones having sexual intercourses will be increased from October 2006 to October 2009. Granada (14%->16%), Boaco (16%->17%)	Terminal Evaluation: Achieved. 34.5% in Granada and 34.5% in Boaco. Ex-post Evaluation: 40.4% in Granada and 29.6% in Boaco.
	(Indicator 5) Listed experiences demonstrated by the project which are influenced in other health offices.	Terminal Evaluation: Achieved. Prepared action plans based on the experiences of the project as model at the National ARH forum. Activities such as YFS and peer activities were introduced by some provinces. Ex-post Evaluation: Dissemination of ARH services and activities introduced by the project to other provinces can be verified as a positive impact of the project.
(Overall goal) Prevention of unintended pregnancy and STDs & HIV/AIDS among the adolescent people in the target provinces	(Indicator 1) % of adolescent pregnancy aged 10 to 19 will be decreased from 2005 to 2012 in the target provinces. (the number of adolescent pregnancy against the total number of pregnancy) Granada (33%->30%), Boaco (27.5%->25%)	Ex-post Evaluation: Partially achieved. 29.44% in Granada and 27.6% in Boaco.
	(Indicator 2) The HIV infection rate for the adolescents aged 15 to 19 will be sustained at the level lowering the national average. (from 7 per 100,000 people in 2005 to 8.5 per 100,000 people in 2010)	Ex-post Evaluation: Achieved. 2.40 in Granada and 5.15 in Boaco against the national average of 16.6 (estimation).

Source : Terminal Evaluation Report, Project Completion Report, Interviews with CP, Questionnaire Survey for the adolescent people in 9 municipalities in the two target provinces (samples of 360 persons)

Note: * The Terminal Evaluation Report pointed out that the target value defined in PDM was a mistake and the right figures were 44%->49%. However, no revision of the PDM was officially made.

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both project cost and the project period were within the plan (ratio against the plan: 98%, 100%) Therefore, efficiency of this project is high.

4 Sustainability

In the policy aspect, the importance of ARH has been continuously highlighted in the national health policy. The experiences and results of the project are referred to in ENSDIA which has been under preparation. In addition, the organizational structure of MOSAFC addressing ARH, including the health services for the adolescents by the health centers in municipalities, has been sustaining. The most of staff of municipal offices and health staff trained by the project have been engaged in ARH activities despite that some of them were changed to other positions. The facilities and equipment for ARH services at the health centers have been mostly well-maintained. In particular, the facilities of the health centers highly motivated have been effectively utilized. On the other hand, YFS has not been continued at some health centers where the ARH activities had not been taken over by successors after the changes of responsible person or health staff at the centers. In terms of the adolescent promoter, 152 promoters were newly trained in the both provinces of Granada and Boaco after the project completion. As of June, 2013, the number of the adolescent clubs continuing activities increased to 44 clubs but some of them suspended their activities as the adolescent promoters trained by the project left the club after their attaining to adulthood. For the technical aspect, the Ministry of Health developed "Manual for Comprehensive Adolescent Care" for promotion of ENSDIA and the manuals have been practiced at all the health centers in the country since the beginning of 2013. In August, 2013, "the Manual for Adolescent Counselling" for the health staff and "the Guide for Improvement of Life Skills" for the adolescent promoters were developed and delivered to the health centers. Also, regular training programs using those manuals have been implemented for the health staff and the adolescent promoters. However, there are differences in the level of knowledge and skills for ARH services among the health centers by the presence of the health staff having the ARH counselling skill training by the project. As for the financial aspect, the Ministry of Health has been allocating to enough budget to cover costs for basic activities to continue or to disseminate ARH, including orientation activities using contraceptive devices and drugs. On the other hand, all the health centers and the adolescent clubs have difficulty to ensure necessary budget for continuous trainings of health staff or adolescent promoters and ARH activities while some of them can have financial assistance by NGOs or the municipal governments. Since some problems have been observed in the technical and financial aspects, therefore, sustainability of this project effect is fair.

Training for new adolescent promoters by the health staff having the ARH counseling skills training at the Granada Health Center

5 Summary of the Evaluation

This project has mostly achieved the project purpose to dissemination of appropriate knowledge and behaviors of the adolescents about ARH as well as utilization of YFS by the adolescents in the target provinces. At the most health centers in the target provinces, YFS and peer activities by the adolescent clubs have been continued. In addition, the overall goal has been partially achieved by the controlled HIV infection rates for the adolescent in the target provinces at the level under the national average through the ARH services and public awareness activities. Also, the numbers of adolescent pregnancy and birth have been reduced in Granada. As for sustainability, there is no change in the importance of ARH in the national health policy and the Ministry of Health allocates budget for the basic activities of ARH. On the other hand, there have been some problems in the technical and financial aspects due to the variance in the quality of ARH services among the health centers and the difficulties in fund raising for activities by the health centers and the adolescent clubs. In the light above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- The variances in the quality of YFS by each health center are attributed to the differences in skills and experiences among the health staff engaged in YFS. The trainings have been continuously delivered for the health staff and the adolescent promoters by using the training materials developed by the project as well as the manuals based on ENSDIA. However, in order to motivate them furthermore, it is recommended to ensure budget covering costs for trainings, necessary activities of ARH and consumable goods such as stationaries and to provide transportation means or cost for interactions among the groups. Also, it is necessary to create opportunities to exchange information and opinions among organizations engaged in similar issues, including NGOs.

Lessons learned for JICA:

- Consideration of technical transfer plan at the planning stage of project is essential for continuity of trainings or activities for human resource development even after the project completion. At the same time, it is necessary to conduct technical transfer which enhances the key stakeholders to continue such activities by themselves through joint activities by the JICA experts, JOCVs, the counterpart staff as well as the health staff during the project period. In addition, if necessary, the follow-up support for continuation of the activities after assessment of ex-post situation is also important.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Panama Office/ El Salvador Office/ March 2014

Country Name	The Project for Improvement of Solid Waste Management in the Municipality of Panama
Panama	

I. Project Outline

Background	Although the waste management service was transferred to the Municipality of Panama from the central government in 1999, the solid waste management had not been adequately executed by the municipal government without their own waste management plan. Upon the request from the Panama government, JICA supported to elaborate the waste management master plan. However, while actions for reduction of waste and improvement of legal and institutional system have been carried out, improvement of collection and transportation system as well as landfill have been delayed due to the lack of skills and knowledge of the municipal government.		
Objectives of the Project	1. Overall Goal: Sustainable solid waste management in the municipality of Panama is achieved. 2. Project Purpose: Solid waste services in the municipality of Panama are improved. 3. Assumed steps for achieving the project goals[1]: The project delivers trainings collection service and landfill management, establishes database of collection vehicles for regular maintenance and information network system for waste management and expands the existing landfill site. Through these activities, the project aims to improve the waste management service in the municipality of Panama. Thereby the waste management service in the municipality of Panama sustains financially.		
Activities of the project	1. Project site: The municipality of Panama 2. Main activities: Development of manuals for supervision of operation of landfill, trainings for collection service and landfill management, establishment of database for vehicle maintenance and information network of waste management, extension of the existing landfill. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 9 persons 2) Trainees received: 6 persons 3) Third country training: 21 persons 4) Equipment: PCs, software, printers, etc. Panama Side 1. Staff allocated: 36 persons 2. Land and facilities: project office, electricity, water supply		
Project Period	January, 2007 to December, 2009	Project Cost	307 million yen
Implementing Agency	Municipal Bureau for Urban and Household Cleansing (DIMAUD), Municipality of Panama (since 2010, the Authority for Urban and Household Cleansing (AAUD: Autoridad de Aseo Urbano y Domiciario) is responsible for solid waste management)		
Cooperation Agency in Japan	Kokusai Kogyo Co. Ltd., EX Corporation		
Related Projects (if any)	Japan's cooperation: The Study on Solid Waste Management Plan for Municipality of Panama (Development Study, 2001 -2003)		

II. Result of the Evaluation[2]

1 Relevance
This project has been highly relevant with Panama's development policy "integrated management of hazardous and non-hazardous waste in an environmentally rational and sustainable way" in the National Environment Strategy (Estrategia Nacional del Ambiente 2008-2012), development needs "improvement of waste management to cope with an increase in waste in urban areas", as well as Japan's ODA policy prioritizing environmental protection at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.
2 Effectiveness/Impact
[The Achievement of the Target set in the PDM] The project focuses on improvement of solid waste management service in the municipality of Panama through improvement of waste collection services, including redesign of collection routes,

[1] Reviewed at the time of the ex-post evaluation

[2] Construction of transfer station for the waste transportation as the Output 2 was excluded at the time of mid-term review due to the difficulties of land acquisition within the project period.

appropriate maintenance of collection vehicles and increases in public awareness, as well as expansion of landfill capacity. The landfill capacity was sufficiently expanded by the project and the current lifetime of the existing landfills is extended to additional 50 years. Also, the small illegal dumps or pile of garbage, so-called "Pataconicitos" in the eastern and northwestern part of Panama City have been progressively eliminated under the cooperation with the communities. However, the operation of collection services has not been improved due to the difficulty to carry out smooth and regular collections with the long distance from the collection sites to the landfills, the lack of transfer stations, traffic jams, uncompleted redesign of collection routes, mechanical troubles of collector vehicles and the lack of supervision for collection service. Therefore, the number of complaints tended to increase at the time of ex-post evaluation despite that it decreased at the project completion. Also, satisfaction of the citizens has been limited according to the household survey. As for the overall goal, the average revenue/expense ratio has been over 1.0 during the period from 2010 to 2012 despite of the downward trend. Although the operational cost per collection has been increasing due to the necessity of large investment in equipment, the Finance Department of AAUD has been monitoring the level of expenses in order to control the expenses not to exceed the revenue. However, it is difficult that the outcome of the project is appropriately evaluated with using this indicator and information only, since the overall goal of the project is more like sustainability of the project effects rather than the outcome of the project.

[Other issues to realize the Project Effect] The project originally planned to construct a transfer station for efficient collection service in order to cover the collection sites with long distance from the disposal site. However, the construction plan for the transfer station was eliminated due to the difficulty of land acquisition at the time of mid-term review. Since one of the key components of the project to improve the collection service was eliminated, improvement of the collection service was seriously inhibited. According to the interview survey for this ex-post evaluation in Panama City[3], 64% of them, in particular the persons living in the areas far from more than 15km from the landfills were not satisfied with the service whereas 22% of the persons living near the landfills were satisfied. The unreliable waste management service by AAUD induced the contract of private collectors who tend to dispose the garbage in much cheaper, informal dumps near the Cerro Patacon landfill site, which are organized by the communities, and the informal dumps have been causing environmental problems due to the inappropriate treatment. Also, from 2009 to 2012, the proportion of final disposal collected by DIMAUD/AAUD decreased 50.4% to 44.3% since the private collection services increased their share.

Therefore, effectiveness/ impact of the project is low.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improvement of solid waste management service of the municipality of Panama	The number of complaints to the 800ASEO* is on a declining trend.	(Project Completion) Achieved. In average, decreased from 13.9 per 1,000 people in 2006 to 9.1. （Ex-post Evaluation）Fluctuated year by year: increased by double from 2009 to 2010, decreased to half of the level of 2009 in 2011, then increased again in 2012.
	The satisfaction survey by DIMAUD shows that the level of satisfaction of the people toward the Solid Waste Services in the Municipality of Panama is improved.	(Project completion) No data available since the survey was not conducted. (Ex-post Evaluation) According to a nationwide household survey, 11% of the population considered performance of AAUD as excellent or good, and 50% considered it as bad or very bad.
	Final disposal services are continuously provided throughout the project period.	(Project completion) Achieved. The average capacity of landfill per day increased from 1,502 ton in 2007 to 1,531 ton in 2009. (Ex-post Evaluation) Increased from 1,903 tons in 2010 to 2,018 tons in 2012. The expansion of landfill size from 132 ha to 162 ha increased lifetime of landfill to additional 50 years.
(Overall goal) Establishment of sustainable solid waste management in the municipality of Panama	The average revenue/expense ratio regarding Solid Waste Management in the municipality of Panama for 5 years after the project is over 1.0.	(Ex-post Evaluation) The ratio improved from 0.94 in 2009 to 1.40 in 2010 and 1.35, 2011, but decreased to 1.19 in 2012. The operational cost per collection (USD/ton) decreased from 114.68 USD/ton in 2009 to 77.34 USD/ton in 2010, but increased to 148.61 USD/ton in 2011 and 194.81 USD/ton in 2012

Source：Project Completion Report, Data provided by AAUD, Interviews with AAUD officials.

＊This is the name of section which deals with customer's claim in DIMUD/AAUD

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was as planned (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 118%) because cost for the third country training and the local cost borne by the Japanese side were not included in the plan. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, AAUD was established under the Law No.51 of September 29, 2010, for more effective solid waste management in Panama City. The sufficient number of capable staff of AAUD, 2,713 employees is directly engaged in

[3] Interviews were conducted with 30 people on a random basis.

municipal waste management. The landfills are operated by Urbalia Panama S.A. (UPSA) under the supervision of the Department of Integrated Waste Management and Sanitary Landfills of AAUD. 10 engineers and technical staff supervise the landfills, but most of them are newly recruited and need specialized trainings for the landfill operation. Since the landfills have not been well-managed, the fires broke out in ETAPA 2, one of the landfills in Panama City in March, 2013. The operation manuals have not been utilized after the organizational change from DIMAUD to AAUD. In terms of the collector vehicles, the maintenance has been transferred to the private company. However, the inadequate corrective and preventive maintenance for collector vehicles has brought about longer time to prepare and to reduce frequencies waste collections. The Human Resource Department of AAUD has no specific training program for their staff to improve their waste management services from the technical aspect. As mentioned above, AAUD has been sustaining the financial balance on the waste management services. Since the waste management is one of the great concerns of the Central Government, the additional budget from the Ministry of Economy and Finance has been allocated to AAUD to purchase or rent collector vehicles.

From these findings, it is considered that the project has some problems in institutional and technical aspects of the implementing agency; therefore, sustainability of the project is low.

5 Summary of the Evaluation

This project has somewhat achieved the project purpose and overall goal of the target set in the PDM. However, the waste collection services have not been improved since one of the key components of the project has not been constructed due to the difficulty of land acquisition. Despite of the good financial balance of the waste management service by AAUD, the proportion of waste collection by AAUD has been decreasing due to the unreliable collection services. As for sustainability, improvement of waste management is still given importance in the Central Government. However, there are problems in terms of institutional and technical aspects due to inappropriate management of the landfills, inadequate preventive maintenance of collector vehicles, and the lack of technical trainings for the staff of AAUD. For efficiency, the project cost exceeded the plan.

In the light of above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency (AAUD):

- AAUD is recommended to fully utilize the manuals and indicators produced by the Project, particularly for the landfill management and monitoring.
- Also it is recommended to furnish the Planning Department with a vehicle and necessary software to continue the designing of routes as well as constructing the transfer station, in order to conduct waste collection in a more efficient way,.
- AAUD should encourage and facilitate the participation of its staff in training programs offered by JICA and other donors, particularly those engaged in the waste collection and supervision of the landfill operation.

Lessons learned for JICA

- As for appropriateness of the indicators of Overall Goal, it is not adequate to verify the sustainability of the solid waste management by only financial indicator since sustainability of the project effects should be verified from the aspects of policy, institutional and technical aspects as well as financial aspect.
  Overall goal should be set as an expected outcome which has direct causal relationship with the Project Purpose.
- After a major change of authorities in charge of continuing the activities of a former JICA Project, it is advisable to have several meetings with the new administrative and technical staff in order to confirm that they have the same interpretation of the project concepts and they are willing to make use of the project outputs.

Cerro Patacon Landfill (in use)

Other Landfill (unused after fire)

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Brazil office: January, 2014

Country Name	
Federal Republic of Brazil	Sustainable Use of Forest Resources in Estuary Tidal Floodplains in Amapá

I. Project Outline

Background	The floodplain areas covered the basins of the Amazon River and its branches reserves abundant forest resources and valuable ecological systems. In the estuary tidal floodplain areas in Amapá, which is located in the downstream basin of the Amazon River, no massive deforestation has been occurred yet. However, livelihoods of dwellers in the floodplain areas ("the riverbank dwellers") have been depending on logging. The state of Amapá is one of the poorest states in Brazil. In particular, Mazagão Velho, the project site, had the third highest poverty ratio of 67% in the state. While the area had a potential to produce furniture using local timber, the inefficient use of timbers and the low skills for timber processing and furniture making hampered the sales price of timbers logged by the riverbank dwellers. The low sales price of timbers forced the riverbank dwellers uncontrolled logging for their livelihood. Therefore, there was a concern that the uncontrolled logging could induce rapid deforestation in the areas and adverse impacts on lives of the riverbank dwellers. On the other hand, the state government of Amapá did not have comprehensive policy and legislation to manage the floodplains and forests and adequate management system. Under those situation, it was necessary to take countermeasures for the issues.		
Objectives of the Project	1. Overall Goal: The livelihood of riverbank dwellers living in the Project Area will be improved through sustainable use of forest resources on the estuary tidal floodplains in Amapá. 2. Project Purpose: The way of utilizing forest resources for improving the livelihood of riverbank dwellers will be improved in the project Area on the estuary tidal flood plains. 3. Logical flow of how the project responses to development issues: The project prepares a basic guidelines for sustainable use of forest resources in the Project Area (note 1), establishes Agroforestry Association by the riverbank dwellers, develops and implements forest management plan and agroforestry system (SAF: Sistemas Agro-Forestal), and concludes legal timber supply contract. By implementing the activities for sustainable use of forests, the project aims at increases in the volume of legally logged timbers, the volume of improved agriculture and timber production, the volume of legal timbers to be standardized and sold as well as practices of agro-forestry. Those improvements attain sustainable use of forest resources and improved livelihoods of the riverbank dwellers. (note 1) Floodplain Areas in Mazagão Velho and Maracá (Município de Mazagão)		
Project Information	1. Project site: Floodplain areas in Mazagã Velho and Marazá (Município de Mazagão) 2. Main activities: Development of basic guidelines for sustainable use of forest resources in the project areas, establishment of the Agroforestry Association by the riverbank dwellers, development of forest management plans and agroforestry action plans, conclusion of legal timber supply contracts between the Agroforestry Association and furniture production companies, and so on. 3. Inputs: Japanese Side 1) Experts: 7 experts 2) Trainees received: 6 persons 3) Equipment: Vehicles, small boat, outboard motor, PC, etc.. Brazilian Side 1) Staff allocated: 19 persons 2) Land and facilities: project office and office equipment		
Project Period	November, 2005 – May, 2009	Project Cost	285 million yen
Implementing Agency	State Institute of Forests (IEF: Instituto Estadual de Florestas), Amapá Institute of Rural Development (RURAP: Instituto de Desenvolvimento Rural de Amapá), Office of Industry, Commerce and Mining (SEICOM: Secretaria de Indústria, Comércio e Mineração)		
Cooperation Agency in Japan	Forestry Agency		
Related Projects	Japan's cooperation: ・Dispatch of expert (Sustainable use of floodplains ecological system, 2002) ・Dispatch of expert (Modernization of furniture industry in Amapá, 2003) Other donors' cooperation: ・Pilot Programme to Conserve the Brazilian Reinforets (PPG7, 1992-2009), Support for the Amazon Fund (the Norwegian Government, 2009-2015)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with the Brazilian' development policy, such as conservation and

sustainable use of forest resources specified under “the Federal Government Multiannual Plan (2004-2007)” and “the Amapá State Multiannual Plan (2008-2011)”, and development needs to improve livelihoods by use of timbers and introduction of agroforestry, as well as Japan’s ODA policy prioritizing support for environment. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project aimed at improvement of utilization of forest resources contributing to improvement of livelihoods of the riverbank dwellers through development of forest management plan in the project area with approval of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), promotion of legal logging by the community (the Agroforestry Association), expansion of production and sales of legally logged timbers as well as introduction of agroforestry. By the introduction of agroforestry, the total number of households participating in the agroforestry action plan reached 117 in Mazagão and 71 in Maracá during the project period. 93 ha in Mazagão and 55 ha in Maracá of the land were cultivated for agroforestry. At the time of terminal evaluation, the agroforestry production attained 801.9 tons in Mazagão and 318.1 tons in Maracá which significantly exceeded the target values. At the time of ex-post evaluation, 109 households in Mazagão and 127 in Maracá participated in the agroforestry action plan and the cultivated land of the project areas were expanded to 109 ha and 129 ha, respectively. The main product of the agroforestry in the project area is acai which are mainly harvested from natural forests of acai. At the time of ex-post evaluation, the annual production volume of acai was 112 tons in Magazão and 312 tons in Maracá. However, the forest management plan ,which is a basic plan for the sustainable use of forest resources, was not approved during the project period because a) right of land use of farmers who were members of the Agroforestry Association has not been established[1], and b) the environment license was not been given to the Association without established right of land use (though the process to receive the license has been progressed). Therefore, the legal logging and sales of timbers was not able to start during the project period. (It was expected to establish the right of land use for Mazagão in September 2013 and Maracá in 2014. In the case of Maracá, entitlement of the right will be through the Association of Workers in Agro-extraction Settlement in Amapá (ATEXMA), which is an umbrella organization of the Agroforestry Association of Maracá.) As a result, the Project Purpose has been limitedly achieved due to the attainment of the project limited to the implementation of the agroforestry in the project areas.

Strainer of acai berries, a necessary time for the riverbank dwellers.

As for the Overall Goal, no sales amount from the sales of legally logged timbers has been resulted because legal logging and sales in the project areas has not been started yet. Also, no expected impact such as furniture production using timbers from the project areas, has not been realized though the project expected that the Agroforestry Associations would have supplied legally logged timbers produced in the project areas to the furniture associations in Amapá. On the other hand, the agroforestry activities introduced by the project contributed to increase in income of farmers participating in the agroforestry action plans through the production and sales of acai. At the time of ex-post evaluation, while the sales price of acai was 40 reais per 60kg, the annual revenue of the Mazagão Agroforestry Association and the Maracá Agroforestry Association were approximately 74,680 reais and 208,000 reais[2], respectively.

Besides that, the technologies introduced by the project, including agroforestry, have been disseminated by IEF through the Programme for Promotion of Forest Extraction (PROEXTRAVISMO) by the state government of Amapá. In addition, the importance of the floodplains in Amapá was recognized through the project. While the state government of Amapá reinforced the forest plan, the Brazilian Enterprise of Agricultural Research (EMBRAPA) conducted forest surveys and the National Institute of Colonization and Land Reform (INCRA) enhanced land readjustment. Furthermore, the SAF products have been supplied to schools by the strengthened access to food programs such as the National School Feeding Program (PNAE). In terms of control of illegal logging, IEF and RURAP reported effects of environmental education contributed to its reduction. However, while the Maracá Agroforestry Association reported 40% of reduction in illegal logging, the Mazagão Agroforestry Association reported that it increased in their area.

Although Counter Parts of the implementing agency and JICA made efforts to coordinate with the related organizations to accelerate the process of the environment license and the right of land use, the forest management plan has not been approved yet. As a result, despite of the effects of the introduction of agroforestry, other expected effect of legal logging and sales has not been realized. Therefore, effectiveness/impact of the project is low.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Improvement of use of	(Indicator 1) The volume of legally logged timbers in the project area (Maracá)	Terminal Evaluation: Unlikely to be achieved. Unlikely to start legal logging during the project period since the

[1] A typographical error was corrected (April 2015)

[2] The exchange rate as of September, 2013, 1 real is equivalent to 42 JPY. 74,680 reais = approximately 314,000 JPY and 208,000 reais = approximately 874,000 JPY.

forest resources to contribute to improvement of livelihood of the riverbank dwellers in the project areas	according to the approved forest management plant will be 200 m^3.	forest management plan has not been approved. Ex-post Evaluation: The production of legally logged timbers has not been started since the forest management plan which is a precondition of the legal timber production, has been still under preparation.
	(Indicator 2) The volume of agroforestry production introduced or improved by the project in the project area will increase to 500 tons.	Terminal Evaluation: Achieved. 801.9 tons/year in Mazagão and 318.1 tons/year in Maracá. Ex-post Evaluation: Confirmed as the Overall Goal.
	(Indicator 3) The volume of legally logged timbers to be standardized and sold for furniture production in the project area (Maracá) will increased to 50m^3.	Terminal Evaluation: Unlikely to be achieved. The delay of approval of the forest management plan constrained conclusion of the timber supply contract. Ex-post Evaluation: No production and sales of legally logged timbers.
(Overall goal) Sustainable use of forest resources and improvement of livelihoods of the riverbank dwellers in the project areas in the floodplains in the state of Amapá	(Indicator 1) The forest management plan is continuously implemented by the Agroforestry Associations in the project areas in the floodplains in the state of Amapá	Ex-post Evaluation: No implemented since the forest management plan has not been approved.
	(Indicator 2) In the Project areas, the volume of agroforestry production introduced or improved by the project will increase to at least 700 tons by 5 year after the project completion.	Ex-post Evaluation: The production of acai: 112 tons/year in Mazagão and 312 tons/year in Maracá.

Source：Terminal Evaluation Report and the interviews with CPs.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was as planned (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 119%) due to the increases in the inputs for dispatch of separate experts of the chief advisor and the forest management expert after the mid-term evaluation, repair of the boat, rental of other boat less affected by waves for safety. Therefore, efficiency of the project is fair.

4 Sustainability

A part of estuary tidal floodplain forests

In the policy aspect, the activities of the project has been supported since the state government of Amapá newly introduced the Community and Family Forest Management Program and enhanced the policy for promotion of forest management and agroforestry by communities which were introduced by the project at the time of review of the state multiannual plan in 2011. In addition, since the State Decree No.3325, providing for exploitation of natural forests, including legal reserved forests in the state of Amapá became effective since June, 2013, it is expected that the forest management plans elaborated by the Project can be legally endorsed. For the institutional aspect, IEF enhanced its implementation structure through newly establishment of the Mazagão Office to cover Maracá and Mazagão. Despite of sustaining the Agroforestry Association, the forest management plan and the timber supply contract have not been implemented yet since the plan has not been approved and the production and sales of legally logged timbers have not been started. In terms of the environment license for the riverbank dwellers, INCRA, a federal organization, and the State Environment Office (SEMA) jointly commit to licensing as the voice of INCRA has been enhanced. Since INCRA is responsible for support small scale farmers to obtain right of land, they cooperates with SEMA to accelerate procedures in SEMA. As a result, the process of licensing has been progressed. For the technical aspect, the technical report developed for dissemination of outputs by the project has been utilized and the activities of agroforestry introduced by the project have been adequately continued by the farmers who participated in the project. However, the trainings for logging by chainsaw which is necessary for adequate logging, has not been delivered since the forest management plan has not been approved. In terms of timber processing skills for furniture production companies, furniture workers who participated in technical trainings by the project utilized skills obtained. Also, SENAI continues technical trainings for furniture companies. For the financial aspect, the budget for implementation of forest management plan and agroforestry has been ensured by the state government of Amapá despite of the unapproved forest management plan. Some problems have been observed in the technical aspects since approval of the forest management plan has been still unclear despite of some positive factors such as expectation of the environment license. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has partially achieved the project purpose to improve use of forest resources contributing to improvement of livelihood of the riverbank dwellers in the project areas. Although the agroforestry has been practiced, the planned production and sale of legally logged timbers by the community has not been realized yet since the forest management plan has not been approved due to the delays of establishment of right of land use

and the environment license. As for the Overall Goal, while the activities of agroforestry increased production and sales of acai and incomes of the participating farmers, the sales revenues from the legally logged timbers have not been generated since the production and sales of legal timbers has not been started. As for sustainability, despite of no problem in the policy, institutional and financial aspects, the unapproved forest management plan brought about some problems in the technical aspect. As for efficiency, the project cost exceeded the plan due to the increases in inputs for dispatch of separate experts of chief advisor and forest management expert, repair of boat, rental of another boat less affected by waves for safety. In the light above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

[IEF]

- IEF needs to jointly take actions with other governmental organizations supporting small scale producers, including INCRA in order not to miss the opportunity which enables to promote the process of establishment of right of land use for the riverbank dwellers in the project areas under the situation where the voice of INCRA for the environment license has been enhanced. Also, IEF should support and facilitate the Maracá Agroforestry Association to contact ATEXMA in order to give the Association the right of land use promptly.

Lessons learned for JICA:

- In the project, the expected outcome of the project such as production and sales of legally logged timbers has not been realized due to the delays of establishment of right of land use and the environment license and the unapproved forest management plan. Since the securement of right of land use is essential to realize the expected outcome of the project, it should have been a precondition for starting the project. Or the project with sufficient project period should have been designed to incorporate activities to support establishment of right of land use and to involve adequate organizations related to the issues.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Paraguay Office/ January, 2014

Country Name	Quality improvement of school management
Republic of Paraguay	

I. Project Outline

Background	The Paraguay government initiated the Education Reform in 1994 based on "PARAGUAY 2020" and was continuing the reform in order to fully accomplish the 9-year obligatory education. As a result, the net enrollment rate was steadily improved. However, the students' aptitude level was low and dropout rates were high. Therefore quality of education needed further improvement. With regard to improving the quality of education, the Paraguay government has conducted teacher training and materials development with the cooperation of the World Bank and Spain, etc. However, as to insufficient annual school hours as well as insufficient coordination between schools and parents, the knowledge and experiences of Paraguay were not enough to solve such problems and did not receive sufficient cooperation from other donors in this regard. Although regional organizations in some areas conducted capacity enhancement training for principals who tool a leading role in school management, such system had not been established nationwide and monitoring of the trainings' contribution to the improvement of school management was not properly conducted.
Objectives of the Project	1. Overall Goal: School management is improved in the schools providing basic education in the target regions. 2. Project Purpose: The training model for principals in the central schools[1] (Principal Training) for improving school management is established in the selected prefectures. 3. Assumed steps for achieving the project goals[2]: The project i) prepares principal training program consisting of preparation methods of School Educational Project (PEI) and Annual School Plan (POA), ii) establishes and applies the principal training model (note1) and improve school management capacity through the implementation of training by Japanese experts for instructors (Principal Training Unit members) and supervisors (note2). With the verification and extension of effectiveness of the principal training model at central schools, the project aims to improve school management by applying the model at associate schools. (note1) principal training model establishes a guiding system which largely guarantees practices of theories/methods learned through training at each school by combining i) training which contributes to improvement of school management by the preparation of PEI and POA and ii) training, monitoring and follow up schemes. "Establishment of the model" is defined as "approval of guidelines by MEC. (note2) Principal Training Unit consists of six (6) members from i) Head Office of Preschool/Primary Education, ii) Head Office of Education Process Enhancement, iii) IFD (Institute of Teacher Training) of MEC, and two (2) members from Prefectural Education Supervision/Coordination Offices of the project's target prefectures (Central and Cordillera). Instructor: training lecturers belonging to Principal Training Unit of MEC Supervisor: training lecturers belonging to Prefectural Education Supervision/Coordination Offices and Teacher Support/Supervision Offices of the pilot prefectures
Activities of the project	1. Project site: Part of Central and all of Cordillera (Central: 50 schools、Cordillera: 54 schools) 2. Main activities: Preparation of principal training program and training module, principal training at the prefectural level by instructors, trial of principal training at the regional level by supervisors, implementation of training for instructors and supervisors, trial of monitoring and evaluation of school management, etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 7 persons 2) Trainees received: 10 persons 3) Equipment: vehicles, mobile phone terminals, desktop computers, voice recorders, etc. Paraguay Side 1) Staff allocated: 8 persons 2) Land and facilities: Two (2) office spaces for Japanese experts and unit members 3) Local cost, salaries to counterpart personnel, training cost, insurance for vehicles

Project Period	July, 2006 to January, 2009	Project Cost	265 million yen
Implementing Agency	Ministry of Education (MEC)		
Related Projects	Japan's cooperation: Regional Training "Improvement of School Management in Central and South America" (Follow up, March 2009); Project for Improvement of School Management (Follow up, April 2010-March 2011); Dispatch of JOCV (primary school teachers, instructors of teacher training, etc.); Dispatch of Senior Volunteer to MEC. Other donors' cooperation: Primary Education Improvement Project "Escuela Viva" (IDB); Project for Quality Improvement of Secondary Education (MECES) (World Bank,1995-2000)		

II. Result of the Evaluation

1 Relevance

[1] Central schools are the largest schools in the primary education school network which usually consists of 5-8 neighboring schools. They provide advices for associate schools within the network and communicate/coordinate with relevant administrative institutes. The total number of central schools targeted by the project is 104 (Central: 50 schools, Cordillera: 54 schools).

[2] Reviewed at the time of the ex-post evaluation.

This project has been highly relevant with Paraguay's development policy "access to education (complete achievement of 9-year compulsory education)", "improvement of quality, effectiveness and equity of education" as set in "PARAGUAY 2020 (1994)" and "Paraguay Strategic Education Plan 2020 (2008)", development needs "school management capacity of principals to secure quality improvement such as guarantee of school hours", as well as Japan's ODA policy; JICA's Country Assistance Program (2007) and Basic Education Initiative for Growth (2002) at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on establishment of principal training model that contributes to improvement of school management at central schools in the target prefectures and objectives at the time of the project completion were to prepare principal training guidelines which include i) the methods of operation and contents of principal training, ii) the methods of school management after training, iii) the way to expand principal training on a national scale and iv) the materials for the trainers and trainees as well as v) to obtain official approval of the guidelines from MEC. As major achievements, principal training guidelines were prepared and the capacity of instructors and supervisors of the principal training, who actually carry out training activities, were enhanced. Regarding i) and ii) the methods of operation and contents of principal training and the methods of school management after training are described in detail and clearly. As for iv), the materials (kits) have been prepared as an attachment to guidelines and for v), the developed guidelines were approved by MEC at JCC held in November 2008. On the other hand, concerning iii), the mechanism to expand principal training on a national scale has not been established by MEC and detailed descriptions have not been included in the guidelines. After the project completion, IFD has been in charge of principal training and supervisors and instructors who were trained by the project have conducted the relevant training and monitoring activities, though the training system is different among prefectures. The mechanism to expand principal training on a national scale has not yet been established and IFD has proposed relevant training as a part of continuous training program and employed and trained new instructors with the approval of MEC. In addition, the number of supervisors in the targeted two (2) prefectures increased. Principal training guidelines which include kits have sufficiently been utilized at the stage of ex-post evaluation.

Principal training by using guidelines

Monitoring report by supervisors

As for the overall goal "improvement of school management in terms of primary education in the target areas", principals of 101 targeted central schools conduct principal training, monitoring and instruction, and extend PEI and POA to associate schools. 167 central schools and 531 associate schools in the target prefectures have already prepared and practiced POA. The number of associate schools is on the increase as a result of extension activities by non-targeted central schools which participated in principal training, and reached to 297 and 235 Central and Cordillera respectively. According to supervisors who conduct monitoring, school hour management was rationalized and the average rate of realization of school hours increased from 35% at the time of the baseline survey in 2007 to 88.33% in 2011 (based on the survey conducted by JICA) through preparation of and adherence to class schedule. Furthermore, positive changes, such as holding meetings between principals/teachers and parents to discuss school management, have been observed. These events illustrate improved school management by POA. However, there exist some schools that are not able to fully practice POA due to insufficient budget.

In this way, this project has largely achieved the project purpose. Instructors and supervisors obtained necessary skills through training during the project period and have been extending the model by using training guidelines after the project completion. In addition, schools whose principals completed the training show improved management.

Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) School management is improved in the schools providing basic education in the target regions.	The methods of operation and contents of Principals' Training are described clearly (in the guidelines).	(Project Completion) Described in detail and clearly (Ex-post Evaluation) Same as above. Training methods have been modified according to demands and environment
	The methods of school management after training are described (in the guidelines).	(Project completion) Described in detail and clearly (Ex-post Evaluation) Same as above.
	The way to expand Principals' Training on a national scale is described (in the guidelines).	(Project completion) Not described in detail and clearly. (Ex-post Evaluation) Although the way to expand Principals' Training on a national scale has not been established, IFD conducts relevant training as a part of continuous training programs.
	The materials for the trainers and trainees are included (in the guidelines).	(Project completion) The materials (kits) have been prepared as an attachment to guidelines and submitted to curriculum/evaluation/instruction head office by preparation team of a guideline. (Ex-post Evaluation) The materials (kits) have sufficiently been utilized.
	The developed guidelines are agreed by the MEC (Paraguayan side)	(Project completion) The developed guidelines were approved by MEC at JCC held in November, 2008.

(Overall goal) The training model for principals in the central schools (Principal Training) for improving school management is established in the selected departments.	Number and quality of POA of associate schools in the neighboring prefectures	(Ex-post Evaluation) 101 targeted central schools extend POA to associate schools and 167 central schools and 531 associate schools have already prepared POA. Regarding the quality of POA, 98.18% of schools have fulfilled the quality of POA set up by the project in both target prefectures and overall quality was greatly improved. Also activity records have shown improvement with the plans based on POA.
	Degree of achievement of POA of associate schools in the neighboring prefectures	(Ex-post Evaluation) The number of associate schools, which practice POA, has been increasing. 297 associate schools in Central Prefecture and 234 associate schools in Cordillera Prefecture practice it.

Source：Project Completion Report, Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost slightly exceeded the plan (ratio against the plan: 106%) because of additional expenses such as printing of training guidelines. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, this project is still given importance in the current development policy in Paraguay as “National Education Plan 2024 (2011)” aims to enhance educational level by improving school management system. Institutionally, main responsibilities of MEC include monitoring and evaluation of PEI and POA and Technical Group of Teacher Training Bureau conducts training for instructors at various IFDs and also carries out training for principals of central schools and as well as monitoring and evaluation activities in collaboration with Education Supervision Office. Part of personnel trained by the project currently carries out activities unrelated to the project because of a reshuffle of personnel at MEC. At present, one (1) technician of Teacher Training Bureau and also one (1) technician of IFD are conducting activities, which are directly related to the project. At the regional level, there are capable personnel who conduct monitoring, evaluation and instruction which are part of tasks of Prefectural Coordination Offices and nationwide Education, Management/Supervision Offices and also there are competent personnel to extend the principal training model. Problems include insufficient personnel to continue activities directly related to the project and weak coordination between Teacher Training Bureau and Education Supervision/Coordination Offices in each prefecture. As for the technical aspect, although training for instructors and supervisors has been continued with the guidelines prepared by the project, further technical strengthening is desirable for model extension. Majority of equipment provided by the project are currently utilized, however, photocopy machines, printers and computers require maintenance or exchange of parts, or disposed because of an unrecovered damage. On the financial aspect, since principal training is not an independent project or program at MEC, no budget is secured. Such budget is included in the integrated budget of continuous teacher training program. Principal training carried out in “Escuela Viva II” supported by IDB has budget to conduct courses specializing in school management for principals of 600 urban schools and 2,000 rural schools, including central and associate schools targeted by this project. However, as mentioned in “Effectiveness/Impact, there exist some schools that delay or suspend activities determined by POA due to insufficient budget.

From these findings, it is considered that the project has some problems in institutional, technical and financial aspects of the implementing agency; therefore, sustainability of the project is fair.

5 Summary of the Evaluation

This project has achieved the project purpose of establishment of principal training model that contributes to improvement of school management by fully utilizing principal training guidelines approved by MEC and by continuously implementing principal training by IFD, though the training system is different among prefectures. On the overall goal, extension of principal training to other schools in the target prefectures and preparation and practice of POA have contributed to better school management in terms of primary education in the target areas. As for sustainability, this project is still given importance in the current development policy. However, there are problems in terms of institutional, technical and financial aspects since part of personnel trained by the project currently carries out activities unrelated to the project after a reshuffle of personnel at MEC, which technically undermines the model extension, and there exist some schools that delay or suspend activities determined by POA due to insufficient budget as well as unsatisfactory finance for the model extension.

In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

- Recommendations for Implementing agency:

It is essential that relevant offices (Teacher Training Bureau, Head Office of Preschool/Primary Education and Head Office of Education Process Enhancement) make policy instructions for each school in order to secure practices of school management improvement. It is necessary to strengthen coordination system among relevant central and prefectural offices so that relevant central offices, particularly Teacher Training Bureau and each Prefectural Education Supervision/Coordination Office coordinate, improve school education management and teacher quality, prepare and practice PEI/POA at each school.

- Lessons learned for JICA:

Principal training model and its guidelines established by the project were highly evaluated by supervisors and relevant educational agencies such as IFD, since training contents adjusted to the existing system were introduced and preparation procedures of PEI and POA are explained in easy and logical expressions in the guidelines. Guidelines were prepared through the formation of consensus among relevant organizations during the project and the quality level of these guidelines is quite high and they can be directly utilized for the implementation of training. In addition, the guidelines are detailed, practical and adjusted to the actual conditions of the country. These experiences can be applied to other similar projects.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Palestine office: December, 2013

Country Name	The Project for Capacity Development on Solid Waste Management in Jericho and Jordan River Rift Valley in Palestine
Palestinian Authority	

I. Project Outline

Background	Palestine consists of the West Bank and the Gaza. Under the Palestinian Authority, as a central government, there were 16 Governorates (corresponds to prefecture) and 483 Local Government Units (LGU). Since most of LGUs were not able to provide sufficient solid waste management (SWM) service due to the budget constraint, there have been concerns about negative impacts of inadequate waste management on health and environment. On the other hand, the Palestinian Local Authorities Law (1997) allows organize a Joint Services Council (JSC)[1] as a confederation of small scale LGUs in order to provision of public services. In terms of SWM, the joint services such as waste disposal by confederation of LGUs were started. Under the situation, the Palestinian Authority requested Japan' technical cooperation to establish a model of SWM based on JSC in the region of Jericho and Jordan River Rift Valley (JJRRV).		
Objectives of the Project	1. Overall Goal: 1) In PNA, a basic policy and a concrete action plan on integrated SWM are formulated. 2) Effective system of SWM modeling JJRRV is diffused in PNA 2. Project Purpose: 1) Sustainable and sanitary system of SWM is introduced in JJRRV. 2) Experiences of improvement on SWM in JJRRV are shared as a model for other areas in PNA. 3. Assumed steps for achieving the project goals[2]: The project establishes organization as a main body (JSC) for SWM in JJRRV, implements an action plan for improvement of SWM (waste collection and transport, rehabilitation of disposal site, etc.), organizes workshops to increase public awareness of SWM. By establishing a model of SWM system and sharing experiences of the model with other LGUs, the project aims at elaboration of a basic policy on SWM at national level as well as dissemination of the SWM model based on JSC.		
Project Information	1. Project site: Jericho and Jordan Rift River Valley 2. Main activities: development of organization for SWM, trainings for JSC staff, development of manuals for SWM, improvement of waste collection and transport, improvement of disposal site, workshop for the citizens, etc. 3. Inputs: Japanese Side 1) Experts: 0 for Long term, 10 for Short term 2) Trainees received: 22 persons 3) Third country training (Jordan): 9 persons 4) Equipment: expansion of Jericho disposal site, repair of SWM equipment, spare parts, etc. Palestine Side 1) Staff allocated: 6 persons 2) Land and facilities: facility and equipment of JSC.		
Project Period	September, 2005 – August, 2008 (Extension) September, 2008 – February, 2010	Project Cost	395 million yen
Implementing Agency	Ministry of Local Government (MoLG), Joint Council for Services Planning and Development for Solid Waste Management in Jericho and the Jordan River Rift Valley[3] (JSC JJRRV)		
Cooperation Agency in Japan	Yachiyo Engineering Co., Ltd.		
Related Projects	Japan's cooperation: (Technical Cooperation: TA, Grant Aid: GA) Improvement in Local Governance System in Palestine (TC, 2005-2010); Follow-up Cooperation (2008-2011); Improvement in Local Governance System in Palestine Phase II (TC, 2010-2014); Provision of Waste Collection Equipment via UNDP (GA, 2006-2009); The Project for Improvement of Solid Waste Management in the West Bank (GA, 2012-2015) Other donors' cooperation: Solid Waste and Environment Management Project (WB, 2000-2009); South West Bank Solid Waste Management Project (WB, 2009-2014); Solid Waste Management Program (GIZ/KfW, 2005-2012, 2011-)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with the Palestine's development policy, such as "establishment of waste management system" specified under "the Palestine Environment Strategy (1999)" and "the Palestine Reform and Development Plan (2008-2010)", and development needs to implement adequate collection and final disposal of wastes, as well as Japan's ODA policy to support for nation-building and reform including improvement of administrative capacity and

[1] During the project period, the name "the Joint Councils for Services, Planning and Development (JCspd)" was sometimes used instead of the Joint Service Councils.

[2] Reviewed at the time of the ex-post evaluation.

[3] The JSC JJRRV is composed of 17 LGUs including the city of Jericho and 16 LGUs in Jordan River Rift Valley.

improvement of basic infrastructure including waste management. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The Project focuses on introduction of sustainable and sanitary waste management (WM) system in JJRRV and sharing experiences among related organizations and the Project Purpose was mostly achieved. At the time of project completion, regular waste collection service started in 16 out of 17 LGUs in JJRRV and use of the existing four illegal disposal sites were suspended. Thus, it was considered that illegal dumps ware reduced. At the time of ex-post evaluation, the regular waste collection service has been continued in 13 LGUs while the service has been suspending in 3 LGUs where the tariff collection rate decreased. The volume of illegal dumps[4] at the time of ex-post evaluation is not able to be measured due to no data of total solid waste production. However, the fact that the decrease in the number of illegal dump sites and the increase in the collected and disposed volume of wastes at the Jericho disposal site indicates that the volume of illegal dumps have been reducing in JJRRV. The political instability since March 2006 induced financial difficulties in Palestine. As a result, the medical solid wastes were landfilled at the special site in the Jericho disposal site at the time of project completion due to the lack of budget to cover fuel cost for incineration disposal at the New Jericho Hospital. At the time of ex-post evaluation, the situation has been continued despite that incineration disposal for a part of medical disposal has been started. On the other hand, JSC JJRRV established its organizational structure, including clarified division of responsibilities, introduction of accounting system, and equipment maintenance system, through the project implementation. In particular, improvement of tariff collection method contributed to financial surplus since 2009 and to sustain good financial basis despite concern about financial deficit. In addition, during the project implementation, the waste disposal system introduced by the project was shared as a model of regional WM system based on JSC through a national level seminar on WM system, the West Bank 11 JSC meetings and so on.

The transshipment base before transporting to the final disposal site

Transporting containers of collected waste to the final disposal site

As for the overall goal, as a result that the approach of the WM system based on JSC has been reflected in "the National Waste Management Strategy (2010-2014)", JSCs providing the WM service were established in all the governorates. Furthermore, dissemination of the model has been promoted through seminars organized by the JICA follow-up cooperation and supports by other donors. Consequently, some components of the model introduced by the project[5], such as operation and maintenance system of facilities and equipment, human resource management, as well as financial accounting system, have been practiced by 7 out of the 11 JSC in JJRRV. Therefore, it can be judged that the overall goal has been partially achieved. In addition, other positive impacts are observed. Illegal dumps have been decreased in the areas delivered SWM service based on JSC, such as Tulkarem and Nabulus, by closing many illegal disposal sites and by adequate WM at the adequate final disposal site. The reduction of illegal dumps contributed to improvement of hygienic environment of surrounding areas. According to the interviews with residents in rural area, bad odor and hygienic environment have been improved and diseases of children have been decreased. Also, the project brought about a social impact of awareness building on coproduction by administrative officers and the residents as well as payment for public services through the project activities. On the other hand, a delay of construction of new regional final disposal site in Ramallah resulted in continuous operation of the Jericho disposal site. Since the capacity of the Jericho disposal site mostly reaches the limit, air pollution has been induced by fires of wastes at the surface of the disposal site. The problem of bad odor has been also caused by undeveloped swage system despite receiving swage and waste of livestock. Those problems are expected to be solved by JICA's grant aid projects: the planned project of expansion of the Jericho disposal site and the on-going project for construction of sewage treatment system to be completed in 2015.

Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) 1.Introduction of sustainable and sanitary waste management system in JJRRV 2.Sharing of good practices of waste management	Waste collection and transportation system is improved so that illegal dumping is reduced.	Project completion: Achieved. 16 LGUs covered by regular collection service. 4 illegal dumping sites in JJRRV were closed; Ex-post evaluation: The increase in the estimated waste volume collected by the JSC from 11,586 tons in 2010 to 14,025 tons in 2012 and the waste volume disposed at the Jericho disposal site from 10,985 tons to 13,305 tons.
	Segregated collection and proper treatment of medical waste is put into practice.	Project completion: Partially achieved. Disposed at the specific section of the Jericho disposal site because incineration at the New Jericho Hospital was not implemented due to the financial difficulty; Ex-post evaluation: Continuously disposed at the specific section of the Jericho disposal site. Some medical equipment, including medicines, has been incinerated at New Jericho Hospital.
	Controlled dumping site which is suited to the situation of JJRRV is realized.	Project completion: Achieved. Implemented disposal at the improved Jericho disposal site; Ex-post evaluation: Possible to dispose waste at the Jericho disposal site by expansion of the capacity from 2.5m to 4m by March 2014 despite the termination of actual capacity of the site.
	The organization to provide SWM service improves its	Project completion: Achieved. Positive financial balance of JSC JJRRV since 2009; Ex-post evaluation: Sustaining positive financial balance of JSC.

[4] The volume of illegal dumps is estimated by difference between the total solid waste production and the total solid waste disposed at final disposal sites.

[5] Utilization of the management manuals and public awareness activities have been practiced by 4 JSC.

	financial base.	
	Experiences in JJRRV for improvement on SWM are well shared among other local authorities in PNA.	Project completion: Achieved. Shared experiences of the project with LGUs, related ministries, and other JSCs through the seminars and workshops.
(Overall Goal) 1. Establishment of basic policy and concrete action plans on integrated SWM for LGUs	Policy paper on SWM of the JSC	Ex-post evaluation: Achieved. Reflected a model of SWM based on JSC in the national strategy.
	Concrete action plans (such as medium term plan) based on policy above.	Ex-post evaluation: Achieved. Elaborated an action plan.
2. Dissemination of a effective model of SWM nationwide	Holding seminars and workshops regularly in JJRRV	Ex-post evaluation: Achieved. Implemented seminars and trainings for dissemination of the model as a follow-up cooperation by JICA.
	Realization of SWM modeling JJRRV among local authorities in PNA.	Ex-post evaluation: Achieved. Implemented components of the model, including management of facility and equipment, human resource and financial accounting system, by 7 JSC.

Source : Terminal Evaluation Report, Project Completion Report, and Interviews with the Counterparts

3 Efficiency

While the inputs were appropriate for producing the outputs of the project, the project period and the project cost were exceeded the plan (ratio against the plan: 150%, 146%) due to the delay of procurement of necessary equipment (waste collection vehicles and equipment) and the necessity of extension of the activities by the Japanese experts. The procurement was implemented by UNDP because the political turmoil in Palestine made difficulty for JICA to directly procure them. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy aspect, the SWM model introduced by the Project was reflected in the National Waste Management Strategy (2010-2014), setting out development of regional waste collection and final disposal based on JSC. The organizational arrangement of operation and maintenance of disposal site and collection vehicles, waste collection service for 13 LGUs, final disposal at the Jericho disposal site has been sustaining by JSC JJRRV. The number of staff of JSC JJRRV increased to 38 staff. In addition, LGUs covered by the collection service have been continuing tariff collection, primary waste collection, monitoring of secondary collection and public awareness activities. There is a certain mechanism to disseminate the SWM model through the national committee for WM and the number of staff has been gradually increasing. However, the organizational structure for dissemination of the SWM model has not been sufficient due to the lack of budget and staff. In addition, the 11 JSCs in the West Bank committee has not been functioning since the completion of the follow-up cooperation by JICA, while the information and experience have been informally shared among the directors of each JSC despite the experience sharing of the improved SWM by the project through the 11 JSC meetings. From the technical aspect, in JSC JJRRV, the manuals for SWM and operation of final disposal site have been utilized and the knowledge and skills acquired through the project activities have been sustaining. However, those technical manuals have not been necessarily utilized by other JSCs. The frequent changes of technical staff induced by the suppressed salary required technical trainings for newly recruited technical staff but the trainings have been delivered by the donors' supports including the follow-up cooperation by JICA (2010) and the support by EU (since 2013) because of the limited budget of MoLG and the lack of human resource for training planning and technical training. As for the financial aspect, the overall collection rate of waste collection tariff, the main revenue source of JSC JJRRV, improved from 63% in 2008 to 93% in 2009. Since 2009, JSC JJRRV has maintaining the financial surplus. On the other hand, the collection rate of each LGU covered by JSC varied. The revenue from the City of Jericho with the collection rate of 100% compensated the loss from LGUs in rural areas where the population have lower affordability (the collection rate 36%-59%). The service for LGUs stopping payment of tariff has been suspended. The subsidy from MoLG was provided until 2010, but stopped in 2011 due to the fiscal difficulty. It is expected that the subsidy will be offered to active JSC, but the continuity is uncertain. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has mostly achieved the project purpose to introduce the sustainable and sanitary SWM based on JSC JJRRV. As a result, regular waste collection and sanitary waste disposal have been realized in JJRRV and the financially stable organizational structure for service provider of waste collection and disposal was established. Also, the overall goal has been mostly achieved as planned through reflection of the SWM model based JSC in the national waste management strategy. As for sustainability, although the SWM model is endorsed by the national strategy, the SWM model have not been sufficiently disseminated to other JSCs due to the limited budget of MoLG and the lack of staff. In addition, technical trainings for staff in charge of waste disposal have been depending on the donors' support. While the JSC JJRRV has been sustaining financial surplus generated by the stable tariff collection, the suspension of service for LGUs stopping payment has been partially contribution of financial stability. Therefore, some problems have been observed in the organizational, technical and financial aspects. As for efficiency, the delay of procurement of waste collection via UNDP resulted in the delay of the project activities which brought about the extension of the project period as well as the increase in the project cost.

In the light above, the evaluation of the project is satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- In order to disseminate the SWM model introduced by the project, it is recommended to allocate necessary staff and

budget in the JSC division of MoLG and to support other JSC with insufficient capacity through utilization of the SWM manuals developed by the project. In addition, it is essential to reactivate the 11 JSC meeting which is a good opportunity for notification and guidance from the central government to the local administrative units.

Lessons learned for JICA:

- It is essential to consider methodologies for encouraging the residents of the service users to participate project activities as well as organizational structure of service provider incorporating participatory approach from the project formulation and planning stage. This project implemented large scale public awareness activities for the residents and establishment of organizational structure for regular waste collection service incorporating cleaning duty of the residents for garbage collection points. Such participatory approach made understanding of the residents and contributed to high collection rate of waste collection tariff. As a result, the stable financial basis of JSC enabled to stably continue the waste disposal service after the project completion. In addition, the approach of co-work involving the residents, which improved awareness of the residents for public services, is a key factor to ensure sustainability.
- Utilization of the follow-up cooperation is effective to disseminate project effects or to reflect them in national policy because those activities require continuous efforts even after the project completion. For this project, the follow-up cooperation contributed to promotion of spontaneous cooperation activities among implementing agencies of each administrative areas which provide SWM services. On the other hand, it is important to consider how to utilize such follow-up activities to support continuous efforts after the project completion at the planning stage.
- For the project aiming at establishment and dissemination of a model, it is preferable to incorporate activities for capacity development of agencies responsible for dissemination of the model, such as a line ministry of the central government. In the case of this project, the speed of dissemination has been slowed down after the completion of the follow-up cooperation due to the undeveloped institutional structure of MoLG for dissemination.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Turkey office: November, 2013

Country Name	Improvement of Livelihood for Small-Scale Farmers in Eastern Black Sea Region
Republic of Turkey	

I. Project Outline

Background	The Eastern Black Sea Region (DOKAP) covering the 6 mountainous provinces of Artivin, Giresun, Gümüşhane, Ordu, Rize and Trabzon, is one of the least developed areas in Turkey. 60% of the labor force was engaged in agriculture. On the other hand, most farmers had only limited productivity due to the small size of land and scattered location. In addition, since the geographical and meteorological conditions in the region constrained variety of crops to be cultivated, tea and hazelnuts were the main crops for the region. However, the over cropping induced lower qualities and prices. As a result, the farmers were facing difficulty to sustain their livelihood based on the cultivation of tea and hazelnuts.		
Objectives of the Project	1. Overall Goal: 1) Farming improvement method is extended to the small-scale farmers in the 6 provinces. 2) The livelihoods of the small-scale farmers are improved in the model areas. 2. Project Purpose: Basic structure and systems of farming improvement for the 6 provinces is developed. 3. Assumed steps for achieving the project goals[1] : The project develops agriculture information and extension system, implements multiple farming in the model areas and prepares farming improvement plan for small-scale farmers in the target areas. By practicing multiple farming, the project aims at establishment of methodology and capacity to develop farming improvement, namely stabilization or improvement of farmers' income through diversification of income sources. Through the reinforcement of capacity of extension staff and small-scale farmers, the farming improvement is disseminated in the 6 provinces and the livelihood of the small-scale farmers in the model area is improved.		
Project Information	1. Project site 6 provinces of Artivin Giresun, Gümüşhane, Ordu, Rize and Trabzon, including model areas of 3 villages (Kuruçm, Coşandere Uğirlu) in Trabzon Province. 2. Main activities Trainings of farm improvement for extension staff, development of manuals for multiple farming and annual farming improvement plan, organizing farmers' groups and practicing multiple farming in the model areas. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 8 Short term experts 2) Trainees received: 8 persons 3) Equipment: 35 items, including vehicles, PCs, tea harvesting machine, etc. Turkish Side 1) Staff allocated: 20 persons 2) Land and facilities: project office		
Project Period	January, 2007 – March, 2010	Project Cost	314 million yen
Implementing Agency	General Directorate of Agricultural Production and Development (TUGEM, renamed as Agrarian Reform: TRGM) of the Ministry of Agriculture and Rural Affairs (MARA, renamed as Ministry of Food, Agriculture and Livestock: MoFAL), Trabzon Provincial Directorate of Agriculture (PDA), Artvin PDA, Giresun PDA, Gümüşhane PDA, Ordu PDA and Rize PDA		
Cooperation Agency in Japan	NTC International CO., Ltd.		
Related Projects (if any)	Japan's cooperation: ・The Study on Regional Development Plan for Eastern Black Sea Region(Technical Cooperation, Development Study,1999-2000) ・Human Resource Development for Participatory Local Development in DOKAP Region (Technical Cooperation, 2005-2009) ・Country Focused Training on Human Resources Development for DOKAP-TARIM Project (2010-2012) ・Senior Volunteers(Vegetable Growing and Farmer's Co-operatives) were dispatched. (2011-2013) Other donors' cooperation: ・Agricultural Reform Implementation Project (World Bank, 2001-2009)		

[1] Reviewed at the time of the ex-post evaluation.

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with the Turkey's development policy, such as creating highly competitive agriculture structure specified under "the Development Plan (2001-2005, 2007-2013)", and development needs to improve agriculture structure in the Eastern Black Sea Region to stabilize and increase incomes of farmers, as well as Japan's ODA policy to support improvement of the agriculture and fishery sector including extension of agriculture technologies and the development of the Black Sea region. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on i) establishment of basic structure and systems for farm improvement including multiple farming through the capacity development of extension staff and the farmers in the model villages and the extension villages in Trabzon Province as well as ii) enhancement and improvement of the extension services. The project purpose i) has been achieved by the introduction of multiple farming by the small-scale farmers in the model villages and the extension villages. At the time of ex-post evaluation, around 70% of the farmers introducing multiple farming in the model villages of Trabzon Province have continuously practiced multiple farming. For the efficient technical transfer and capacity development of the small-scale farmers, the farmers' groups were voluntarily formulated in a participatory approach. Such group activities arranged site visits to learn good practices of multiple farming and to enable successful dissemination of farming skills. Project purpose ii) has been also achieved; only 6% of farmers evaluated the agricultural extension services poor at the terminal evaluation and interviewed farmers were satisfied with the extension services developed by the project at the time of ex-post evaluation.

Kiwi Fruits planting for multiple farming in Trabzon

As for the overall goal, multiple farming has been practiced by 1,474 farmers in total in the target 6 provinces through the implementations of farm improvement plans elaborated by the Project for each province, including implementation of the model projects by the trained extension staffs. Also, the small-scale farmers in the model villages and the extension villages in Trabzon recognized improvement of their income through farm improvement.

Furthermore, there have been some positive changes in socioeconomic environment for rural women in the target provinces. For example, members of the Trabzon Cosandere Women's Group, which was established for the project activities, have started to generate income by selling handicrafts which they produce.

Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Development of basic structure and systems of farming improvement for the 6 provinces in the Eastern Black Sea Region	(Indicator 1) More than half of small-scale farmers in the model areas and extension area, who participate in the project, determine to continue the activities.	Terminal Evaluation: Achieved. 86% of farmers' group members (594 farmers including 272 from the model villages and 322 from the extension area). Ex-post Evaluation: In Trabzon Province, 510 farmers in the model villages have accessed agriculture information for farm improvement and 371 farmers have been still continuously practicing multiple farming.
	(Indicator 2)The evaluation grade of "poor" for agricultural extension services is decreased from 50% to 20% in the model areas.	Terminal Evaluation: Achieved. Only 6% of farmers evaluated that agricultural extension services was poor or not sufficient. Ex-post Evaluation: According to the interviews with the farmers in the model areas, they are satisfied with the extension services developed by the project but they need further technical assistant for unfamiliar issues not covered by the project, such as disease control of plants.
(Overall Goal 1) Extension of farming improvement for small-scale farmers in the 6 provinces	(Indicator 1-1) Multiple farming is applied by more than 1,200 small-scale farmers in 6 provinces by the end of 2013.	Ex-post Evaluation: In total, 1474 farmers applied multiple farming in 6 provinces. (Applied by 371 farmers in the model villages in Trabzon, 465 in extension villages in Trabzon, 638 in extension villages in other 5 provinces.)
	(Indicator 1-2) More than 75% of extension staff responsible for the extension area can instruct the farming improvement in each extension area by the end of 2013.	Ex-post Evaluation: , 48 staffs, directly in charge of this project and succeeding project (38% of 125 of extension staff trained) assigned in the extension area are instructing multiple farming for farmers.
(Overall Goal 2) Improvement of the livelihoods of the small-scale farmers in the model areas	(Indicator 2-1) More than 70% of small-scare farmers in the model areas, who applies farming improvement through the project, fell stable or increased income by the end of 2013.	Ex-post Evaluation: All the interviewed farmers answered their income level improved through the practices of multiple farming despite of the differences of level of improvement.

Source : Terminal Evaluation Report, PDAs of the 6 provinces, Interviews with farmers in 3 model villages (15 farmers) and 4 extension villages in Trabzon Province (16 farmers).

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 98.1%, 97.5%). Therefore, efficiency of this project is high.

4 Sustainability

Newly introduced Green House in an extension village, Yaliköy, Trabzon

In the policy aspect, dissemination of the farm improvement introduced by the project has been endorsed by the Ninth Development Plan which focuses on improvement of efficiency of the agricultural structure and creation of highly organized and competitive agricultural structure. As for institutional aspect, the extension system for farming improvement in the 6 provinces has been well-functioning. The sufficient number of staff, including both administrative and extension staffs, have been assigned. 3 administrative personnel at MoFAL and each PDA for the 6 provinces are responsible for the extension services. 125 extension staff were trained for the post project period between 2010 and 2012, and 48 extension staff have been engaged in instruction of multiple farming for the farmers in the 6 provinces. Also, the most of farmers' groups have been continuing their activities for farm improvement. From the technical aspect, according to MoFAL, the staffs of MoFAL and the PDAs, the extension staff as well as the farmers' groups have been sustaining their knowledge and techniques for farm improvement acquired through the project. Also, the trainings for the staffs and the farmers newly joining the activities have been continuously delivered by the Trabzon PDA. However, the farmers pointed out that further improvement in extension services is in need after the project completion since farmers have been facing unfamiliar issues, such as diseases or fluctuation in production. Furthermore, they need knowledge and skills for marketing of their new products, in particular fruits, which have been harvested after the project period for the first time. To respond to needs of the farmers, both MoFAL and JICA have been providing support to the project sites through dispatch of Senior Volunteers and training for extension staffs. In terms of the financial aspect, MoFAL has continuously allocated necessary budget to the PDAs of the 6 provinces in order to implement model projects of farming improvement and the PDAs have executed the budget for dissemination of farming improvement. The total budget for the 6 province increased 845.million Turkish liras in 2010 to 990 million Turkish liras in 2012. Therefore, sustainability of this project effect is high.

5 Summary of the Evaluation

This project has largely achieved the project purpose and overall goal. The model of farm improvement based on multiple farming has been introduced and sustained by the small-scale farmers in the model villages and in the extension villages in Trabzon as well as in the extension villages of the other five provinces after the termination of the project. The farm improvement introduced by the project contributed to increase in the farmers' income in Trabzon. Also, the model of farm improvement has been disseminated to the small-scale farmers in the target 6 provinces through the enhancement of extension services. As for sustainability, the dissemination of the farm improvement is supported by the national development plan and the administration and the extension systems, including the training system for the extension staff and the farmers, have been well-functioning at the central and the provincial levels. In addition, the trained extension staff and farmers have been sustaining the knowledge and technologies for farm improvement. The some technical issues, which were not addressed by the project such as disease control and production control of newly introduced plants, have been tackled by MoFAL with support of JICA. Also, the necessary budget for dissemination of multiple farming have been allocated by MoFAL and been executed by the PDAs in the 6 provinces. In the light above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency,:

【the Ministry of Food, Agriculture and Livestock】

- It is recommended to continue providing technical support for the farmers since harvest of some crops, in particular, fruit trees, require at least a few years. In addition, it is necessary for the extension staff to obtain knowledge and skills to tackle issues of disease control and production control in order to stabilize agricultural production through collaboration with experts in such field.
- In order to generate income from agricultural production, marketing of products which are to be harvested for the first time is essential. Therefore, collaboration between the extension staff and experts in marketing is recommended.

Lessons learned for JICA:

- Since the project period was limited, some challenging issues such as disease control, measures to cope with fluctuation of production had been assumed to be tackled by MoFAL or the farmers after the project. However, in order to develop the project impact and sustainability, it is considered to be necessary to formulate project with sufficient length of the period to include those technical issues within the frame work of the project activities.
- Support for group activities is effective not only dissemination of agricultural technologies but also income generation activities. Farmers' groups facilitate to learn good practices through visit of model site and to practice them under the cooperation by the members. Also, the group activities facilitate other income generation, such as production and sales of handicrafts by rural women's groups.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Middle East and Europe Department: December, 2013

Country Name	Capacity Development of Environmental Administration in Algeria
Algeria	

I. Project Outline

Project Cost	260 million yen	
Project Period	December 2005 - November 2008	
Implementing Agency	The National Observation for Environment and Sustainable Development (ONEDD), The Ministry of Land Planning, Environment and Tourism (MATET) Central Regional Laboratory (CRL) (Alger) (under ONEDD)	
Cooperation Agency in Japan	Ministry of Environment	
Related Projects (if any)	Japan's cooperation: Project for Capacity Development of Environmental Monitoring (Phase 2 of this project) (Technical cooperation, 2009-2012) Other donors' cooperation: Technical cooperation to ONEDD/HQ by GTZ	
Background	In Algeria, following the recovery from the unstable public order of the early 1990s and the upsurge of the economy, environmental administration became a focus for the government. ONEDD was established under the MATET as a part of the "National Environment Action Plan for Sustainable Development (NAPE-SD)" in 2003. The mission of ONEDD was to support the decision making of the environmental administration, and to provide services in the field of laboratory analysis through collecting the information on the current condition of the environment and industrial activities and research of the environment. When outline of the water and sediment pollution in the Oued El Harrach (OEH) was reported as a result of field studies conducted by the JICA short-term experts dispatched from 2004, ONEDD recognized the needs to strengthen its capacity to conduct the environmental monitoring.	
Inputs	Japanese Side	Algeria Side
	1. Experts: 10 persons 2. Trainees Received in Japan: 7 persons 3. Equipment: 57 million yen 4. Local Cost: 26 million yen 5. Others: Local consultants	1. Staff allocated: 22 persons 2. Land etc. provided: An office for experts, a temporary laboratory, 2 sampling vehicles 3. Local Cost: 381,000 Euros
Project Objectives	Overall goal 1) ONEDD establishes environmental monitoring system based on the National Environmental Strategy under the well-organized network of laboratories and stations with the Central Regional Laboratory (Alger) plays a leading role. 2) National environmental protection policy is promoted and counter-measures are recommended. 3) Counter-measures to prevent environmental pollution in Oued El Harrach industrial areas are deployed.	
	Project Objective Environmental monitoring capacity of the Central Regional Laboratory (Alger) is strengthened.	
	Outputs Output1: Laboratory management to ensure a high-quality operation is in place Output2: Skills and knowledge in field survey and sampling management are acquired Output3: Skills and knowledge in organic chemical analysis are acquired Output4: Skills and knowledge in inorganic chemical analysis are acquired Output5: Skills and knowledge in microbiological analysis are acquired Output6: Skills and knowledge in developing and maintaining database are acquired Output7: Skills and knowledge for environmental evaluation, analysis and recommendation utilizing the obtained data are acquired Output8: Technical knowledge for the de-pollution and remediation are acquired Output9: Knowledge on environmental quality standards, regulations, and institutional/administrative setup for de-pollution and remediation are acquired	

II. Result of the Evaluation

Summary of the Evaluation
This project has mostly achieved its objective of strengthening of environmental capacity of CRL since most indicators, set at the beginning of the project, have been achieved considerably (e.g.: the number of samples analyzed increased from 103 in 2005 to 690 in 2011, the monitoring data was compiled/summarized and disclosed, and internal trainings were conducted). The overall goal is also mostly achieved since the environmental monitoring system is established (although, continuous effort for regional laboratories and monitoring stations is needed to firmly establish the system). As for sustainability, some problems have been observed in terms of technical and financial aspects due to the still weak status of

ONEDD.

For relevance, the project has been highly relevant with Algeria's development policy, development needs as well as Japan's ODA policy. For efficiency, the project cost exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Algeria's development policy (high priority on environmental monitoring in National Environmental Strategy 2000-2010 and NAPE-SD 2003), development needs (capacity development in environmental monitoring for pollution control of OEH), as well as Japan's ODA policy (priority on environmental issues), at the time of both ex-ante evaluation and project completion. Therefore, its relevance is high.

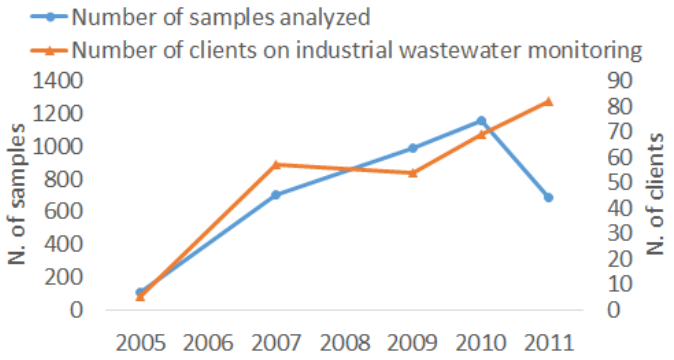
2 Effectiveness/Impact

This project has largely achieved the project purpose of strengthening of environmental monitoring capacity of the CRL, as well as overall goal of establishment of monitoring system through the activities of CRL and ONEDD.

For the project purpose, most indicators set at the beginning of the project, have been achieved considerably. (i) CRL's environmental monitoring for various clients: the number of samples analyzed at CRL increased from 103 in 2005 to 690 in 2011,and the number of clients on industrial wastewater monitoring increased from 5 in 2005 to 82 in 2011. The standard operating procedures (SOPs) for sampling that the project developed have been used, shared with ONEDD's other regional laboratories, and updated, which have improved the quality of sampling. (ii) Comprehensive environmental reports on the OEH pollution problems: due to the delays of the construction of the laboratory facilities, such reports were not prepared as expected during the project period, but with the support from the Phase 2 project, the preliminary interpretation was conducted based on the updated and accumulated monitoring data, and the results were summarized in a report. (iii) Technical advice to ONEDD's other regional laboratories: Although it is provided, periodic training has not been realized yet due to budgetary constraints.

The overall goals have also been mostly achieved though there are some issues to be further addressed. (i) Network of laboratories: with the CRL's technical guidance, regional laboratories and monitoring stations became able to carry out monitoring activities on industrial wastewater in accordance with the executive decree 07/300 (issued in 2007, enacted in 2010.) for decision on penalty tax against discharging wastewater above the regulation level. However, these activities rest still weak, in comparison with CRL. (ii) Recommendations and implementation on policies and countermeasures: MATET has assigned ONEDD as designated laboratory for industrial effluent monitoring. With strengthened cooperation with CRL, Direction de L'environnement de la Wilaya d'Alger (DEWA) has taken more strict action to control the coastal area of OEH through reinforcing the inspection toward industrial factories. Also, national-level coordination between MATET and environment-related ministries are being promoted in the context of environmental legislation. Phase 2 also positively impacted to achieve the overall goals; CRL transferred the technique to operate monitoring devices to laboratories and monitoring stations in the regions, and thus further strengthened the network with them.

Therefore, effectiveness/impact of this project is high.



Number of samples and clients of CRL (source: CRL)

Laboratory equipment (Gas Chromatography/ Mass Spectrometry, source: CRL)

3 Efficiency

Although the project period was within the plan, some inputs were not appropriate for producing the outputs (such as delay of set up of provisional laboratory facility by Algerian side). And the project cost exceeded the plan (ratio against the plan: 130 %) due to cope with the delay of input. Therefore, efficiency of this project is fair.

4 Sustainability

The project has some problems in technical and financial aspects of the implementing agency due to its still weak status of ONEDD. In the technical aspect, while the skills transferred from this project are kept in CRL, the capacity of other regional laboratories/monitoring stations is still in improvement stage. As for the financial aspect, commercial activities of ONEDD, which should be financially independent as an independent administrative agency, is limited in analysis of industrial wastewater and is weak to manage the revenue to cover all the expenditure. However, considering its mission to public interest, the status of ONEDD will be changed to Public Administrative Establishment (EPA) in the character of Science and Technique (the process of changing status of ONEDD is under preparation within the Government of Algeria). Once this change is in effect, all the budget will be taken in charge by the State.

No problem has been observed in policy background and the structural aspects of the implementing agency: this project

is consistent with the next 10 years national plan of environmental protection of the Government of Algeria in an ongoing manner, and the relationship between ONEDD Headquarters and CRL has much improved with the progress of the Phase 2 project.

Therefore, sustainability of this project effect is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

In the project, technical advice to ONEDD's other regional laboratories has not been realized yet due to budgetary constraints of CRL and ONEDD. Therefore, it is recommended that the CRL and ONEDD will continue its effort to ensure their financial sustainability by increasing samples or clients as well as taking the government's assistance, in order to diffuse knowledge and skills on advanced technologies of chemical analysis compiled in CLR for other regional laboratories/monitoring stations.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Morocco Office/ February, 2014

Country Name	Improvement of Value Adding Method for Fisheries Products
Kingdom of Morocco	

I. Project Outline

Background	Fisheries of the Kingdom of Morocco (hereinafter referred to as "Morocco"), brought in the largest catch in Africa and the fisheries sector as a whole absorbed approximately 400,000 workers, including surrounding industry such as seafood processing. However, the catch of fish was declining because of the over-fishing in the past years. It was important to utilize the limited marine resources effectively through the diversification of processed products, improvement of quality and freshness as well as exploration of unused resources, although marine resources in Morocco were marketed in considerably limited forms (i.e. primary or simple secondary processed products, such as frozen, canned, bottled and powdered products). In addition, the EU, the major importer of Moroccan fisheries products (approximately 42% of gross exports), requested Morocco to comply with food safety standards, which had become an urgent issue. In order to solve these problems, the government of Morocco established the Seafood Processing Technology Center ("le Centre Spécialisé de Valorisation et de Technologie des Produits de la Mer" hereinafter referred to as "CSVTPM") in February 2003 with Japan's grant aid cooperation as one of the centers of National Research Institute of Marine/Fisheries (INRH), to assist efforts to improve the value adding method of the fisheries processing sector, including fishermen. However, CSVTPM had neither sufficient experiences in terms of processing technologies development, hygiene and quality control, nor sufficient linkage and cooperation with processing plants and fishermen.
Objectives of the Project	1. Overall Goal: New processed fish products and measures for quality and sanitary control, developed with the cooperation of the CSVTPM, are applied in the fisheries sector. 2. Project Purpose: Proposal for value adding methods for fisheries products are compiled through the CSVTPM's activities. 3. Assumed steps for achieving the project goals: The project i) enhances capacities of counterpart agency (CSVTPM) in the field of fisheries products processing and sanitary and quality control, ii) produces trail processed fisheries products jointly with enterprises and iii) prepares draft guidelines for better sanitary and quality control. Consequently, processed fisheries products developed in cooperation with CSVTPM are marketed and new sanitary and quality control technologies, for which CSVTPM conducts researches and development in the course of the project, are introduced to the fisheries industry.
Activities of the project	1. Project site: The entire Morocco (Agadir as a base of experiments and researches) 2. Main activities: - Training for technicians of enterprises by counterpart personnel (C/P), who receive technical instructions on production of processed fisheries products and sanitary and quality analysis, as well as implementation of joint developments and experiments of new products and establishment of quality control system at CSVTPM's processing plant. - Proposal of draft training plan for fishermen concerning sanitary and quality control technologies of fisheries in selected model small fishing villages. - Strengthening of CSVTPM' public relations activities, technical and information system, cooperation with agencies concerned as well as preparation of CSVTPM's mid-term activity plan (draft). 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 15 persons 2) Trainees received: 5 persons 3) Equipment: Equipment for processing and analysis, vehicles for extension, etc. Moroccan Side 1. Staff allocated: 12 persons 2. Land and facilities: Office space for Japanese experts (two rooms at CSVTPM) 3. Local cost, 28 million yen for electricity, consumables, maintenance and management of land/facilities
Project Period	June, 2005 to June, 2009 / Project Cost: 245 million yen
Implementing Agency	National Research Institute of Marine/Fisheries (INRH) Seafood Processing Technology Center (CSVTPM)

Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries
Related Projects (if any)	Japan's cooperation: Establishment of Extension System for Artisan Fisheries in Morocco (TC, 2001-2005), Project for National Fisheries Laboratory (GA, 2007-2009), Project for Central Laboratory of Development and Technology Center of Fisheries Products (GA, 2001-2003), dispatch of individual experts (promotion of fisheries and management of marine resources, 2001 to present)

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Morocco's development policy "poverty alleviation, reduction of regional gap, the value added and improvement of sanitary and quality control", which is incorporated in the project, as set in policy documents including the National Initiative for Human Development (2006-2010), the Action Plan for Fisheries Sector Development (2005-2007) and the Strategy for Fisheries Development (2009-2020), development needs "efficient and highly value-added fisheries", as well as Japan's ODA policy; JICA Country Program for Morocco (2004). Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on proposal of value adding methods for fisheries products through the CSVTPM's activities. Indicators which measure the achievement of the project purpose is (i) proposal of at least 3 types of trial products for merchandize, (ii) proposal of improvement measures for sanitary and quality control guideline for Morocco, and (iii) continuous provision of technical services for the private sector by CSVTPM. As to (i) and (ii), researches were in the process at the stage of the project completion. At the stage of ex-post evaluation, trail products proposed by the project, such as sardine sausage, were proposed to the fisheries industry and won Innovation/Technical Research and Development Contest. Thus, this indicator has been fulfilled to some extent. For (ii), although the results of researches were presented to individual enterprises, they were not fully incorporated in guidelines as supplementary information. At the time of ex-post evaluation, personnel of CSVTPM did not understand what "supplementary information to the guideline is incorporated" actually means. CSVTPM explained that the both sides of Japan and Morocco had not clearly recognized that the research results should have been incorporated in the guidelines at the beginning of the Project. It can be inferred that both the Japanese side and the Moroccan side did not fully build common recognition regarding the establishment of the target at the planning stage and during the project. As for (iii), at the time of ex-post evaluation, it was confirmed that CSVTFM continuously provide technical services for the private sector and that it has made an agreement with Agadir Halio Pole (AHP) to establish cooperation system with the private sector and strengthen the cooperation activities. However, no concrete activity has not yet been conducted.

As for the overall goal, the indicators to measure the achievement level are (i) development of several numbers of processed fish with the contribution of CSVTPM's technologies for merchandize, (ii) introduction of several numbers of technologies for quality and sanitary improvement of fish products to the fisheries industry, (iii) implementation of artisanal fish processing as well as improvement of fish quality in small fishing villages. As to (i), whitefish paste has been developed and marketed by the processor in Casablanca. For (ii), although researches in terms of quality improvement were conducted, the results of these researches have not been incorporated into product labels, training materials and manuals as planned. As for (iii) dried mussels are newly produced as a processed product in small fishing villages by the project's survey. After the project completion, CSVTFM, with the support from the INPH Agadir Center, prepared the manual to disseminate the mussels processing technique and held the seminars for women engaged in the process. However, at the time of ex-post evaluation, CSVTFM does no support quality control, which is required for commercialization and sales. In spite of such situation, the fisheries industry recognizes the importance of CSVTPM and universities have requested CSVTPM for joint practices and training for qualification, and theme of master's and doctor's degrees.

In this way, this project has enhanced capacities of CSVTPM, to some extent, in the fields of processing and sanitary and quality control but has not fully achieved the project purpose at the time of project completion, although shown some progress at the time of ex-post evaluation. As for overall goal, processed fisheries products developed through the project were marketed and technologies and knowledge of CSVTPM have started to be utilized in the fisheries industry. After the project completion, cooperation between CSVTPM and the industry has been continued; however, effects on the entire fisheries industry, including fishermen, were limited. Therefore, effectiveness/ impact of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Proposal for value adding methods for fisheries products are compiled through the CSVTPM's activities.	1) At least 3 types of trial products (*) are proposed for merchandize. *products jointly developed with enterprises Note: The indicator was modified to "At least 3 types of trial products (*) are proposed for merchandize" during the extension period.	(Project completion) Joint research and development were conducted for production of sardine sausages and patty using pelagic fish. Partly achieved. (Ex-post evaluation) Sardine sausage of SUNRISE (prize winning product of the 5th Innovation/Technical Research and Development Contest), sardine patty of COPELIT and whitefish paste of Somafaco were proposed as trial products. Production and proposal of trial products will be continued.

	2) Improvement measures (**) for sanitary and quality control guideline for Morocco is proposed. **supplementary information to promote scientific grounds of the existing sanitary guideline	(Terminal evaluation) The research on histamine control for bottled anchovies has been in process. Proposals of measures for improvement have not been attained. (Ex-post evaluation) The results of CSVTPM's researches on "histamine control mechanism" were incorporated into the reports and product manuals. Although analysis of automatic control of cadmium is in process, proposals of measures for improvement have not been attained. Therefore, indicator 2 has not been achieved.
	3) CSVTPM continues to provide technical services for the private sector. (The indicator was added during the extension period.)	(Project completion) CSVTPM continues providing technical service such as guidance on food development/cooperation with the private sector and support for such cooperation based on the needs of the industry and enterprises. (Ex-post evaluation) Information exchanges between CSVTPM and the private sector, such as oil processing firms and canning firms has been continued but not active. On the other hand, it has made an agreement with Agadir Halio Pole (AHP), which is the competitive base of processed fisheries products industry and joint activities will be conducted in 2014 in the fields of research, training and public relations.
(Overall goal) New processed fish products and measures for quality and sanitary control, developed with the cooperation of the CSVTPM, are applied in the fisheries sector.	1) Several numbers of processed fish developed with the contribution of CSVTPM's technologies are merchandized.	(Ex-post evaluation) Whitefish paste has been marketed by the processor in Casablanca.
	2) Several numbers of technologies for quality and sanitary improvement on fish products are introduced to the industry. (For instance, the results of the researches are incorporated into product labels, textbooks and manuals.)	(Ex-post evaluation) Researches, such as "survey on influences of plastic containers in terms of creation of histamine of small pelagic fish", "assessment of contamination by heavy metal (cadmium) of pelagic fish that are landed in the ports of southern region", were conducted. The results of these researches are planned to be incorporated into reports and manuals of CSVTPM. The results have not been incorporated into product labels, training materials and manuals. Therefore, indicator 2 has not been achieved.
	3) Artisanal fish processing is occurred in local communities.	(Ex-post evaluation) Dried mussels were newly produced (without support from CSVTFM).
	4) Quality of fish harvested by artisanal fishers is improved.	(Ex-post evaluation) Preservation has been improved by drying of mussels.

Source：Project Completion Report, Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, both the project cost and the project period were slightly exceeded the plan (ratio against the plan: 136%, 133%) because the project period was extended. The extension period was appropriate to develop and market several new processed fisheries products. Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, improvement of value-added products and sanitary and quality control introduced by this project are still given importance in the current development policy in Morocco as the Strategy for Fisheries Development (2009-2020) aims at the enhancement of competitiveness by improvement of added value. Institutionally, Development Strategy of INRH was established based on the Strategy for Fisheries Development and specifies the improvement of value-added of fisheries products processing as one of six (6) institutional roles. CSVTPM was institutionally reformed and expected to play an important role in supporting the enhancement of value-added of fisheries products. Necessary personnel are allocated for this purpose and the institution of the implementing agency is established. As for the technical aspect, although personnel of CSVTPM have necessary technical level and have accumulated experiences through cooperation with enterprises not only concerning sanitary and quality control but concerning applied technologies such as smoking, sanitization by heat-treatment, marinating and so forth, there are some problems in terms of maintenance and management, for instance, there is no agency of the manufacturer for the existing equipment for fermentation at the fisheries bio-technology laboratory of CSVTPM. On the financial aspect, the insufficient budget of INRH has constrained the activities of CSVTPM. In order to address priority issues, the Government of Morocco has been pushing forward with the financial reform to spread a part of budget for the Department of General Affairs and the Department of Finance. It is expected that the activities of CSVTPM will be smoothly carried out for achieving a partial financial self-reliance. In addition, it is necessary to establish a system for cost covering of technical advices about seafood processing for the private sector. After the project completion, joint activities with the private sector were not very active and to improve the situation, Agadir Halio Pole (AHP) that aims to activate the fisheries products processing sector was established in 2011. AHP has already prepared the activity plans regarding research, training and public relations and takes an important initiative in keeping and extending the effects generated by the project.

From these findings, it is considered that the project has some problems in technical and financial aspects of the implementing

agency; therefore, sustainability of the project is fair.

5 Summary of the Evaluation

This project has partially achieved the project purpose “proposal of value adding methods for fisheries products through the CSVTPM’s activities” by the capacity enhancement of CSVTPM in the fields of fisheries products processing and sanitary and quality control, however, the degree of its achievement is limited at the time of ex-post evaluation. As for overall goal, although new processed fish products developed with the cooperation of the CSVTPM have been marketed, improved technologies have not been introduced. Also, processed products have been produced in local communities, however, there was no support from CSVTPM and the effects were limited. As for sustainability, this project is still given importance in the current development policy and the institution of the implementing agency is established. However, there are problems in terms of technical and financial aspects due to unsatisfactory maintenance and management of equipment and insufficient cost for extending fisheries product processing technologies. As to efficiency, both the project cost and the project period exceeded the plan due to the extension of the project period for joint research and development activities of the new products with the private sector.

In the light of above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

It is necessary for CSVTPM to more actively exchange views and promote cooperation on the new products with the fisheries industry, particularly, fishermen and to further support the production of processed products in the local communities.

Lessons learned for JICA

- In Morocco, the consumption of fish has been increasing and the needs for value-added fisheries products have been enhanced, however, the needs for processed marine products depends on how the private sector prioritize diversification of processed products and development of new markets. It is important to commence a project at a proper timing after assessing the changes in cultural backgrounds, institutional system for preparation and capacities of absorbing new technologies, when a technical cooperation is started.
- Interviews with personnel concerned were conducted with regard to the indicator to assess the degree of achievement of the project purpose “improvement measures for sanitary and quality control guideline for Morocco is proposed”. However, the personnel did not recognize that the results of researches by CSVTPM had to be reflected in the existing guidelines. Although the reflection was a quite important part of the project purpose, it is considered that the issue had not fully been discussed among the personnel concerned at the time of establishing targets and that the terminal evaluation was done without common understanding. It is essential to fully consider the logic of the project framework.
- This project was extended for one year based on the result of the terminal evaluation, however, evaluation based on Development Assistance Committee (DAC)’s five evaluation criteria was not conducted at the end of the extended period. It is considered better to assess the degree of the achievement based on DAC’s criteria at the end of extended period for smoothly conducting the ex-post evaluation.

CSVTPM

Fisheries products processing unit

Microscope of microbiology laboratory

Internal Ex-Post Evaluation for Technical Cooperation Project

Conducted by Ghana Office : January, 2014

Country Name	The Project for HIV and AIDS Prevention through Education (HAPE Project)
Republic of Ghana	

Ⅰ Project Outline

Background	In the Republic of Ghana (Ghana), HIV prevalence for the aged between 15 to 24 years old had been increasing from 1.9% to 2.6% for the period of the year 2003 to 2007. It had been the major issues for Ghana to prevent new infection among the youth. The Ghana AIDS Commission (GAC) which was established under the direct supervision of the President had been taking the lead to tackle HIV and AIDS, promoting multi-sectorial approaches, as there was a concern that the proper knowledge on HIV/AIDS had not been spread among people. According to the Ghana Population and Health Survey (2003), the level of awareness for the people on HIV/AIDS is quite high, showing 99% for men and 98% for women. However, only 38% of those men and women together have the proper knowledge on HIV/AIDS. In case of the Ashanti region and Eastern region, which have marked the highest HIV prevalence of the country, where the facilities of VCT/PMTCT (*) have been well established; only few people have voluntarily used those facilities. Under these circumstances, it has become imperative to disseminate the proper information and knowledge on HIV/AIDS・VCT/PMCT, and to improve the accessibilities of social services that will promote to raise awareness and to change behavior of those young generation toward HIV/AIDS. *VCT: Voluntary counseling and testing PMTCT: Prevention of Mother to Child Transmission		
Objectives of the Project	1. Overall Goal：High risk behaviours among the youth in the target districts are reduced. 2. Project Purpose：The awareness about the risk of infecting HIV and STIs among the youth (Aged 10 -24) and the social environment to reduce youth high risk behaviours are created in the target communities. 3. Logical flow of how the project responses to development issues[1]： ①Dissemination of knowledge on HIV /AIDS prevention through mass media, ②Promotion of service utilization on HIV/AIDS Prevention, ③Through the establishment of proper mechanism to prevent HIV/AIDS involving the various stakeholders such as schools and communities, young generations will become fully aware of risk on HIV/AIDS and the social environment to promote them to avoid high risk behaviors are created. As a result, high risk behaviors on HIV/AIDS are reduced among youth in the target communities.		
Project Information	1. Project site：Accra city、Eastern region（one city and five districts）、Ashanti region（one city and three districts） 2. Main activities：(following activities were carried out by local NGO “PPAG” with the Japanese assistance) ①Development of education materials on BCC/IEC(*)manuals and guidelines,②implementation of awareness raising activities using dramas and films, ③information dissemination on medical services , such as VCT/PMTCT services, ④holding PMC meetings at the target communities, ⑤ implementation of training for peer education, ⑥net-workings among various stakeholders, ⑦ HIV/AIDS prevention through education for school teachers and related stakeholders, ⑧ implementation of trainings, ⑨implementation of trainings on administrators (those in charge at DAs) * PPAG: Planned Parenthood Association of Ghana, BCC: Behavior Change Communication / IEC: Information, Education and Communication 3. Inputs Japanese Side (1) Experts:2 for Long term (2) Trainees received: 2 persons (3) Equipment: Vehicles, Audio-visual aids, Generator、Computers、Office Equipment Ghanaian Side (1) Counterpart:4 persons (2) Land and facilities: Project Office, Utilities		
Project Period	October 2005 – September 2009	Project Cost	297 million yen
Implementing Agency	Ghana AIDS Commission (GAC)、District Assembly (DA)		
Cooperation Agency in Japan	None		
Related Projects	Japan’s cooperation： ・Japan Overseas Cooperation Volunteers：Dispatch of 27 JOCVs to the target regions in the field of communicable disease control (2005～2009) ・Provision of Medical Equipment（equipment for HIV AIDS・Blood Test）amounting for 78.8 million yen(2004～2009) ・Group Training Course on HIV AIDS and Reproductive Health in Japan : 7 persons (2007- 2009) ・Collaboration with Sony Corporation (June to July in 2009) : BCC/IEC related events for youth and community people were carried out using equipment provided by Sony		

[1] Reviewed at the time of the ex-post evaluation.

	Other donors' cooperation： ・WHO: Care& Support, ・UNAIDS: Technical assistance (coordination of UN agencies and other donors in the field of HIV/AIDS) ・World Bank：Ghana Multi- Sectoral HIV/AIDS Program ・UNICEF: Formulation and implementation of PMTCT, OVC ・USAID: Assistance toward NGOs who carry out the preventive care and supports for HIV/AIDS ・Netherland：Establishment of VCT/PMTCT center

Ⅱ Result of the Evaluation

1 Relevance

This project has been highly relevant with Ghanaian's development policy "(e.g. the importance of HIV and AIDS Prevention through Education as set in the National HIV&AIDS Strategic Plan (2011-2015) and National HIV, AIDS STI Policy (2013)), development needs, "(e.g. assistance toward youth on the prevention of HIV AIDS)", as well as Japan's ODA policy "Japan's Country Assistance Program for Ghana (2005)", at the time of both ex-ante evaluation and project completion.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on promoting the awareness raised on the risk of HIV/AIDS among youth of target communities, and the reduction of their high risk behaviors. The achievement level of the project purpose was examined by four indicators as described in the table below[2].

According to the interviews with the field officers of PPAG and those officers in charge of HIV/AIDS at District Assemblies (DAs) during the field study, it was confirmed that the indicator 1) had been already achieved at the terminal evaluation and has been further progressed after the project completion. No relevant data was available for the indicator 2), however, it is assumed that the number of youth who has referred to the health services has been increasing as the number of CHPS (Community-Based Health Planning & Services) facilities[3] was increased after the initiation of the project. As for indicator 3), it is also readily assumed that the number of youth who has positive attitude toward PLHIV has increased as the awareness raising activities at the target hospitals have been continued. At the Bekwai District Hospital, the awareness raising activities, which focuses on how to use condoms, how to deal with prejudice against HIV/AIDS and STDs and discourse on health issues, have been carried out every week with the participants of 100 to 200. As for the indicator 4), the mechanisms for youth to avoid high risk behavior has been somewhat established. Currently, the GAC at the central level coordinates and monitors the progress of activities for the youth to avoid high risk behaviors. And the District Sustainable Plan, which was developed at the terminal evaluation for the purpose of continuing the activities, has now been carried out and vehicles procured by the project to the DAs have been well utilized to implement activities. (In some area, the District Sustainable Plan has not been implemented due to the budget shortage). At the New Juaben city, the group discussion or film showings have been continuously carried out by field officers in collaboration with coordinators of SHED (School Health Education Program). There are, however, some concerns that film showings and the renewal of films have been suspended as some members of newly formed drama group left for Accra.

The achievement level of Overall Goal is examined by four indicators as described in the table. As for the indicator 1), the progress has already shown at the time of project completion. The HIV prevalence for New Juaben city has decreased from 6.4% in 2005 to 5.8% at the project completion in 2009 and to 3.0% at the ex-ante evaluation in 2012. As for indicator 2) to 4), no relevant data were available at the time of ex-ante evaluation, but some progresses have been confirmed at the project completion as described in the table.

In summary, although the achievement levels at the ex-ante evaluation have not been fully examined as some data were not available, the project has partially achieved its objectives as the awareness about the risk of infecting HIV and STIs among the youth of target communities have increased to some extent, and the social environment which promotes the youth to avoid the high risk behaviors has been gradually created.

Therefore, the effectiveness /impact of the project is fair.

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose) The awareness about the risk of infecting HIV and STIs among the youth (Aged 10 -24) and the social environment to reduce youth high risk behaviours are created in the target	1) Number of youth who had HIV test is increased by 20% from the year 2005.	Project completion(＊):Achieved. The percentage of those youth who had HIV test was increased from 6.5% (2005) to 11.7 %(2009), which contributed to more than 80% increase in comparison with that of baseline (2005). According to the data in Bekwai DA, 655 youth received HIV test in 2008 (2.63% of total youth population) and the number increased to 1,479 in 2009 (5.78%) Ex-post evaluation: In Bekwai District, the number of youth who received HIV test increased to 1,981 in 2010(7.54%) and the number in 2012 was recorded as 1,612(5.82%) which showed slight decrease.[4] In comparison with that of 2008, the number was more than doubled.

[2] The field study at the ex-ante evaluation was only targeted to one city (New Juaben City) and one district (Bekwai District) as a sample. Therefore, the result of the field study does not represent the whole population.

[3] This means the Community- Based Health Planning & Services provided by the field health professionals stationed at DAs who can also provide the VCT services.

[4] According to those in charge of Bekwai DA、the reason of slight decrease in 2012 is due to that not all of relevant data were reflected to these figures as some quarterly report were not submitted by the deadline.

communities.	2) Number of youth who has referred to health service is increased by 20% from the year 2005.	Project completion(＊):Mostly achieved based on the quarterly report. Ex-post evaluation: According to those officers in charge of HIV/AIDS prevention at New Juaben city, the number of youth who has been referred to the health services on family planning and reproductive health services has been increasing as two CHPS facilities was newly constructed after the initiation of the project.
	3) Number of youth who has positive attitude toward PLHIV is increased by 20% from the year 2005.	Project completion(＊):Mostly achieved. The number of youth who has positive attitude toward PLHIV, which were examined through five questionnaires, has been increased by 18% in average from the year 2005. Ex-post evaluation: According to those officers who are in charge of HIV/AIDS prevention in DAs, the number of youth who has positive attitude toward PLHIV has been increasing as a result of continuous activities of awareness raising, such as Heart to Heart campaign conducted at Bekwai District hospital after the project completion.
	Supplemental indicator 1) The social environment or mechanisms established (or strengthened) by the project, which fosters youth in the target communities to avoid high risk behaviors	Ex-post evaluation: GAC monitors and coordinates the works by NGOs on BCC/IEC, such as group discussions and service delivery for youth. Awareness raised on HIV/AIDS has been progressed through discussions on radio and film showing at the communities. There are some concerns, however, that film showings and the renewal of films have been suspended as some members of newly formed drama group left for Accra.
(Overall Goal) High risk behaviours among the youth in the target districts are reduced.	1)HIV prevalence aged between 15-24 (15-19、20-24)	Project completion(＊): The HIV prevalence in average for three target districts was decreased from 3.8% (2005) to 2.1%(2008), which has come closer to the national average of 1.8%. Ex-post evaluation: The HIV prevalence for New Juaben city was decreased from 6.4% in 2005 to 5.8% in 2009, and 3.0% in 2012.
	2) Number of youth who report consistent condom use in the past 6 months is increased by 20% from the result of the baseline survey.	Project completion(＊): The Proportion of youth who report consistent condom use in the past 6 months was increased 6.3% from the result of the base line survey. Ex-post evaluation: Relevant data was not available. However, it was confirmed that New Juaben city has continuously carried out awareness raising activities for the youth to avoid high risk behaviors by warning that they are put in danger, especially during Christmas and Valentine seasons when they tend to take risk behavior.
	3) Median age at first sex remains as same as result of the baseline survey.	Project completion(＊):Achieved. Median age at first sex was mostly unchanged from 16.8 to 16.77 years old from the baseline survey. Ex-post evaluation: Data was not available.
	4) Number of youth who had sex with non-regular partner is decreased by 20% from result of the baseline survey.	Project completion(＊): The proportion was changed from 33.7% at the baseline to 26.8% at the project completion which accounts for the decrease by 20.5% from the result of baseline survey. Ex-post evaluation: Data was not available.

Source：The result of interview toward those in charge of HIV/AID in DAs and field officers of local NGO (PPAG)
(＊)Based on the data at the terminal evaluation

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan, the project cost was significantly higher than the plan because of the procurement of mini-buses for all ten districts in order to continue the activities based on the District Sustainable Plan.(Ratio against the plan: 100% and 166% respectively)

Therefore, efficiency of this project is fair.

4 Sustainability

As for the policy aspect, there has been the established support from government in terms of HIV and AIDS prevention through education toward youth, as the government of Ghana has promoted the importance of such education using mass media as set for “National HIV, AIDS STI Policy (2013)” and has developed the related strategy for HIV/AIDS prevention.

As for the institutional aspects, there has been a clear institutional arrangement in which GAC as the key institution to coordinate and to monitor the activities under the HIV/AIDS prevention through education, while NGOs and DAs have carried out grass-route activities according to the national plan and to report the progress to GAS. As for the awareness raising activities, GES (Ghana health services) has now collaborated with junior high schools.

Minibus procured by the project (New Jouben city)

As for the technical aspects, those in charge of HIV/AIDS at DAs and NGOs have sufficiently acquired the knowledge and skills through project activities and have now been able to conduct the trainings on BCC/IEC by themselves. Those knowledge and skills acquired through project activities have been introduced to other areas through the Regional Coordination Committee (RCC). The educational materials on BCC/IEC, manuals, guideline and BCC strategic manuals have still been utilized at schools and DAs. There are some concerns that film showings and the renewal of films have been suspended as some members of newly formed drama group left for Accra. However, there have been no problems reported after the project completion. As for the financial aspect, the budget of HIV/AIDS awareness raised at Bekwai District has increased, such that GHC 1,678 in 2010 to GHC 2,560 in 2013. While, in the New Jouben City, the budget of same

kind has decreased from GHC 3,840 to GHC 965. Due to the insufficient budget, some of activities under the Sustainable District Plan have not been carried out after the project completion. As no external funds from other donors have utilized, some attempts have been made to generate the fuel cost by squeezing the routine activities when the activities have become stagnant. The proportion of budget allocation of HIV/AIDS activities in the total budget of DAs has been reduced from 1% to 0.5% and the educational activities on HIV/AIDS have been downscaled. It is presumed that the prospect of financial sustainability is somewhat uncertain. Therefore, the sustainability of this project is fair.

※GHC :Ghana Cedi (local currency of Ghana)　1 GHC=US$0.44 (November in 2013)

5　Summary of the Evaluation

This project has partially achieved its objectives to create awareness about the risk of infecting HIV and STIs and the social environment to reduce youth high risk behaviours in the target communities. According to the field study of selected one city and one districts, the awareness of youth about the said risk has been increased to some extent, and social environment to encourage the risk-adverse behaviour has gradually been created. However, the achievement level is somewhat limited for the continuing mechanism to sustain the effect of the project. As for the sustainability, the concern was pointed out in the financial aspects. As for the efficiency, the project cost was exceeded the plan.

In light of the above, the evaluation of the project is partially satisfactory.

Ⅲ Recommendations & Lessons Learned

Recommendations for Implementation agency：

Currently, proportion of budget allocation of HIV/AIDS activities from DAs has been reduced from 1% to 0.5% and the educational activities on HIV/AIDS has been downscaled which might affect the achievement. Therefore, it is necessary for DAs to effectively secure the budget allocation from District Assembly Common Fund managed by the Common Fund Administrator. For that, DAs should prepare the effective proposal in order to obtain the funds to implement activities of HIV/AIDS prevention through education.

Lessons learned for JICA：

Some activities of the project were contracted out to the local NGO, PPAG. After the project completion, in New Juaben city, which was one of the target areas of the field study of ex-post evaluation, the project officer of PPAG has continued activities as the government staff under DA. While, in Bekwai District, which was also the target area of the field study of ex-post evaluation, the project officer of PPAG moved to other NGO and his successor of government staff under DA was also transferred to other position. Therefore, activities under this DA have been carried out by the newly assigned officer. Sustainability of the project could have been much higher if project activities had been well integrated into daily routine as well as the capacity development of government officer on HIV had effectively been carried out during the project period.

Therefore, in order to sustain the effect by the project in the similar project, it is recommended that the project activities should be effectively incorporated into the routine work during the project period.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Ghana Office :（March, 2014）

Country Name	Scaling up of Community Based Health Planning and Services (CHPS) Implementation in the Upper West Region
Republic of Ghana	

I. Project Outline

Background	In Ghana, a national policy "Community Based Health Planning and Services (CHPS)" started in 1999 for better access to health services. CHPS was implemented mainly by District Health Management Teams (DHMTs) in the following way: a district was divided into CHPS zones between 3,000-5,000 populations; Community Health Committee (CHC) was set up at each CHPS zone; CHPS compounds are constructed and CHOs are trained and deployed to these zones. However, the scaling up of CHPS was slow for reasons such as lack of district-level administrative capacity, insufficient number and capacity of CHOs, and low level of community participation. In the Upper West Region (UWR), the performance of health indicators such as infant mortality rate was particularly worse than other regions, showing the poverty level of the people with limited access to basic health services.
Objectives of the Project	1. Overall Goal: To increase coverage of functional CHPS[1]. 2. Project Purpose : Institutional capacity of the Ghana Health Service (GHS) on CHPS implementation in UWR is strengthened. 3. Assumed steps for achieving the project goals[2]: in the two pilot districts (stage I districts), (1) the administrative capacity for CHPS implementation is developed (i.e. equipment are provided and CHOs are trained) and Community Health Action Plans (CHAPs) for promoting community participation are implemented, (2) capacity development for health personnel at each level of UWR is carried out through the Facilitative Supervision (FSV), and (3) the referral system among hospitals is improved. Through these improvements, the services, which follow the CHPS policy, are able to be provided throughout the health system. Further, such good practices of health services in stage I districts are disseminated to other districts (stage II districts).
Activities of the project	1. Project site: Upper West Region (UWR) 2. Main activities: (1) standardized training in health administration management; (2) training for CHOs and Community Health Nurses (CHNs); (3) conducting situation analyses on CHPS activities and developing a supervision guideline; (4) conducting situation analyses and developing a guideline on the referral system; (5) conducting situation analyses on community participation and developing training materials; and (6) disseminating good practices to other districts through training and sharing the guidelines. 3. Inputs Japanese Side (1) Experts: 12 for Short term (2) Trainees (short course) received: 9 persons (3) Equipment: motorcycles, bicycles, medical equipment, radio communication system Ghanaian Side (1) Core Staff:19 persons (RHMT and DHMT) (2) Land and facilities: project office, utilities
Project Period	March 2006 – February 2010 / Project Cost: Approx. 500 million yen
Implementing Agency	Ministry of Health (MOH), Ghana Health Service (GHS) and Policy Planning Monitoring and Evaluation Department (PPMED), Regional Health Management Team (RHMT) of UWR; and District Health Management Team (DHMT) of each pilot district.
Cooperation Agency in Japan	IC Net Limited
Related Projects (If any)	Japan's cooperation: This project was the central part of the Programme for the Improvement of the Health Status of People Living in UWR, the first model JICA programme. Together with this project, activities were carried out through: (1) dispatch of Japan Overseas Cooperation Volunteers (JOCVs) (JFY2005-JFY2009), (2) procurement of equipment through the Grant Aid project (May 2006 – December 2007), and (3) cooperation with the Aid Coordination Advisor (November 2008 – November 2009). After the completion of this project, (4) the Improvement of Maternal and Neonatal Health Services Utilizing CHPS system in the Upper West Region (Technical Cooperation, 2011-2016) and (5) the Project for the Development of CHPS Infrastructure in the Upper West Region (Grant Aid for Community Empowerment, JFY2012) were implemented. In addition, (6) the Policy Advisor for Promoting Community Health (individual expert at GHS and PPMED, 2011-) is supporting PPMED HQ. Other donors' cooperation: USAID : training and provision of equipment to support the CHPS implementation in 28 districts in the seven regions excluding the three regions in the north (5 years from 2004). UNICEF: training of CHOs, construction of CHPS compounds, support for CHOs' living environment, etc.

[1] Regarding the definition of functional CHPS, this survey followed the definition of CHPS with i. assignment of CHO and ii. home visit paid by CHO. (This definition was redefined after the project completion and the original definition was CHPS with fulfillment of : 1.completion of community awareness 2. acceptance of community 3.CHO assigned 4.CHO with basic necessary equipment 5. CHV assigned.)

[2] Reviewed at the time of the ex-post evaluation.

	Multiple donors: Sector Budget Support (Health)

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Ghana's development policy such as the second Health Sector Five Year Programme of Work (2002-2006), the third Health Sector Five Year Programme of Work (2007-2011) and the Health Sector Medium-Term Development Plan (2010-2013) that all prioritize the implementation of CHPS, development needs for provision of basic health services and better access to such services in UWR, where under-five mortality rate is still high at 108 per 1,000 births (2011), as well as Japan's ODA policy the Country Assistance Program for Ghana (2006), at the time of both ex-ante evaluation and project completion.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project aimed to strengthen administrative capacity of GHS in implementation of CHPS in UWR. The degree of achievement of the project purpose was verified based on the performance of the five indicators listed in the table below[3]. On Indicator 1, while FSV implementation rate varied by level of local administration, the rate at the district level, i.e. FSV implemented by DHMT for the Sub District Health Teams (SDHTs), increased from 56.7% (2009) to 69.8% (2012). Managerial and supervisory officers at district or higher levels consider that FSV has contributed to more timely and direct services such as supervision and guidance for health personnel and provision of supplies. Although sufficient data were not available on FSV implementation by SDHTs and CHOs, the rate is estimated to have decreased due to factors such as unavailability of the FSV tools, and high staff attrition. It is considered that the data collection was insufficient after project completion because the FSV tools were not directly applicable for operations at the district level, and therefore data were not properly managed. The subsequent project is revising the tools to improve such situation. Indicator 2 showed a decrease from the time of terminal evaluation presumably due to the difficulties in ensuring transportation means and fuel and conflicting programmes. However, CHPS Implementation Guideline (Final Draft) recommends that estimated number of home visit by CHO is about 50 times per month. Therefore, the number of home visit at the time of ex-post evaluation is still above recommendation. On Indicator 3, the procured equipment was well utilized until the time of project completion but not sufficiently enough at the time of ex-post evaluation (see the table below). As for Indicator 4, appropriately-referred cases in the target area accounted for around 80%. Since 2009, the referral operation monitoring has been incorporated into FSV. Also, the current project is engaged in the revision of the tools and training for further strengthening the referral system. Indicator 5 showed an increase from 48% at the time of terminal evaluation to 54% at the time of ex-post evaluation. In addition, all of the surveyed CHOs said that the contents of the CHO training, especially how to enter the community (community entry), formation of CHCs, how to promote community participation, problem identification and finding solutions, were very useful, and they often referred to the learning guides that they had received in the training.

With respect to the overall goal, "to increase coverage of functional CHPS", the number of functional CHPS zones increased from 81 at the time of terminal evaluation to 166 at the time of ex-post evaluation, achieving 84% of the target of 197 CHPS zones for 2015. It is likely that GHS will achieve this target by 2015 through implementation of its plan to construct CHPS compounds that are funded by the Project for the Development of CHPS Infrastructure in the Upper West Region (JFY2012), and others to be constructed by District Assemblies (DAs)/Member of Parliaments (MP) etc. It was also observed that the dissemination of the activities developed and initiated under this project (CHAP, the Community Emergency Transport System (CETS), FSV, etc.) have been promoted and disseminated to other regions and nationwide by study tours for district directors and other means. Furthermore, FSV is expected to be reflected in the national CHPS implementation guideline that is currently being revised. Besides, a number of good practices were observed including the followings: institutionalized delivery (recommended) has increased thanks to CHOs' facilitation of community participation, and the enhanced communication among CHPS, districts and sub districts through FSV; and the community members contributed for the construction of rooms in CHPS compound for mothers' privacy and emergency delivery. As for the relation to other projects, it was observed that collaboration with the grant aid project and other activities, including those by JOCVs and other donors such as UNICEF, contributed to the increase in CHPS zones.

In summary, the project purpose was achieved to a certain degree at the time of project completion, however, the decreased in the use of the tools, which had to be revised by the subsequent project. The overall goal has been achieved based on the increase in functional CHPS zones.

Therefore, effectiveness/impact of the project is fair.

Achievement of Project Purpose and Overall Goal

<table>
<tr><th>Aim</th><th>Indicators</th><th>Results</th></tr>
<tr><td>(Project Purpose) Institutional capacity of GHS on CHPS implementation in UWR is strengthened.</td><td>1. Job performance of health personnel is improved according to performance standard (PS) for RHMT, DHMTs, SDHTs and CHOs (verified through FSV implementation rate and performance</td><td>FSV implementation rate
<table>
<tr><th>Target FSV</th><th>At the time of Terminal Evaluation (2009)</th><th>At the time of Ex-post Evaluation (March 2012)</th></tr>
<tr><td>RHMT to DHMT</td><td>na</td><td>97.2%</td></tr>
<tr><td>DHMT to SDHT</td><td>10.9%(2008) -> 56.7% (2009)</td><td>69.8%</td></tr>
<tr><td>SDHT to CHO</td><td>7.5%(2008) -> 23.7% (2009)</td><td>8%</td></tr>
<tr><td>CHO to Community Health Volunteer (CHV)</td><td>52.5%</td><td>na</td></tr>
</table></td></tr>
</table>

[3] The analysis took into consideration the Improvement of Maternal and Neonatal Health Services Utilising CHPS system in the Upper West Region (2011-2016), the subsequent (Phase 2) project that is currently being implemented.

<table>
<tr><td></td><td>assessment)</td><td>Source: JICA internal documents

Performance assessment: improvement was confirmed in most of the performance items in all districts.</td></tr>
<tr><td></td><td>2. Number of households covered by CHO home visit increases</td><td>
<table>
<tr><td>No. of home visits per month per CHPS zone</td><td>2006</td><td>Terminal Evaluation (2009)</td><td>Ex-post Evaluation (Sept. 2013)</td></tr>
<tr><td>Visits/month</td><td>57.8</td><td>90.1</td><td>53.6</td></tr>
</table>
Source: extracted from the District Health Information Management System (DHIMS2)</td></tr>
<tr><td></td><td>3. All of the motorbikes/ medical equipment/ radio sets procured by the project are fully utilized until the end of the project period.</td><td><Project completion> Fully utilized until the end of the project period.
<Ex-post evaluation> They have been properly maintained but not fully utilized. Uses of motorbikes have been restricted to save fuel and for other reasons (home visits are carried out on foot as much as possible). The radio sets have not been used since 2010 due to limitations in connectivity settings. CHOs use mobile phones for communication. When a blood pressure cuff is broken, it is repaired by the region or a new set is purchased by the district.</td></tr>
<tr><td></td><td>4. Promotion of cases appropriately referred by CHO increases (in three districts)</td><td><Terminal evaluation> 98% (March-May 2009), 93% (June-August 2009)
<Ex-post evaluation> around 80% in most districts according to the district-wide data collected by the region (2011).</td></tr>
<tr><td></td><td>5. Proportion of CHPS zones implementing CHAP increases</td><td><Terminal evaluation> 52.6% of CHPS zones implemented CHAP activities at least once. Approx. 30% of them implemented the activities without support from NGOs.
<Ex-post evaluation> The number of CHPS zones implementing CHAP has increased.
s
<table>
<tr><td>Item</td><td>2009</td><td>2013</td></tr>
<tr><td>No. of CHPS zones where CHO/CHN was assigned</td><td>138</td><td>166</td></tr>
<tr><td>No. of CHPS zones where CHO/CHN carries out community participation activities</td><td>77</td><td>127</td></tr>
<tr><td>No. of CHPS zones where CHAP is implemented.</td><td>37</td><td>69</td></tr>
<tr><td>% of CHPS zones where CHAP is implemented</td><td>48%</td><td>54%</td></tr>
</table>
Source: JICA internal documents</td></tr>
<tr><td>(Overall Goal)
To increase coverage of functional CHPS.</td><td>Increase in the number of functional CHPS zones</td><td>
<table>
<tr><td>Item</td><td>Project commence-ment (2006)</td><td>Terminal evaluation (2009)</td><td>Ex-post evaluation (Nov. 2013)</td><td>Target for 2015</td></tr>
<tr><td>No. of functional CHPS zones</td><td>24</td><td>81</td><td>166</td><td>197</td></tr>
<tr><td>Target achievement rate (%)</td><td>12%</td><td>41%</td><td>84%</td><td>100%</td></tr>
</table>
Sources: JICA internal documents and interviews</td></tr>
</table>

Note: For some indicators, information as of project completion was not available, and information as of terminal evaluation was used.

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 131%) because of the expansion of the project sites during the second half of the project period from the planned two pilot districts to all of the nine districts, and the increase in the project activities following such expansion.

Therefore, efficiency of the project is fair.

4 Sustainability

In the policy aspect, the Health Sector Medium-Term Development Plan (2010-2013), and the objective 1 “Bridge the equity gaps in geographical access to health services” of the Health Sector Medium-Term Development Plan (2014-2017) that is currently being drafted attaches importance on strengthening of the district-level primary health care system and acceleration of implementation of the revised CHPS policy. Also, the Annual Programme of Work (APOW) 2014 that is being developed based on the above-mentioned draft Medium-Term Development Plan promotes the increase of CHPS coverage, increase of outreach and home visits and improvement of quality of basic medical services. Therefore, strengthening the administrative capacity of GHS in implementing CHPS is still important. In the institutional aspect, considering that the extension of CHPS requires multi-sector involvement and the local administration systems and community participation are essential particularly in the district or lower levels, GHS plays a central role in the technical aspect of CHPS and facilitates stakeholders’ participation to promote CHPS. Currently, community participation is being extended and established by CHOs without depending on external resources (such as support from NGOs). With the 14 facilitators developed under this project, there are sufficient human resources for UWR to independently conduct training for CHOs. The subsequent project also continues training for CHOs and the sufficient number of human resources is ensured. In the technical aspect, while there are rotations of CHOs in every two to three years mainly due to their return to school and personnel transfer, the quality of services

have been maintained through supervision and coaching as part of FSV that was introduced under this project. Also, the manuals and guidelines that were revised based on the ones developed under this project are used, and there is a mechanism to disseminate those outputs to district health directors in other regions through study tours, etc. In the financial aspect, expenses for providing services (such as vaccination) are covered by the budget for CHPS that is allocated as part of the health programme budget. Purchase and provision of medical supplies and equipment for implementing CHPS is funded by the Internally Generated Fund (IGF) that is reimbursed from the National Health Insurance Scheme. Staff costs are funded from the central government, and some budget is allocated from the district level to cover a certain extent of cost for fuel and maintenance of motorcycles for CHOs' activities. Cost for CHPS compound construction is funded from the Project for the Development of CHPS Infrastructure in the Upper West Region (Grant Aid for Community Empowerment) and the development budget of DAs/MPs, and others. To ensure sustainability, the local government structures must be fully engaged in all levels of CHPS implementation. Through this, the institutional, technical and financial aspects will be sustained, partly due to the sustainability component of the current project. Therefore, sustainability of the effects of this project is high.

5 Summary of the Evaluation

This project achieved its project purpose, "institutional capacity of GHS on CHPS implementation in UWR is strengthened" to a certain extent at the time of project completion. Although part of the outcomes has not been maintained at the time of ex-post evaluation, a number of positive changes have been observed through interviews. As for the overall goal, "to increase coverage of functional CHPS", the number of functional CHPS zones has steadily increased and achieved 84% of the target for 2015 at the time of ex-post evaluation. It was also observed that the activities developed and started under this project have been extended to other regions and the country at large through study tours, etc. and that FSV would be reflected in the national guidelines. In terms of sustainability, the institutional, technical and financial aspects of the implementing agency are considered to have been continuously improved with support from the current project. For efficiency, the project cost exceeded the plan. In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency：

1) FSV is a good tool for monitoring units in the region, districts, sub districts and community. It is recognized by districts and other higher levels but not so by the service providers. Therefore, efforts are required to disseminate the system to all stakeholders for the sake of expanded community activities and services. Data management and reporting are particularly important for the system, hence it is recommended to consider how to ensure relevant inputs (human resources, budget, equipment, etc.) are available in a sustained manner.

2) CHOs are critical staff in facilitating community level activities. Therefore, efforts are needed to manage the high attrition of CHOs, strengthening the instruction and support system through the training and supervision of CHOs, and promoting active community health activities (prevention and health promotion) through smooth communication.

Lessons learned for JICA：

1) In this project that was to promote strengthening of administrative capacity in local health services, FSV was found to be effective in increasing communication between different administrative levels, promoting community participation (expanding the CHAP/CETS area) and enhancing regional activities. Therefore, in similar projects where different levels of stakeholders are involved, it is important to place emphasis on linkage between one level and another and to support strengthening of management and supervision between those levels.

2) While the manuals and guidelines developed for training and other activities are still kept and utilized, the FSV tools and the database are not much used anymore in some districts. Based on this finding, it is considered important to thoroughly check the acceptability of tools in the tool development stage.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Kenya Office: February, 2014

Country Name	Blood Safety Project
Republic of Kenya	

I. Project Outline

Background	Kenya had hospital based blood transfusion service relying on family donors, and there had been increasing anxiety on the weak capacity for proper blood product preparation and supply. The Government of Kenya issued Policy Guidelines on Blood Transfusion in Kenya in 2001, and the National Blood Transfusion Service (NBTS) made the transition from conventional system to the system where blood is collected from voluntary donors, screened and processed at Regional Blood Transfusion Centers (RBTCs) and supplied from RBTCs to hospitals. In addition, blood transfusion for children constituted about 40% of all transfusion cases. There was only one-size blood bag (450ml) available and this implies that in transfusion for children, the unused blood was discarded, and therefore a considerably large part of the blood was wasted.		
Objectives of the Project	1. Overall Goal: Approaches[1] for safe, appropriate and efficient use of blood products demonstrated by the project are applied to other Blood Transfusion Service (BTS) institutions in Kenya. 2. Project Purpose: Approaches for safe, appropriate and efficient use of blood products are developed, demonstrated and applied as national standards. 3. Assumed steps for achieving the project goals[2]: (1) The project transfers the technologies of (i) preparation of small volume packed red cells (PRCs) for children, (ii) logistics management of blood and blood products, and (iii) clinical practice of blood transfusion at model facilities, and documentation of those activities (development of guidelines, Standard Operation Procedure (SOP), manuals and tools[3]), (2) The small PRCs are routinely used and the number of unnecessary discarded blood units decreases at the model facilities, and (3) The SOPs, manuals and tools for clinical use of blood products are widely available at model facilities.		
Activities and inputs of the project	1. Project site (Model facilities): RBTC Nakuru, Rift Valley Provincial General Hospital (PGH Nakuru), Naivasha District Hospital, Koibatek District Hospital 2. Main activities: (1) establishing Hospital Transfusion Committee (HTC) in each model hospital to function as an information sharing place for RBTC and hospital departments, (2) revising SOPs for preparation of small PRCs for children, and implementing a pilot study for PRCs preparation, (3) revising SOPs and introducing the concept and theory, and tools for logistics management of blood products, and (4) revising SOPs for safe and appropriate use of blood products and training on safe and appropriate blood transfusion management. 3. Inputs (to carry out the project activities) Japanese Side 1. Experts: 9 persons (Long-term: 2, Short-term: 7) 2. Trainees received : 19 persons (CP training in Japan) 3. Equipment: Cold chain equipment, blood bags, photocopy machine, vehicles, computers for data analysis and others Kenya Side 1. Staff allocated: 24 persons 2. Land and facilities: project offices 3. Local costs: 240 million Kenya Shilling		
Project Period	October 2006 – October 2009	Project Cost	253 million yen
Implementing Agency	National Blood Transfusion Service (NBTS)		
Cooperation Agency in Japan	Japanese Red Cross Society and Hokkaido Red Cross Blood Centre		
Related Projects (if any)	Japan’s cooperation: Development study on safe blood supply (2000), Follow-up cooperation (Nov 2009 - Oct 2010) Other donors’ cooperation: (1) The US President’s Emergency Plan for AIDS Relief (PEPFAR), (2) USAID: promoting blood donation, and construction blood center, (3) CDC for promoting blood screening, (4) American Association of Blood Banks (AABB) for capacity development		

II. Result of the Evaluation

1 Relevance
This project has been highly relevant with Kenya’s development policy “blood safety as an intervention area in the

[1] At the mid-term review, “approaches for safe, appropriate and efficient use of blood products” were defined as (a) the improvement of the logistics management system, (b) introduction and use of small PRCs for children), and (c) improvement of the clinical practice of blood transfusion through recording/reporting and the investigation of adverse/unexpected reactions by a Hospital Transfusion Committee (HTC)

[2] Reviewed at the time of the ex-post evaluation.

[3] Tools are, such as visual aids reporting format, monitoring checklist, seminar module etc.

implementation of the Kenya Essential Package for Health" as set in Second National Health Sector Strategic Plan for the period 2005-2010 (extended to cover the period 2011-2012), development needs, "increasing number of blood transfusions and further PRC utilization", as well as Japan's ODA policy: Country Assistance Program to Kenya (year 2000) at the time of both ex-ante evaluation and project completion.. Therefore, relevance of this project is high.

2 Effectiveness/Impact

(1) Attainment of Project Purpose and continuity of project effects

At the project completion, the SOPs and various tools were developed and actually used at the model facilities. In accordance with the SOPs and tools, cumulatively 413 small PRCs for children were prepared at RBTC Nakuru by the time of project completion. In addition, 1,556 PRCs for adults were prepared which used the SOP developed by NBTS with a little modification in preparation of the small PRCs for children. At the time of ex-post evaluation, at least 8 items including major products such as SOPs for PRCs, PRCs reference, SOPs for cross match related tests in the laboratory were mentioned as being applied nationally in Kenya, according to NBTS. In addition, the Regional Society for Blood Transfusion has adopted the Hemovigilance Manual introduced by the project and with funding from PEPFAR, they provide technical assistance to 28 HTCs. the improved logistics management led to that the number of unnecessary discarded blood units has reduced. The model facilities have continued activities for PRCs preparation, logistics management, and appropriate use of PRCs. RBTC Nakuru has continued preparing PRCs following the SOPs and tools from the project. With the support of the AABB, NBTS developed national SOPs and forms in 2009, which were supposed to be incorporated to the guidelines developed by the project. However, the incorporation has not been made yet.

Overall, there is improvement in the management of blood transfusion services at model sites. Whenever the RBTC Nakuru has the appropriate inputs to prepare small PRCs for children, quality assurance is done and the quality of the packs is monitored at both the RBTC Nakuru and model hospitals blood banks. The reference charts are well displayed at both RBTC and hospital facilities. Almost all transfusions at the model hospitals are carried out by using PRCs. According to records available in the transfusion registers at model facilities and reports by Hemovigilance Officers, there are almost no adverse / unexpected reactions from transfusions.

(2) Overall Goal

The NBTS has gradually increased processing of blood products including PRCs for transfusion for children and adults respectively. PRCs have been gradually increased from 40% (2010) to 60% (2012) of all blood collected and screened. All the RBTCs are now preparing and supplying PRCs to NBTS satellite centers and transfusing facilities around the country. The RBTCs are also using most of the manuals and tools developed for logistics management of blood products. They are all conducting supervisory visits to facilities within their areas of jurisdiction using the guideline and checklist. In addition, the number of hospitals with HTCs has increased from 11 (2009) to 28 (in 2012).

In this way, this project achieved the project purpose, and positive outcomes were observed in the model facilities after project completion. The overall goal has been achieved as application of the project approaches are observed nationally. Therefore, effectiveness/ impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Approaches for safe, appropriate and efficient use of blood products are developed, demonstrated and applied as national standards.	Availability of SOPs and supporting tools that reflect the successes and lessons of activities of the project.	(Project Completion) 24 SOPs, guidelines and tools were developed. (Ex-post Evaluation) 24 SOPs, guidelines and tools were available.
	Improvement in management of BTS at model sites.	(Project completion) logistics management, PRC preparation management including quality control, HTC management, and transfusion service management including adverse reaction monitoring have improved. (Ex-post evaluation) Improved managements are maintained.
	Commencement of procedures to apply approaches in order to improve management of BTS as national standards.	(Project completion) The manuals and tools applied nationally: The guideline for and checklist (manual) for supervision of hospital transfusion laboratories, hemovigilance manual for hospital transfusion services, and blood request/issue/receipt voucher. (Ex-post Evaluation) In addition to the above listed items, SOPs for PRCs, PRCs reference, SOPs for cross match related tests in the laboratory, blood stock ledgers, and temperature monitoring chart are applied nationally.
(Overall goal) Approaches for safe, appropriate and efficient use of blood products demonstrated by the project are applied to other BTS institutions in Kenya	Number of BTS institutions applying the approaches demonstrated by the project	(Ex-post Evaluation) All 6 RBTCs as well as other BTS institutions such as hospitals and nursing homes have applied the approaches (360 facilities in total) at least one or several approaches[4].

Source : Project Completion Report, Terminal Evaluation Report, Interviews with counterparts

3 Efficiency

[4] The follow up activities were implemented by local consultant after the project ; rolling out experiences and knowledge gained from the Project in the Nakuru model region to national level by developing training module with NBTS, RBTC and model hospitals and conducting training at model sites.

While the inputs were mostly appropriate for producing the outputs of the project, and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 115%) because at the time of ex-ante evaluation, no specific budget for counterpart training was included. Therefore, efficiency of the project is fair.

4 Sustainability

The project is still given importance in the current development policy. NBTS targets to convert 80% of collected and screened blood into PRCs. In fact, one third of the blood will be converted into small volume packs for transfusion in children in accordance with the NBTS's internal policy. Institutionally, with on-going devolution of health services, there is uncertain aspect, such as the future re-organization of the operations of NBTS and model health facilities. Although the functions related to blood safety policy formulation, setting standards and capacity building of county health service providers will be retained at the National Government level, the County Government health structures will gradually take over functions related to blood collection, donor education, recruitment and hospital level utilization of blood products. Staff deployment and distribution will be further considered to optimize service delivery at NBTS, RBTCs and model hospitals.

In technical aspect, there is mostly sufficient technical capacity of the related parties for continuation of PRCs preparation, supply and proper use, excluding issues that NBTS sometimes experiences difficulties in dealing with erratic supply of triple and quadruple blood bags for preparation of small PRCs for children. The project counterparts are still in post at RBTC Nakuru and model hospitals. RBTC Nakuru continues to train and mentor other RBTCs and hospital staff on PRCs preparation, supply and appropriate use in the clinical setting. The project counterparts actively participate in and facilitate sessions in regular Continuing Medical Educations at both RBTC and model hospitals. Financially, there is a chronic problem of budget shortage and NTBS including RBTCs is heavily financed from external sources, primarily PEPFAR. Although PEPFAR's support continues to 2015, the prospect for succeeding support in the future is not clear. Devolution of health services to the county levels will require further examination of budget sources and to secure necessary budget for blood transfusion activities. Thus, as there are uncertainties in institutional and financial aspects, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

This project has achieved project purpose of "approaches for safe, appropriate and efficient use of blood products are developed, demonstrated and applied as national standards". Overall goal has been also achieved as the SOPs and tools developed by the project are being widely applied, and the number and percentage of PRC preparation and use have increased nationally. As for sustainability, there are uncertainties in terms of institutional and financial aspects due to the ongoing devolution of health services. For efficiency, the project cost slightly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

1. NBTS is recommended to finalize and issue the guidelines for logistics and inventory management as national standard. In doing so, efforts should be made to harmonize the guidelines with other tools that have so far been developed by other development partners.
2. In order to sustain the preparation and supply of small PRCs for transfusion in children, NBTS is recommended to review its procurement practice with a view to continuously avail to the RBTCs' adequate quantities of triple and quadruple blood bags. Where resources allow, hospitals are also encouraged to contribute to the budget for the procurement of these supplies. This will help in further minimizing wastage that may accrue from sustained utilization of adult PRCs for transfusion in children.
3. In order to address the chronic problem of budget shortage, NBTS is recommended to develop and implement a strategy for cost recovery. In line with the on-going devolution of health services in Kenya, the County Governments and County Hospitals may be potential partners in cost sharing (for procurement of supplies, printing of tools and support to blood donation campaigns) aiming to sustain quality services.

Lessons learned for JICA:

1. A model-development approach (which verifies the effectiveness of the project at the early stage and then disseminates it to other areas) was incorporated in the project design and it greatly enhanced the standardization of project approaches by scaling it up to the national level. Nakuru region model sites had a profound positive impact on NBTS in the adoption of the approaches and were eventually applied as national standards.

Recording of PRCs at Nakuru RBTC

Stand for Preparation of PRCs at Nakuru RBTC

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Malawi office: Jan, 2014

Country Name	Development of Smallholder Irrigation Schemes Technical Cooperation Project
Republic of Malawi	

I. Project Outline

Background	The agricultural sector was and is still an important sector in Malawi for sustainable economic development and poverty alleviation. In 2002 about 72% of farmers were categorized as small scale farmers holding less than 1ha of agricultural land and their agricultural productivity was low and vulnerable against natural disasters such as drought since most of farmers were subsistence farmers mainly depending on rain fed agriculture. The country, however, has significant irrigation potential that remains largely underdeveloped due to lack of budget, limited human resources and technical capacity of Malawi government. Because of this situation, the Development Study on Capacity Building and Development for Smallholder Irrigation Scheme was conducted by JICA in 2002-2005, and a small scale irrigation development package was developed.
Objectives of the Project	1. Overall Goal: Small-scale irrigation farming is promoted, disseminated and practiced in appropriate areas in Malawi in order to increase food security. 2. Project Purpose: Nationwide extension system for comprehensive small-scale irrigation farming (Note 1) is established. 3. Steps for achieving the project goals: This project established the comprehensive small scale irrigation farming characterized as a low-cost irrigation farming method and techniques (Note 1) and provided training for the Ministry of Agriculture and Food Security (MoAFS) and the Ministry of Irrigation and Water Development (MoIWD) members of staff (extension workers (Note 2) in all Extension Planning Areas (EPAs) (Note 3). Through these activities, MoAFS and MoIWD strengthened their capacity to promote the comprehensive small-scale irrigation farming in all potential irrigation areas in Malawi. Farmers in all potential irrigation areas in Malawi applied and practiced the comprehensive small-scale irrigation farming, and then they increased the agricultural production, which eventually contributed to improved food security of Malawi. Note 1: The comprehensive small scale irrigation farming is established based on the small scale irrigation development package developed by the precedent JICA's development study "Study on Capacity Building and Development for Smallholder Irrigation Scheme" (2002-2005). The "Small scale irrigation development package" refers a package of low-cost technologies for self-help irrigation development, which enables smallholder farmers to embark on irrigation farming without any external inputs. This package was composed of (i) comprehensive guideline, (ii) technical manual, (iii) leaflet, (iv) posters, and (v) picture stories. This package was developed by JICA's Development Study on Capacity Building and Development for Smallholder Irrigation Schemes (2002-2005). Note 2: Extension Workers in this project refers to staffs from MoAFS and MoIWD and it included Agricultural Extension Development Coordinators (AEDC), Agricultural Extension Development Officer (AEDO), Extension & Methodology Officer (EMO), Irrigation Officer (IO) and Irrigation Assistants. Note 3: In this report, terminology of "EPA" refers to an administrative unit or a field office of MoAFS where the extension workers are dispatched. There are 8 Agriculture Development Divisions (ADDs), 28 District Agricultural Development Office (DADOs) and 195 Extension Planning Areas (EPAs) under MoAFS in Malawi.
Activities of the project	1. Project site: Malawi nationwide 2. Main activities: Trainings for extension workers in all EPAs, development of dissemination program and tools for small scale irrigation farming, examination and revision of experience and application of small scale irrigation development package, and establishment of improved comprehensive package for nationwide dissemination of small scale irrigation farming. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 5 persons (2 for Long term, 3 for Short term) 2) Trainees received: 14 persons 3) Equipment: 4WD vehicle x 2, PCs, projectors, printers, scanners, desk, chair, cabinet Malawi Side 1) Staff allocated: 27 persons 2) Land and facilities: project office, electricity, water supply 3) Local cost: salaries to counterpart personnel
Project Period	March 23, 2006 –December 22, 2009 / Project Cost: 284 million yen
Implementing Agency	• Department of Irrigation (DOI), Ministry of Irrigation and Water Development (MoIWD) • Department of Agriculture Extension Service (DAES), Ministry of Agriculture and Food Security (MoAFS)
CA[1]y in Japan	None
Related Projects (if any)	Japan's cooperation: • Study on Capacity Building and Development for Smallholder Irrigation Scheme (Development Study, 2002-2005) • Project for Development of Medium Scale Irrigation Scheme (Technical Cooperation, 2011-2014)

[1] Cooperation Agency

II. Result of the Evaluation[2]

1 Relevance

This project has been highly relevant with Malawi's country's development policy ("food self-sufficiency through promotion of irrigation farming" in the National Irrigation Policy and Development Strategy (2000), Malawi Vision 2020 (1997), the Malawi Growth and Development Strategy II (2011-2016)), development needs ("promotion of small scale irrigation farming"), as well as Japan's ODA policy for Malawi with the priority area of food security, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project focuses on establishing the dissemination system of the comprehensive small-scale irrigation farming in Malawi by strengthening the capacity of MoAFS and MoIWD staff (extension workers) through developing a low-cost irrigation farming method and techniques to be applicable in all potential irrigation areas. The total number of irrigation groups formed by project completion in 2009 was 2,535 , which surpassed its target of 1,220. It was confirmed that the major irrigation and agricultural techniques of the comprehensive small scale irrigation farming have been practiced in the irrigation sites. For example, gravity fed irrigation, canal alignment and reshaping, river diversion, weir construction, ancillary bed construction, botanical pest control, compost manure making, rice transplanting, and sasakawa maize and mulching planting, and so on were practiced at five sites visited. It is likely that the comprehensive small-scale irrigation farming were introduced and the monitoring and evaluation activities were generally institutionalized at most of the EPAs after project provided the training to MoAFS and MoIWD staff (in 125 EPAs out of total 195 EPAs) in Malawi. However, it was revealed that the monitoring and evaluation capacity of EPAs needed to be further strengthened particular in quality of reporting and data recording. In addition, limited background of AEDOs in irrigation and inadequate technical support by District irrigation engineers towards AEDOs are constraints.

As for the overall goal, 1,873 sites were developed by AEDOs during the project period (2006-2009) and cumulatively 2,535 sites with 4,877 ha of irrigation areas were developed from 2003 to 2009 including the project period of the precedent JICA's development study. However, the data after 2009 till now is not available. Moreover, the actual data for the following indicators: percentage of irrigation areas developed by AEDOs among the potential irrigation area in Malawi, irrigation areas where irrigation agricultural farming is actually implemented during the dry season among irrigation areas developed by AEDOs, and volume of agricultural outputs/products produced in the dry season among irrigation areas developed by AEDOs are not available. Therefore, the achievement of overall goal was not verifiable at the time of ex-post evaluation. On the other hand, in all the five sites visited, farmers cited increased crop production due to two cycle irrigation farming. This has improved household food security and household income from sales of irrigation crops. The income from crop sales has been used for payment for school fees for children, buying clothes for family members, building houses, buying livestock and so on. These sites were supported not only by this project but also other donors/NGOs projects.

In this way, this project has mostly achieved the project purpose. It was confirmed that the five irrigation sites visited during the ex-post evaluation survey, continuously practiced comprehensive small-scale irrigation farming that brought about some positive impacts. However, it could not be confirmed with the tangible figures as to what extent the comprehensive small irrigation farming has been disseminated and practiced in the potential irrigation areas in Malawi due to lack of data set as indicators. Therefore, effectiveness of the project is fair.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Nationwide extension system for comprehensive small-scale irrigation farming is established.	Irrigation groups increased to 1,220	(Project Completion) 2,535 irrigation groups (Ex-post evaluation) No information
(Overall goal) Small-scale irrigation farming is promoted, disseminated and practiced in appropriate areas in Malawi in order to increase food security.	Demonstrated irrigation group members increased to 21,960	(Ex-Post Evaluation) No information
	Demonstrated irrigation area increased to 1,830 ha	(Ex-Post Evaluation) 1,873 sites were developed from 2006 to 2009, but its dimension was not available. Cumulatively 4,877 ha of irrigation areas were developed at 2,535 sites from 2003 to 2009. Although no statistical data at national level is available regarding the irrigation area after 2009, statistics of division level indicates that an increase in irrigation area in Lilongwe ADD, and Kasungu ADD.

Source: Project Completion Report, Interviews with counterparts

3 Efficiency

While the inputs were mostly appropriate for producing the outputs of the project, and the project cost was within the plan (ratio against the plan: 81%), the project period was extended for 9 months (ratio against the plan: 127%) because short-term experts in the field of farm management were not dispatched as planned. Therefore, efficiency of the project is fair.

[2] Constraint of Evaluation: The ex-post evaluation reexamined the appropriateness of the indicators for project purpose and overall goal, and modified their indicators by providing several additional indicators as well as deleting the duplicate indicators in order to assess their achievement appropriately.

4 Sustainability

In policy aspect, this project is still given importance in the current development policy as the National Irrigation Policy and Development Strategy (2000), which aims at poverty reduction and food self-sufficiency through small scale irrigation. Regarding the institutional aspect, the Malawi government has increased the recruitment of AEDOs over the years, and the number of extension officers has been expanded to disseminate the package. However, there is still need of increasing the number of irrigation extension officers at EPA level since most of the AEDOs at EPAs have limited background in irrigation. In addition, the backup system on irrigation technology from DADOs to EPAs must be strengthened. Regarding the technical aspect, no training has been initiated by ADDs/DADOs to AEDOs due to budget constraints, however, other development projects of Malawi government and NGO's initiatives maintain and disseminate the knowledge and skills for small-scale irrigation farming. It is worth noting that most of bikes to be used for extension activities are broken down and not -serviced due to lack of budget for spare parts. Regarding financial aspect, inadequate fund are allocated to AEDOs to carry out all agricultural extension services. From these findings, the project has some problems in institutional, technical and financial aspects, however, the fact that other initiatives supported by development projects funded by GoM and NGO's, have continued to maintain and disseminate knowledge and skills for small scale irrigation farming amongst AEDO's nationwide, therefore sustainability is fair.

5 Summary of the Evaluation

The project has mostly achieved the project purpose. The number of irrigation groups formed by project completion was 2,535 groups, which surpassed its target value of 1,220, many types of the comprehensive small-scale irrigation farming were applied by the irrigation groups, and the basic extension system for comprehensive small scale irrigation farming was established at most of the EPAs by the project completion. However, it could not be verified at the time of ex-post evaluation to what extent the comprehensive small-scale irrigation farming has been actually disseminated and practiced in the potential irrigation areas in Malawi due to lack of information. As for sustainability, the project has some problems in institutional, technical and financial aspect such as shortage of irrigation extension officers, lack of training to extension officers, and limited budget, however, the initiatives to promote small scale irrigation farming technologies have been maintained through support from other development projects funded by GoM and NGOs. As for efficiency, the project period was longer than planned because the dispatch of short-term experts in the field of farm management was delayed.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is recommended to increase the number of irrigation extension officers at EPA level to provide technical support to AEDOs who have limited knowledge in irrigation, so that EPA will be able to provide more technical support to farmers in the aspect of irrigation techniques.
- In order to increase frequency of field visits by the extension officers, securing funding for transport costs as well as availability of means of transport are urgent issues. It is suggested efforts be made to allocate the appropriate funding for transport cost as well as maintenance cost for vehicles and motorcycles that are non-runners in order to improve the mobility of extension officers for better provision of extension services. If possible, it is also recommended to consider the possibility of raising financial resources through other means such as collection of service fees from farmers in order for the extension services to be self-sufficient.
- This ex-post evaluation faced difficulties in data collection for number of irrigation sites, irrigation areas, volume of agricultural outputs/products, etc. and could not verify the achievement of overall goal partly due to weak monitoring and evaluation capacity of extension offices. Since they are key information to know the outcomes of the extension services and important baseline data for future sector policy, it is suggested that efforts be made to improve the monitoring and evaluation capacity of extension officers by provision of training based on the analysis of issues.

Lessons learned for JICA:

- The ex-post evaluation revealed a financial difficulty for AEDOs to carry out all agricultural extension services due to lack of O&M budget allocated from MoIWD. In the planning stage, JICA should carefully examine whether implementing agency has enough capacity to finance the necessary O&M budget for AEDOs to disseminate small-scale irrigation farming nationwide after project completion. If it is assumed that securing the O&M budget for AEDOs is difficult after project completion, it is necessary to take some measures for fund raising in advance such as setting up a system of fee collection from service users or collaboration with other donors working for agricultural development in Malawi in dissemination of small-scale irrigation farming.

Chamkhuta Iirrigation Site in Mitunda EPA

Tisaukilanji Irrigation Site in Chiwamba EPA

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Madagascar office: October, 2013

Country Name	Project for Improvement of Maternal, Newborn and Child Health Service
Madagascar	

I. Project Outline

Background	In Madagascar, reduction of infant and maternal mortality has been one of priorities in the national health policy. In particular, mothers and children in rural areas had limited access to health services. JICA had been supporting the Hospital Center of University of Mahajanga (CHUM) and the Basic Health Centers (CSBs), but more enhancement of integrated maternal and child health service system, including referral system, had been urgent issue due to large proportion of mothers and children among the patients referred to CHUM.		
Objectives of the Project	1. Overall Goal: Government health policies and health programs especially in the field of improvement of maternal and child health service is reinforced in Madagascar. 2. Project Purpose: High quality maternal and child health service based on evidence-based medicine is provided to the people in Boeny Region. 3. Assumed steps for achieving the project goals[1]: The project establishes human resource development system to deliver humanized care (note 1) and evidence-based medicine (EBM) (note 2), and implements community health system, including accessible referral and counter referral model from community to CSBs and upper health institutions for perinatal emergency cases. By practicing a model of perinatal care in the target site, the project aims at provision of high quality maternal child health service based on humanized care and EBM. Through incorporating and dissemination of verified effects of the model of perinatal care, the national health policies/programs are reinforced in Madagascar. (note 1) a. satisfying care by the both sides of patient and health service provider by collaboration based on dialogues between the both sides, b. medicine based on evidence, c. user-friendly system which makes health service providers close to users as much as possible. (note2) the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.		
Project Information	1. Project site: Boeny Region, including the pilot sites of Mahajanga I and Mahajanga II (districts) 2. Main activities: Trainings of humanized care and EBM for medical staff, implementation of community IMCI (Integrated Management of Childhood Illness), introduction of follow-up and evaluation system, development of accessible referral and counter referral models for perinatal emergency care and improvement of medical facilities. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 5 for Long term, 18 for Short term 2) Trainees received: 45 persons 3) Equipment: 83 items, including vehicles, PCs, delivery beds, other medical equipment for trainings, etc. Malagasy Side 1) Staff allocated: 60 persons 2) Equipment: Vehicles for field survey 3) Land and facilities: project office, electricity		
Project Period	January, 2007 – January, 2010	Project Cost	280 million yen
Implementing Agency	Ministry of Health and Family Planning (since August 2011, change to Ministry of Public Health), Boeny Regional Office for Public Health (DRSP), Mahajanga University Hospital Center (CHUM)		
Cooperation Agency in Japan	International Medical Center of Japan (National Center for Global Health and Medicine since 2010)		
Related Projects	Japan's cooperation: (Technical Cooperation: TA, Grant Aid: GA) ・The Project for the improvement of Mahajanga University Hospital Center (GA, 1999-2001) ・The Project for the Improvement of Mahajanga University Hospital Center (TC, 1999-2004) ・The Improvement of Provincial Mother and Child Health by Utilizing the Function of Mahajanga University Hospital Center (TC, 2005-06) ・Project for Development of Maternal and Child Health Complex in Mahajanga Province (GA, 2006-09) Other donors' cooperation: ・Dispatch of expert to CHUM (France, 2004-05) ・Project for Strengthening Health Service in Mahajanga Province (GTZ, 1993-2007) ・Technical cooperation (Institut Régional de Coopération Développment Alsace, 2005-11) ・Integrated Management of Child Illness at Community Level (UNICEF, 2007-now) ・Management of Mother and Newborn at Home (UNICEF, 2009-now)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with the Madagascar's development policy, such as improvement of maternal and child health specified under "the Madagascar Action Plan (2007-2012)" and the Development Plan of the Health Sector and Social Protection (2007-2011), and development needs to reduce infant mortality and maternal mortality as well as to increase accessibility of the population to health services, as well as Japan's ODA policy to support human centered

[1] Reviewed at the time of the ex-post evaluation.

development for poverty reduction, including the health and medical care. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on improvement of maternal and child health services based on the humanized care and EBM through capacity development of medical and health staff at the top referral health institution of Maternal and Child Health Center (CME) in CHUM (CME/CHUM) and the primary health institutions (CSBs) in Boeny Region. As a result, the project purpose has been achieved by the increase in practice of the humanized care[2], the decrease in practice of the inappropriate medical interventions to be avoided, and the increase in the satisfaction of mothers who had delivery at CME/CHUM and sample CSBs[3], as well as improvement of access of high risk parturient women to necessary medical intervention. The proportion of Caesarean section at CME/CHUM among the estimated number of parturient women having absolute maternal indications[4] was estimated to increase since the unmet obstetric need survey conducted by the project indicated a decrease in the number of high risk parturient women who could not have Caesarean section[5]. Also, training system on humanized care and EBM for medical staff was established at CME/CHUM. At the community level, community IMCI and the referral system from community to the CSBs and CME/CHUM for perinatal emergency cases were introduced in the pilot sites in the region in order to complement the coverage of public health service by Community Agents (CAs, community health promoters) and Traditional Birth Attendants (TBAs). The activities of community IMCI has been continued under the support of the Ministry of Public Health and some NGOs supported by UNICEF through the trainings despite of the suspension of follow-up activities by the Regional Office for Public Health (DRSP) and District Office for Public Health (SDSP).

Physical exercises during the Mothers' Class at CME/CHUM

As for the overall goal, the Interim Plan of the Ministry of Public Health 2012-2013 prioritizes the institutionalization of the humanized care as one of the specific objectives for maternal and child health in the country. In addition, the training module on the humanized care and EBM has been utilized for trainings of medical and health staff in Fianarantsoa region under the follow-up cooperation of JICA. Also, the community IMCI has been applied in all the 22 regions of Madagascar since 2011.

Furthermore, the project has contributed to the decrease in infant mortality at CME/CHUM from 38.2 per 1,000 live births in 2011 to 35.6 in 2012. Introduction of Mothers' Class at CME/CHUM, which is one of useful tools to increase public awareness for perinatal care, has attracted pregnant women (40 participants with 8 sessions in 2008, 252 participants with 22 sessions in 2012) and enabled them to be confident of delivery at CME/CHUM. At the CSB level, no Mothers' Class is held due to no training opportunity for health staff on the activities.

Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Provision of high quality maternal and child health services based on evidence-based medicine in Boeny Region	(Indicator 1) Increasing rate of practice of humanized care during delivery/birth care in the pilot zone of Boeny Region.	Terminal Evaluation: Increased the recommended practices such as massage to ease parturient women. Ex-post Evaluation: Improved humanized cares by WHO except offering meal to parturient women have improved since project completion.
	(Indicator 2) Decreasing in inappropriate medical intervention for normal delivery in the pilot zone of Boeny Region.	Terminal Evaluation: Decreased interventions to be avoided such as hourly gynecological internal examination at the active stage. Ex-post Evaluation: Keeping almost the same level as at the terminal evaluation.
	(Indicator 3) Increasing rate of appropriate use of medicines for delivery in the pilot zone of Boeny Region	Terminal Evaluation: Increased since the inappropriate interventions such as use of oxytocin decreased. Ex-post Evaluation: No data available.
	(Indicator 4) Increase in satisfaction level of users for maternal and child health service in the pilot zone of Boeny Region	Terminal Evaluation: Reduced negative comments on relationship with medical/health staff from 23% to 9% at CSBs but increased from 10% to 37% despite the high satisfaction with medical service at CME/CHUM. Ex-post Evaluation: 98.2% of the parturient women/mothers at the sample CSBs and CME/CHUM satisfied with the health/medical staff and their care.
	(Indicator 5) Improvement in capacity of service providers for maternal and child health service in the pilot zone of Boeny Region	Terminal Evaluation: Improved knowledge and practices of health staff at CME/CHUM and the CSBs on perinatal care. Ex-post Evaluation: The interviewed mothers at the sample CSBs and CME/CHUM felt improvement of the capacity of medical/health staff for practicing the humanized care.
	(Indicator 6) Increasing rate of Caesarean	Terminal Evaluation: Estimated to increase in rate of Caesarean

[2] The practices of humanized care were verified by the baseline and the end-line surveys based on "Care in Normal Birth-a practical guide" by the World Health Organization (WHO).

[3] CSBII Betsako, CSBII Boanamary and CSBII Belobaka were observed in the ex-post evaluation survey.

[4] High risk cases which absolutely need Caesarian section due to the maternal condition such as threatened rupture of uterus. The probability of parturient women having absolute maternal indication is estimated 1.1-1.3% of the total number of parturient women.

[5] Unmet Obstetric Need can be estimated by the deduction of parturient women who had caesarean section by absolute maternal indication from the estimated total number of parturient women having absolute maternal indications.

	section by absolute maternal indications in Boeny Region	section by absolute maternal indications since the decrease in death case of parturient women by 23-24 cases. Ex-post Evaluation: The number of Caesarean section at CME/CHUM has kept almost the same level of 500 cases.
(Overall goal) Reinforcement of policies and programs to improve maternal and child health in Madagascar	To what extent the result of the project will be reflected the government health policies and health programs especially in the field of maternal and child health.	Ex-post Evaluation: Achieved. The humanized care was incorporated in the Interim Plan of the Ministry of Public Health 2012-2013.

Source : Project Completion Report, Interviews with staff and parturient women/mothers of CME/CHUM and the sample CSBs including CSBII Belobaka, CSBII Betsako and CSBII Boanamary.
Note: The data and information at the time of ex-post evaluation in the table are based on the interviews with parturient women/mothers at the sample CSBs and CME/CHUM.

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ratio against the plan: 90.3%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

In the policy aspect, dissemination of the humanized care introduced by the project is incorporated in the Interim Plan 2012-2013 despite that its implementation is uncertain due to the political instability. The institutional system for practicing the humanized care and the referral system for perinatal care between CME/CHUM and the CSBs has been well-functioning. In particular, CME/CHUM has been functioning as the top referral institution not only at regional level but also at national level. Also, collaboration between CME/CHUM and DRSP Boeny, which is responsible for regional health administration, has been reinforced. However, the number of health staff at CME/CHUM decreased to 58 staff in May 2013 from 70 staff at the beginning of CME in 2007, while the number of deliveries and the patients of CME/CHUM increased. Therefore, there is a concern about the deployment of the medical/health staff at CME/CHUM for the future. The support system for the community IMCI and newborn care activities, including referral from CAs or TBAs to CSBs and the upper health institutions has been continued as well. The community IMCI activities have been supported by the Ministry of Public Health and some NGOs. On the other hand, the supervision for CAs and TBAs by DRSP and SDSP has been suspended due to the budget constraint. In addition, the number of CAs/TBAs as well as health staff of DRSP and SDSP has not been sufficient. As for the technical aspect, trainings on EBM and humanized care have been continuously delivered to the health/ medical staff of CME/CHUM and CSBs by 32 well-trained trainers at CME/CHUM. Also, the medical/ health staffs trained by the project have kept their improved capacity to practice EBM and the humanized care. As well, CAs have kept their capacity to delivery IMCI for the mothers and children in the pilot site after the project. In terms of the financial aspect, there is no specific budget for trainings of EBM and the humanized care allocated by the Ministry of Public Health in order to disseminate the models of improved mother and child health care introduced by the project in other regions of Madagascar.

Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has largely achieved the project purpose and overall goal. The mother and child health care in the pilot site in Boeny Region have been improved by introduction of the models of EBM, the humanized care and the community IMCI and newborn care. Also, the models of the improved mother and child health care have been disseminated to other regions. As for sustainability, the dissemination of the humanized care is endorsed by the health sector policy; and the institutional system to continue the improved perinatal care in the pilot site, including the training system, has been well-functioning despite some problems in terms of institutional and financial aspect, such as due to insufficient number of health staff at CME/CHUM, DRSP and SDSP and CAs/TBAs and no specific budget allocated to trainings in order to disseminate the improved models of maternal and perinatal care in the country. However, the trained medical/ health staff and CAs have kept their capacity to practice the improved perinatal care.

In the light above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

[To CME/CHUM and DRSP]

It is essential to outreach Mothers' Class at CSBs since it can be a useful device to enhance awareness of the humanized care for pregnant women. It is expected that the trained health staff at CME/CHUM or the IEC (Information, Education and Communication) specialist will train the health staff at CSBs.

[To the Ministry of Public Health]

The budget allocation to continuously deliver the trainings for health staff is required in order to disseminate the models of maternal and perinatal care, the humanized care, at national level.

Lessons learned for JICA:

The effective models of maternal and perinatal care ensure sustainability of the project effect since the beneficiaries, such as pregnant women and mothers, recognize the positive effects of the improved care. The development of the successful model can be attributed to the synergy effect of the grant aid project for improvement of the health facilities and equipment and the technical cooperation project for improvement of capacity of medical and health staff to provide better health care services. Also, the follow-up cooperation by JICA contributed to disseminating the models from the pilot site to other region in the country.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Senegal office: March, 2014

Country Name	Project on the Safe Water and the Support on Community Activities Phase 2 (PEPTAC 2: Projet Eau Potable Pour Tous et Appui aux Activités Communautaires Phase 2)
Republic of Senegal	

I. Project Outline

Background	In Senegal, the Japanese government has provided grant aid for construction and rehabilitation of water supply facilities in more than 110 sites. As a result, more than 300,000 villagers had access to safe water and hygienic environment. On the other hand, establishment of community-based management system became a key issue to self-reliantly maintain sustainable water supply facilities. Under those situation, for the period from 2003 to 2006, JICA conducted technical cooperation for PEPTAC 1 aiming at establishment of Water Users' Association (ASUFOR: Association des Usagers de Forage) and maintenance system under cooperation among ASUFOR, government, and private agents in 24 sites. Also, other donors supported capacity building and extension of ASUFORs. However, there were remaining sites to extend ASUFORs in Tambacounda Region due to its remoteness.
Objectives of the Project	1. Overall Goal: The system for sustainable utilization of drinking water is deployed in the target area (40 sites in Tambacounda Region to be extended by the Senegal side) 2. Project Purpose: The system for sustainable utilization of drinking water is implemented in the project site (35 sites in Tambacounda Region) 3. Logical flow of how the project responses to development issues: The project establishes O&M system for the water supply facilities based on ASUFORs and promotes adequate utilization of water as well as introduces community activities (small animal raising and market gardening). By activating the O&M system based on ASUFORs and community activities, the project aims at sustainable utilization of safe drinking water and improvement of living conditions in the project sites in Tambacounda Region. Through the extension of the O&M system introduced by the project, sustainable utilization of safe drinking water and community activities are disseminated to other target sites in the Region.
Project Information	1. Project site: 35 sites in Tambacounda 2. Main activities: trainings of O&M and water utilization for operators of water supply facilities and the members of ASUFORs, development of maintenance plan for the facilities and guidelines for water utilization and implementation of community activities at the pilot sites 3. Inputs: Japanese Side 1) Experts: 10 experts 2) Trainees received: 4 persons 3) Third country training: 5 persons 4) Equipment: water meters, water pumps, water pipes, generators, equipment for agriculture and livestock farming. Senegal Side 1) Staff allocated: 19 persons 2) Land and facilities: Construction of project office in Tambacounda, liaison office in Dakar, furniture, electricity and water supply.
Project Period	November, 2006 – March, 2010 / Project Cost: 568 million yen
Implementing Agency	Ministry of Urbanization, Habitat, Construction, Water (MUHCH: Ministère de l'Urabanisme, de l'Habitat, de la Construction, de l'Hydraulique)*, Ministry of Health and Medical Prevention (Ministère de Santé et Prévention Medicale), Ministry of Agriculture, Fisheries, and Biofuel (Ministère de l'agriculture, de la Pisciculture et des Biocarburants), Ministry of Livestock (Ministère de l'Elevage) *While the ministry was restructured in October, 2009, there was no influence on the project. And since 2012 (after the project), the name of the Implementing Agency was changed to "Ministry of Water and Sanitation" (MHA: Ministère de l'Hydraulique et de l'Assainissement).
Cooperation Agency in Japan	Earth and Human Corporation , Kokusai Kogyo Co., Ltd.
Related Projects	Japan's cooperation: (Technical Cooperation: TC, Grant Aid: GA) ・Project of Water Supply in Rural Area (GA, 2004-2007) ・Project for Safe Water and the Support on Community Activities (PEPTAC I) (TC, 2003-2006), ・Project of Drinking Water Supply in Tambacounda Region (GA, 2010-2012) Other donors' cooperation: ・PEPAM-Luxembourg SEN/026 (Luxembourg - Thiès, Louga regions) ・PEPAM-BAD-2 (Banque Africaine de Développement - Kaffline, Tambacounda, Kolda, Sedhiou, Ziguinchor regions) ・PEPAM-BA (Belgium - Diourbel, Kaolack, Fatick, Kaffrine regions) ・PEPAM-IDA (World Bank - Matam, Saint-Louis, Tambacounda regions)

II. Result of the Evaluation[1]

[1] The site survey was not able to cover all the 35 projects sites because they were scattered in the Region.

1 Relevance

This project has been highly consistent with the Senegal's development policy, such as increase in population with access to safe water in rural areas specified under "Poverty Reduction Strategy Paper (PRSP)" and the Millennium Water and Sanitation Program (PEPAM), and development needs to establish community based O&M system for sustainable utilization of safe water, as well as Japan's ODA policy to prioritize water supply. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project focuses on establishment of O&M system based on ASUFOR under collaboration with the public and private sector at the project sites as well as community activities for sustainable utilization of safe water at the pilot sites in Tambacounda Region. By the end of the project, ASUFORs functioned to provide adequate water supply service. At the time of ex-post evaluation, the capacity of the ASUFORs strengthened by the project was verified by the check points defined by the project and it is confirmed the majority of them have been well-functioning. In general, the water supply facilities in the project sites have been well maintained and the hygiene practices including consumption of safe water source, safe water storage and clean water points, have been sustained. During the project, the community activities were introduced and carried out by female members of ASUFORs in 5 pilot sites. After the project completion, those activities have been continued by the female members of ASUFORs.

Dialacoto Water Tank

As for the overall goal, 80% of ASUFORs established after the project by Senegal side have been well-functioning in the target area. The coverage of safe water supply has been increased and population with access to safe drinking water is 547,374 people with a coverage rate of 51% of the whole region population at the time of ex-post evaluation. Also, the project contributed to reduction of workload of water fetching by women. According to the 12 sample visited sites, the improved hygiene practices successfully decreased water-borne disease. Furthermore, the community activities were introduced to and have been continued in some surrounding sites other than the target area.

Therefore, effectiveness/impact of the project is high.

Achievement of project purpose and overall goal

Aim	Indicators	Results
(Project Purpose) Establishment of system for sustainable utilization of safe water in the project sites in Tambacounda Region	ASUFOR is adequately entrenched in the 35 project sites. [Check Points] 1. The water facilities are well operated. 2. The regular meeting of the Steering Committee is held more than once a month. 3. The Executive Board is held once a month. 4. The monthly accounting record is prepared. (in note book or form of meeting minutes) 5. The metered system is implemented. 6. (1) The bank account of ASUFOR is opened. (2) Reserves is regularly deposited in the bank account except the case of serious breakdown. 7. The collection rate of water tariff is 100% 8. Adequate unit tariff for operation and maintenance of the water supply facilities is established. 9. General Assembly is held annually. 10. The water supply facilities are cleaned up.	Terminal Evaluation: Mostly achieved. Out of 35 sites, 31 sites with adequate water supply service. In average, 8.5 point (35 sites) fulfilled in the project sites. Ex-post Evaluation: 90% of ASUFORs established by the project have been well-functioning. According to the sites visit for the ex-post evaluation, 10 out of 12 sites were well-functioning as 8 points fulfilled in average at these 12 visited project sites.
(Overall goal) Extension of system for sustainable utilization of safe water in the target area in Tambacounda Region	The number of sites where ASUFOR are adequately operated and sustained in other than the project sites (as least 40 sites)	Ex-post Evaluation: 83 ASUFORs were established after the project and 80% of them well-functioning.
	The number of villages sustaining the community activities in other than the project sites (at least 5 sites)	Ex-post Evaluation: According to 12 villages, community activities have been introduced to some surrounding sites after the project. The activities are still continued in all these sites.

Source : Terminal Evaluation Report, Interviews at the ex-post survey, and data from MHA

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was higher than the plan (ratio against the plan: 118%) because of additional cost for procurement of equipment for rehabilitation works of the existing water supply facilities. Therefore, efficiency of this project is fair.

4 Sustainability

In the policy aspect, the Water & Sanitation Program "PEPAM" endorsed institutional support for ASUFORs. Also, a consultant team was established in each district through PEPAM by the MHA who is responsible for

monitoring ASUFORs. No policy issue was observed at this ex-post evaluation; however, there is a plan to introduce a policy management reform in future that will transfer maintenance and water production works to the private sector.

Maleme Niani Maintenance Guidelines

For the institutional aspect, there was no change in the institutional and organizational arrangements. ASUFORs are responsible for daily O&M of water supply facilities, small scale repairs and water tariff collection. If the reform comes to be effective, the role of ASUFORs related to maintenance and water production will be transferred to the private sector and therefore ASUFORs would focus on providing services for boreholes users. The Team for Wells and Boreholes (BPF: Brigade des Puits et Forage) is in charge of support for ASUFORs and repairs of water facilities which ASUFORs cannot deal with. However, the monitoring system by BPFs has not been fully functioning due to the limited number of staff and limited budget for field visits. The Subdivision of Maintenance (SM: Subdivision de Maintenance) of the Directorate of Exploitation and Maintenance (DEM: Direction de l'Exploitation et de la Maintenance)/MHA deals with large scale repairs.

From the technical aspect, the technical staffs of SM/DEM and BPFs have sufficient technical knowledge and skills to adequately support ASUFORs. The project trained the borehole operators for small repair works and they properly maintain aging equipment. They also have sustained their technical knowledge and skills through use of manuals developed by the project as well as refresher training session at the training center of Tambacounda delivered by DEM.

As for the financial aspect, the budget for activities of BPFs has not been sufficient to conduct adequate monitoring of ASUFORs because of the tight national budget. However, most of ASUFORs in the project sites are able to cover the cost of spare parts and repair of minor breakdown since they have the sufficient tariff level varying from 200 FCFA/m^3 to 400 FCFA/m^3 and the sufficient collection rate of more than 80%. In sum, while there are some concerns in each aspect of the project sustainability due to the forthcoming reform, not severe issues are observed except for budget constraints at the time of the ex-post evaluation. Therefore, sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has largely achieved the project purpose to establish sustainable O&M system based on ASUFORs in the project sites and the overall goal to extend the system to other sites in Tambacounda region in order to promote utilization of safe water. Also, the community activities introduced by the project brought about improvement of living conditions in villages through more participation of women in socio-economic activities. As for sustainability, safe water supply system based on ASUFORs is endorsed by the national water and sanitation program, the well-functioning institutional setting and the sufficient financial capacity of ASUFORs despite the budget constraints on the BPF activities and changes in the roles by the forthcoming policy reform. As for efficiency, the project cost was slightly exceeded the plan due to the additional procurement of equipment to replace obsolete ones.

In the light above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

To MHA (Ministère de l'Hydraulique et de l'Assainissement)

- It is recommended to increase the number of staff and the budget for BPF to conduct regular site visits for monitoring of ASUFORs under the new Agency that will be established to replace the current Direction de l'Exploitation et de la Maintenance "DEM" by the planned reform.
- It is necessary to accelerate the process of getting a contract of maintenance works for boreholes with the private service providers. The agreement of private companies will take over the role initially performed by SM and BPF and is expected to lead to improved repairing works on the field.

Lessons learned for JICA:

- The inclusion of training of small repair works for borehole operators in the project was important to maintain aging equipment in a proper condition. It prevents facilities from frequent breakdowns and helps having a continuous water service as well as generates better care management and maintenance.

Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Middle East and Europe Department : November, 2013

Country Name	The Kazanlak Area Revitalization Project
Bulgaria	

I. Project Outline

Project Cost	378 million yen	
Project Period	Original: November, 2004 – September, 2007 Extended Period: October 2007 - March 2008	
Implementing Agency	Kazanlak Municipality, Ministry of Economy (name changed to Ministry of Economy and Energy during the project)	
Cooperation Agency in Japan	None	
Related Projects (if any)	[Japan's Cooperation] - Acceptance of technical training participants for "Community based approach for regional development" (2003-2005)	
Background	It was one of the most important and urgent issues for the Government of Bulgaria to be admitted to the European Union in the year 2007. The government established six priority programs including "Sustainable Development of Economy and Improvement of Business Climate" which places importance on the regional economic development through promotion of tourism, agriculture and forestry. As 16% of population was concentrated in Sofia and economy was heavily concentrated, regional disparity between urban and rural areas was expanded and it was considered that the unemployment rate reached up to 30% in the rural areas. The Government of Bulgaria saw the situation as a serious problem since this regional disparity may hinder the economic growth. Under these circumstances, the Government of Bulgaria requested the Government of Japan the technical cooperation aiming at transferring knowledge and skills concerning participatory regional promotion and extension of these knowledge and skills nationwide with the model of Kazanlak area which is famous for Rose Valley and rose oil industry.	
Inputs	Japanese Side	Bulgarian Side
	1. Experts: 11 persons (60.47 MM, 7 fields) 2. Trainees Received: 6 persons 3. Equipments 108 million yen 4. Local Cost 57 million yen	1. Counterpart Personnel: 6 persons 2. Facilities: Project office (Kazanlak) 3. Local Cost: facilities (excavation, restoration and exhibition of tomb, access road, re-pavement and beautification of Kazanlak central square, extension and repairs of information center, improvement of the rose park, improvement of railway station and bus terminal, etc.
Project Objectives	Overall goal 1. Economy is enhanced by the regional development mainly through tourism development and the living standards of the Kazanlak Municipality are improved. 2. A regional development model is established and contributes to development promotion in less developed areas in Bulgaria.	
	Project Objective(s) The number of tourists to Kazanlak increases throughout the year through the synergy effect of five (5) tourism development strategies (i) Tourism Area Development Strategy, ii) Tourism Event Development Strategy, iii) Special Product Development Strategy, iv) Human Resource Development in Tourism (service and hospitality) Strategy, and v) Tourism Infrastructure Strategy and the tourism season is prolonged..	
	Output(s) ・Organizations in charge of regional development are established and managed mainly through tourism development. ・Human resource is developed to promote regional/tourism development in Kazanlak as well as to provide services to satisfy tourist needs. ・Various infrastructures are developed and improved for visiting, staying and sightseeing in Kazanlak. ・Tourism area development is promoted based on the regional characteristics of Kazanlak. ・Tourism promotion events are planned and managed and many people come to Kazanlak in various seasons. ・Special products are produced by making the most of Kazanlak's nature, tradition, history, etc. and satisfy tourist needs. ・Employees in the tourism industry become guest-oriented and service and hospitality are improved.	

II. Result of the Evaluation

Summary of the Evaluation

In Bulgaria, before the inception of the project, the government established “Sustainable Development of Economy and Improvement of Business Climate” as one of the most prioritized program, which places importance on the regional economic development through promotion of tourism, agriculture and forestry. The project’s target area of Kazanlak suffered from the decrease in population and inactive economy even though it has resources for tourism such as rose valley and historical heritage such as Thracian Tomb.

Relevance is “high” since the project has been highly relevant with Bulgaria’s development policy, development needs, as well as Japan’s ODA policy at the time of both ex-ante evaluation and project completion. As regards effectiveness, this project has achieved “the increase in the number of tourists throughout the year and prolonged tourism season” since the number of tourists was doubled compared to before the project in 2003 despite some fluctuations. Overall Goal has been also achieved to a certain extent as it is inferred that the living standard of the people in the Kazanlak area has been improved because of the enhanced income with a larger number of tourists. Also the Kazanlak model for tourism promotion consisting of special products development, private lodgings, etc. was incorporated into “the National Strategy for Sustainable Tourism Development 2007-2013”. In this way, the expected effects have mostly been observed.

On the other hand, efficiency is “fair”, as project cost was significantly higher than that of the plan and the project period was slightly longer than the plan due to 6-months extension of the project for strengthening of implementation system. Sustainability is also “fair”. In terms of policy and technical aspect of the implementing agency, there was no problem observed because regional promotion is still important in Bulgaria and activities initiated by the project and related to comprehensive approach consisting of five (5) strategies (i) Tourism Area Development Strategy, ii) Tourism Event Development Strategy, iii) Special Product Development Strategy, iv) Human Resource Development in Tourism (service and hospitality) Strategy, and v) Tourism Infrastructure Strategy) have been continued and enhanced. As to institutional aspect, Kazanlak Sustainable Tourism Association (KSTA), a participatory organization that runs the information center and lodgings, has scaled down its activity, however, Kazanlak municipality largely maintains the structure/system as an implementing agency and has actively conducted activities such as joint projects in the field of tourism marketing with neighboring local governments. The budget of the Kazanlak municipality for the tourism sector has been decreasing and support from EC that supplements current budgetary deficiency may be discontinued. Thus, some problems have been observed in implementing agency’s institutional and financial aspects and overall sustainability is considered to be “fair”.

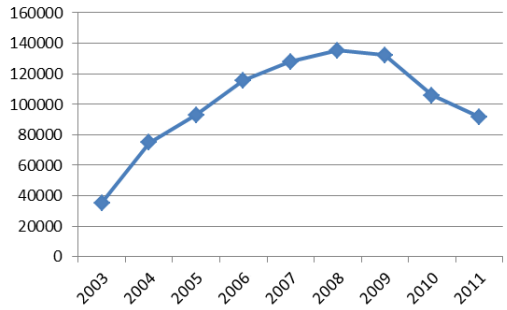
In short, i) relevance of the project is “high” since the project was consistent with policies and development needs of both Bulgaria and Japan, ii) the project purpose “the increase in the number of tourists” has been achieved and some impacts, such as better living standard of the local residents as well as incorporation of Kazanlak model for tourism promotion into the national strategy, have been observed, and iii) there have remained some problems in terms of efficiency and sustainability. In the light of above, this project is evaluated to be “satisfactory” despite some problems.

1 Relevance

This project has been highly relevant with Bulgaria’s development policy “reduction of regional economic disparities” specified in “Regional Development Law” enacted in February 2004 and “promotion of cultural and agricultural village tourism” included in “the National Strategy for Sustainable Tourism Development 2007-2013”, development needs “activation of economy of Kazanlak, which is a local city with the population of less than 100 thousand and has been suffering from the decrease in the population and inactive economy, through regional revitalization” by utilizing regional resources (natural environment and historical heritage), as well as Japan’s ODA policy “JICA’s Cooperation Policy for Bulgaria” that places importance on “market economy and agriculture” and “narrowing of regional disparity between urban and rural areas”, which were identified as important fields in Policy Discussion 2003, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is “high”.

2 Effectiveness/Impact

This project has largely achieved its project purpose, “the increase in the number of tourists throughout the year and prolonged tourism season”. i) Establishment of the information center and website, ii) construction of access road to Thracian Tomb and square, iii) implementation of Thracian event, and iv) production and sale of trial products, which were conducted based on the five strategies,(i) Tourism Area Development Strategy, ii) Tourism Event Development Strategy, iii) Special Product Development Strategy, iv) Human Resource Development in Tourism (service and hospitality) Strategy, and v) Tourism Infrastructure Strategy), contributed to “the increase in the number of tourists and prolonged tourism season”. In addition, the number of tourists was doubled compared to before the project in 2003 despite some annual fluctuations. As for the overall goal, despite incomplete official data, according to the head of a ward in Kazanlak municipality, income of the residents has been increased as a result of the enhanced land for rose cultivation and the establishment of new lodgings following the increase in the number of tourists, and it can be inferred that living standards in the Kazanlak region have been improved. In addition, the comprehensive tourism promotion approach introduced by the project consisting of special products development, private lodgings, etc. was incorporated into “the National Strategy for Sustainable Tourism Development 2007-2013”, as “Model of Rural Tourism” and it is considered that the Kazanlak model has been recognized to some extent as an effective tool.
In the light of above, it can be judged that the project purpose has largely been achieved and the overall goal has been achieved to some extent. Therefore, effectiveness/impact of this project is “high”.



Number of Tourists
Source: Kazanlak Municipality

Outside of Tourist Information Center

Inside of Tourist Information Center

3 Efficiency

The inputs were appropriate for producing the outputs of the project. The project cost was significantly higher than the plan (ratio against the plan: 189%), because of the increase in the physical input as a result of the extension of the project period for 6 months, especially in terms of the activities for establishment of implementation system. KSTA, which is in charge of regional tourism promotion and extension, was established in June 2007. In order to ensure the continuous utilization of know-how regarding regional development so far transferred through the project, it was judged appropriate to add activities that are required for 6 months for the firm establishment of implementing system, such as strengthening of KSTA, through cooperation between the public and private sectors. As a result, the project period was slightly longer than the plan (ratio against the plan: 117%) and therefore, efficiency of this project is “fair”.

4 Sustainability

This project is consistent with “the National Strategy for Sustainable Tourism Development 2007-2013”, which incorporates the Kazanlak model as “Model of Rural Tourism”, and also regional development is still one of the prioritized policies in Bulgaria. As for technical aspect, activities concerning the comprehensive approach consisting of 5 strategies introduced by the project have been continued and enhanced. Therefore, the project has no problem in policy background and technical aspects. As to institutional aspect of the implementing agency, despite the reduction of KSTA’s activities, Kazanlak municipality largely maintains the structure/system that had been established during the project and has actively conducted activities such as joint projects in the field of tourism marketing with neighboring local governments. In other words, participatory organization of KSTA, which was established to manage the information center, lodgings, events, special products, etc. has reduced its activity (while still regularly holding board meetings and general meetings) and new implementing system (consisting of Kazanlak municipality, the Kazanlak Regional Development Council: KRDC, KSTA, Rose Foundation, etc.) has not yet been established. Nevertheless, relevant organizations have co-operated with each other in organizing events or other activities on adhoc basis under the strong leadership of Kazanlak municipality. As for financial aspect, the budget of the Kazanlak municipality has been decreasing (33,446Lv in 2007, 24,910Lv in 2011) and some infrastructures have not been completed due to this insufficient budget. In addition, support from EC that supplements current budgetary deficiency may be discontinued.
Since above issues were observed, this project has some problems in institutional and financial aspects of the implementing agency. Therefore, sustainability of this project is “fair”.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

- The new implementing system (consisting of Kazanlak municipality, the Kazanlak Regional Development Council: KRDC, KSTA Rose Foundation, etc.) officially has not yet been established. In reality, however, the municipality has actively carried out activities for tourism development whenever required such as Rose Festival in cooperation with Rose Foundation and other organizations (museums, galleries, cultural center, etc.). It is desirable to establish a permanent implementation system to ensure the involvement of the entire relevant regional agencies/personnel.

Lessons learned for JICA

- Activities related to establishment of implementation system were enhanced and the project period was extended for 6 months, and accordingly the project cost exceeded the planned amount because of the increase in the physical input. It is necessary to examine more concrete activities and corresponding inputs at the stage of the project formulation.
- PDM (Project Design Matrix) was not prepared before the commencement of the project and PDM for evaluation (PDMe) was prepared at the stage of the Terminal Evaluation. However, some indicators of PDMe were not appropriate for evaluation. It is necessary that PDM with concrete and clear indicators be elaborated before the commencement of the project in order to secure the logics among Outputs, Project Purpose and Overall Goal and to accurately assess the degree of achievement.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Middle East and Europe Department: December, 2013

Country Name	Project for Improvement of Training Equipment for the Institute of Technology of Fisheries and Aquaculture of Alger (Projet de Renforcement des Equipments de Formation pour l'Institut de Technologie des Pêches et de l'Aquaculture d'Alger)
Algeria	

I. Project Outline

Project Cost	E/N Grant Limit: 594 million yen		Contract Amount: 590 million yen
E/N Date	March 2006, June 2006		
Completion Date	February 2008		
Implementing Agency	Institut Technologique des Pêches et de l'Aauqculture (ITPA) Alger (Currently Institut National Supérieur de la Pêche et de l'Aquaculture (INSPA))		
Related Studies	Basic Design Study: July, 2005-January, 2006		
Contracted Agencies	Consultant	Overseas Agri-Fisheries Consultants Co., Ltd.	
	Contractor	-	
	Supplier	JSM Ltd., Miho Shipbuilding Co., Ltd.	
Related Projects (if any)	Other donor's Cooperation ・ Technical cooperation of Spain for capacity training of teachers at fishery training institutions. (June 2006-July 2006)		
Background	Although Algerian economy had gained the momentum of growth backed by high price of petrol and natural gas, the number of unemployment had remained high. Thus, the diversification of economy out of hydrocarbon sector had been high priority, especially for creating the new employment as much as possible. Under the National Economic Recovery Plan (2001-2004) and 5-year Economic Growth Plan (2005-2009), the Algeria government continued its efforts to solve a problem of unemployment in Algeria. The modernization and industrialization of fishery and agricultural sectors was one of the major priorities of the government which were expected to absorb such a demand of employment. At the same time, the fishery sector had a problem that the actual fishery production in 2005 of approximately 140,000 tons was far below the estimated allowable catches of 280,000 tons per year. Therefore, as set in National Development Plan for Fisheries and Aquaculture (2003-2007), the government aimed to increase the fish production and strengthen human resources for this planned production increase. Under this situation, the government of Algeria requested the government of Japan for a grant aid project for procuring equipment necessary for training at Institut Technologique des Pêches et de l'Aquaculture (ITPA) Alger, which was responsible for training fishery workers in Algeria.		
Project Objectives	Outcome To develop the knowledge and skills of human resources in the fishery industry by procuring training equipment at the Institute of Technology of Fisheries and Aquaculture (ITPA) Alger		
	Outputs Japanese Side ・ Inshore training ship (80 tons) ・ Engine simulator, training equipment for generation control, experimentation kit of basic electrical technology, experimentation kit of electronic equipment, workshop for freezing simulator Algerian Side ・ Reservation and provision of a location to install the ground training equipment ・ Clearing obstacles on the equipment installation site ・ Installation of electrical power wiring and conduit water supply to the vicinity of the installation location of training facilities ashore. ・ Preparation of access routes to deliver equipment ・ Mooring area for the training ship		

II. Result of the Evaluation

Summary of the Evaluation
In order to increase the fish production and strengthen human resources, a new training plan was established in 2004 by the Ministry of Fishery and Marine Resources. However, the training ship of ITPA Alger was severely deteriorated, and since this was a trawler ship, it did not allow training for seine fishing, which was becoming an essential method in Algeria. Also the ITPA Alger had owned only a part of equipment for the disassembly and assembly of engine, it was not able to provide adequate training to real situation of the fishery. The training capability of ITPA Alger needed to be strengthened since it would be promoted to Institut National Supérieur de la Pêche et de l'Aquaculture (INSPA)[1] and was expected to provide extensive training programs and would be entitled to issue various certificates. This project has somewhat achieved its objectives. Both the number of cadet officers who complete the training course and the number of days per year for on ship seine fishing training have achieved the targets set at the ex-ante evaluation. INSPA can now implement both theoretical and practical trainings effectively. The working force in fishery sector increased

[1] ITPA Alger was officially upgraded to INSPA in August, 2006. It is a university level institute administratively under the Ministry of Fishery and in terms educational programs, it is under the Ministry of Higher Education and Scientific Research.

from 2006 to 2009 about 31%, for those who have licensed, increase in 26%. However, the impact on increase of fish production is limited. Concerning sustainability, there was no problem observed in current status of operation and maintenance, institutional, technical and financial aspects. For relevance, the project has been highly relevant with Algerian development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period slightly exceeded the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Algerian development policy "increasing the fishery production and creating job in the fishery industry as set in National Development Plan for Fisheries and Aquaculture (2003-2007) and the Master Plan of Development of Activities for the Fishery and the Aquaculture in the Horizon 2025 (officially adopted in 2011)", development needs "increasing the number of fishery officers and fishery workforces by providing practical training ", as well as Japan's ODA policy "diversification of industries" at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has achieved its objective to develop the knowledge and skills of fishery workforce, including cadet officers. The number of cadet officers who complete the training course and the number of days per year for on ship seine fishing training are in line with the targets set at the ex-ante evaluation. Before the project, the training of cadet officers or above level was commissioned to Institut Supérieur Maritime (ISM), currently Ecole Nationale Supérieur Maritime (ENSM) under the Ministry of Transportation. However, after the project, INSPA carries out those training courses by itself, and hence ENSM no longer conducts training. According to professors and administrative staff of INSPA, the quality of the training has improved by the ship and equipment provided by the project, as the courses at INSPA can be effectively carried out in the combination of theoretical and practical aspects, and thereby the skills and knowledge of students/trainees have improved.

As to impact, although the project has impact on the increase of the number of those who have obtained license and the fishery workforce to some extent (the working force in fishery sector increased from 2006 to 2009 by about 31%, for those who have licensed, increase by 26%), with the possible trend of exhaustion of coastal fishery resources, the resulting data shows a short of its impact upon the fish production.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator(unit)	baseline value (year of BD: 2005)	target value (target year:2009)	actual value (target year:2009)	actual value (ex-post evaluation:2012)
Indicator 1 Number of officer cadets trained per year	40 per year (trained at ISM)	100 per year (60 will be added by the project who will be traine at ITPA)	- INSPA Alger 88 - ITPA COLLO 17 * - ITPA ORAN 19	- INSPA Alger:86 - ITPA COLLO: 20 - ITPA ORAN: 22
Indicator 2 Number of days per year for seine fishing training on ship	0	140 days/year	135 days days/year	145 days/year

(Source: INSPA)

* There are seven fishery training institutes nationwide under the Ministry of Fishery and Marine Resources, among which ITPA Collo and ITPA Oran provide training courses for officer cadets or above.

Training Ship


Refrigeration Training Equipment

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 99%), the project period slightly exceeded the plan (ratio against the plan: 125%) because of the delay of detailed design. Outputs were produced as planned.

Therefore, efficiency of this project is fair.

4 Sustainability

The equipment and ship provided by the project are maintained by INSPA. No problem has been observed in current status of operation and maintenance, institutional, technical and financial aspects of the executing institution.

Institutionally, the new staff members were recruited, which was considered necessary for the continuity of the project effect, and there is a system that INSPA receives technical assistance on ground training equipment from the Algerian ship construction sites in Algeria. On technical aspect, the equipment installed in INSPA is assured by the professors who utilize the equipment and had been trained during the installation and activation by the Japanese technical team. In addition, the

team of maintenance of equipment (engines and other parts) does conduct the periodic training programs for the professors who use the equipment. Financially, the total budget of INSPA exceeds the amount estimated necessary for operation and maintenance costs at the time of ex-ante evaluation, and actually INSPA spent the operation and maintenance costs for the ship and equipment periodically as planned.

On the current status of operation and maintenance, the ship and equipment is well fully utilized and well maintained. The training ship has been sent to the dock for periodic maintenance in 2010 and 2012, and keeps the class certified by Bureau Veritas (The French bureau of shipping) after inspection.

Therefore, sustainability of the effect of this project is high.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

Considering the background that Algerian fishery shows the possible trend of exhaustion of coastal fishery resources, INSPA is recommended to modify the training plan in accordance with the actual trend of fish catches and resources and to implement it timely.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Dominican Republic office: July,2013

Country Name	The Training Center for Development of Foreign Trade and Investment Project (El Proyecto de creación del centro de capacitación para desarrollo del comercio exterior en la República Dominicana)
Dominican Republic	

I. Project Outline

Project Cost	E/N Grant Limit: 641 million yen		Contract Amount: 628 million yen
E/N Date	August, 2006		
Completion Date	April, 2008		
Implementing Agency	Center for Export and Investment of Dominican Republic (CEI-RD: Centro Exportación e Inversión de la República Dominicana)		
Related Studies	Basic Design Study: December, 2005-July, 2006		
Contracted Agencies	Consultant(s)	Yamashita Sekkei Inc.	
	Contractor(s)	Fujita Corporation	
	Supplier(s)	Fujita Corporation	
Related Projects (if any)	Cooperation by Japan ・The Project for Reinforcement of Training Center for Development of Foreign Trade and Investment of the Dominican Republic (Technical Cooperation, July 2008-June 2011) ・Dispatch of senior volunteers (Marketing, Investment Promotion, SMEs, Quality Control and group coordinator) under the Trade and Investment Promotion Program (Total of 13 personnel, 2003-2011) Cooperation by Other Donors ・Enforcement of Competitiveness Development (Inter-American Development Bank, Grant, 2003-) ・Trade Management Strengthening Program (Inter-American Development Bank, Grant, 2005-)		
Background	Since 2000, the Government of Dominican Republic had been focusing trade and investment promotion under the trade liberalization policy. In 2003, the Government of Dominican Republic established CEI-RD to provide consulting and training services for small and medium size firms (SMEs) in order to strengthen their competitiveness in the international market. However, the limited capacity of CEI-RD had difficulty to meet the expanding demand for their services. Therefore, the Government of Dominican Republic requested Japan to support construction of training center in CEI-RD.		
Project Objectives	Outcome To reinforce human resource development for promotion of foreign trade and investment by construction of training center for development of foreign trade and investment in CEI-RD.		
	Outputs Japanese Side ・Construction of the training center: the total floor size of 2,257m^2, including training rooms, auditorium, multi-purpose hall, business center, meeting rooms, consulting room, and so on ・Equipment for training course, material development, business center and exhibitions Dominican Republic Side ・Site development ・Preparation of electricity line, phone line and water pipe ・Interconnection of servers		

II. Result of the Evaluation

Summary of the Evaluation

Since the preference treatment of free zone in Dominican Republic was going to be abolished due to the WTO accession, quality improvement and export promotion of domestic products were key issues for domestic industries in order to cope with competition in the international market. Also SMEs which accounted for the majority of industries in the country needed knowledge and knowhow to penetrate into the international market. However, CEI-RD had only limited capacity to provide sufficient trainings and technical services for such domestic industries.

The project has partially achieved the objectives of reinforcement of human resource development for promotion of foreign trade and investment by CEI-RD due to the change in function of CEI-RD keeping with the limited budget. As for sustainability, problems have been observed in terms of financial aspects as well as current status of operation and maintenance due to the limited budget for training courses and the limited utilization of some parts of the facilities constructed by the Project.

For relevance, the project has been highly relevant with Dominican Republic's development policy, development needs, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period slightly exceeded the plan.

In the light of above, this project is evaluated to be unsatisfactory.

1 Relevance

This project has been highly relevant with Dominican Republic's development policies of the National Plan of

Competitiveness (“improvement and development of competitiveness of the country through export and foreign direct investment (FDI) promotion policies”), development needs (“quality improvement of domestic products and expansion of exports), as well as Japan’s ODA policy to Dominican Republic for supporting human resource development for expansion of exports and product development towards international competitiveness at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

2 Effectiveness/Impact

This project has partially achieved its objectives of human resource development for promotion of foreign trade and investment. CEI-RD implemented only 35 training courses with 1,980 participants in 2009 despite of the target of 140 courses with 4,250 participants in total due to the budget limitation of CEI-RD. The number of companies participating the training courses in 2009 was below the target. In terms of incubation and exhibition, the targets have not been achieved completely; however, the indicator on the number of participants has achieved the target. It is because of the change in scope of the training center constructed by the Project at the time of mid-term review for the JICA’s technical cooperation project to enhance capacity of the training center. The function of “incubation” had been eliminated while CEI-RD introduced “the acceleration process” for the companies with enough conditions and interests in export business because the acceleration service requires less budget and less technical assistance than incubation. Also, the activities of the training center focused on technical supports, including development of manuals, for trade fairs and events for export promotion of domestic companies organized by CEI-RD.

On the other hand, according to the participants, although the number of the training courses implemented by the training center had been limited, they were able to increase their knowledge about export process including regulations and planning. In addition, as a result of the training courses, the companies increased their sales or profits. Also, the number of export companies and the number of export items, including non-traditional goods have been increasing through the information provided to foreign investors by CEI-RD.

In this way, positive impacts were somewhat observed but the numbers of training courses and the participants of training courses were far below the target. Therefore, effectiveness/impact of this project is low.

Quantitative Effects

	Actual (2005, BD)	Target (2009)	Actual (2009)	Actual (2012) (Ex-post evaluation)
Indicator 1: The number of training courses (annual)[1]	(Actual) 74 courses	(Plan) 140 courses	(Actual) 35 courses	(Actual) 34 courses
Indicator 2: The number of participants of training courses (annual)	(Actual) 1,831 participants	(Plan) 4,250 participants	(Actual) 1,980 participants	(Actual) 1,859 participants
Indicator 3: Entrepreneur support (incubation)	(Actual) N.A.	(Plan) 60 person	(Actual) 2 pilot project with 2 companies started. Creation of website for the center	
Indicator 4: The number of items for permanent exhibitions at CEI-RD	(Actual) N.A.	(Plan) Approximately 470 items in total	(Actual) No permanent exhibition	
Indicator 5: The number of exhibitions, events and lectures	(Actual) 17 times	(Plan) 34 times a year with 5,640 participants	(Actual) 5 exhibitions held for the period from 2009 to 2012 with over 10,000 participants	
Indicator 6: The number of export companies participating the training courses	(Actual) N.A.	(Plan) 1,600 companies or 70% of the target export companies of 2,278	(Actual) 618 companies	(Actual) 594 companies

(Source) CEI-RD

[1] The target number for the training courses and participants were set for courses conducted by CEI-RD (Basic Design Report Japanese Version 18-19 pages). Therefore the actual numbers of the courses conducted by CEI-RD were collected at the time of ex-post evaluation. These figures do not include the numbers of the training courses conducted by others who rented CEI-RD facilities. CEI-RD rented out its facilities for 151 courses（6,517 participants）in 2009 and 315 courses（10,510 participants）in 2012 (This footnote is added in October 2014).

Exterior of the Center

Auditorium in the Center

3 Efficiency

Although the project cost was within the plan (99% against plan), the project period slightly exceeded the plan (105% against plan) because of suspension of construction work related to construction of the subway system. The outputs were mostly as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The training center constructed by the project are operated and maintained by CEI-RD. Despite the new management and the changes of scope of the training center, it is assured that the training center should continue their programs. Under the manager, 12 professional technicians and 5 support staff are assigned for the maintenance of the facility. The maintenance staffs have enough technical level and they have trainings by the Maintenance Department. The annual budget of CEI-RD in 2011 was 91 million RD. It is not enough for the activities of CEI-RD, including the trainings at the training center as well as continuation of CEI-RD itself. Therefore, CEI-RD started to rent the facilities of the training center, including training rooms and auditorium, experimentally in order to gain own revenue source. Also, CEI-RD charged participants of some training courses in order to cover the costs. The current status of the training center is good conditions so far because of proper daily maintenance. However, some parts of the training center, including the business center, consulting room, multi-purpose hall, have been limitedly utilized because of the change in the scope of the training center.

The Project has problems in financial aspects as well as the current status of operation and maintenance due to the issues mentioned above. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency :

Since the budget constraints limit the development of the training center, it is necessary to gain revenue from the center's activities, such as charging system for the training courses. Also it is recommended to elaborate strategy to promote the use of the training center under alliance with the governmental and private institutions related to foreign trade. Alliance with academic institutions, including universities, is another option to increase opportunities to utilize the training center through implementation of training courses linked trade development.

Lessons learned for JICA :

It is necessary to carefully assess the institutional capacity of the implementing agency, including financial resource and functions in order to sustainably operate and maintain the facilities developed by the Project at the planning stage. According to the capacity assessment, the focus of the Project is needed to be more specified.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by China Office (February, 2014)

Country Name	The Project for the Establishment of the Monitoring Network for Acid Deposition, Dust and Sandstorm
People's Republic of China	

I. Project Outline

Project Cost	E/N Grant Limit: 739 million yen		Contract Amount: 322 million yen
E/N Date	December, 2006		
Completion Date	March, 2008		
Implementing Agency	China National Environmental Monitoring Center (CNEMC) and environmental monitoring center in each target city		
Related Studies	Basic Design Study : March, 2006 – January, 2007, Detailed Design Study : January, 2007 – March, 2007		
Contracted Agencies	Consultant	SUURI-KEIKAKU Co., Ltd., Green Blue Corporation	
	Contractor	Sirius Corporation, Ogawa Seiki Co., Ltd	
	Supplier	-	
Related Projects (if any)	The Acid Deposition Monitoring Network in East Asia（EANET）		
Background	In accordance with economic growth, China had experienced massive emission of air pollutants and the coverage of emission had expanded. SO2 from coal combustion and NOx from factories and vehicles had created serious air pollution issues and had caused acid rain which had become the transnational concern. The State Environment Protection Administration (SEPA) formulated the 5 year national environmental protection plan following to the 11th five-year plan (2006-2011) in which the institutional strengthening of environmental monitoring centers was regarded as one of the objectives. As a measure to the issue of acid rain in the East Asia, the Acid Deposition Monitoring Network in East Asia（EANET）was established with the initiative of Japan. EANET supposed that 13 countries monitor the acid deposition in a common method and submit the data. However, regardless of the huge geographical area, the number of sites for data collection/submission of China was limited to 9 sites in 4 cities. Considering its impacts on the environment of East Asia as a whole, the degree of China's participation to EANET was not insufficient. As a measure to the dust and sandstorm problem, China, Mongolia, South Korea, and Japan had cooperated with the international agencies to launch ADB-GEF Project for dust and sandstorm in March, 2003, in which the related parties were formulating a master plan. The master plan focused on implementing a short-range forecast for warning based on the regional monitoring network. The four countries agreed to monitor and share the data based on the master plan. However, the number of data was still insufficient to develop an effective dust and sandstorm forecast.		
Project Objectives	Outcome To strengthen acid deposition, dust and sandstorm monitoring systems in China by procuring and installing equipment for monitoring sites (34 sites for acid deposition monitoring and 16 sites for dust and sandstorm monitoring) (Before implementing the project, a component for the dust and sandstorm monitoring systems was cancelled after the talks with the Chinese side and the project focused on acid rain component only.)		
	Output (s) Japanese side ・ Procuring and installing equipment at acid deposition monitoring sites (34 sites) : air pollution measuring instruments, precipitation samplers, rain gauges, data transmission systems and others ・ (Plan) Procuring and installing equipment at dust and sandstorm monitoring sites (sites) : lidar, anevovane, visibility meter, data transmission systems and others Chinese side ・ Constructing monitoring stations or renovating of monitoring rooms to install air pollution measuring instruments, ensuring power supply and others ・ Securing places for installation of precipitation samplers and rain gauges, and preparing fixed foundations ・ Securing utilities including power supply ・ Constructing monitoring stations or renovating of monitoring rooms to install lidar, and installing a roof skylight		

II. Result of the Evaluation

Summary of the Evaluation
In accordance with the economic growth, China experienced a problem of massive emission of air pollutants and the expansion of its coverage, which also had become the transnational issue. EANET, which was established with the initiative of Japan needed to strengthen the measures to transnational environmental issues by collecting acid deposition observation data from East Asian countries.

This project has somewhat achieved its objectives of “to strengthen acid deposition monitoring systems in China”, as the number of data has increased and the every hour continuous monitoring has become possible partially. However, data were not obtained from the all centers under the project. In addition, the number of sites for data collection to be submitted to EANET has not increased. As for sustainability, there are problems on the financial aspect and the current situation of operation and maintenance as some equipment items are broken and budget is not sufficient to repair those items.

For relevance, the project has been relevant with China’s development policy, development needs as well as Japan’s ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period slightly exceeded the plan.

In light of the above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly consistent with China’s development policies on environment protection (strengthening the institutional capacity of environment monitoring centers as set in the11th five year plan, the national environmental protection five year plan, and the 12th five year plan), development needs (strengthening monitoring systems to combat acid rain and air pollution issues), as well as Japan’s ODA policy to China (prioritizing environmental protection) at the time of both ex-ante and ex-post evaluation. In addition, air pollution is not only the issue in China but transnational environmental issue. Therefore, relevance of this project is high.

2 Effectiveness/Impact

After technical evaluation of some of the equipment, Chinese side and Japan sides decided to cancel the component of the procurement and installation of equipment at dust and sandstorm monitoring sites (16 sites), and the project implemented the acid rain component only. Therefore, the effectiveness/impact of this project is evaluated in terms of the “strengthening of the acid deposition monitoring systems”.

This project has somewhat achieved its objectives of “to strengthen acid deposition monitoring systems in China”, as the number of data has increased and the every hour continuous mesurement has become possible partially, as a result of introducing the data measuring instruments. As to the technical capacity, the manuals were prepared and each monitoring center has strengthened the technical capacity of engineers for operation, maintenance and repair of the installed equipment. CNEMC carried out technical training twice to the target monitoring centers to strengthen the capacity of data measuring, compilation/reduction and analysis. As a result, the capacity for measuring acid deposition and air pollution has strengthened, the data have been compiled, and the environment management technical level has been strengthened.

On the other hand, although the every hour continuous morning at the 34 sites was anticipated at the time of ex-ante evaluation, actually only 20 sites implemented the every hour continuous measuring completely in 2010. Eight sites partially implemented it, while 6 sites did not carry out it at all. This situation happened because of the sporadic blackouts (1 site), breakdown of the equipment as the altitude of the site exceed the critical elevation of the equipment (1 site) and others. At the time of ex-ante evaluation, 43 sites including 34 project target sites were anticipated to submit data to EANET, there was no agreement on submission of the data before project implementing

As to impact, although it is too early to reflect the results of the project to national policies, however, the reports and researches submitted by CNEMC to SEPA were utilized as reference for China’s environmental policy and institutional formulation. Japan and China agreed to share the data from the project for three years after the project completion (2008-2010), and the data were submitted accordingly. However, data on pH and EC was measured by the equipment procured by Chinese side by its own and therefore was not included in the agreement between the two countries to be shared. Since other data were supplemental data for the two items, the submitted data were not fully utilized. Further, in order to share the data after 2011 and utilize the shared data for research publication, a new agreement needs to be concluded. However, no talks have been made on the data sharing at the time of ex-post evaluation. As a result, data after 2011 was not collected at many sites for the ex-post evaluation.

Therefore, effectiveness/impact of the project is fair.

Quantitative Effects

	Actual value at the time of ex-ante evaluation（BD）	Target value of the target year （2009 - one year after completion）	Actual value of the target year （2009）	Actual value 2010	Actual value at the time of ex-post evaluation* （2012）
Indicator 1: Increase in the number of data at the monitoring centers which were newly introduced the automatic measuring instrument.	Once a day (12 days per month)	Every hour continuous measuremet （24/day）	Every hour continuous measuremet （24/day） • The number of centers which measure all : 8 centers • The number of centers which measure partly : 17 centers. • The number of	Every hour continuous measuremet （24/day） • The number of centers which measure all : 20 centers • The number of centers which measure partly : 8 centers. • The number of	Same as 2010

			centers which does not measure the data: 9 centers.	centers which does not measure the data: 6 centers.	
Indicator 2 : The number of data on acid deposition, and implementation of data quality control	2 items (pH、EC)	Increased to 10 items (pH、EC、3 components of anion, and 5 components in cation) at the international quality standard.	Achieved	Achieved	Same as 2010
Indicator 3 : The number of sites for data collection to be submitted to EANET	9 sites	43 sites (Maximum)	8 sites	8 sites	8 sites
Indicator 4 : Obtaining dust and sandstorm observation data based on ADB-GEF	No regular data observation	NA			

（Source）CNEMC, Japan Environmental Sanitation Center

*Based on an interview with CMEMC. However, no specific data were obtained.

3 Efficiency

Although the composition of procurement and installation of dust and sandstorm monitoring equipment was cancelled, the output of the procurement and installation of acid deposition monitoring equipment was produced as planned. Due to the cancellation of the dust and sandstorm component, the project cost was substantially below the plan (ratio against the plan: 41%). However, the project period slightly exceeded the plan (the ratio against the plan: 106%) as the negotiation needed between the implementing agencies and the consultant to reach the agreement on the specification of the equipment.

Therefore, efficiency of this project is fair.

4 Sustainability

The equipment procured under the project is maintained by each environmental monitoring center in each target city, and is overseen by CNEMC. Under CNEMC, there were two categories of monitoring centers of Provincial level center and Prefectural level center, and all of the centers under the project are categorized Prefectural level centers. Institutionally, staff has been allocated as planned and the implementation structure is sustained what it was considered desirable at the time of ex-ante evaluation. As to the reporting system, the data of the Prefectural level monitoring centers are reported to the Provincial level monitoring centers which report to CNEMC the provincial monitoring situation. The data are managed by the Prefectural level monitoring centers. According to CNEMC, data on 24 hour continuous data measuring at some provincial level monitoring center including the sites under the project are reported normally, therefore, CNEMC thinks there is no problem on the data measurement at the Prefectural level monitoring centers.

CNEMC continues training to environmental monitoring centers by nominating different targeting centers every year.

The project has a financial problem. The operation and maintenance budget of each monitoring center are allocated from respective local government. Maintenance requires more expenses than the amount estimated at the time of ex-ante evaluation. Some centers cannot repair the equipment due to insufficient operating budget.

According to CNEMC, the equipment is fully utilized at most of the centers and the facilities of centers as a whole function normally. In addition, the regular inspection is carried out. However, there is a problem on the current situation of operation and maintenance as some equipment items at some centers are not repaired due to the insufficient operating budget. However, according to CNEMC, those equipment items are being repaired or replaced with the Chinese side with its own resources, and therefore 24 hour continuous measurement is being carried out at some centers including the centers under the project.

Thus, as some centers have problems on financial aspect and the current situation of operation and maintenance, sustainability of the project effects is fair.

III. Recommendations & Lessons Learned

Recommendations:

1. CNEMC is recommended to continue identifying the breakdown of the equipment, to advise environmental monitoring centers to repair the equipment, and ensure the 24 hour continuous measurement is carried out.
2. SEPA and EANET are recommended to take the initiative to conclude a new agreement, and continue sharing the data accordingly.

Lessons Learned :

1. In case of a project which aims to combat transnational environmental issues, an agreement needs to be reached on the continuous use of the data by stakeholders in both Japan and a recipient country at the project planning stage. JICA

should pay attention fully whether this aspect is incorporated.

2. In order to monitor the environment accurately, analysis of detailed data is needed. Therefore, the sites for the equipment installation should be selected with due attention to the specification of the equipment including critical elevation.

Equipment utilized at Changdao, Shandong Province (indoor)

Equipment utilized at Changdao, Shandong Province (outdoor)

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Dominica office: March 2014

Country Name	Project for Construction of Small-Scale Fisheries Center in Paramaribo
Republic of Suriname	

I. Project Outline

Project Cost	E/N Grant Limit: 817 million yen		Contract Amount: 693 million yen
E/N Date	January 2007 (Extension date: January 2008)		
Completion Date	October 2008		
Implementing Agency	Ministry of Agriculture, Animal Husbandry and Fisheries (MAAHF)		
Related Studies	Basic Design Study: June 2006 - January 2007, Detailed Design Study: February 2007 – March 2008		
Contracted Agencies	Consultant	Overseas Agri-FIsheries Consultants Co. Ltd.	
	Contractor	IWATA CHIZAKI INC.	
	Supplier	IWATA CHIZAKI INC.	
Related Projects	[Japan's cooperation] • The Project for the Modernization of Small-Scale Fisheries in Commewijne District, Eastern Suriname I/II (Grand aid, FY1990) • The Project for the Modernization of Small-Scale Fisheries in Commewijne District, Eastern Suriname II/II (Grand aid, FY1991) • The Project for the Improvement of Fishing Gear and Equipment in the Republic of Suriname (Grant aid, FY1995) [Other donors' cooperation] • Assistance for regional cooperation on fishery resource management and statistics by CRFM (Caribbean Regional Fisheries Mechanism) under CARICOM • Assistance for fisheries management planning by FAO and ACP (African, Caribbean and Pacific Group of States).		
Background	The fisheries industry in Sriname constituted about 5.6% of the total export value (2004) and it was an important source of foreign exchange after mining products such as aluminum, gold, and crude oil. As the annual landing of fishery products in Paramaribo, the capital city of Suriname, amounted to16,000 tons by the industrial fishing boats and 6,000 tons by small-scale fishing boats (2004), Paramaribo had played an important role as a central fishing base in the country. However, due to lack of public fish landing facilities for small-scale fishing boats in and around Paramaribo area, small-scale fishermen were forced to unload and prepare for fishing in unsanitary conditions. Also insufficient supply of ice restricted small-scale fishermen from going on planned fishing or limited the number of days per fishing. In addition, as none of the existing landing bases satisfied the level of facility development stipulated by the Fish Inspection Act (2002), their improvements were required in order to meet sanitary control standards for export of fishery products to European countries.		
Project Objectives	Outcome To construct hygienic and functional public landing facilities in compliance with the Fish Inspection Act and small-scale fisheries center equipped with jetty in Paramaribo.		
	Outputs Japanese Side • Construction of jetty (landing jetty, access jetty, revetment, ice-making facility, oil filling facility, water supply facility) • Construction of management building, security guard room, power-receiving room • Construction of fishing gear mending shed • Procurement of insulated container, fish container, spring scale, flat scale, pallet, handy pallet truck, freshness meter Suriname Side • Securing and land preparation of the project site • Provision of facilities for distribution of electricity and water supply and telephone lines • Supply of oil tanks and feeders • Construction of fence and gate, procurement of office equipment and furniture		

II. Result of Evaluation

Summary of the Evaluation
As for relevance, this project has been highly relevant with Suriname 's development policy, development needs, as well as Japan's ODA policy for Suriname, at the time of both ex-ante and ex-post evaluation. As to effectiveness and impact, this project has achieved one objective of "increase in efficiency of landing works for small-scale fishermen". Meanwhile, although an improvement in quality of catches was observed after the ice production capacity was expanded by the project, the project has not yet achieved the other objective of "improvement in quality of fishery products" so far because the necessary infrastructure and system for sanitary inspection have not been established yet in the Center. The increased efficiency of landing works brought about a positive impact of improvement in working environment of fishermen and brokers. For efficiency, the project period exceeded the plan due to delay of project implementation period cause by high

rainfall. As for sustainability, the institutional capacity and system for quality management is still weak. The implementing agency has been working to respond to the challenges accrued from day to day such as securing O&M budget and replacement of damaged ice making machines by the support of the government. Therefore, this project has some problems in institutional aspect and O&M status of project facilities.

In light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Suriname's development policy ("promotion and strengthening of fisheries related industries" in the Multi-Year Development Plan 2001-2005 and "improvement of food security and strengthening of national economy through agriculture and fishery sector development" in the Multi-Year Development Plan 2010-2015), development needs ("construction of hygienic and functional fisheries facilities for small-scale fishermen"), as well as Japan's ODA policy for Suriname "A New Framework for Japan-CARICOM Cooperation for the Twenty-First Century (February 2002)" with the priority area of promotion of tourism, fishery and agriculture development, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has achieved one objective of "increase in efficiency of landing works for small-scale fishermen", however, the project has not yet achieved the other objective of "improvement in quality of fishery products" so far. It was confirmed that the implementing agency has been working on construction of inspection facility of fishery products in the Fisheries Center for improving their quality. Regarding the project effect on "increase in efficiency of landing works for small-scale fishermen", all key indicators such as "period that sufficient quantity of ice can be supplied to small-scale fishing boats", "time for preparation and unloading for fishing" and "number of trips for fishing (SK-OG type fishing boats)" met their target values. According to the interview results with staff of Fisheries Department, MAAHF and the Center, brokers, ship owners and fishermen, it was recognized that efficiency of landing works was increased because waiting time at landing facility was shortened after construction of jetty, and efficiency of transport was increased because trucks were able to access to near fishing boats.

Meanwhile, an indicator of "number of small-scale fishing boats that utilize jetty" was below its target value. Initially it was planned that other landing facilities in Paramaribo would be integrated to the Center, however, eight existing landing facilities are still functioning in Paramaribo according to the statistics officer of Fisheries Department. It is assumed that this affected the achievement of the above indicator. The reason why existing landing facilities are utilized continuously after the project completion is unknown. The project installed two ice making machines with production capacity of 10 tons/day/unit. Currently one unit of ice making machine with production capacity of 10 tons/day installed by the project and other two units with production capacity of 4 tons/day are operational. Therefore, current ice production capacity of the Center is 18 tons/day, which is slightly below the target value. However, the supply of ice is generally sufficient since the catches are directly transported by trucks from jetty to clients based on the contract agreement between fishermen and brokers/fishery households, hence demand of ice for fish processing and storage at the Center is not so much. Regarding the indicator of "volume of catches", an accurate statistical data is not available.

Regarding the effect on "improvement in quality of fishery products", according to the interview survey results, the improvement in freshness of catches due to increased capacity of ice production and the improvement in hygiene of work place was recognized. On the other hand, the sufficient quality management system has not been established as a sanitary inspection of catches is only conducted once a month randomly. In this respect, the implementing agency plans to strengthen the quality management system in the Center by establishment of independent quality management unit separated from the Fisheries Department and new construction of a quality management building. As for the impact, improvement in working environment of fishermen and brokers by increased efficiency of landing works was identified as a positive impact.

According to the results of water quality monitoring by Suriname Environmental Development Association, no major negative impact on natural environment was identified. Meanwhile, discharge of wastewater from fishing boats and dumping of fuels from jetty to the river is observed and there is a need for regulating these acts. However, no specific measures have been taken by the related organizations so far. It was confirmed that there was no resettlement of people associated with the land acquisition since the land was provided by the state-owned fisheries company free of charge and prior consultation between the implementing agency, the state-owned fisheries company and other companies near the project site was carried out successfully. There was no negative impact on navigation of vessels

Therefore, effectiveness of the project is fair.

Quantitative Effects

	Baseline value (2007)	Target value (After project completion)	Actual value (2008)	Actual value (2012)
Indicator 1 Period that sufficient quantity of ice can be supplied to small-scale fishing boats	4 months	12 months	12 months	12 months
Indicator 2 Time for preparation and unloading for fishing				
a) Time for unloading of catches (SK-OG type fishing boats)	Approx. 2 hours	Approx. 1 hour	Approx. 1 hour	Approx. 1 hour

b) Time for procurement and loading of ice	4 hours – more than 1 day	Approx. 2 hours	Approx. 2 hours	Approx. 2 hours
c) Time for procurement and loading of fuel and water	2 – 4 hours	Approx. 1 hour	Approx. 1 hour	Approx. 1 hour
Indicator 3 Number of trips for fishing (SK-OG type fishing boats)	Average 15 times/ year/boat	Average 16-17 times/ Year/boat	N.A.	20-24 times/ year/boat
Indicator 4 Volume of catches	2,646 tons/year	2,999 tons/year	N.A.	20,000 tons (the yearly total landings of the region Paramaribo). (Note 1)
Indicator 5 Number of small-scale fishing boats that utilize jetty	-	10 boats/day (Note 2)	N.A.	5-6 boats/day

Source: Ministry of Agriculture, Animal Husbandry and Fisheries (MAAHF).
Note 1: This data was based on the interview results to the staff in charge of statistics since no official statistic data of catches was recorded.
Note 2: In the Basic Design Report of this project (2007), it was confirmed that 218 boats (including SK-GG, SK-OG, and SK-B type fishing boats) were based in Paramaribo and engaged in landing and preparation for fishing in the existing landing sites in the Paramaribo district. Among 218 boats, 16 boats were possessed by the ship owners who also owned jetties and having secured landing sites and 30 boats were out of service. The project presumed that the rest of 172 boats were the users of jetty. Based on the above assumption, the target value for number of small-scale fishing boats that utilize jetty per day (i.e.10 boats/day) was calculated considering other conditions such as number of fishing boats by types, average number of trips for fishing per year, and operated days.


The brokers buy fresh fish when catches are unloaded at jetty.


The fuel supply from the fuel tank at jetty to mooring boats became possible after the project completion.


The supply of sufficient volume of ice for fishing became possible after the project completion.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 84%), the project period exceeded the plan (ratio against plan: 153%) because of prolonged project implementation period caused by bad weather such as high rainfall. Outputs were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of the project facilities have been carried out by Paramaribo Small-Scale Fisheries Center under Fisheries Department, MAAHF. Although there are vacancies in some staff positions including the manager of the Center, the O&M activities of the Center has been conducted without serious problems by the existing staff of the Center with support of staff of Fisheries Department. However, as the institutional capacity and system for quality management is still weak, the institutional aspect of the project has some problems. The maintenance works for ice making machines, refrigerators, and stand-by generators are outsourced to the private service providers. Since the technical level of private service providers is sufficient, the technical aspect of the project has no problem. Principally the Center is run on a stand-alone basis, its main source of revenue is sales of fisheries products.

The balance of revenue and expenditure of the Center is positive, the necessary O&M budget including labor cost is secured at a certain level. However, the O&M cost for project facilities is separately allocated by the Government of Suriname. For example, when one unit of ice making machine with production capacity of 10 tons/day was out of order due to refrigerant leak, the Center was difficult to repair it within its own budget. In this case, the government secured the budget and installed two units of new ice making machines with production capacity of 4 tons/day. It was confirmed that the Center has been work to raise the project effects through new construction of a building for sanitary inspection and allocation of fisheries statistics offices together with securing their necessary budget.

Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency

- Although the institutional aspect of the Center is generally sufficient, the position of manager is vacant and its function has been carried out by the head of Fisheries Department temporarily. Since the Center is expected to play a central role as a major landing base in Suriname and its function and responsibility will be expanded in the future, it is recommended that the Center must appoint full-time manager as soon as possible and prepare the staffing for sanitary inspection and fisheries statistics in order to further improve its institutional capacity.
- The works for quality inspection and statistics have been started by staff of Fisheries Department. The collected data is utilized for national statistics data base. However, it was revealed that the collected data at the Center was not sorted out as an individual statistical data of the Center. It is suggested the Center must record the exclusive basic statistical data of the Center such as volume of catches. Also it was revealed that there is a possibility of dumping of wastewater

and fuels from the fishing boats and jetty. In this respect, the Center is expected to let related organizations take necessary preventive measures for above illegal dumping such as promotion of educational campaign for users of the Center including fishermen, establishment of regulatory measures and strengthening of its enforcement.

Lessons learned for JICA

- In relation to the above recommendations for implementing agency, JICA is suggested to consider the possibility of organizing training program in Japan as well as Suriname for staff of implementing agency concerning management improvement and fishing in consideration for environment.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Laos Office: November, 2013

Country Name	The Project for the Construction of Hinheup Bridge
Lao PDR	

I. Project Outline

Background	National Road 13 (NR13) is the nation's most important north-south corridor, extending from the Chinese border in the north to Vientiane Municipality and then to the Cambodian border at the southern tip of the country, passing through all the major cities of the country. Improvement of NR13 to a 2-lane all-weather Class III road started in 1993 with funding from international donors and work on the southern portion was completed in 2001. The Japanese Government also contributed to this improvement by constructing approximately 70 permanent bridges under a grant aid scheme. The Hinheup Bridge which is located on the northern portion of NR13 was the last temporary bridge on NR13, and was opened to service approximately 100 years ago. In 1981, its superstructure was washed away by a flood. A Bailey type of bridge was constructed in the 1990s with UK funding. However, the bridge superstructure did not fulfill the requirements of national road: (1) The width of the bridge was narrow and did not allow two-way traffic. (2) The pedestrian structure was defective and lacked connecting bolts, compelling pedestrians to walk on the carriageway and exposing them to danger. (3) The low stiffness of the superstructure to its span length caused severe vibrations when heavy vehicles passed. (4) The piers and their foundations had been damaged by flooding, increased traffic, and weathering. Thus, the existing bridge structure was in danger of collapsing . The collapse of the bridge would result in Vientiane being effectively cut off from the major cities of the north, as there was no viable alternate route, and this would have highly adverse economic impacts on the northern region.		
Objectives of the Project	To ensure smooth and safe traffic on the target section of the northern part of NR13 by constructing a new Hinheup Bridge, thereby contributing to the promotion of economic activities near the bridge site and in the northern area of the country.		
Outputs of the Project	1. Project Site: the Hinheup Bridge on the northern part of NR13 2. Japanese side - Construction of a new Hinheup Bridge (Bridge length: 195m) - Approach roads to the new bridge from both banks (Total length: 755m) - Necessary facilities for both of the major structures (e.g., drainage, etc.) 3. Lao PDR (hereinafter referred to as Laos) side: - Compensation for relocation of houses from construction sites and provision of new land for new settlers with required infrastructure. - Acquisition of construction sites and lands necessary to perform temporary works (PC girder manufacturing, stockpiling of materials and equipment, and repairing of equipment and materials such as formwork & re-bars). - Removal or relocation of public utilities, such as electric cables, and telephone cables. - Installation of road signs along the new approach roads. - Provision of power distribution facilities for lighting on the new bridge.		
E/N Date	27 November, 2006 (D/D) 16 May, 2007	Completion Date	28 January, 2010
Project Cost	E/N Grant Limit: 968 million yen, Contract Amount: 722 million yen		
Implementing Agency	Department of Roads, Ministry of Public Works and Transport (DOR, MPWT) (After the project completion, facilities are transferred to the Department of Public Works and Transport (DPWT) of Vientiane Province)		
Contracted Agencies	A Joint venture of Oriental Consultants Co., Ltd. and Nippon Koei Co., Ltd., The Zenitaka Corporation		
Related Studies	Basic Design Study: March 2006 – September, 2006, Detailed Design Study: December, 2006 – June, 2007		
Related Projects (if any)	Japan's Cooperation: - Project for Improvement of Bridges on NR13 (Grant Aid, 1994-2001) - The Capacity Development Project for Road Maintenance in Laos (Technical Cooperation,2011-2016) Other Donors' Cooperation: - International Development Association: Reconstruction of NR13S (266km) (1997), Reconstruction of NR13S (2002), The second road maintenance and administration program (2009)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with Lao development policies, such as "infrastructure development as a driving force for economic growth" and "emphasis on construction and repair of roads system in the local and urban areas in order to develop of road network in Laos" as set in the "Socio-Economic Development Strategy for 2010 and 2020 (established in 2001), the 7th

Five-year Socio Economic Development Plan (2011-2015)" and other documents, and development needs to improve the damaged Hinheup bridge which is located on the route from the Vientiane Capital to Vang Vieng and Luang Prabang on the NR13, the nation's most important north-south corridor, as well as Japan's ODA policy for prioritizing development of economic and social Infrastructure at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to ensure smooth and safe traffic on the target section of the northern part of NR13 by constructing a new Hinheup Bridge". The new bridge construction has produced intended effects such as elimination of waiting time and reduction in crossing time as there are 2 lanes and the bridge has become wider than the old bridge. The pedestrian safety has improved dramatically because the new bridge has become wider and has a side-walk for pedestrians. In addition, the number of vehicles to vehicle/motorbike accidents has decreased greatly, according to the residents nearby. This is because the width of the bridge was widened from one way to two ways.

As to impact, according to village headmen and shop owners, economic activities such as kiosks and restaurants near the bridge site have increased as a new large bus terminal nearby the bridge which was developed after the completion of the project attracts an increasing number of passengers and tourists to drop-by and shop or take a rest at the terminal. Currently, another parking space for large tourist buses is under construction to be the designated parking space by the provincial government for large tourist buses to take breaks, and therefore, more passengers are expected to use the shops and restaurants at the terminal. The increase in the loading capacity of the new bridge has contributed to facilitation of transport of passengers and goods between major cities which are growing in numbers, according to the truck and bus drivers. The negative impacts were mitigated by the effort of the project. 10 affected households were compensated 100% by cash on the basis of replacement cost with the appropriate resettlement procedure. Regarding the impact on natural environment, required Initial Environmental Evaluation was conducted and approval was obtained, and no negative impact was found. No issues in associate with the resettlement has occurred. In addition, the project has not removed the old bridge for the use of pedestrians, therefore there is no inconvenience for the local villagers as they have not cut off from the existing paths.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Year 2006 (before the project) Actual value	Year 2010 (target year) Target value	Year 2010 (target year) Actual value	Year 2013 (ex-post evaluation year) Actual value
Indicator 1 Elimination of waiting time	- Waiting time: 0 - 2 minutes - No. of vehicles waiting: 0 – 5	0	0	0
Indicator 2 Reduction in crossing time	40 seconds to 2 minutes 40 seconds	14 seconds	10-14 seconds	10-14 seconds
Indicator 3 (supplement) Daily Traffic Volume	Motorbike: 1,051 Sedan: 494 Bus: 131 Truck: 530 Total: 2,206	n.a.	n.a.	Motorbike: 1,311 Sedan: 655 Bus: 561 Truck: 468 Total: 2,995*
Indicator 4 (supplement) Loading capacity	Weight limit of 10 tons	25 tons	25 – 30 tons	25 – 30 tons

Source: measured during a project site visit on July, 2013 and interview with the implementing agencies

* The figures are estimated traffic volumes counted during the project site visit. The total traffic volume on the same section under the Public-Private Infrastructure Advisory Facility (PPIAF), "Moving Forward: Developing Highway PPPs in Lao PDR, 2013 is 2,870. Although the figures are slightly different, both sources indicate the same trend.

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were mostly within the plan (ratio against the plan: 75%, 105%). Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance of the facilities constructed by the project have been carried out by the DPWT of Vientiane Province. The project has no problem in the institutional aspects as the institutional structure is sustained what it was considered desirable at the time of ex-ante evaluation. The number of staff assigned to the operation and maintenance unit is sufficient, and the DOR supports DPWT by providing technical guidance and support when required.

DPWT has a capacity in operation and maintenance for Double Bituminous Surface Treatment (DBST) surfaced roads, however, technical capacity lacks in the operation and maintenance of asphalt pavement roads. Also technical capacity in bridge maintenance is not very high. These are being addressed by on-going technical cooperation project: Project for Improvement of the Road Management Capability. It is expected that the technical capacity of DPWT improves under the technical cooperation project.

The maintenance budget of the facilities is allocated from the Road Maintenance Fund (RMF), which comprises of a fuel levy, toll charges, overloading fines, and donor support. RMF is said to cover only 40% of what is actually needed across the country and the budget of DPWT is insufficient because the requested amount from DPWT cannot be fully allocated. Nevertheless, a simple maintenance such as cleaning and grass-cutting are conducted regularly through community-based contract, and additional funding for maintenance works can be made when there is a need (in 2013, it was painting). However,

it is uncertain whether a prompt budget allocation will be made when there is any damage to the bridge.

Regarding the current status of operation and maintenance, so far there has been no big damage on the facilities. DPWT carries out periodic inspection every three months in accordance with community-based contract for a simple operation and maintenance (cleaning, grass-cutting and reporting any damage), however, the number of items for regular inspection was limited compared with what was desirable at the time of ex-ante evaluation. In addition, in 2012-13, DPWT made painting works by requesting additional budget. According to DPWT, it will request a budget for repair when damages are found. However, future prospects for O&M are uncertain due to budget constraint.

Thus, as this project faces concerns on the technical and financial aspects as well as the current status of operation and maintenance, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to ensure smooth and safe traffic on the target section of the northern part of NR13", as the project has produced intended effects such as elimination of waiting time and reduction in crossing time. Positive impacts were identified in terms of expansion of economic activities nearby the bridge and facilitation in the transport of passengers and goods between major cities.

As for sustainability, there are some issues in technical and financial aspects as well as the current status of operation and maintenance. DPWT needs to improve capacity on the operation and maintenance of asphalt pavement road and bridge maintenance, though the capacity is expected to be enhanced through the on-going technical cooperation project. There is uncertainty in securing financial resources for the future operation and maintenance activities, although the current physical condition of the facilities is good.

In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. It is highly recommended for DPWT of Vientiane Province to obtain capacity in asphalt pavement and bridge maintenance through the on-going technical cooperation project. Given the budget constraints of RMF, regular monitoring of damages or wear and tear of the bridge at an early stage is encouraged in addition to the current regular inspection, in order to apply promptly for additional budget to take counter-measures.

Lessons learned for JICA:

1. Financial sustainability of the road and bridge maintenance needs to be carefully examined at the time of planning and it is important to make the facilities maintenance free as much as possible.
2. Implementing a technical cooperation project along or after a construction project could be examined at the planning stage, as it can complement well to strengthen the sustainability aspect.

The new Hinheup bridge

The old bridge

The nearby market at bus terminal

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bangladesh Office: January 2014

Country Name	Project for the Improvement of the Storm Water Drainage System in Dhaka City (Phase II)
Bangladesh	

I. Project Outline

Background	Dhaka City is located on the flat delta of three major international rivers and it has been seriously damaged by flood of river overflow and heavy rainfall in the rainy season. In response to this problem, Japanese Grand Aid "Project for the Improvement of the Storm Water Drainage System in Dhaka City (Phase I)" was implemented in 1991-1993 in order to mitigate the flood damage in the high priority drainage area, namely Drainage Zone F and H by construction of Kallyanpur Pumping and improvement of existing drainage channels. However, serious flood damage had still taken in place due to decrease of retention capacity in the city and the flow capacity of drainage channel caused by recent rapid urbanization. Therefore, improvement of drainage system in the target area was still necessary.		
Objectives of the Project	To mitigate the flood damage in the high priority drainage area, namely Drainage Zone H by improvement of the functions and operation of the existing drainage facilities, thereby contributing to improve the urban health and the safety conditions in the target area.		
Outputs of the Project	1. Project Site: Drainage Zone H (about 17.60 km^2) in Dhaka City. Direct beneficiaries of this project are about 870,000 people in Drainage Zone H. 2. Japanese side 1) Expansion of Kallyanpur Pumping Station (drainage capacity: 10 m^3/second) ➢ Civil work facilities (intake structure, surge tank, box culver, intake fore-bay, side path, etc.) ➢ Pump house ➢ Pump facility and equipment (vertical axial flow pump 1,500 mm: 5 m^3/second x 2 units) 2) Procurement of sludge removal equipment (4 types, 6 units) ➢ Sludge vacuum loader (1 units) ➢ High water pressure jetting machine (1 unit) ➢ Sludge transportation truck with crane (1 unit) ➢ Sludge transportation truck (3 units) 3. Bangladesh side: 1) Removal of accumulated sludge in open channels and drainage pipes in Drainage Zone H 2) Preparation of the warehouse and parking space with roof for sludge removal equipment 3) Preparation of Land for the pumping station		
E/N Date	February 11, 2007 (Detailed Design) June 12, 2007	Completion Date	August 1, 2009
Project Cost	E/N Grant Limit: 951 million yen, Contract Amount: 797 million yen		
Implementing Agency	Implementing Agency: Dhaka Water Supply and Sewerage Authority (DWASA) Operating Agency: DWASA		
Contracted Agencies	CTI Engineering International CO., Ltd, OBAYASHI Corporation		
Related Studies	Basic Design Study: February 2006 – August 2006 / Detailed Design: February 2007 – May 2007		
Related Projects (if any)	Japan's Cooperation: • Project for the Improvement of the Storm Water Drainage System in Dhaka City (Phase I) (Grant aid, 1991-1993) Other Donors' Cooperation: • Dhaka Water Supply and Sanitation Project (construction of storm water pumping stations at Kamlapur and Rampura) (World Bank, 2012-2015)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Bangladesh development policy ("floods control" in the Poverty Reduction Strategy Paper (2005) and the Sixth Five Year Plan (2011-2015)), development needs ("To mitigate the flood damage in the high priority drainage area in Dhaka), as well as Japan's ODA policy for Bangladesh with the priority area of social development and human security including disaster management, at the time of both ex-ante evaluation and project completion. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has somewhat achieved its objective of "to mitigate the flood damage in the high priority drainage area, namely Drainage Zone H by improvement of the functions and operation of the existing drainage facilities" as shown in the improvements in the quantitative effects. All 5 pumps at Kallyanpur Pumping Station including 3 existing pumps provided by the Phase I of this project have been operational without any problems. and the water level at Kallyanpur Pumping Regulating Pond has been regulated less than 5 meters after project completion in 2009. The flood duration at Kallyanpur Pumping Regulating Pond was improved from 6 days in 2006 to 1 day in 2009, and none in 2013. Also the flood duration at low-lying land in Drainage Zone H was improved from average 7 days in 2006 to Average 3-4 days in 2009, and less than 6-8 hours in 2013.

All above three indicators met their target values. This is mainly because after the project completion, Dhaka city has not experienced the heavy rain with 5-year probability rainfalls floods (i.e. either rainfall with 192 mm/day or rainfall with 245 mm/two days) except July 27, 2009 when rainfall was recorded as 333 mm/day. The capacity of pumping station (total 20 m^3/second for Phase I and II) was designed on the basis that the regulating pond (total storage capacity: 2 million m^3) with 227 acre (about 918,700 m^2) of land was to be constructed by the Government of Bangladesh. However, 56 acre (about 226,600 m^2) of land (private land) has not been acquired yet and current capacity of regulating pond does not reach the target. It means that if 5-year probability rainfall flood happens, the Pumping station would not mitigate the damage by shortening the flood duration due to limited storage capacity of regulating pond. DWASA has conducted removal of sludge by utilizing sludge removal equipment provided by this project, and according to DWASA, they removed 7,000 m^3 of sludge from open channels and 16,000 m^3 of sludge from drainage pipes in 2010 as planned. The sludge removal of drainage pipes has been conducted by DWASA and the works for sludge removal of open channel has been contracted out to private company. In every year before the monsoon season, the sludge removal works are conducted. Despite this, the water flow and width of canal has been reduced due to the illegal encroachment and inappropriate sludge dumping by private contractors (Note1).

As for the impacts, according to DWASA, there was a decrease in accidents associated with sludge removal works after the introduction of the automated sludge removal equipment. At the same time, they pointed out that the introduction of sludge removal equipment by the project contributed to the improvement of safety in sludge removal works.

.The Government of Bangladesh has taken several initiatives to restore the ecosystem of the rivers flowing by the city as a whole. For example, projects for the removal of the sludge from the river beds, enforcement of environment compliance (acts and rules) are being implemented. Illegal encroachments and dumping of wastes were also evicted several times after 2007. As stated earlier, the land acquisition for the regulating pond is still pending issue. DWASA has already submitted the Development Project Proposal (DPP) for the acquisition of rest 56 acre of land in the planning commission. Embassy of Japan and related agencies including the Economic Relations Division (ERD) under the Ministry of Finance had meetings for several time to resettle this issue, and the agencies have shown their commitment to expedite the process. Although functions and operation of the drainage system has been improved, the risk of flood damage seems not to be mitigated as completely as planned since the necessary storage capacity of the regulating pond is not secured at the time of ex-post evaluation.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator	Baseline value (2006)	Target value (2009)	Actual value (2009)	Actual value (2013)
Indicator 1 Water level at Kallyanpur Pumping Regulating Pond in less than 5-years probability rainfall flood (Note 2)	More than 5 m	Less than 5 m	Less than 5 m	Less than 5 m
Indicator 2 Flood duration (Note 3) at Kallyanpur Pumping Regulating Pond in more than 5-years probability rainfall flood	6 days	3 days	1 day	None (0 day)
Indicator 3 Flood duration at low-lying land in Drainage Zone H	Average 7 days	Average 4-5 days	Average 3-4 days	Less than 6-8 hours
Indicator 4 Sludge volume removed from the open channels and drainage pipes in Drainage Zone H by DWASA	7,000 m^3 (open channels) 16,000 m^3 (drainage pipes)	7,000 m^3 in 2010(Note 4) (open channels) 16,000 m^3 in 2010(Note 4) (drainage pipes)	7,000 m^3 in 2010 (open channels) 16,000 m^3 in 2010 (drainage pipes)	N.A.

Source: DWASA

Note1: Sludge removed by the private contractors is dumped at the bank of open channels and not transported to the dumping ground designated by Dhaka city. Due to this, major share of the sludge returned to the cannel during the rainy season.

Note 2: 5-years probability rainfall is defined as either rainfall with 192 mm/day or rainfall with 245 mm/2 days.

Note 3:Flood duration means no. of days when the water level of Kallyanpur Pumping Regulating Pond exceeds 5 meters

Note 4: It was expected that DWASA would remove sludge accumulated in the open channels and drainage pipes in Drainage Zone H by 2010. Therefore, target year of indicator 4 should be 2010.

3 Efficiency

Although the project cost was within the plan (ration against the plan: 80%), the project period was slightly exceeded the plan (ration against the plan: 113%) because of delay associated with the custom's clearance and land acquisition issue. The project inputs were appropriate for producing the outputs of the project. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of the Kallyanpur Pumping Station and sludge removal equipment have been carried out by DWASA. Regarding the institutional aspect, there is a shortage of manpower for O&M of the pump stations as well as for sludge removal equipment, however, it is supplemented by utilizing the private service providers by contracting out a part of maintenance works. Regarding the technical aspect, necessary maintenance has been conducted for pumping stations and sludge removal equipment. There is an O&M manual for the pump machines but it is not available in the pumping station for use of the pump operators because the manual is prepared only in English and kept at the O&M Division of DWASA HQs. In this respect, DWASA plants to prepare the manual in Bengali language to be available at pump stations, so that the pump operators will be able to utilize the manual for their reference on site. DWASA organizes training for the staff in different Divisions, however most of the technical staffs get training from their workplace, no training for the operators were provided yet.

This issue needs to be improved. Regarding the financial aspects, the sufficient O&M budget has been allocated. The project facilities have not experienced any major problems and breakdown so far and they have been maintained in a good condition.

This project has some problems in technical aspect, hence sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has somewhat achieved the project objectives of "to mitigate the flood damage in the high priority drainage area, namely Drainage Zone H by improvement of the functions and operation of the existing drainage facilities". All quantitative indicators achieved the target values. However, the ex-post evaluation is difficult to verify whether the project is able to respond to floods caused by 5-year probability rainfalls because Dhaka city has not experienced it after project completion except one day in 2009. In addition, the important precondition of the project which is construction of the regulating pond (total storage capacity: 2 million m^3) has not been fully functioning due to the land acquisition issue. It will be also a risk for achieving the project objective. Sludge in the open channels and drainage pipes in Drainage Zone H were removed by DWASA as planned.

As for the impacts, the project has partly contributed to a decrease in accidents associated with sludge removal work. The land acquisition of 56 acre (about 226,600 m2) of private land for regulating pond is an important pending issue. Therefore, effectiveness/impact of this project is fair.

As for sustainability, the project has some problems in technical aspect since the trainings for operators are not sufficient .and pump operator cannot refer the Bengali manuals on site at the time of the ex-post evaluation. This situation would be improved once the planned translation of O&M manuals into Bengalese language are completed. . For efficiency, the project period slightly exceeded the plan because of delay associated with the custom's clearance and land acquisition issue.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- Since the operators have small chance to receive the training, it is recommended to increase the training opportunities for the operators as same as the technical staff, which may contribute to further strengthen the sustainability of this project.
- In order to prohibit dumping of removed sludge from the pond and drainage canal on the bank, it is recommended to strengthen the monitoring activities for sludge removal works done by the private contractors during their contract period by frequent patrol to the sites. Also it is suggested to consider the following additional counter measures such as penalizing violators by collection of penalty charges and elimination of violated contractors from the sludge removal works in the future in order to strengthen compelling force to violated actions if it is appropriate.

Lessons learned for JICA:

- Despite that the difficulty of the land acquisition caused by rapid urbanization had been considered at the planning stage and necessary measures have been taken by the Bangladesh side, insufficient capacity of a regulating pond is still a pending issue at the time of ex-post evaluation. In this regard, it would be preferable that land ownership situation, social risks associated with resettlement of residents, and the implementation capacity of related authorities are clarified before the implementation of the project.

Water level measurement scale

some part of the existing regulating pond
some part of the existing regulating pond

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Egypt office: December, 2013

Country Name	The Project for Modernization of Agricultural Mechanization Center in Damanhour
Egypt	

I. Project Outline

Project Cost	E/N Grant Limit: 792 million yen		Contract Amount: 790 million yen
E/N Date	June 2007		
Completion Date	October 2008		
Implementing Agency	Agricultural Mechanization Sector (AMS), Ministry of Agriculture and Land Reclamation (MALR)		
Related Studies	Basic Design Study: February – October 2006 / Detailed Design Study: March 2007 – February 2008		
Contracted Agencies	Consultant(s)	Sanyu Consultants Inc.	
	Contractor(s)	Dai Nippon Construction	
	Supplier(s)	Sojitz Corporation	
Related Projects	Sinbelawin Agriculture Mechanization Center in Dakahlia Governorate (Grand Aid, 1984-1987)		
Background	The agricultural sector in Egypt accounted for 13.9% in the total GDP in 2005, and 30% of the employed population in Egypt was engaged in the sector. The majority of farmers used "agricultural machinery hiring service" provided by 6 agricultural mechanization center (AMC) and 126 agricultural mechanization stations in whole country established by Ministry of Agriculture and Land Reclamation (MALR). However, since there was no agricultural mechanization center with any repair facility or training facility in Beheira Governorate in the west delta (the project's target area), the number of broken machinery was increasing due to longer time for repairing and insufficient technical capacity of operators and mechanics. Such situation caused failure to meet farmers' demand for the agricultural machinery and, as a result, affected agricultural productivity in the area.		
Project Objectives	Outcome To establish the supporting system of promoting agricultural mechanization in Beheira Governorate by modernization of the Damanhour Agricultural Mechanization Center (DAMC).		
	Outputs(s) Japanese Side: a) Construction of Facilities • Workshop building, training building, staff building, tractor shelter, and adjunct facilities b) Procurement of Equipment • Equipment for workshop and training Egyptian Side: a) To secure land for the project and to clear, level and reclaim the land b) To provide facilities of electricity, water supply and drainage in and around the project site c) To maintain and use the facility and equipment provided by the project as well as to assign staff for operation and maintenance of the facilities and equipment		

II. Result of the Evaluation

Summary of the Evaluation

Since the farmers in Beheira Governorate in the west delta did not have a sufficient accessibility to agricultural machinery hiring service in their locality, they were forced to do farming in the disadvantageous condition such as delay of harvesting and cultivating period, and reduction of productivity. This project was aimed at upgrading the existing Agriculture Mechanization Center in Damanhour (DAMC) from a machinery renting station to a modern center which provides key services to project beneficiaries such as (i) renting of agriculture machinery, (ii) maintenance of the machinery at a workshop and (iii) training for the staff and operators for a comprehensive agriculture machinery service.

The project has realized expected positive effects such as provision of training to farmers, reduction of time for repairing agricultural machinery by construction of facilities and provision of equipment at DAMC. Also DAMC as well as its subordinating hiring stations have become able to provide stable agricultural machinery rental service to farmers in Beheira Governorate because the number of workable machinery has been increased due to improvement of maintenance capacity of DAMC. As a result, the project has positive impacts on increase in agricultural production and productivity and farmer's income.

As for sustainability, this project has no problem in structural and technical aspects, but problems are observed in terms of financial aspect of the implementing agency and current status of operation and maintenance due to Ministry of Agriculture and Land Reclamation (MALR)'s budget cut as well as revenue decrease from agricultural machinery rental service and training to farmers influenced by the Revolution in January 2011. For relevance, the project has been highly relevant with Egypt's development policy, development needs, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Egypt's development policy ("to increase agricultural productivity for food

security" in the 5th Socio-Economic Development Plan 2002/03-2006/07 and the Sustainable Agricultural Development Strategy towards 2030), development needs ("to promote agricultural mechanization in Beheira Governorate"), as well as Japan's ODA policy "the Japan's Country Assistance Program for Egypt" with priority area of poverty alleviation and improvement of living standards at the time of both ex-ante and ex-post evaluations. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives of strengthening DAMC's function as a regional center for agricultural machinery rental service to farmers, maintenance of agricultural machinery as well as technical trainings. The rate of workable machinery in the target area improved from 85.5% in 2006 to 91.0% in 2011 and 92.0% in 2012 as a result of reduction of time for repairing and capacity improvement through staff training. The number mostly met the target value of 94.4% while, in parallel with this project, AMS/MALR have increased agricultural machineries (e.g. tractors and combines) at DAMC and neighboring 19 Hiring Stations under the administration of DAMC from 485 in 2006 to 1,143 in 2012. The average time for repairing one machine at DAMC improved remarkably from 90 day in 2006 to 60 days in 2011 and 50 days in 2012, although it has not yet fully achieved its target value of 36 days. As a result of the above improvement, DAMC together with its subordinating 19 Hearing Stations have become able to provide stable agricultural machinery rental service to farmers in Beheira Governorate after the project.

Also the project has a positive effect on improvement of DAMC's training function through the facility construction and the equipment procurement, as training courses for farmers were organized 46 times with 1,380 participants in 2010/2011 (the Egyptian fiscal year: from July to June) and 26 times with 780 participants in 2011/2012 (the Egyptian fiscal year). In contrast, the training courses for AMS staff who engaged in operation and maintenance of agricultural machinery at centers ware organized only one time a year in 2011 and 2012. The participants' numbers were also limited to 20 persons in 2011 and 12 persons in 2012, which was far below the target value of 400 participants. The main reason for this was that after the Revolution January 2011 in Egypt, demonstrations and strikes of AMS staff calling for permanent jobs took place in DAMC, and DAMC was not able to organize expected number of training courses for the staff under such difficult political and social situation. Nevertheless, DAMC could successfully provide the machinery rental and repairing service as well as farmers training by mobilizing its staff who is equipped with knowledge and skills through past staff trainings. This helped to promote the utilization of agricultural machinery by farmers.

To sum up, although DAMC has not implemented the expected number of training courses for AMS staff, it has been sufficiently performing its key roles to provide stable agricultural machinery rental service, maintenance of the machinery, and farmers training in Beheira Governorate.

The project has positive impacts on increase in agricultural production and productivity and farmer's income. According to the interview survey to the farmers in the target area, they have increased both production volume and productivity of certain crops such as sugar beet, clover and summer maize by hiring rental machinery from DAMC and hiring stations. Adopting agricultural machinery farming after the project enabled them to: (i) save seeds quantity, (ii) save agricultural labor time, (iii) reduce losses of harvested crop to the minimum, and (iv) reduce cultivation and harvesting costs. These advantages have contributed to increase of farmer's income. No negative environmental impact was observed and no land acquisition as well as no resettlement of people were conducted.

Therefore, effectiveness of this project is fair.

Quantitative Effects

Indicator(unit)	baseline value (2006)	target value (2011)	actual value (2010/2011)	actual value (2011/2012)
Indicator 1 Rate of workable machinery in the target area (%)	85.5	94.4	91.0	92.0
Indicator 2 Average time for repairing one machine (days)	90	36	60	50
Indicator 3 No. of training courses for farmers (no. of course /year)	N/A	10	46	26
Indicator 4 No. of farmers who received the training at DAMC (no. of person/year)	N/A	200	1,380	780
Indicator 5 No. of training courses for AMS staff who engaged in operation and maintenance of agricultural machinery (no. of course /year)	N/A	20	1	1
Indicator 6 No. of AMS staff who received the training at DAMC (no. of person/year)	N/A	400	20	12

Note 1: The project target area is 578,000 ha of farmland in Beheira Governorate and the number of target farm families is 255,400.
Note 2: Indicator 1: Rate of workable machinery in the target area (%) = (No. of workable machinery (i.e. tractor and combine) in the target area) / (Total no. of machinery in the target area including unusable machinery and machinery under repair and maintenance).
Note 3: DAMC is responsible for management of 19 Hiring Stations located in the three General Administrations such as (i) Behera, (ii) El Aradi & El Gededa and (iii) Wadi & El Natron.
Note 4: The Egyptian fiscal year starts 1st July and ends 30th June.

3 Efficiency

The inputs were appropriate for producing the outputs of the project, and both the project cost and the project period were within the plan (ration against the plan: 99% and 68%). Therefore, efficiency of this project is high.

4 Sustainability

The facilities/equipment provided by the project are maintained by Agricultural Mechanization Sector (AMS) of Ministry of Agriculture and Land Reclamation (MALR), while Damanhour Agricultural Mechanization Center (DAMC) carries out operation and maintenance (O&M) activities in the field level. DAMC is responsible for O&M of 19 Hiring Stations located in the three General Administrations (Behera, El Aradi & El Gededa, Wadi & El Natron) with total 179 staff. The majority of DAMC staffs are equipped sufficient technical skills for O&M with over 20 years of working experience, and conduct scheduled maintenance including the preventing maintenance based upon established O&M manuals. Its inventory management for spare parts is properly done by DAMC. While total budget allocated to AMS has been dropped around 34% for 3years from 2008 to 2010, and especially after the Revolution in January 2011. As a result, AMS has problems of securing necessary O&M budget because (i) demonstrations and strikes by the staff negatively impacted on its business such as renting of agricultural machinery and trainings for farmers, which in turn affected the revenue of DAMC, and (ii) MALR made a significant cut of its budget for AMS/DAMC operations. Although all the facilities and equipment provided by the project are in good condition and fully utilized so far, the budget cut affects purchase of spare parts and maintenance work for some machinery.

This project has no problem in structural and technical aspects, but problems are observed in financial aspect of the implementing agency and current status of operation and maintenance. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

In order to keep the facilities and machineries provided by the project in good condition for farmers' convenience, MALR is recommended to consider increasing the budget to AMS for the operation and maintenance.

Lessons learned for JICA

Provision of necessary facilities/ equipment to reinforce past JICA's assistance is effective. In the project, the implementation agency has rich human resources in both the local and the central levels, which is supposed to be a result of the past JICA technical cooperation projects and training. As a result, the project maintains relatively favorable effects even after the completion.

Machineries after repair at DAMC

Equipment at DAMC workshop

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Ethiopia Office/ Nov, 2013

Country Name	The Project for Water Supply in Afar Region
Ethiopia	

I. Project Outline

Background	In Ethiopia, it was estimated that about 24 % of the population can access to safe potable water. This figure was quite lower than the average of the countries of Sub-Sahara (54%, estimated by UNDP). People in the rural area, where 85% of the total population of Ethiopia lived, spent a lot of time and manpower to fetch potable water, and it caused the acceleration of the poverty in the area. Average water supply coverage in the Afar state, one of the poorest states in Ethiopia, was only 16.5% against the same of the national level 30.9% in 2001. The Government of Ethiopia aimed to improve the water supply coverage in the Afar state from 44% (urban) and 14% (rural) in 2001 up to 90% (urban) and 62% (rural), in an average 65.1 % by 2016.		
Project Objectives	To provide safe and stable water in the Afar State by constructing water supply facilities, carrying out a technical assistance (capacity development of rehabilitation and operation skills and maintenance skills), and procuring equipment necessary for rehabilitating the existing water facilities, and thereby contributing to decrease in water-borne diseases and lighten burden of collecting water.		
Summary of the project implementation	1. Project site: 9 towns in the Afar National Regional State (Gubi Dowra, Kelewan, Derayitu, Chifra, Eli Wuha, Nemelefen, Wederage, Kumami, and Dulecha) 2. Output(s) by Japanese side: (1) Construction of water supply facilities in 9 towns in Afar Regional National State: ・ Water source facilities: (1) 6 new wells, reuse of 6 test wells as production wells, and rehabilitation of 3 wells by the Ethiopian side with support of the Japanese side, (2) installation of 12 sets of well pumps, electric generators and (3) electric generator rooms (12 sets) ・ Water supply facility (pipelines) ・ Distribution facility (6 sets of distribution reservoirs, an elevated water tank, public water taps) (2) Procurement of a truck with well rehabilitation equipment and a truck with pumping test equipment (3) Technical Assistance (a soft component) for well rehabilitation technique and management of water supply service 3. Output(s) by Ethiopian side: Constructing an access road, land acquisition and site clearance, installing the protective fences for the wells and the public fountains, sites for storing the procured equipment		
E/N Date	November, 2006 (Detailed Design:DD) May, 2007 (Construction)	Completion Date	February, 2010
Project Cost	E/N Grant Limit: : 23 million yen (DD), 544 million yen (Construction)	Contract Amount: 23 million yen (DD), 470million yen (Construction)	
Implementing Agency	The Water Resources Bureau, The Afar National Regional State (AWRB)		
Contracted Agencies	A joint venture company of Kyowa Engineering Consultants Co., Ltd. and Yachiyo Engineering Co., Ltd., Toa-Tone Boring Co., Ltd.		
Related Studies	Basic Design Study: January 2006 – July 2006, Detail Design Study: December 2006 – November 2007		
Related Projects (if any)	Japan's Cooperation: The Groundwater Development and Water Supply Training Project at Ethiopian Water Technology Center (EWTEC) (Phase II (2006-2008) and Phase III (2009-2013) Project (Technical Cooperation) Other donors' Cooperation: World Bank, UNICEF, OAU (AU), and the Government of Italy support water supply projects		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Ethiopia's development policies, such as water supply and sanitation development under "Plan for Accelerated and Sustained Development to End Poverty" (PASDEP) (2006-2010) and Growth and Transformation Plan (GTP) (2010-2015), development needs to improve access to safe potable water both at the national and regional level as well as Japan's ODA policy (prioritizing water supply) at the time ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has achieved its objectives of providing safe and stable water in the Afar State at a limited level. Out of nine sites, the water facilities at three sites (Nemelefen, Wederage and Kumami) are not functional (as of May 2013), due to breakdown of the equipment (a pump at one site, and generators at two sites). It takes generally 6-8 months to repair/replace equipment, and prospect of repair of these facilities is not clear as the repair of those facilities requires relatively higher technical skills which AWRB is not equipped with.. In addition, some wells which constitute the water supply schemes at the two sites among the three sites where the water facilities are not functional (Nemelefen and Wederage) are dried up. Although the water facilities at other sites are functional, for this reason, the estimated population served by the project currently is 22,827 compared to the target 34,550. The current actual total volume of water supply of 570.6m^3/day is lower than the target of

1,702m^3/day. Partly because water facilities are non-functional at three sites, and partly because water facilities under the project provide water supply services for only 4-5 hours due to the insufficient power supply of generator which stops working because of higher temperature (sometimes exceed 45 degrees C) than the anticipated temperature (35 – 40 degrees C).

With the training conducted by the project, the technicians at the AWRB have improved their knowledge and skills for well rehabilitation works. As a result, and by using the equipment provided by the project, the AWRB rehabilitated more than 60 wells in the last three years and provided maintenance services for more than 150 water facilities including hand pumps. Regarding the quality of the water, communities are satisfied with water quality in terms of its smell except two sites where people find salt concentration is a major water quality problem, though they still use the water source. Water quality analysis is carried out once a year which supports the above mentioned people's recognition.

Although some favorable impacts such as reduction of time of fetching water and reduction of water-borne diseases prevalence were found, the project did not reach the target of its direct objectives in various aspects, and therefore, effectiveness/impact of this project is low. There is no negative impact on natural environment. There is no land acquisition/involuntary resettlement except Chifra. At Chifra, the generator house was constructed inside a farmer's farm field with the permission of the land owner.

Quantitative Effects

Indicator	Year 2006 (before the project) Actual value	Year 2010 (target year) Target value	Year 2010 (target year) Actual value	Year 2012 (ex-post evaluation year) Actual value
Indicator 1: Water supply coverage ratio in 9 towns	49.4%	75.6%	n.a.	58.6%
Indicator 2: Water supply volume in 9 towns : (1) Volume per day per person (2) Total volume per day	(1) 12.3 litters (2) 408m^3/day	(1) 25 litters (for public taps) (2) 1,702m^3/day	n.a	(1) 14.6 litters*1 (2) 570.67 m^3/day
Indicator 3 (Supplemental indicator): Water served population in 9 towns	16,320	34,350	n.a.	22,827*2

*1 Total water supply volume per day/actual population in 9 towns. *2 Total water supply volume per day/25L per capita (assumed water consumption per capita based on the beneficiary interviews at the time of ex-ante evaluation). Source: Field Survey Result (2013): Interview with WWO officers

A WC Chairman with record book (Eli Wuha)

Tap water at home yard at Gubi Dowra

A Water point at Woderage

3 Efficiency

Although the outputs were produced mostly as planned, Ethiopian side has not yet fulfilled their responsibility. For example, fences around the water supply facilities were not constructed at many project sites. The project cost was within the plan (ratio against plan: 87%), however, the project period exceeded the plan (ratio against the plan: 131%). The reason of delay is re-drilling the boreholes in three sites due to the dried hole. Therefore, efficiency of this project is fair.

4 Sustainability

Operation and maintenance (O&M) of the water facilities constructed by the project is carried out by Water Committees (WC) in the target towns with the support of Woreda Water Offices (WWO) at Woreda level[1]. WCs basically are responsible for management of water supply, whereas WWOs are responsible for the protective inspection of the facilities and assisting all the activities of WCs, such as doing minor repairment of facilities, regular protective inspection and requesting assistance to AWRB for serious mechanical problem. Institutionally, after the reorganization of AWRB, the capacity O&M department has changed to smaller level as "Team", and as a result, the number of staff allocated to O&M Team was reduced to seven which is much smaller than the planned 28 staff. Each WWO has relatively sufficient number of technical staff of about 8-9. At community level, WCs exist in 8 sites, and the WCs have at least six members for management, however, WC's management is at beginning stage in most sites.

Technically, the lack of capacity is observed at all levels (AWRB, WWOs, and WCs). The O&M Team of AWRB once in a year undertakes inventory to determine the functionality level of water schemes. However, they are not capable enough to fix serious problems, partly because of the resignation of experienced and knowledgeable 2 staff members. As to WWOs, although

[1] Administratively, the Afar state has 5 zones which are divided into 29 Woredas. Woredas are further divided into 32 towns and 236 villages.

they perform regular monitoring and check-up, WWOs sometimes fail to identify problems in water facilities. In addition, although high water leakage loss due to bust caused by high water pressure was seen in existing pipelines, a technical issue hampers WWOs to replace the existing piplines to HD PVC pipelines which are durable and cost effective to exactly fit with the newly constructed main water pipeline by the project. In most sites, WCs are generally not engaging and upholding the responsibility of water scheme administration to the desired level. Although training was provided by this project, newly re-elected WC members were not given any training, consequently they lack necessary knowledge nor skill for management. Financially, although the budget allocation for AWRB including O&M budget has increased, the amount is not sufficient to meet vast demands for rehabilitation and maintenance services. As to WCs, except three non-functional sites, all the remaining six water facilities collect water tariff regularly and keeps financial records. However, due to increasing fuel cost, low water supply service and lack of community commitment to pay water bills, most water facilities are financially unsustainable to cover necessary O&M expenses (payroll of pump operators, fuel cost, and repair cost) by themselves. Exceptionally, operating expense of the facilities of Chifra WC was decreased by half since WWO at Chifra made efforts to connect the water facility to the main electric power gridline.

As to the current status of O&M, as mentioned above, the water facilities at three sites are non-functional and still waiting solution from the AWRB. AWRB took longer time to respond to the request of various water facilities in the region (6 to 8 months). As explained above, the water facilities under the project provide water supply services for a limited amount of time (4-5 hours), as the generators would stop functioning during mid-day as the temperature becomes very hot. As to WWOs, at least once a week the WWOs perform regular monitoring and check-up of the water facilities. Besides, whenever problems happened, the WWOs fix them within their capacity if possible and buy equipment for repair and spare parts when necessary. If necessary, the WWOs request AWRB for assistance. In general, it is observed that the water supply facilities operation and maintenance activities are not undertaken in appropriate manners by WC in most towns. All procured rehabilitation equipment is still providing their intended service without any major problem. Once in six months the AWRB has properly taken the necessary maintenance service measures for the donated rehabilitation trucks. Thus, as this project has problems in institutional, technical and financial aspects as well as the current status of operation and maintenance, sustainability of this project is low.

5 Summary of the Evaluation

This project has achieved its objectives of providing safe and stable water in the Afar State at a limited level. The water facilities at three sites are not functional due to breakdown of the equipment, and dry up of some wells. As a result, the latest figures for the population served by the project as well as the water supply volume do not reach the target. With the training given through the project, the technicians at the AWRB have improved their knowledge and skills for well rehabilitation works and actually undertook rehabilitation of 60 wells and maintenance services of 150 water facilities by using the equipment procured by the project. Although some favorable impacts were found, the project does not reach the target in various aspects, effectiveness/impact of this project is low.

For efficiency, the project period slightly exceeded the plan. As for sustainability, there are problems in institutional, technical and financial aspects as well as the current status of the O&M due to insufficient number of staff, technical capacity and O&M budget. In addition, currently water facilities are not functional at three sites due to breakdown of the equipment.

In light of the above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. Considering the vastness of the region and lack of sufficient capacity to address the growing demands of rehabilitation and maintenance services from Woredas, it is recommendable to strengthen the operation and maintenance activities in the Afar. Otherwise, the small town water supply systems constructed and rehabilitated by the project would not be sustainable in the future.
2. The AWRB together with WWOs should consider the revitalization of the new WCs through facilitation and training (i.e. water scheme administration, financial management and O&M) provision of necessary guidelines for the newly re-elected members of the WCs.
3. The AWRB has to make necessary arrangements for the water facilities to access electric power sources to reduce the increasing operational cost.
4. In most of the project sites replacement of the distribution pipeline system has to be considered to avoid unnecessary water loss due to frequent breakdowns and leakage.

Lessons learned for JICA

In a region such as the Afar region which is the most difficult region for sustainable water supply, the selection criteria of the sites could be stricter and a soft component could be more comprehensive, considering more than 30% of the project sites are not functional only after 2 years of the completion of the project,.

1. Increasing fuel cost have posed serious challenges to the sustainability of the water schemes. Hence, availability of the conventional grid line for electricity or the plan of extending the grid line might be considered for the selection of the site. Connecting the water supply system to the gridline of electricity, and thereby cheaper supply of electricity could improve financial status of a WC as in the case of this project.
2. In case of the project, the project should have included the training to the plumbers and water technicians for O&M of HD PVC pipelines for sustainability of the project effect. In accordance with the content of the technical skills to be transferred and the technical level of the target group, appropriate support scheme (i.e. Technical cooperation) should be taken into consideration. In addition, considering the difficulty in organizing the WCs, more user friendly support could have been provided, for example, not only letter-based but also picture-based manuals could be more appropriately prepared.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Honduras Office: November, 2013

Country Name	Project for improving San Felipe Hospital
Honduras	

I. Project Outline

Background	The San Felipe Hospital (the "Hospital"), located in the capital Tegucigalpa, is the oldest hospital in Honduras built in 1882 and one of the 6 tertiary level hospitals in Honduras. Originally developed as a second level hospital, however, in accordance with the needs for the tertiary level hospitals, the Hospital became to have the functions of both tertiary level hospital which offers highly specialized medical service and the only secondary level hospital in the health region number one. However, the Hospital had problems: lack of space in examination and waiting areas, inadequate disposition of facilities, and deteriorated facilities and medical equipment. Outpatients department was always full of patients and they were often left to wait for a long time. It happened several times that patients returned home without being examined and treated.		
Objectives of the Project	To improve the performance of the outpatient department and medical service quality of the San Felipe Hospital by (1) constructing facilities and procuring medical equipment at outpatient department, and (2) providing training (soft component of Grant Aid Project) for the operation and maintenance of medical equipment, thereby contributing to the improvement of health indicators and capacity development of medical staff.		
Outputs of the Project	1. Project Site: The San Felipe Hospital 2. Japanese side - Construction of an outpatient department building (3,588.9 m^2) and a machinery building - Procurement of medical equipment for outpatient department and support services (Outpatient medical equipment, X-ray, Laboratory Medicine, blood center, endoscopy, etc.): 169 units for 48 items - Training for the operation and maintenance of medical equipment. (Soft component program: capacity building for maintenance and management system, and planning and execution of the annual maintenance) 3. Honduran side: - Assurance of land leveling and land clearing, removal of existing building, deleting underground objects - Protecting a wall, which is a historic architecture adjacent to the building being demolished, by setting and removing a service entrance, and constructing an entrance for the wall - Connecting infrastructure services including electricity, water supply and sewage, telephone and others. - Purchase of furniture and general equipment		
E/N Date	May 23, 2007	Completion Date	21 September, 2009
Project Cost	E/N Grant Limit:888 million yen, Contract Amount: 885 million yen		
Implementing Agency	San Felipe Hospital (the "Hospital")		
Contracted Agencies	A Joint venture of Nihon Sekkei, Inc. and Fujita Planning Co., Ltd, Konoike Construction Co., Ltd., Sojitz Corporation		
Related Studies	Basic Design Study: July 2006 – December 2006, Detailed Design Study: February, 2007 – January, 2008		
Related Projects (if any)	Japan's Cooperation: - The Project for Strengthening Nursing Education and In-service Training in El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic (Technical Cooperation, 2007-2011) - Project for improving hospital network in the capital region (Grant Aid, 1996) Other Donors' Cooperation: - USAID supports human resource development in maternal and child health (2009-2010)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with Honduran development policies, such as "improving of quality and efficiency of the health services, strengthening capacity of tertiary level hospital, and facility and equipment improvement" as set in the" Health Sector Plan 2002-2006", "National Health Plan 2010-2014" and other documents, and development needs to strengthen the function of the tertiary level hospitals, as well as Japan's ODA policy for prioritizing support for the health sector, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to improve the performance of the outpatient department and medical service quality of San Felipe Hospital. The number of outpatients that received treatment increased by 125% from 2005 to the target year 2010, and the number of referred patients has also increased. The increase of the number of laboratory tests shows the enhancement of diagnosis capacity of the Hospital. The facilities and equipment of the project has enabled the Hospital to provide patients with better services. The patients' satisfaction surveys conducted by the Hospital show the substantial increase on the satisfaction ratio from 37% in 2006 to 74% in 2011. All the facilities are being fully used for the purpose which they were built, and the equipment has been utilized fully, except a few items such as one of the x-ray machines, though the x-ray machine has already been fixed by a local company San Felipe hospital has contracted with and is currently working well.

As to Impact, although the project was expected to contribute to a decrease in death rates from diabetes, liver cirrhosis and others, it is difficult to find how the project contributes since the Hospital only keeps track of the obligatory notification diseases, and does not collect any data (impact indicators) to follow up the current situation of chronic diseases. However, the project has contributed to capacity development of the human resource especially nursing, dentist, medical students, who mention that the opportunity to be assigned to this Hospital has helped them develop better skills and improve their knowledge, environmental conditions and proper gear provided for this capacity development purpose.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Year 2005 (before the project) Actual value	Year 2010 (Target year) Target value	Year 2010 (Target year) Actual value	Year 2011 Actual value	Year 2012* Actual value
Indicator 1 Number of outpatients (persons/year)	129,688	Increase (30 % increase is expected)	292,647	302,564	279,802
Indicator 2 Number of patients referred to the Hospital (persons/year)	31,587	Increase (no target)	42,222	43,863	38,948
Indicator 3 Number of laboratory tests (persons/year)	334,976	Increase (no target)	514,247	494,505	446,701
Indicator 4 Number of imaging tests (persons/year)	10,554	Increase (no target)	11,310	11,393	11,826

Source: The San Felipe Hospital

* 2012 values of some indicators dropped from previous years. It might be related to i) reduction of hospital staff and ii) 45 no service days caused by 3 strikes of hospital staff.

3 Efficiency

Although the project cost was as planned (ratio against the plan: 100%), project period slightly exceeded the plan (ratio against the plan: 122%).The outputs of the project were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of medical equipment provided by the project have been carried out by the Hospital. Institutionally, there is a room for improvement. The Biomedical department is supposed to be responsible for maintenance; directly carrying out O&M activities as well as supervising placing orders for repairs to contract companies. Currently, the communication with those companies is directly made by each department and is not necessarily through the Biomedical department. Therefore, in order to control and supervise the overall status of equipment, spare parts and consumables in the Hospital, the institutional status of the Biomedical department needs to be strengthened. The number of maintenance staff of the Biomedical department is 5 and currently, 5 members are sufficient to carry out basic equipment maintenance. The Hospital contracts a private company for complex equipment repairs who has plenty of experiences in repairs and maintenance of medical equipment such as x-ray, ultrasound machines, etc. As for the number of medical staff, there would be no further cut in the number of medical staff, and therefore, institutionally there is no problem in the operation of the hospital.

In the technical aspect, the current staff of the Biomedical department has some difficulties in carrying out the maintenance. For example, the opportunity for training and updates is very limited and the staff that received the soft component training no longer works at the Hospital. However, the Biomedical department recently incorporated a staff member that fulfills the required profile. Additionally, an operation manual is being prepared by the Hospital that includes the job training program to keep up with technological updates.

Financially, the allocated budget from the government has increased, however the administration department of the Hospital considers that the needs of the Hospital don't match the budget assigned by the government. Thus, the Hospital searches for additional budget from other donors. In addition, in order to keep running some of the equipment, the Hospital authorities have made alliances with private companies who assure better quality of backup services based on social responsibility standards to support the Hospital with specific equipment.

As for the current status of O&M, the Biomedical department is not following a strict maintenance plan with periodical

checkup of the building, and none of ledgers, stock of consumables and spare parts are available. Nevertheless, most of the equipment procured by the project is relatively in good conditions. The Hospital has been able to provide the corrective maintenance required when the equipment procured by the project has had operational problems except one of the x-ray machines, which is being repaired by a contract company. The Hospital has been able to provide consumables except for a few medical equipment items such as the electrocardiograph graduated paper which cannot be found in the country. The Hospital has started an inventory process and work guideline preparation. The outpatient building facilities are maintained clean and in proper conditions. There were some problems with the drainage system in the surrounding of the outpatient building and in the kitchen the Hospital constructed, but the corrective maintenance measures are taking place.

Thus, as this project has problems in institutional, technical and financial aspects as well as the current status of operation and maintenance, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "To improve the performance of the outpatient department and medical service quality of San Felipe Hospital", as the number of outpatients, the number of referred patients, and the number of tests have increased as planned. A positive impact was identified in terms of capacity development of medical staff and medical students who were assigned to the Hospital.

As for sustainability, there are issues in institutional, technical, and financial aspects as well as the current status of operation and maintenance. There is no established proper maintenance system, the maintenance staff lacks qualification and training experience, and the Hospital faces financial constraints for maintenance activities. However, equipment and facilities are basically maintained well and the Hospital is taking various measures for solving the above problems.

In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. The review of the O&M manual, which is being prepared by the Hospital, is needed so that the Biomedical Department would implement them adequately. An equipment inventory action for working equipment is also necessary. It is important to seek mechanisms that guarantee an efficient relation among providers of medical equipment and the biomedical department of the Hospital. To enhance their skills and capacity, the biomedical and maintenance staff could take advantage of assisting and working together with specialized maintenance technicians when special maintenance is needed for certain medical equipment.
2. The periodical checkup of the building is encouraged to make preventive actions and reduce the corrective ones that incur higher costs. The drainage system is a contamination point for the outpatient department, and disposed water that comes from the kitchen area should go through the appropriate sewer system. While the correcting measure is taking place, the repair works should be accomplished completely.

Lessons learned for JICA:

1. In case of the project, a greater number of high level staff participated than that of operational staff. The operational staff is more permanent in the institution and do the work, while high level staff (such as hospital director and sub director) are subject to be moved every 4 years. If more these operational staff participated in the project, a wider participatory methodology could be carried out and thus contribute to strengthening the Project's sustainability. Therefore, emphasizing the participation of operational staff at the designing stage can be useful in case that their movement is more stable than high level staff.
2. In this project there is a problem that consumables for electrocardiograph cannot be procured in the country at the time of this evaluation. Lessons can be drawn for other projects that the procured equipment must be confirmed to get provision of consumables and spare parts for its proper use.

A sterilizer

Waiting areas are all kept under good conditions

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Honduras Office: October, 2013

Country Name	The Project for Reconstruction of Guaymon Bridge
Honduras	

I. Project Outline

Background	In Honduras, it was essential to secure and develop the distribution network of agricultural products and others in order to reactivate the production and consumption of such merchandise. The road network was especially important to this end, as 65% of the movement of goods in the country depend on the road transportation. The Guaymon Bridge is located on a trunk road CA13 on the "Rehabilitation Plan Logistics Corridor", a plan developed by the Government of Honduras aiming at strengthening economic competitiveness of Central America by improving the road network in the region. CA13 is located in a region with large plantations of bananas, palm oil, coffee, and others. CA13 was considered a most significant road in Honduras as it is not only the route used to transport these agricultural products to La Ceiba which is a commercial area of the region, but also to the San Pedro Sula, the largest commercial area in the north of the country, and Cortes which has the country's largest port; Port Cortés which handles 80% of the export to Honduras (2005). The Guaymon Bridge collapsed after hurricanes hit the region in 2005. A Baily type provisional bride was installed which could facilitate the two lane passage. However, the state of the bridge was extremely unstable and there was a high risk of collapsing again if flooding occurs. In addition, the bridge was forced to restrict load weight and maximum speed, in spite of the fact that 34% of the traffic volume was heavy goods vehicles such as buses, trucks and others.		
Objectives of the Project	To improve the function of the Guyamon Bridge on the national road C13 (in El Progreso, Yoro) and ensure inland transport of people and principal products fully and effectively by reconstructing the Guyamon Bridge		
Outputs of the Project	1. Project site: El Progreso, Yoro 2. Japanese side - Removal of existing Guyamon Bridge and constructing a new bridge (160m) - Renovation of the approach road - Bank protection 3. Honduran side Preparation of land required to work, moving electric poles, power lines, water pipes etc., allocating traffic controllers and security guards for a detour, and works for riparian structures		
E/N Date	May 23, 2007	Completion Date	September 2, 2009
Project Cost	E/N Grant Limit: 950 million yen	Contract Amount：946 million yen	
Implementing Agency	General Directorate of Highways (GDC) of the Ministry of Public Works, Transport and Housing (SOPTRAVI)		
Contracted Agencies	Katahira & Engineers Inc., Hazama Ando Corporation		
Related Studies	Basic Design Study: June – December, 2006		
Related Projects (If any)	-		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Honduran development policies, such as “poverty reduction through economic growth and stability, completion of logistics corridor and development of trourism related important roads” as set in the Poverty Reduction Strategy Paper (2001), and National Development Plan 2010-2014, and development needs to facilitate transport of goods and trade through development of trunk road network to commercial areas and ports, as well as Japan’s ODA policy (transport network development program and social economic development program 2006) for facilitating equitable and sustainable economic growth and development rural industries including agriculture at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high

2 Effectiveness/Impact

This project has largely achieved its objectives, “to improve the function of the Guyamon Bridge and ensure inland transport of people and principal products fully and effectively”. The load weight limit has been mitigated as planned, and the maximum speed limit has been mitigated to the level of 10km/h above the target. According to the mayor and the residents nearby, when the provisional bridge was used, there was traffic congestion of 1.5 hours at maximum for crossing the bridge, however, there has been no traffic congestion and the travel speed has significantly improved after the construction of the Guyamon Bridge. The traffic volume has increased by 150% of the volume before the project, and therefore, the stable transport of people and goods was ensured. The mayor, residents, and the implementing agency said the traffic safety has improved as a result of the

widening of the road. In addition, there was a concern of the possibility of collapse of the provisional bride, however, after the construction of the Guaymon Bridge, there has been no restriction of a bridge use even under the floods and earthquakes, and thus the vulnerability to natural disasters has improved.

As to impact, according to the Chairperson of the Chamber of Commerce and Industry of El Progreso, after the construction of the Guaymon Bridge, the access between northern coastal cities and El Progreso has improved, and goods transport on C13 has increased,and thereby, investment in agriculture and agriculture production have increased. Moreover, access to public services for residents has increased. In addition, according to the residents, and Chamber of Commerce and Industry, before the construction of the Guaymon Bridge, there were many cases of car-break in which targeted the cars which were stuck in heavy traffic on the provisional bridge. However, as a result of elimination of the traffic congestion after the construction of the Guaymon Bridge, no such case has occurred and security has improved. There is no negative impact on the natural environment, and no land acquisiotn/resettlement occurred.

Therefore, effectiveness/impact is high.

Quantitative Effects

Indicator	2006 (Before the project) Actual Value	2009 (Target year) Target Value	2009 (Target Year) Actual Value	2012 (January - December) Actual Value
Indicator 1 load weight limit	32 tons/vehicle	40.9 tons/vehicle	N/A	40.9 tons/vehicle
Indicator 2 maximum speed limit	30km km/h	60 km/h	N/A	70km/h
Indicator 3 Traffic volume on the Guyamon Bridge	Approximately 3,900 vehicles/day（Bus and Truck account for 34%）	N/A	N/A	5,830 km/h（Bus and Truck account for 34.8%）

Source: DGC, SOPTRAVI

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were within the plan (ratio against the plan: 100%, 76%).

Therefore, efficiency of this project is high.

4 Sustainability

The operation and maintenance of the facilities constructed by the project has been carried out by the implementing agency, GDC of SOPTRAV for large scale repair, and Directorate Executive Road Fund (VF) for routine maintenance work and periodic inspection and maintenance. There is no change in the roles and responsibility and the number of personnel of DGC and VF. However, the number of the engineers at VF is insufficient to oversee the maintenance work of the national road network. Although the maintenance and inspection were supposed to be contracted out to private companies at the time of ex-ante evaluation, they only contract out those works when necessary, and no systemic institutional setup is made. There is no problem on technical aspect, as the private companies carry out the maintenance.

The budget for VF has increased since 2007. According to GDC, the budget for GDC has also increased for the past three years, however, no figures were presented and therefore, there is uncertainty for the future prospect.

Regarding the current status of operation and maintenance, the function of the facilities has been maintained. The bridge, bank protection and drainage facilities were observed to be properly maintained. Although no periodic maintenance has been implemented, maintenance activities are carried out when necessary. In addition, GDC said they would take appropriate measures when the large scale repair is needed in the future.

Thus, as there are minor problems in institutional and financial aspects, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

This project has largely achieved its objectives, “to improve the function of the Guyamon Bridge and ensure inland transport of people and principal products fully and effectively”. The load weight limit and the maximum speed limit have been mitigated. Travel speed, traffic volume, and safety as well as the vulnerability to natural disasters have improved. In addition, impacts such as increase of goods transport to the major commercial areas and ports, increase of agricultural production, and improvement of access to public services are observed.

As for sustainability, there are minor problems in institutional and financial aspects, as a part of the institutional structure is not sustained what it was considered desirable at the time of ex-ante evaluation, and details of the budget are not disclosed. However, no problem is found in the function of the Guaymon Bridge.

In light of the above, this project is evaluated to be highly satisfactory

III. Recommendations & Lessons Learned.

Recommendations to implementing agency:

As the effects of the project such as regional economic vitalization, improvement of residents’ access to public services, and improvement of security are observed, the implementing agency is recommended to carry out proper maintenance and secure budget in order to sustain the project effect.

Lessons learned for JICA:

In countries and regions where the crime rate is high, development of roads and bridges does not only produce effects of

smooth transportation, improvement of access to various services, and economic vitalization, but also mitigates incidence of crimes (robbery) as a result of the reduction in traffic congestion.

Superstructure: bridge support, bridge abutment (from El Progreso)

Superstructure(from the north)

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Indonesia office: February, 2013

Country Name	Rural Water Supply Project in the Province of Nusa Tenggara Barat (NTB) and Nusa Tenggara Timur (NTT)
Republic of Indonesia	

I. Project Outline

Project Cost	E/N Grant Limit: 245 million yen		Contract Amount: 212 million yen
E/N Date	July, 2007		
Completion Date	July, 2009		
Implementing Agency	Directorate General of Human Settlements (DGHS) Ministry of Public Works		
Related Studies	BD Study: June, 2003 – December, 2003 Implementation Review: February, 2006 – May, 2007		
Contracted Agencies	Consultant(s)	Japan Techno Co., Ltd.	
	Contractor(s)	Takenaka Civil Engineering & Construction Co,. Ltd.	
	Supplier(s)	-	
Related Projects	[Japan's Cooperation] - The Study on Rural Water Supply Project in Nusa Tenggara Barat and Nusa Tenggara Timur (TC, 2000-2002) [Other Donors' Cooperation] - The Second Water and Sanitation for Low Income Communities Project (WSLIC) (2002-2007, IBRD) - Water Hibah (AusAID) (2011)		
Background	In the provinces of Nusa tenggara Barat (NTB) and Nusa tenggara Timur (NTT), which include the least developed regions in Indonesia, only 50% and 60% of people had access to clean water. The remaining people obtain unclean, unreliable water from dug wells, springs, and rainwater, the latter often being insufficient in the dry season. These sources also sometimes had adverse impacts on the health of people, and the infant mortality rate of NTB and NTT Provinces was the highest and fourth highest among all provinces of Indonesia. Therefore, it was an urgent task to improve hygiene conditions in specifically rural areas of the two provinces.		
Project Objectives	Outcome To secure a sufficient volume of safe water for the rural areas in East Nusa tenggara Province and West Nusa Tenggara Province by constructing rural water supply systems.		
	Outputs(s) Japanese side - Construction of the following facilities of rural water supply systems ・intake facilities ・distribution pipes ・public taps ・material for house connection ・transmission pipes ・service reservoir -Soft Component: community development and operation and maintenance (O&M) management. i) preparation of trainer's manual and documents for education and sensitization of people, ii) training of trainers, iii) assistance for development of a monitoring plan, and iv) guidance for monitoring activities during the preparation and guidance phases. Indonesian side -Acquisition of land for the construction of water facilities, and securing of access road to the construction site -Construction works of house connection facilities in Bagikpapan		

II. Result of the Evaluation

Summary of the Evaluation

In the provinces of NTB and NTT, many people were exposed to unclean, unreliable water from dug wells, springs, and rainwater, which sometimes had adverse impacts on the health of people. Therefore, it was an urgent task to improve hygiene conditions for villagers in those two provinces.

This project has achieved the improvement and enhancement of water supply conditions in the target villages (i.e. to provide households with easier access to safe water throughout the year) to a certain extent though delays were found in installation of house connection in some villages. Nevertheless, according to community people, water quality has become better compared to water from wells, which they used before the Project. As for sustainability, some problems have been observed in terms of financial aspect and current status of O&M due to insufficient budget for O&M of the existing facilities. Regarding relevance, the project has been highly relevant with Indonesia's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. As for efficiency, the project period exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Indonesia's development policy "to improve capacity of water supply system" as set in the National Strategy (Renstra) of Ministry of Public Works 2010-2014, and development needs "to increase number of people who can access to safe water in NTB and NTT", where people had obtained unclean, unreliable water from dug wells, springs, and rainwater, as well as Japan's ODA policy "Country Assistance Program 2004" to assist the Government of Indonesia (GOI) to improve basic public services including providing better water and sanitation services to create a democratic and fair society at the time of both ex-ante and ex-post evaluation, Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has achieved its objectives of supplying safe water to the communities in NTB and NTT by constructing facilities to supply safe water to a certain extent. The facilities constructed by this project can serve about 20,000 population as planned, and the actual number of beneficiaries was about 13,204 at the time of ex-post evaluation, which was 67% of the target value. This result was caused by the delay in installation of house connection in some villages. In general, house connection was given more priority than public taps in water supply development, but it takes time for beneficiaries to understand the benefit of bearing expenses for house connection. In the villages where house connection was delayed, public taps have covered population. Another delay was in the installation of necessary piping network expansion because the materials that were procured under this project had different specification from those that are locally used Galvanis pipe in some areas. Nevertheless, the planned total water supply volume was achieved. Also, according to community people, water quality has been greatly improved compared to water from wells, which they used before the Project. For instance, according to the communities in Dusun Mapak Desan, Desa Jempong Baru, people now use the water from public tap for cooking and drinking without boiling, while the water from wells must be boiled. The soft components generally contributed to the community development and O&M management, though one (1) public tap has been stopped in Bajur and one (1) public tap has been moved to another place because of the unpaid water charge.

Positive changes, to which this project might have contributed, have been observed in the project areas: the incidence of water-borne disease (i.e., skin disease, diarrhea) has been decreased after the project, for instance, in Tarus (Desa Mata Air and Desa Tarus), where 1,140 persons newly got access to safe drinking water through this project, number of patients who have diarrhea has been decreased drastically from 1,722 persons in 2009 to 400 persons in 2011. In addition, it is reported that the burden of women and children to fetch drinking water from the river/well has been reduced. No negative impact on natural environment was observed. As for the land acquisition, the public taps were installed on the land granted by land owners. The process of land acquisition was reported successfully completed as planned.

Therefore, effectiveness/impact of this project is fair.

Quantitative effects

Indicator	target value (2011)	actual value (2011) (target year) at ex-post e aluation
Number of beneficiaries *	19,642	13,204
(Supplementary indicator) Water supply volume	16.25 liter/second	16.25 liter/second

Source: Basic Design Study in 2006, Data collection from PDAM, National Statistics in 2011

Note: *) The figure includes the number of people served by the public water taps and house connection constructed under this project plus those served by existing facilities and facilities that were newly constructed by the Indonesian side besides this project, to which the water intake and transmission facilities constructed under this project supplied water.

3 Efficiency

Although the project cost was within the plan (ratio against the plan : 87%), the project period exceeded the plan (ratio against the plan: 128%) because of delay in administration of procurement procedure, i.e., the delay in finalizing/verifying the contract documents for construction works. Outputs have been changed since construction works of house connection facilities by the Indonesian side was not completed in almost all the project sites except in Bagikpapan. The reasons of these are that i) whether or not to install house connection depends on beneficiaries, who bear the cost for connection and ii) the pipe networks are necessary to be more expanded before house connection.

Therefore, efficiency of this project is fair.

4 Sustainability

The facilities/equipment provided by the project are maintained by Perusahaan Daerah Air Minum (PDAM), Regional Drinking Water Enterprise. The project has some problems in financial aspect and the current status of operation and management due to insufficient budget for O&M of the existing facilities. Though the current conditions of the provided facilities were basically good, for instance, in Bajur, one public tap has been stopped because the community did not pay the water charge and in Lower Duman, there is one public tap which has been moved to another place, because the community does not pay the fee. However, no serious problem has been observed in structural/technical/operation aspects, since i) the implementation structure is sustained what it was considered desirable at the time of ex-ante evaluation, ii) PDAM's staff are able to utilize facilities constructed by the Project and the public tap group has been functioning well in the target villages, and iii) facilities constructed by the Project are generally well maintained, despite some problems such as unrepaired public taps and insufficient utilization of manuals prepared by the project. The soft component of this project contributed to such performance.

Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency
<For Implementing Agency>.
- Implementation Agency shall continue monitoring of progress of house connection and provide necessary assistance to accelerate it. In addition, it shall discuss with related PDAMs how to utilize the materials for house connection provided by the Project.
- It is recommended that PDAMs take measures to collect water fee through discussions with community people regarding the benefits of using tap water.

Lessons learned for JICA
Since the house connection works will be done by PDAM based on the request from beneficiaries and its cost shall be borne by beneficiaries, it took a long time to increase the number of service population. In addition, it was not so effective to provide only materials for house connection without installation within the Project. Therefore, project design should be well prepared, considering the cost, works and understanding for the project by beneficiaries, and should be decided together with confirmation on work plan and budget allocation plan prepared by implementing agency, prior to the commencement of project.


Water Pump

Water Reserve Tank


Public Tap


Unrepaired Public Tap


Stock Galvanized Pipe for H.C


Stock equipment for H.C

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Egypt office: February 2014

Country Name	The Project for Rehabilitation of Floating Pump Stations in Upper Egypt (Phase IV)
Arab Republic of Egypt	

I. Project Outline

Project Cost	E/N Grant Limit: 740 million yen		Contract Amount: 673 million yen
E/N Date	(Phase I) December 2006, (Phase II) July 2007		
Completion Date	March 2009		
Implementing Agency	Mechanical and Electrical Department (MED), Ministry of Water Resources and Irrigation (MWRI)		
Related Studies	Basic Design Study: February – August 2006		
Contracted Agencies	Consultant	Sanyu Consultants Inc.	
	Contractor	-	
	Suppliers	(Phase I) Sojitz Corporation, (Phase II) Kubota Corporation	
Related Projects	Project for Rehabilitation of Floating Pump Stations in Upper Egypt Phase I (1991-93), Phase II (1996-98), and Phase III (2003-04) (Grant Aid, Government of Japan)		
Background	The agricultural sector of Egypt played the major role in the national economy by creating employment opportunities and acquiring foreign currency as well as securing food supply to the county. The sector accounts for 16% of the total GDP in 2003, which placed the third following the service sector (50%) and the industrial sector (34%). There were 103 irrigation pump stations along the River Nile in Upper Egypt, and out of them 45 stations are designed as floating type pump stations, which could no longer function properly due to deterioration. In response to the above situation, the Japan's Grant Aid Project, Project for Rehabilitation of Floating Pump Stations in Upper Egypt (Phase I, II, III) from 1991 to 2004 rehabilitated 26 floating pump stations.		
Project Objectives	Outcome To promote the stable water supply to farmers in Upper Egypt by supplying pump equipment for improvement of eight (8) pump stations.		
	Outputs(s) Japanese Side: a) Rehabilitation of 8 pump station at following locations: - No. 27: Gezeret El-Kobania Kebly (floating) - No. 29: Sahel El-Akab Bahary (floating) - No. 30: Gezeret Meneha (floating) - No. 31: El-Sarag (floating) - No. 32: Gezeret El-Fawaza El-Keblia (floating) - No. 33: Middle Fawaza (fixed) - No. 34: Gezeret Abo Arafa (floating) - No. 35: El-Hegs El-Mostagda (floating) Egypt Side: a) New construction and rehabilitation of water tower, discharge pipe and discharge canal b) Replacement of transformer and electric cable c) Dismantlement of current pump station d) Installation of floating pomp		

II. Result of the Evaluation

Summary of the Evaluation

Between 1991 and 2004, 26 floating pump stations along the River Nile in Upper Egypt were rehabilitated by the Japan's Grant Aid Projects. However, there still remained 19 floating pump stations that needed rehabilitation. Particularly eight (8) floating pump stations, which were targets of this project, seriously declined their functions and caused shortage of irrigation water in their service area.

The project has largely achieved its objectives of the improvement of total water discharge (increase by around 40% since 2006), pump efficiency (from 30-40% in 2006 to 77% in 2012), crop production in the service area of the project (increase by 25% since 2006), and reduction of operation and maintenance (O&M) cost (as a result of reduced operating time of pump stations). Also the project has positive impacts on increase in number of livestock and income of farmers.

As for sustainability, there was no problem observed in terms of structural, technical and financial aspects and current status of O&M of the implementing agency. For relevance, the project has been highly relevant with Egypt's development policy, development needs, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period slightly exceeded the plan.

In the light of above, this project is evaluated to be highly satisfactory.

1 Relevance

This project has been highly relevant with Egypt's development policy ("to raise food self-sufficiency and to improve water

resources" in the long-term socio-economic development plan titled "Egypt 21th Century 1997/98-2017/18"), development needs ("to maintain the irrigated agriculture in Upper Egypt"), as well as Japan's ODA policy "the Japan's Country Assistance Program for Egypt" with priority area of poverty alleviation and improvement of living standards at the time of both ex-ante and ex-post evaluations. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives of the improvement of total water discharge, pump efficiency, crop production in the service area of the project, and reduction of operation and maintenance (O&M) cost per unit volume of supply water. The total water discharge volume of target 8 pump stations improved by at least 41% in 2009 and 40% in 2012 since 2006 (before the project). the average pump efficiency(Note 2) of 8 pump stations improved from 30-40% in 2006 to 80% in 2009 and 77% in 2012, which achieved its target. The reason for slightly lower pump efficiency in 2012 than that in 2009 was due to minor adjustments of the suction and discharge water level of the pump stations. The crop production in the service area of the project increase from 19,500 t/year in 2006 to 24,765 t/year in 2009 (27% growth) and 24,375 t/year in 2012 (25% growth), which also met the target. The production volume has been increased in most of the crop area (Note 3). This is because the productivity of crop production in the target area has improved by provision of sufficient volume of water with appropriate scheduled timing after the project. In addition, the irrigation service area has been expanded by average of 25% after the project due to increase of irrigation water supply, which also contributed to increase of crop production. According to the results of interview survey to 50 farmers in 5 villages in the target area, it was confirmed that improvement of electro-mechanical efficiency of pumping machine reduced O&M cost per unit volume of supply water by pump stations and outage hours of operations.

The project has positive impacts on increase in number of livestock of farmers. According to the interview survey results to farmers, most of farmers increased the number of their livestock because they were able to increase the production of livestock feed such as clover and berseem. Also farmers' income was increased by a certain extent after the project due to increase of crop productivity. No negative environmental impact was observed and no land acquisition as well as no resettlement of people was conducted.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	baseline value (2006)	target value (2009 or later)	actual value (2009)	actual value (2012)
Indicator 1 (Note 1) Total water discharge of 8 pump stations (PS)	28,600,000 m^3/year	App. 35,500,000 m^3/year (Increase by 24%)	40,407,000 m^3/year (Increase by 41%)	40,174,000 m^3/year (Increase by 40%)
Indicator 2 (Note 2) Pump efficiency of 8 PS	30-40 %	80%	80%	77%
Indicator 3 (Note 3) Crop production in the service area (Note 4) of the project	19,500 t/year	App. 24,765 t/year (Increase by 27%)	App. 24,765 t/year (Increase by 27%)	App. 24,375 t/year (Increase by 25%)

Source: Mechanical and Electrical Department (MED), Ministry of Water Resources and Irrigation (MWRI)

(Note 1) The part of the discharge volume at Station No.33 in 2012 was not available.
(Note 2) Pump efficiency = Water power outputs (kW) / Electrical power input (kW) x 100.
(Note 3) The major types of crops produced in Upper Egypt as follows: (i) in the winter season (from October to April): wheat, clover, berseem, onion and vegetables; (ii) in the summer season (from May to September): sugarcane, maize, bananas, soybean and sesame, and (iii) in the Nile season (from June to August, the term once the Nile river flooded before Aswan High Dam): vegetable, fruits and berseem. It usually depends on water availability whether farmers cultivate the summer season crops or the Nile season crops.
(Note 4) Actual values of indicator 3 in 2009 and 2012 are calculated based on the improved percentage estimated by the implementing agency (MED/MWRI).
(Note 5) Total service area of the project is 2,255 feddan (=947 ha) (1 feddan = 0.4 ha) which is supplied with water from the eight pump stations.

Impact: Change in Average Number of Livestock (unit: No. of head/household)

Type of animals	Before the Project	After the Project
Cattle	2	3
Donkey	2	4
Sheep	10	12
Chicken	28	32

Source: The result of interview survey to 50 farmers in 5 villages in the target area.

3 Efficiency

Although the project cost was within the plan (91%), the project period slightly exceeded the plan (112%) due to the delay of equipment transportation (Bad weather hampered shipment to pass through sluice gate). Outputs were produced mostly as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The target 8 pump stations are maintained by the Mechanical and Electrical Department (MED), Ministry of Water Resources and Irrigation (MWRI). Currently MED holds 10 supervisors, 30 mechanics/electricians, and 25 operators /guardians, who carried out the O&M of pump stations in the filed level including the target 8 pump stations. MED has a good experience in O&M of floating pumping stations, and they conduct the required schedule maintenance activities based on the O&M manual including preventive maintenance such as supplying lubrication oil and checking status of certain parts.

MED also provides training for the staff working for the floating pump stations, which covers basic O&M techniques of pumping stations including electro-mechanical equipment. Examining the maintenance budgets for MED in the past three years, it is supposed that MED has not experienced difficulties in allocation of O&M budget for the project facilities. All of the targeted 8 pump stations have been fully functioning without defects since their installation, and this could suggest that maintenance has been appropriately done so far.

This project has no problem in structural, technical and financial aspects of the implementing agency. Therefore, sustainability of this project is high.

III. Lessons Learned

Lessons learned for JICA

In this ex-post evaluation, it took a long time to obtain data such as water discharge volume of each pump station and maintenance costs because the data are not arranged in the readily available manner. It is suggested that JICA requests an implementing agency to build a database during/after the project implementation phase, so that it has easy access to necessary data for checking facilities' conditions.

Floating Pump Station

Discharge Pipe

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia office: October, 2013

Country Name	Project of Rehabilitation of Irrigation System in Cochabamba
Bolivia	(El Proyecto de Rehabilitación del Sistema de Riego en el Departamento de Cochabamba)

I. Project Outline

Project Cost	E/N Grant Limit: (Phase I) 310 million yen (Phase II) 374 million yen		Contract Amount: (Phase I) 289 million yen (Phase II) 365 million yen
E/N Date	(Phase I) August, 2006, (Phase II) June, 2007		
Completion Date	(Phase I) March, 2008, (Phase II) February, 2009		
Implementing Agency	Prefectural Government of Cochabamba (Prefectura del Departamento de Cochabamba)		
Related Studies	Basic Design Study: November, 2005-July, 2006		
Contracted Agencies	Consultant(s)	(Phase I) Taiyo Consultants Co., Inc. (NTC International Consultants Co., Inc. since July, 2008) (Phase II) NTC International Consultants Co., Inc.	
	Contractor(s)	(Phase I and II) Tokura Corporation	
	Supplier(s)	-	
Related Projects (if any)	Cooperation by Japan ・The Project of Vegetable Seeds Production in Cochabamba (Grant Aid, 1987) Cooperation by Other Donors ・Sustainable Agriculture Development Program (GTZ/GiZ, 2005-2014)		
Background	In highland and valley regions of Bolivia, the small farmers have been engaged in traditional rain-fed cultivation. Cochabamba is one of the major agricultural areas with irrigation system located even in the valley region under limited annual rainfall. Over 50 years, the irrigation system contributed to agricultural production in Cochabamba. However, the deteriorated irrigation system induced water leakage and lower irrigation efficiency. In addition, the rapid urbanization polluted irrigation water with inflows of untreated sewage. Under this circumstance, the government of Bolivia requested the government of Japan to support rehabilitation of the irrigation system in Cochabamba.		
Project Objectives	Outcome To increase irrigation water volume and its efficiency as well as to improve quality of irrigation water by rehabilitation of irrigation system in “La Angostura” in Cochabamba.		
	Outputs(s) Japanese Side ・Lining of canals of 34.1km ・Construction of separate gates, rehabilitation of intake gates of the Central Canal ・Mortar waterproofing works of 10,882m^2 ・Construction of maintenance roads of 20.2km Bolivian Side ・Land preparation ・Reconnection of illegal sewage to drainage pipes or septic tanks ・Construction of drainage for rainwater in urban areas ・Control of illegal-damped waste to the irrigation canals.		

II. Result of the Evaluation

Summary of the Evaluation

In Cochabamba, most of the farmers have been engaged in small-scale cultivation of Alfalfa, feed grain, with the average cultivated land of around 1 hectare. However, due to the deterioration of the irrigation system and reduced water efficiency caused by water leakage from the old earth canal, farmers have difficulty of cultivation under the limited annual rainfall of 500mm.

This project has partially achieved planned water volume and improved quality of irrigation water. After the project, it is observed double cropping is introduced and the frequency of production per year is increased by using water delivered through the improved canal. The water transportation time is also improved while the expected expansion of irrigation area is not achieved due to urbanization and the diversification of agricultural crop is not realized. As for sustainability, some problems have been observed in terms of the financial aspect and the current status of operation and management due to a lack of financial source to cover the expensive cost for maintenance of the irrigation system. For relevance, the project has been highly relevant with Bolivia’s development policy, development needs as well as Japan’s ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Bolivia’s development policy (“access to water for irrigation” in the National

Irrigation Development Plan 2007-2011"), development needs ("irrigation system for agricultural production"), as well as Japan's ODA policy to support for improvement of productivity at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has somewhat achieved its objectives of increases in volume of irrigation water and improvement of quality of irrigation water while the targeted expansion of irrigation area is not achieved due to urbanization and the diversification of agricultural crop is not realized. The following change with the water delivered through the improved canal is observed while no comparable data on water efficiency through the canal is available since the calculation method on the efficiency at the time of planning is not identified.

For example, the farmers started double cropping by cultivation of "forrajero", maize for feeding, in addition to cultivation of "choclero", maize for consumption. Also, the Alfalfa producers became enabled to increase frequency of cultivation a year from 5 to 7 after the project. In addition, the crop loss by drought dramatically reduced after the Project. According to the farmers in the target sites, the drought in 1998 damaged 90% of crops but the drought in 2010 caused only loss of 10% in crops. Moreover, the average of water transport time in the entire irrigation system has been significantly reduced from 10 hours 20 minutes in 2005 to 5 hours 20 minutes in 2012. Furthermore, according to the Water User's Association of the National Irrigation System No.1 of Angostura (AUSNR No.1: Asociación de Usarios del Sistema Nacional de Reigo No.1 La Angostura), such improvement contributed to the increase in income of the farmers in the target areas (from 667-1,013 to 1,063-2,697 US$/ha).

The water quality has been improved due to the reduction of discharges of waste water and garbage into the canals after the project. Although illegal dumping remains in some sectors of the canals, source of environmental degradation, such as offensive odor and infections, has been managed through periodical monitoring by the farmers and the technicians of AUSNR No.1:).

The effect by water improvement is observed to some extent while the targeted expansion of irrigation area is not realized; therefore effectiveness/impact of this project is fair.

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were within the plan (ratio against 96%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

The facilities constructed and rehabilitated by the project have been maintained by AUSNR No.1 under the supervision of the Directorate of Irrigation of the Secretary of Productive Development. AUSNR No.1 is also responsible for control of illegal dumped waste and illegal connection of sewage to the irrigation canals. In addition, the users of the irrigation water, namely the farmers in the project site, have been carrying out cleaning of the irrigation canals according to the plan of water releases. AUSNR No.1 has kept the same structure for O&M of the irrigation system and the sufficient number of staff (8 permanent staff and 6 contract staff) and the technicians of AUSNR No.1 with sufficient experience for O&M of the irrigation system. However, AUSNR No.1 has had financial deficit since 2007 except in 2010. Although water charge has been collected by 100%, the revenue can only cover the O&M cost for the canals but not cover the cost enough for maintenance the Angostura's dam which should be done every five years. The periodic maintenance of the Angostura's dam has not been carried out since 2000 though the irrigation system has been mostly functioning well. Overall, the project has some issues in financial aspect and the current status of operation and maintenance. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

(For AUSNR)
The AUSNR needs to negotiate with the Prefectural Government of Cochabamba and elaborate mid-term plan for arrangement of major maintenance of the Angostura Dam in order to carry out necessary maintenance.

(For Local Governments)
It is important that the local governments develop integrated plans for solid waste management including improvement of waste disposal as well as environmental education in order to prevent illegal dumping into the irrigation canals.

Lessons learned for JICA

1. It is necessary to make a record of calculation methods on effectiveness indicators; otherwise it is difficult to obtain comparable data.
2. Prevention of illegal dumping is one of the key issues for proper O&M of the irrigation system, in particular, for the canals.

Before the Project

After the Project

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Timor-Leste office: May, 2013

Country Name	The Project for Rehabilitation and Improvement of Maliana I Irrigation System
Timor-Leste	

I. Project Outline

Project Cost	E/N Grant Limit: 737 million yen		Contract Amount: 732 million yen
E/N Date	August, 2007		
Completion Date	February, 2009		
Implementing Agency	Ministry of Agriculture and Fisheries (MAF), National Directorate for Irrigation and Water Management (NDIWM or IMWD before the organizational reform)		
Related Studies	Basic Design Study: February, 2005 - March, 2006 (Implementation Review Study: February – May, 2007)		
Contracted Agencies	Consultant(s)	Sanyu Consultants	
	Contractor(s)	Toa Corporation	
	Supplier(s)	-	
Related Projects (if any)	[Japan's cooperation] ・Agricultural Promotion Advisor (Irrigation and Rice Cultivation) (Individual expert, August, 2010 - August, 2013) [Other donors' cooperation] ・Rural Development Programme IV (Strengthening of agricultural extension) (EC/GIZ, 2011-2016)		
Background	In Timor-Leste, agriculture was an important production sector that employed more than 70% of the total population and accounted for 32% of GDP. However, the food self-sufficiency ratio remained at around 60%, and more than 60,000 tons of rice had to be imported every year. The Mariana I irrigation system was one of the main irrigation systems of Bobonaro District, the second largest rice producer among the 13 districts of the country. However, the portion of the fixed weir that had been raised was washed out during the flood in 1992, which made it difficult to ensure stable supply of irrigation water.		
Project Objectives	Outcome To ensure stable distribution of irrigation water by rehabilitating the Marian I Irrigation System in Mariana Sub-district of Bobonaro District.		
	Outputs(s) Japanese Side ・ Rising of the fixed weir ・ Widening and rehabilitation of canals (main canal, Ramaskora secondary canal and Ritabau secondary canal) ・ Rehabilitation of related structures ・ Technical transfer on organizational management and water management (soft component) Timor-Leste Side ・ Acquisition of land for widened canals and control facilities ・ Renting of land for temporary canals for rehabilitation of the intake and for revetment works ・ Establishment of a water user association (WUA) ・ Construction of tertiary canals in the new irrigation area (labor contributed by beneficiaries)		

II. Result of the Evaluation

Summary of the Evaluation

The Mariana I irrigation system was one of the main irrigation systems of Bobonaro District, the country's second largest rice producing district. However, the raised portion of the fixed weir was washed out during the flood in 1992, and it was difficult to ensure stable supply of irrigation water.

This project has largely achieved the stable distribution of irrigation water in Mariana Sub-district of Bobonaro District as shown in the increase in the cropping area as well as yield of paddy. As for sustainability, problems have been observed in the financial aspect and the current status of operation and maintenance due to non-payment of water fees and a possibility of serious troubles on the irrigation facilities.

For relevance, the project has been highly relevant with Timor-Leste's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

This project has been highly relevant with Timor-Leste's development policy "rice self-sufficiency as set in the National Development Plan (NDP) and the Strategic Development Plan (SDP)", development needs "increase in rice production by expanding irrigation area", as well as Japan's ODA policy "development of basic infrastructures including irrigation, strengthening of operation and maintenance capacity, and rehabilitation of irrigation facilities for enhancing food self-sufficiency and sustainable economic development, as set in the Country Assistance Program" at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has largely achieved its objectives in terms of the quantity of water intake for agriculture and the cropping area. Concerning paddy cultivation during wet season, although the performance of the indicator was below the planned values due to the delays in conversion of dry fields to paddy fields, the conversion process has progressed since then, and the actual values almost reached the target in 2012 (at the time of the ex-post evaluation). The cropping area of paddy during dry-season has been far beyond the planned value. These have led to high positive impacts including the twofold increase in the paddy yield in the target area (1,410 tons in 2007 and 3,675 tons in 2011). Some issues were observed at the same time: the collection of water fees by the WUA has not been as successful as planned (see "4 Sustainability"); and the construction of the tertiary canals by farmers took long time in some target cultivation areas. Overall, nevertheless, the project has increased rice production by increasing irrigation water supply in a stable manner. Therefore, effectiveness/impact of this project is high.

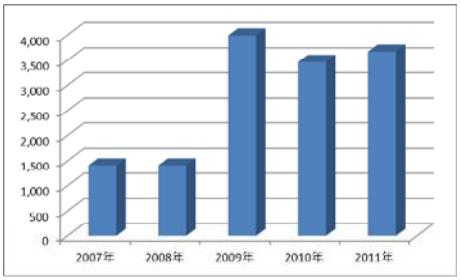
Quantitative Effects

	Actual value 2007 (Implementation review study)	Planned value 2009 (target year)	Actual value 2009 (target year)	Actual value 2010	Actual value 2011	Actual value 2012 (Ex-post evaluation)
Indicator 1 Agriculture water intake (capacity) of Mariana I irrigation system (m^3/second)	0.88	1.37	1.37(wet season) 0.46(dry season)	1.37(wet season) 0.46(dry season)	1.37(wet season) 0.46(dry season)	1.16(wet season)
Indicator 2 Cropping area of Mariana I irrigation system (paddy) (ha)	600(wet season) 100(dry season)	1,050(wet season) 150(dry season)	920(wet season) 200(dry season)	1,000(wet season) 415(dry season)	1,000(wet season) 450(dry season)	1,000(wet season)
Cropping area of Mariana I irrigation system (dry field) (ha)	100(wet season) 100(dry season)	200(dry season)	120(wet season)	120(wet season)	120(wet season)	No data

Sources: BD for planned values; interviews with the Bobonaro agricultural office for actual values of 2009-2011; measurement by the ex-post evaluation team for the actual water intake of 2012

Notes: wet season is from January to May; dry season is from July to November. The actual values for Indicator 1 in 2009 – 2011 are not the actual measurement but the planned capacity due to lack of measurement devices such as flow meters.

Paddy yield in Mariana I irrigation system (ton)



Source: statistics from the Bobonaro agricultural office

Secondary canal in Ramaskora

Bulobo River area under cultivation

3 Efficiency

The outputs of the project were produced mostly as planned, and both the project cost and the project period were within the plan (ratio against the plan: 99%, 99.4%). Therefore, efficiency of this project is high. The construction of the tertiary canals by the Timor-Leste side has been completed, and the lining works is planned to be continued.

4 Sustainability

The facilities developed by the project are maintained by the WUA, and MAF, the implementing agency, is responsible for technical and financial support through the Bobonaro agricultural office.

No problems have been observed in terms of the systems of staff assignment and monitoring, as well as the technical aspect of operation and maintenance by WUA, owing in part to the training under the soft component of this project. However, the financial status of the WUA, that has the primary responsibility for operation and maintenance, is serious as MAF had not allocated subsidies for operation and maintenance of the irrigation scheme till 2011 despite its explanation before the project, and the farmers reacted to it by not paying the water fees. This resulted in no collection of the water fees at all in the fiscal year 2011 (the government provided the subsidy only in that year). Also, the site observation and the interviews with the implementing agency revealed a problem of declination of the piers of the aqueduct bridge, the existing infrastructure that is still utilized (outside the project scope). The function of the irrigation system has not been affected by this problem so far, but there is a concern on a possible adverse effect in the future. This problem was not foreseen in the planning stage, and may be beyond the operation and maintenance capacity of the WUA and the implementing agency.

Due to these major concerns in the financial aspect and the current status of operation and maintenance, sustainability of the effects of this project should be evaluated at low at this time. Nevertheless, the above-mentioned problem in the aqueduct bridge piers has already been taken care of by JICA, including a follow-up study, emergency construction works with surveys toward planning of mid and long term countermeasure construction works.

A crack on a side wall portion of the aqueduct under the bridge

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

The non-allocation of the subsidies for operation and maintenance of the facilities that MAF had agreed with farmers before the implementation of this project resulted in the farmers' refusal of payment of water fees. MAF is recommended to allocate funds for operation and maintenance of the project facilities and, in case of shortage of funds, to make budgetary requests to the Ministry of Finance.

Lessons learned for JICA

As stated above, the implementing agency's failures to pay its contribution (subsidy) may result in the decline of water fee collection rate. JICA should ask the partner government including the Ministry of Finance and other agencies concerned to fulfill the responsibilities on the partner country side so that the line ministry could allocate budget properly.

In case of utilizing existing physical structures in Timor Leste:

This project had a policy to make the best use of the existing structures to contain costs. Based on it, the entire part of the aqueduct including piers was utilized. However, there found a problem of the declination of the piers, which brought a concern on a possible problem in the water flow function in the future. This problem was not foreseen in the basic design study of this project, and may be difficult for the implementing agency to handle considering its financial and technical capacity. In Timor-Leste where design drawings and other information on physical structures are not always available, utilization of existing structures should be based on careful planning and due consideration backed by sufficient studies on the scope of cooperation and construction methods.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal office: Nov, 2013

Country Name	The Project for Extension of the Facilities at Mindelo Fishing Port (Projecto de Expansão do Port Pequeiro de Mindelo en República de Cabo Verde)
Republic of Cape Verde	

I. Project Outline

Project Cost	E/N Grant Limit: 306 million yen		Contract Amount: 305 million yen
E/N Date	September, 2007, Extension of E/N: March, 2008		
Completion Date	February, 2009		
Implementing Agency	Ministério das Infra-Estruturas e Economica Maritima (Reorganized from Ex-Ministério das Infra-Esturturas, Tranposrtes e Mar in October, 2008)		
Related Studies	Basic Design Study: December, 2005-Februrary, 2007		
Contracted Agencies	Consultant(s)	Fisheries Engineering Co. Ltd.	
	Contractor(s)	Toa Corporation	
	Supplier(s)	-	
Related Projects (if any)	Cooperation by Japan ・The Project for Construction of the Facilities at Mindelo Fishing Port (Grant, 1998/1999) Cooperation by Other Donors ・None		
Background	In Cape Verde, fishery industry is one of strategic sectors for economic growth and poverty reduction of the country. In particular, the marine products accounted 76.8% of the total export of agricultural products from the country. In the Growth and Poverty Reduction Strategy Paper (GPSRSP) 2004-2007, fishery development is included in one of the 5 strategic pillars to promote competitiveness to foster economic growth and employment creation. The government of Cape Verde has prioritized modernization of productive infrastructure and reinforcement of commercialization for sea products in order to increase in employment as well as exports. However, there were limited facilities with sufficient capacity to accommodate marine products according to the sanitation standards, such as the Hazard Analysis and Critical Control Point (HACCP). In particular, the supply of ice was a key issue to increase fishery yield in São Vicente Island, where is the second largest fishery base in the country. Therefore, the government of Cape Verde requested Japan to support development of ice making and storage facilities at Cova Inglesa Fishing Complex (CPCI: Complexo de Pesca de Cova Inglesa) in São Vicente, which was constructed by the Japan's grant aid project in 1998/99.		
Project Objectives	Outcome To increase stable supply of ice for semi-industrial fishing vessels and small fishing boats operating surrounding São Vicente Island by construction and rehabilitation of ice making and storage facilities at CPCI in São Vicente.		
	Outputs(s) Japanese Side ・Construction : the total floor space of 281m^2 of ice making building ・Rehabilitation of existing ice making and storage facilities ・Provision of equipment: 16 fenders Cape Verde Side ・Demolition of the existing oil tank ・Installation of office furniture ・Installation of service electricity line ・Development of access road from the public road to the project site		

II. Result of the Evaluation

Summary of the Evaluation

In Cape Verde, Mindelo, São Vicente island is one of the most important fishery bases in the country and obtained 20% of the total fishery yield of the country. CPCI was only one fish port implementing HACCP which is requirement for all the marine products for export. However, the cold storage and ice making facilities were operated limitedly because of aging. Also, fishermen complained about expensive cost and limited capacity of freezing and cold storage for marine products landed at CPCI.

The project has partially achieved the objectives of the increase in stable supply of ice for semi-industrial vessels and small fishing boats operating surrounding São Vicente due to the limited increase in ice demand despite of the increase in the capacities of ice production and the storage volume. As for sustainability, some problems have been observed in terms of technical and financial aspects due to the lack of trainings for technical staff and the insufficient budget to cover their operation costs without government support.

For relevance, the project has been highly relevant with Cape Verde's development policy, development needs, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, the project period exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory.

1 Relevance

This project has been highly relevant with Cape Verde's development policies of "the Growth and Poverty Reduction Strategy (GPRSP) 2004-2007 and 2008-2011" ("promotion of competitiveness including fishery industry"), development needs ("modernization of cold store infrastructure"), as well as Japan's ODA policy to Cape Verde for supporting promotion of fishery industry at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

2 Effectiveness/Impact

This project has partially achieved its objectives of the increase in stable supply of ice for fishing boats operating in São Vicente. The capacity of ice production volume of CPCI increased from 10 tons/day in 2005 to 20 tons/day in 2010, although it decreased to 16 tons/day in 2012 due to the breakdown of one of compressors in 2012 (Indicator 1). The storage capacity also increased from 30 tons in 2005 to 60 tons in 2010 and remains the same level of capacity after the completion of the Project (indicator 2).

Facilities of CPCI

Regarding indicator 3 and 4, although the volume of landed catches at CPCI has increased from 2,985 tons (2010) to 4,907 tons (2012), actual supplies of ice did not increase （2,413 tons of ice to the fishing boats in 2010 and 1,039 tons of ice (Jan-May in 2012)） due to the expanding business of a private food processing company, Frescomar.

Frescomar makes a direct contract with the fishermen and buys landed fish at CPCI which are covered by less amounts of ice (its ice to fish ratio is 1 to 3, instead of 1 to 1 planned by the Project). In 2010, the actual volume of landed catches at CPCI was 2,985 tons, within which 434 tons of fish were bought by Frescomar. While the volume of ice could not reach the target volume of ice (4,067 tons/year), CPCI was capable of supplying the increasing volume of ice compared to that before the Project and this led to the expansion of the volume of iced marine products landed at CPCI from the baseline value of 73.5% in 2005 to 80.9% in 2010. At the time of ex-post evaluation, the volume of fish going to Frescomar had increased 8.6 times from 434 tons (2010) to 3,765 tons (2012). On the contrary, the fish to local market decreased by more than 50% from 2,550 tons (2010) to 1,142 tons (2012). Therefore, this substantial change has adversely affected CPCI's supply volume of ice to the fishing boats as the boats which sell fish to Frescomar buy less ice than planned by the Project. The higher price of ice is also another factor that has reduced motivations of most of the fishermen and fish sellers to buy the appropriate volume of ice based on quality standards.

After all, unchanged demands for ice also have resulted in a lower actual operation rate of ice production at CPCI in 2012 (36.5%) than the baseline value in 2005 (62.2%) (indicator 5).

While the Project has achieved its goal in terms of stable supply of ice at CPCI for local market and fishing boats using CPCI with greater capacities of ice production and the storage volume, the demands for ice have become much less than expected due to the sharp increase in the volume of fish going to Frescomar. No environmental/social impact was confirmed at the time of ex-post evaluation. Therefore, effectiveness/impact of this project is fair.

<Quantitative Effects>

	Actual (2005, BD)	Target (2010)	Actual (2010)	Actual Ex-Post Evaluation
Indicator 1: Production volume of ice for fishing boats using CPCI	(Actual) 10 tons/day (Maximum production capacity)	(Plan) -	20 tons/day	16 tons/day (Estimation)
Indicator 2: Storage volume of ice at CPCI	(Actual) 30 tons	(Plan) -	60 tons	60 tons (Estimation)
Indicator 3: Supply volume of ice for fishing boats using CPCI	(Actual) 1,889 tons/year	(Plan) 4,067 tons/year	2,413 tons/year	1,039 tons/ half a year
Indicator 4: Production of iced marine products landed at CPCI (Volume of ice supplying for fishing boat/ volume of marine products landed at CPCI)	(Actual) 73.5% (1,889 tons/ 2,569 tons)	(Plan) 158.3% (4,067 tons/ 2,569 tons)	80.9% (whole year) (2,412 tons/2,985 tons)	41.9%(Jan-May in 2012) (1,039 tons*/2,477 tons) ---------- N/A % (whole year) (N/A /4,907tons)
Indicator 5: Operation rate of ice production (annual ice sales volume / annual ice production capacity)	(Actual) 62.2% (2,178 tons/ 3,500 tons)	(Plan) More than 62.2%	34.4% (2,412 tons/7,000 tons)	35.5%(Jan-May in 2012) (1,039 tons/ 2,916 tons**)

(Source) Data provided by CPCI and INDP (the National Institute of Fisheries Development (Instituto Nacional de Desenvolvimento das Pescas)) for ex-post evaluation

*The data of the volume of ice supplying for fishing boat are obtained only for the period from January to May in 2012.

** 2,916 tons is calculated as follows; 7,000 tons(annual production capacity)/12months × 5months(Jan-May)＝2,916 tons

3 Efficiency

Although the project cost was mostly as the plan (99% against plan), the project period exceeded the plan (113%

against plan) because of the transportation delay of raw materials from Japan in France where was the transit site to Cape Verde. The outputs were mostly as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The facilities constructed and rehabilitated by the Project are operated and maintained by CPCI with 21 staff, including the executive director, the chief of quality control and hygiene services, the chief of maintenance and operation, the chief of administrative and financial services, 4 machine operators, 2 administrators, 2 stevedores, 2 auxiliary quality control and folk lift operator. After the breakdown and repair of one compressor in 2010, the regular inspection and maintenance have been implemented adequately. Therefore, the facilities have been in good conditions since then. The safety operation of ice production at CPCI has been continued. After the Project, no accident related to the screw of conveyor is detected since the protection guard has been correctly functioning. However, there are some concerns about technical level of technicians. Due to the lack of trainings, they cannot properly fill the check lists and record operation, maintenance and troubles by equipment, such as compressors. Also, CPCI cannot afford enough revenue to cover the operation and maintenance (O&M) cost, including electricity and water, though the government has raised the price of ice to 9.5 CVE per kg from 9.0 CVE per kg and is planning to increase further to 12 CVE per kg in future in order to improve financial balance of CPCI. Due to the insufficiency of revenue, CPCI has been depending on the government support for the expenditure for O&M, including the expensive electricity cost of over 50 million CVE which is higher than the revenue of 44.7 million CVE in 2011.

Fishing boats landing fish at CPCI

The Project has problems in technical and financial aspects due to the issues mentioned above. Therefore, sustainability of this project is fair.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

-CPCI needs to make efforts to sensitize more fishermen and wholesalers about the importance of compliance with the recommended proportion of ice by quality standards.

- Also, it is necessary for CPCI to improve the O&M system to maintain the facilities installed by the Project in good condition, including keeping records and data related to operation and maintenance, in particular of the ice plants.

Lessons learned for JICA

-A lesson from this project is the necessity of proper demand forecast of the ice. In this project, the actual needs of ice are very limited because of high price of ice and operation of canning company with ice plant. At the time of basic design, it is necessary to forecast the needs of ice by taking into consideration i) the possibility that the price of ice rises and ii) the existence of other entities, which would have negative impact on the demand of ice.

-- The project also indicates the necessity of close examination of technical capacity and future plan of operation and maintenance at the initial stage, including the training plan of technicians. In case there are concerns on technical level of the implementing agency, it is preferable that related technical assistance from Japanese side be considered for proper operation and maintenance of the facilities.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Sri Lanka Office: December, 2013

Country Name	The Project for Improvement of Meteorological and Disaster Information Network
Sri Lanka	

I. Project Outline

Background	In Sri Lanka, it was an urgent task to mitigate damage of properties and prevent human lives against floods and landslides caused by rainfalls. The Department of Meteorology (DoM), Ministry of Disaster Management and Human Rights (Ministry of Disaster Management at present),, was regularly collecting observed data from 22 meteorological stations located nationwide. However, because of the long interval between the observations, the limited number of stations, and the visual check on the observation by meteorological observers, the precision and reliability of obtained weather data was insufficient. Also, it took time for DoM headquarters to collect and manually edit the data; thus it was not possible to issue weather forecasts and warnings precisely and promptly.		
Objectives of the Project	To improve meteorological observation accuracy by procuring and installing equipment for a meteorological information network system, thereby contributing to improvement of weather forecasting accuracy, early transmission of warnings, and mitigation of damages caused by natural disasters.		
Outputs of the Project	1. Project Site: Whole country (DoM headquarters and 19 meteorological stations and 18 collaborative stations located nationwide 2. Japanese side 1) Construction of the following facility(s): None 2) Procurement and installation of the following equipment: Automatic weather observation (AWS) systems, satellite communication (VSAT: Very Small Aperture Terminal) systems, and a central operating system 3) Technical assistance (soft component) in operation of the installed systems 3. Sri Lanka side: Satellite communication contracts with a satellite operator, to obtain a necessary communication frequency band, to erect fences at 2 collaborator stations to avoid effects on observed data by entry of any third party, and to install the equipment at the 7 stations in the Northern and Eastern provinces after completion of the Project		
E/N Date	August 27, 2007	Completion Date	July 13, 2009
Project Cost	E/N Grant Limit: : 807 million yen, Contract Amount: 630 million yen		
Implementing Agency	Department of Meteorology (DoM), Ministry of Disaster Management and Human Rights(Ministry of Disaster Management at present)		
Contracted Agencies	Oriental Consultants Co., Ltd., Marubeni Corporation		
Related Studies	Basic Design Study: October 2006 – June 2007		
Related Projects (if any)	Japan's Cooperation: ・ Comprehensive Study on Disaster Management (Technical Cooperation (Development Study), 2006 - 2009) ・ Disaster Management Capacity Enhancement Project Adaptable to Climate Change (DiMCEP) (Technical Cooperation, 2009 – 2012)		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Sri Lanka's development policy, such as establishing the multi-hazard early warning system as set out in "The Road Map for Disaster Risk Management (2005)", and development needs to improve the lead time to issue extreme rainfall warnings for reducing flood damages, as well as Japan's ODA policy for reducing vulnerability specified under the Country Assistance Programs, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objective, "to improve meteorological observation accuracy," as most of the targets, i.e. reduction of time required for collection of meteorological data (Indicator 1), narrowing of interval for collection of meteorological observation data at normal times (Indicator 3) and at severe weather (Indicator4), have been attained by using AWS and VSAT installed at meteorological stations. The number of meteorological stations that can provide data (Indicator 2) increased, but has not reached the target as the installation process at one station (that was planned after project completion) was delayed due to the land property issue raised after end of civil war. The installation process is scheduled to be completed in the middle of 2014. Precision of the observed data was enhanced by more frequent collection from larger number of stations. Accuracy of meteorological observation and collection is supposed to be ensured: because manual observation is done in parallel at the station, DoM can every time compare both AWS and manual data and calibrate AWS if each data set shows difference. The data processing has been improved, too, with use of the central operating system and partly thanks to the technical assistance (soft component) under this project.

While the equipments are generally used at the time of ex-post evaluation, some equipment, especially the communication (VSAT) system, are not in proper order, and therefore the DoM headquarters cannot monitor 11 stations as of Aug 30th, 2013.

The identification of the reasons of malfunctioning and the necessary countermeasures are still under examinations at the time of ex-post evaluation.

As for the impacts, warnings have become transmitted to the related organizations in more timely manner than before the project. Together with awareness programmes to the public, such improvement is expected to mitigate damage by natural disaster, but no evidence is confirmed at the time of ex-post evaluation. Accuracy of forecasting is to be improved by introducing an objective forecast method of which now DoM is trying to strengthen the capacity through a JICA's Technical cooperation project that is currently being formulated.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	2006 (before the project) Actual value	2011 (target year) Target value	2011 (target year) Actual value	2013 (ex-post evaluation year) Actual value
Indicator 1: Time required for collection of meteorological data	Approximately 50 minutes *1	Within 10 minutes	Within 10 minutes	Within 10 minutes
Indicator 2: Number of stations as sources of meteorological observation data	20 synoptic stations of DoM *2	38 (20 DoM stations and 18 collaborator stations)	36 (18 DoM stations and 18 collaborators' stations)	37 (19 DoM stations and 18 collaborators' stations)
Indicator 3: Interval for collection of meteorological observation data at normal times	3 hours	1 hour	1 hour	1 hour
Indicator 4: Interval for collection of meteorological observation data at severe weather	1 hour (Applicable stations only)	10 minutes (Applicable stations only)	10 minutes (Applicable stations only)	10 minutes (Applicable stations only)
Indicator 5: (supplementary) Items observed and collected		DoM stations: 7 items Collaborators' stations: 5 items *3	DoM stations: 7 items Collaborators' stations: 5 items	DoM stations: 7 items Collaborators' stations: 5 items

Sources: DoM (answer to the questionnaire), DiMCEP reports.

Notes: (1) Before the project, it took 10 minutes for observation (visual check), 10 minutes for preparation of data in a specific format (by manual work), and 30 minutes for collecting data (headquarters collects data from observation stations by phone).

(2) Before the project, 18 collaborators' stations had existed besides these 20 DoM stations, but data was collected from 7 collaborators' stations once per day by telephone. From the other 11 collaborators' stations, data was collected once per month by mail.

(3) DoM stations are supposed to collect data for 7 items (Wind direction, Wind speed, Temperature, Humidity, Barometric pressure, Rainfall, Solar radiation) and collaborators' stations are supposed to collect data for 5 items (Wind direction, Wind speed, Temperature, Rainfall, Solar radiation).

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 78%), project period exceeded the plan (ratio against the plan: 131%) because the deterioration of security caused the delay of custom clearance for VSAT. The outputs of the project were produced mostly as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance of the equipment procured by the project have been carried out by DoM, the implementing agency. The implementation structure has sustained what it was considered desirable at the time of ex-ante evaluation. The number of staff is somehow sufficient to achieve their management and regular operation in the DoM headquarters and each AWS station. In addition, DOM is recruiting more than 100 officers based on their plan in near future, which shows DOM's strong intention on institutional strengthening. As for the technical aspect, there are institutional efforts such as preparation of manuals (e.g. Maintenance Manuals and "Cleaning Procedures" both in English and Sinhala are prepared by Electronics Engineering Division of DOM) and DoM's capacity to operate and maintain the equipment fulfills minimum requirement, but is not sufficient enough. Even though the Technical Officer (Electronics Engineering Division) usually identifies the main cause of the AWS fault, it takes some time to get it repaired due to the spare parts and transportation problems. In the financial aspect, certain budget is allocated for operation and maintenance of the equipment but not adequate enough to purchase all the necessary spare parts in timely manner.

Therefore, there are some problems in the technical and financial aspects of the implementing agency as well as the current status of operation and maintenance, and sustainability of this project effect is fair.

5 Summary of the Evaluation

This project has largely achieved its objective, "to improve meteorological observation accuracy" as the time required for collection of meteorological data as well as the interval for collection of data have been reduced as expected by using the AWS and VSAT systems installed under this project. Accuracy of weather forecasting and warning are expected to be improved with such data and a new JICA technical cooperation project that is under formulation. As for sustainability, there are some problems observed in terms of the technical and financial aspects of the implementing agency and the current status of operation and maintenance due to limitations of technical and financial capacity of DoM to repair breakdown and purchase spare parts in a

timely manner. As for efficiency, the project period exceeded the plan.
In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- To examine more about the communication system since the communication system (VSAT) procured by the project is not in proper order.
- To maintain the accuracy of AWS data which is going to be essential part of the objective forecasting method. More investment for the maintenance work of AWS is recommended.
- To consider the linkage between this project and upcoming Technical Cooperation Project to be started from FY2014 for improving capacity of weather forecasting and warning in terms of improving accuracy of forecasting by introducing an objective forecast method.

Lessons learned for JICA:

- It is important to examine more cautiously about the feasibility of maintenance of equipment, especially feasibility of repair work in a case of technical troubles.


AWS data shown in DoM headquarters


AWS data logger


VSAT system

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Laos Office: March 2014

Country Name	The Project for the Construction of Lao-Japan Budo Center
Lao PDR	

I. Project Outline

Background	There were approximately 400 athletes in Budo (Karatedo, Judo, and Aikido) players in the Lao PDR (hereinafter referred to Laos). Partly owing to the instructions given by members of Japan Overseas Cooperation Volunteers (JOCV) and Senior Volunteers (SV) dispatched from time to time since 1966, the technical skills of these Budo players had risen, and Laos had produced several medalists at international events such as Southeast Asian Games (SEA Games). Stimulated by the achievements of these athletes, the number of persons who want to participate in Budo practice had been increasing. However, there was no Budo center satisfying the international standard in Laos. Athletes were practicing mostly by making use of spaces such as meeting rooms and lecture halls. In addition to the aging of facilities, these buildings had problems because they were not designed specifically for sports and large spaces were not available. In some cases, players in different Budo disciplines were rotating the same place for each practice. Thus, most Budo players were practicing in an environment that was far from sufficient. In addition, Laos would host the 25th SEA Games in 2009. Karatedo and Judo would be included as official events, however, there was no facility in Laos for Budo tournament that can host international events such as SEA Games.		
Objectives of the Project	To enable Budo practices and competitions to be performed in better conditions, and to promote Budo education in Laos by constructing Lao-Japan Budo Center (the Budo Center) in Vientiane and procuring the necessary equipment there.		
Outputs of the Project	1. Project Site: Vientiane 2. Japanese side - Construction of (1) Main Budo Hall Building (Budo hall, stage, administration office, federation rooms, spectator seats, hall, etc.), (2) West Annex (Judge rooms, infirmary, equipment storage rooms, etc.), and (3) East Annex (Changing rooms for men and women, lavatories for men and women, multipurpose lavatories, etc.) - Procurement of equipment: (1) Tatami mats for Judo, (2) Mats for Karate, (3) Folding chairs, (4) Floor protection sheets, and others 3. Lao side: - Clearance of obstacles and grading work in the site - Gates and boundary fence work - Table-tennis table - Connecting water supply, electricity line and telephone line in the project site,		
E/N Date	-1st phase: 31 August, 2007, 12 March, 2008 (Extension), 11 March, 2009 (Re-extension) -2nd phase: 19 December, 2008	Completion Date	30 October, 2009
Project Cost	E/N Grant Limit: Phase1 - 400 million yen, Phase2 - 201 million yen / Contract Amount: Phase1 - 380 million yen, Phase2 - 196 million yen		
Implementing Agency	National Sports Committee (NSC)		
Contracted Agencies	Azusa Sekkei Co., Ltd., A Joint Venture of Kanto Construction Co., Ltd. and Sanpo International		
Related Studies	Basic Design Study: October 2006 – August, 2007, Detailed Design Study: September, 2007 – November, 2007		
Related Projects	Japan's Cooperation: - Grant Assistance for Cultural Grassroots Project (Procurement of Karate equipment) (2002) - Dispatch of JOCV and SV		

II. Result of the Evaluation

1 Relevance

This project has been consistent with the Lao development policy, as education is regarded as high priority agenda under the National Growth and Poverty Eradication Strategy (NGPES) formulated in 1996 as well as the 7th five year National Social Economic Development plan 2011-2016 Further, at the time of ex-ante evaluation, the importance of sports for healthy development of youths was well recognized in the field of education, and the Lao Government recognized the importance of policies for the development and popularization of sports in the country[1]. The project has been consistent with the needs for developing a Budo center which satisfies the international standards for hosting international competition as well as offering spaces of practice for Budo athletes at both ex-ante and ex-post evaluation. Assistance in the field of sports through Japanese ODA assistance is referred in "FY 2013 Priority Policy for International Cooperation", however, relevant statements related to the project objective was not referred clearly in the Japan's ODA policy to Lao at the time of ex-ante evaluation. In light of the above, relevance of this project is high[2].

[1] At the time of ex-post evaluation, the current Lao Government policy for promoting sports was not confirmed as an official document.

[2] The relevance is high though the purpose of the project was not mentioned in the Japan's ODA policy to Lao at the time of ex-ante

2 Effectiveness/Impact

The project has largely achieved its objectives, "to enable Budo practices and competitions to be performed in better conditions, and to promote Budo education in Laos"

The Budo Center has been utilized for international competitions. First, the Budo Center was used as a venue for Judo and Karate do competitions at the 25th SEA Games in 2009. Further, the ASEAN University Games 2012 was held at the Budo Center and some national (or lower level) competitions were also held. In addition to hosting competitions, the Budo Center has been fully utilized for regular practices of Judo, Aikido, Karatedo, and Tae Kwon Do for the general public, students and children. Currently, 3-4 lessons/day are held every day (26 times per week). In addition, when the facilities have a vacancy, the facilities are used by the Judo national team, and for other sports such as badminton and various events. After the construction of the Budo Center, the practices have been performed in better conditions because the space of practicing becomes wider. Members of Budo federations have their regular practice at the Budo Center, and they do not need to use the previous practice venues which were not suitable to Budo practices. As the result of the environmental improvement, people are more interested in Budo, and the number of athletes and people who practices Budo as well as those who participate in international games has increased.

As to impact, according to the Judo Federation and some athletes, the level of players' Budo skills has improved, as they have larger space for and equipment for practice. The JICA Senior Volunteers, dispatched to Ministry of Education and Sports for the management of the Center after the project completion, partly contributed to this improvement. While the Budo Center is mainly used for Budo practice and competition, the Budo Center is also used for cultural event such as concerts and seminars/lectures. No negative impact on natural environment was observed, and land acquisition/resettlement did not occur.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Year 2007 (before the project) Actual value	Year 2010 (target year) Target value	Year 2010 (target year) Actual value	Year 2012/2013 (ex-post evaluation year – the latest full calendar/fiscal year) Actual value
Indicator 1: The number of Budo athletes/those who practice Budo	400 (Judo, Aikido, and Karatedo)	Increase	300 (208 for Judo, Aikido, and Karatedo)*	621 (452 for Judo, Aikido, and Karatedo)
(Supplement Indicator): Number of Budo practices per week at the Budo Center	-	-	22 lessons per week (6 days/week)	26 lessons per week (Full week)
Indicator 2: The number of International games held in Laos (annual)	0	Increase	2 (Including the SEA game in 2009)	1
(Supplement Indicator): Number of Budo competitions (national or lower level) in the Budo Center (annual)	-	-	2	3
Indicator 3: Number of athletes who participate in international games	23	Increase	37	46

Source: Judo Federation

* The number of athletes decreased in 2010, as after construction completed, some athletes do not know where the new practice place is or the Budo Center is far from home.

3 Efficiency

Both the project cost and the project period exceeded the plan (ratio against the plan: 140%, 142%) because price of the construction materials escalated, and therefore the biddings were unsuccessful several times and the second phase (phase 2) was added. Outputs were produced mostly as planned.

Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance of the Budo Center had been carried out by NSC until 2011. At the time of the ex-post evaluation, the Budo Center is under the Elites Sport Department, Ministry of Education and Sports (MOES), which took over some of the NSC's functions, while the actual operation and maintenance is carried out by the Judo Federation under the contract with MOES. The Judo Federation is responsible for operation and maintenance including daily check-up and staff allocation, and has assigned five staff members to the Budo Center for conducting the operation and maintenance.

There are some problems with the technical aspect. In accordance with the NSC's termination, the technical staff allocated from NSC had been assigned to another appointment and there had been no technical staff at the Budo Center. In 2013, the Judo Federation hires one technical staff who used to be a NSC volunteer. At the handover of the facility upon completion, the training for the use of the equipment was provided by the supplier, but the Judo Federation would like to train staff from all federations (Judo Federation, Karate do Federation, Akido Federation, Tekwondo Federation and Kendo Federation) who use Budo center as practice venue. In addition, no manual for maintenance of equipment in Lao language is available.

Financially, the Budo Center has its own revenue from membership fees from each federation (including the Judo Federation) that rent the Budo center for practice as well as from facility usage fees from the concerts and seminars. By using such revenues, the Judo Federation covers the necessary operation and maintenance cost such as staff salary and equipment cleaning (conducted jointly by all federations twice a year) and repairs as well as the cost for necessary utilities, though the

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evaluation. The reasons are; (1) the project satisfies the aims of Cultural Grant Assistance for "promoting developing countries' cultural assets and higher education institutions" at the time of ex-ante evaluation; and (2) Cultural Grant Assistance was not required to align with Japan's country assistance policy at the time of this project's approval.

budget is not enough. MOES allocates budget for large-scale repairs when needed.

There is no problem observed on the current condition of the facilities and equipment. The new technical staff of the Judo Federation conducts checkups and regular maintenance of the equipment monthly, who also maintains the facilities (building) including air conditioning, and replacement and repair of lightning fixtures. So far, there have not been any cases that equipment is broken. If any equipment is broken they will use budget from the Budo center account or will request MOES for assistance. However, there is uncertainty for facility condition in the future, because it is unclear who is responsible for the large-scale repair when needed.

Thus, as this project has concerns on the technical and financial aspects as well as the current status of operation and maintenance, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to enable Budo practices and competitions to be performed in better conditions, and to promote Budo education in Laos by constructing the Budo Center in Vientiane and procuring the necessary equipment there". The Budo Center has been utilized for international competitions and for regular practices of Budo for the general public, students and children. As the result of the practice environment improvement, the number of athletes and people who practices Budo as well as those who participate in international games has increased. As to impact, following the practice environment improvement, the level of players' Budo skills has improved.

Efficiency is fair because both the project period and cost exceeded the plan. As for sustainability, problems were found in each of technical and financial aspect as well as the current status of the operation and maintenance.

In light of the above, this project is evaluated to be satisfactory.

III. Recommendations

Recommendations to implementing agency:

- Technical transfer for maintenance activities in the BUDO center is recommended to be practiced periodically so that the staff both from the BUDO Center and from the relevant sports federations will be able to perform maintenance work.

The Lao-Japan BUDO Center

Tatami mats for Judo

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Madagascar Office: February 2014

Country Name	Project of extension and improvement of equipment of the Center of Training and Application of Agricultural Mechanization in Antsirabe) (Projet de'extension et d'aménagement des equipments du Center de Formation et d'Application du Machinisme Agricole à Antsirabe)
Madagascar	

I. Project Outline

Background	The Center of Training and Application of Agricultural Mechanization in Antsirabe (CFAMA) is a sole training center specializing agricultural machineries in Madagascar. CFAMA has occupied an important position in the national policy of agricultural mechanization in the country. It was established in 1982 and delivered trainings for mechanization dealing with various needs. However, the decrepit training facilities and equipment restrained implementation of the trainings. In addition, CFAMA faced financial constraint to construct training facilities and to procure new equipment due to the self-supporting accounting system since 2000.		
Objectives of the Project	To improve trainings at CFAMA by constructing facilities and procuring machineries/equipment for the trainings, and thereby contributing to promotion of agricultural mechanization in Madagascar.		
Outputs of the Project	1. Project Site: Zone Ivory and Zone Indafy, Antsirabe, Vakinakatra Region 2. Japanese side 1) Construction of the following facilities: training facilities at Zone Ivory and Zone Indafy 2) Procurement of the following equipment: 43 items of agricultural machineries (tractors, cultivators, etc), construction machineries (bulldozers, backhoes, semi-trailers, etc.), workshop equipment and training equipment. 3. Malagasy side: Removal of existing building and land leveling, moving existing equipment to other places.		
E/N Date	November 14, 2007	Completion Date	May 20, 2009
Project Cost	E/N Grant Limit: : 578 million yen, Contract Amount: 563 million yen		
Implementing Agency	Implementing Agency : Ministry of Agriculture (the former Ministry of Agriculture, Livestock and Fisheries) Operating Agency : Center for Training and Application of Agriculture Machinery in Antsirabe (CFAMA: Centre de Formation et d'Application au Machinisme Agricole)		
Contracted Agencies	NTC International Corporation, Tokura Corporation, and Sirius Corporation		
Related Studies	Basic Design Study: February 2007 – September 2007		
Related Projects (if any)	Japan's Cooperation: ・The Project for Rice Productivity Improvement in Central Highland (PAPRIZ) (Technical Cooperation, 2009-2015) Other Donors' Cooperation: ・Project for Watershed Management and Irrigation System (BVPI), (WB, 2006-2014 ※to be extended) ・Project for Watershed Management of Lake Araotra (BV Lac), (AFD, 2003-2013) ・Promotion of Small Agricultural Equipment, (FAO)		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Madagascar's development policy, such as the promotion of agricultural mechanization prioritized by "Madagascar Action Plan (2007-2012)" and "the Sector Program of the Agriculture, Livestock and Fisheries (under finalization 2013-2025)", the development needs to achieve food self-sufficiency and to increase agricultural productivity, as well as Japan's ODA policy for supporting agriculture sector and rural development as one of priority areas specified by the policy dialogue on economic cooperation in 2006. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has somewhat achieved its objectives, "to improve trainings for agricultural mechanization at CFAMA". CFAMA delivered improved trainings for key actors of agricultural mechanization in Madagascar, including higher level agriculture engineers as instructors, local manufacturers producing agricultural equipment and farmers as users of equipment.

[The Achievement of the Target set in the Basic Design Report] In terms of training course for agricultural machine conductors, the number of trainees completing the course has constantly exceeded the target number of 30 from 2010 to 2012. On the other hand, in terms of the certificate courses of "Training course for professional qualification diploma (DOQ)" and "Training course for advanced engineer certificate (BTS)", the numbers of trainees completing the course were below the target. This is due to the fact that CFAMA has reduced the number of trainee to 25 per year and the training period to 5 months for the agricultural machine maintenance. This is attributed to the economic downturn caused by the political crisis in 2009, therefore the preference of trainees has been changing into the shorter and more general training courses (indicator 1) for minimizing the

tuition and the time of training instead of the certificate courses (Majority of the trainees cannot afford to spend long time, sacrificing their economic activities). However, indicator 1 has not increased as much as indicator 2 and 3 has been decreased from 2010 to 2012. A la carte course was also below the target, but the reason why it was below is not confirmed at the time of ex-post evaluation.

[Other Achievements] To respond the economic change abovementioned, CFAMA increased the training courses for local manufacturers of agricultural equipment. CFAMA has diversified their training courses targeting from higher level agricultural engineers to farmers using agricultural equipment in order to promote agricultural mechanization by not only human resource development of technical persons but also capacity development of farmers. For example, 1-2 days trainings (Workshops) for farmers on utilization of agricultural machinery have been conducted by CFAMA. From 2010 to 2012, 148 farmers were trained for agricultural mechanization. In addition, CFAMA started more practical courses in cooperation with PAPRIZ, a technical cooperation project by JICA. In the workshops abovementioned, PAPRIZ has been utilizing the facility and equipment installed by the project and delivering technical trainings including metal works for local manufactures of agricultural equipment who supply mechanic services as well as agricultural equipment and parts. CFAMA have contributed to diffusion of agriculture equipment through strengthening the manufacturing capacity. As a synergy effect by PAPRIZ, CFAMA also enhanced their capacity to develop and produce agricultural equipment, such as threshers, winnowers, weeders and seeders. The strengthened technical capacity for agricultural equipment enables CFAMA to collaborate with HONDA, a Japanese manufacturer, and the World Bank in order to supply agricultural equipment. According to the lecturers and instructors of CFAMA as well as the trainees, the quality of trainings has been improved since the facilities and equipment installed by the project are very useful and easy to handle for practical training. In particular, the training equipment installed by the Project enabled to increase the course hours for practical trainings. Also, improved quality of trainings increased good reputation of CFAMA and provided more job opportunities for ex-trainees, especially for the BTS holders. There was no land acquisition for the project, and environmental and social negative impacts were not confirmed at the time of ex-post evaluation.

To sum up, although CFAMA have contributed to the capacity development of local manufacturers producing agricultural equipment and local farmers as users of equipment, the project purpose set at the Basic Design, that approximately 120 agriculture engineers was trained per year, was partially achieved. Therefore, effectiveness of this project is fair.

Quantitative Effects

Indicators	(Before the project) 2006 Actual	(After the project) 2010 Planned	2010 Actual	2011 Actual	(Ex-post Evaluation) 2012 Actual
Indicator 1 No. of trainees who complete “Training course for agricultural machine conductors”*	25	30	45	38	34
Indicator 2 No. of trainees who complete “DOQ and agricultural machine maintenance”	31	30***	28	22	18
Indicator 3 No. of trainees who complete “BTS in agricultural mechanization (2-year course)”	23	30***	15	10	18****
Indicator 4 No. of participants for a la carte courses**	41 persons	60 or above	12	5	51
Indicator 5 No. of trainees accommodated in dormitories*****	24	92	425 for short-term 43 for long-term	951 for short-term 40 for long-term	1,475 for short-term 40 for long-term

Note:* The training period reduced from 2.5 months to 1 month.

** A la carte trainings are organized by requests. Training period took several ranges (from 4days to 5 months).

*** The fixed number of each course reduced to 25 participants.

****This is expected to recover to 26 for the academic term of 2012-2013. Regarding the academic term of 2013-2014, it is reported that No. of trainees of BTS recovers to 42.

*****The dormitories was planned to accommodate long-term trainees participating the diploma and certificate courses, but it has also accommodated short-term trainees participating a la carte courses.

Source：CFAMA and the Project for Rice Productivity Improvement in Central Highland (PAPRIZ)

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 98%), project period exceeded the plan (ratio against the plan: 162%) because of much time required on restoration works for defects in the newly constructed facilities such as cracks on the walls, broken drain pipes, leakage of water, and distortion of wooden furniture. The outputs of the project were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance of the training facilities and equipment installed by the project have been carried out by CFAMA.

Although the organizational structure of CFAMA is well-developed with necessary number of staff allocated including lecturers and instructors, the limited delegation of decision making on staff deployment hinders the smooth implementation of CFAMA's activities. Due to the control of the Ministry of Agriculture, CFAMA requires to consulate with the operation committee headed by the Director of Rural Engineering of the Ministry, which takes a long time to make decision, including deployment of technical staff. As for the technical aspect, the current lecturers and instructors have sufficient knowledge and experience to carry out trainings. However, since most of them are nearly retirement age, the technical transfer from the experienced lecturers to the younger training staff is a key issue to sustain quality of trainings delivered by CFAMA. Since CFAMA has been a financially independent organization, the main revenue sources are tuition fees for the training courses, rental fee of agricultural machinery/equipment to farmers, sales of agricultural equipment and products, and rental fee of the facilities. The most expenses of CFAMA, including costs for consumables and personnel, have been covered by their own revenue and reserves. Salaries for 11 staff dispatched from the Ministry of Agriculture are covered by the government budget. However, no financial plan based on depreciation of the existing facilities and equipment may bring about difficulty to replace aged facilities and equipment in future. The facilities and most equipment have been in good condition except one broken tractor despite that the limited availability of spare parts for some equipment constrains timely replacement. CFAMA has been utilized substitute spare parts produced by themselves for the maintenance as planned, but there are concerns about that it may shorten lives of the machinery and equipment.

Therefore, there are some problems in institutional, technical and financial aspects and the sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has somewhat achieved its objectives, "to improve trainings for agricultural mechanization at CFAMA" as CFAMA delivered improved trainings for key actors of agricultural mechanization in Madagascar. Positive impacts were also identified, such as improved quality of trainings, increased reputation of CFAMA, and the strengthened technical capacity of CFAMA to produce agriculture equipment. Therefore, effectiveness/impact of this project is fair. The efficiency of this project is fair due to the exceeded project period caused by the restoration works for defects in the facilities constructed by the Project.

As for sustainability, there is no problem on the current status of operation and maintenance of the facilities and most equipment. However, there are some problems observed in terms of institutional, technical and financial aspects due to the time consuming decision making process, aged training staff and insufficient financial plan for future replacement.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

CFAMA needs to carefully manage their budget for future replacement and rehabilitation of the training facilities and equipment. Also, the plan of employment and training aimed at younger engineers is essential for CFAMA to keep the sufficient training capacity and the current good reputation which have been accumulated by the existing training staff who would be retired near future.

Lessons learned for JICA:

The synergy effect of grant aid project and technical cooperation project had increased capacity of training center. In the case of this project, CFAMA not only improved their training capacity for agricultural mechanization but also diversified their function to directly promote agricultural mechanization through trainings for local manufacturers and sales of agricultural equipment. Strategic combination of grant aid and technical cooperation can enhance effectiveness and impacts of project.

The graduation ceremony in 2013

Dormitories constructed by the project

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Peru Office: February 2014

Country Name	Reconstruction of Earthquake-Affected Areas in the Ica Region
Peru	(El Programa de Reconstrucción del Área Afectada por el Terremoto en la Región de Ica)

I. Project Outline

Background	On August 15, 2007, the powerful earthquake hit in the coastal area of Ica Region of Peru. This devastating earthquake killed more than 600 people in the Ica Region and the capital city of Lima. The Ica Region was affected severely, and school facilities and water supply facilities were badly damaged. Against such circumstance, reconstruction of affected educational and water supply facilities was urgently needed to recover the daily activities.		
Objectives of the Project	<Education Component> To provide safe and appropriate environment to students by reconstructing elementary / secondary schools and a vocational training school and by procuring furniture and equipment necessary for rehabilitating existing school facilities. <Water Supply Component> To provide safe and stable water by reconstructing water tower and related facilities and by procuring equipment necessary for rehabilitating the existing water facilities.		
Outputs of the Project	1. Project Site: Chincha province, Pisco province and Ica province in Ica Region 2. Japanese side (1) Reconstruction of 5 School facilities. *Actual output was 4 facilities (See Efficiency for detail). (2) Reconstruction of Water Tower (1,500m^3) as well as rehabilitation of water pipe, distribution pipes and lifting pump 3. Peru side: (1) Land acquisition (Environmental and social considerations) (2) Permanent disposal of scrap material (3) Provision of electricity, telephone and piped water		
E/N Date	17 March, 2008	Completion Date	13 January, 2010
Project Cost	E/N Grant Limit: 785 million yen, Contract Amount: 785 million yen		
Implementing Agency	Implementing Agency: Reconstruction Fund for the South (FORSUR) Operating Agency: <Education Component> Educational Infrastructure Office (OINFE) of Ministry of Education (MINEDU), <Water Supply Component> Ministry of Housing, Construction and Sanitation (MVCS) and Ica Municipal Drinking Water and Sanitation Company (EMAPICA)		
Contracted Agencies	(i) Yachiyo Engineering Co., Ltd., (ii) Japan International Cooperation System Corporation, (iii) Ejecutora De Obras S.A.C., (iv) Marquisa S.A.C., (v) CIESA Contratistas Generales S.A.C.		
Related Studies	Basic Design Study: November 2007 – February 2008		
Related Projects	Japan's Cooperation: • Study on Housing Reconstruction with Seismic-resistant Houses (Feb 2007 – April 2009, Development Study) • Dissemination on Construction Technology for Low-Cost and Seismic Resistant Houses II (May 2007 – April 2010, Technical Cooperation) Other Donors' Cooperation: • Emergency assistance from Spain on fishery, health, education and communication (2007) • Other emergency assistances from bilateral organizations (US, Switzerland, German, UK, Australia and Belgium) as well as multilateral organizations (Red Cross, FAO, UN, IDB, WB and CAF).		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Peruvian development policy ("rehabilitation and restoration of infrastructure affected by the earthquake" in the National Disaster Prevention and Attention Plan (2004) as well as education and water sector policies[1]), development needs ("restoration of education environment and water supply affected by the earthquake in Ica Region"), as well as Japan's ODA policy for Peru (2007) with the priority area of global issues including assistance for disaster prevention and reconstruction, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has partially achieved to provide the safe and appropriate environment to students and largely achieved to provide safe and stable water in the Ica Region. As to the Education Component, the project initially targeted five schools, however, four schools (San Antonio de Padua School, John F Kennedy School, Jose de la Torre Ugarte School, and Julio Cesar Tello School) were reconstructed by this project and the remaining one school (Jose Carlos Mariategui School) was reconstructed by Peruvian government and Peru-Japan Countervalue General Fund (FGCPJ). According to the interview results with directors and teachers, they have been satisfied with the more earthquake resistant educational facilities reconstructed according to the recent National Building regulation, and they felt more secure in the new facilities. Meanwhile, the total number of students in the target five schools was 7,339 in 2013, which has not fully met the target value of 9,400 (78% of achievement). For reference, a degree of achievement for four schools was 74% in 2013. The main reasons why the schools have not recuperated their number of students at the same level as 2007 are: (i) due to surrounding socioeconomic and family

[1] The Disaster Prevention and Attention Strategic Plan by MINEDU (2004) for education sector; and the Reconstruction Plan for the Earthquake-Affected Area in Ica Region (2007) for water sector.

situations after the earthquake: some students have migrated to other cities and haven't returned to the affected areas (Jose de la Torre Ugarte School), (ii) since in schools that have secondary school and primary school, only secondary school facilities were reconstructed and students of the primary schools still have to study in temporary classrooms, and lavatory facilities were not reconstructed[2], hence some students have moved to other schools which offer better educational facilities and services(Julio Cesar Tello School, Jose Carlos Mariategui School), (iii) increasing competition with private and newly opened schools (Jose de la Torre Ugarte School), and (iv) the norms of 35 students per class room was applied (John F Kennedy School) and the "same zone" norm (students should go to schools in the same zone where they live) was applied after 2008 (Jose de la Torre Ugarte School, Jose Carlos Mariategui School); as a result, the number of students at the target five schools decreased[3].

As to the Water Supply Component, the number of population served in the Manzanilla area, Ica province, reached approximately 26,000 in 2009, which was exceeded the population who was able to access to water supply before the earthquake. After the construction of new water tower by the project as well as development of new wells by EMAPICA as replacement of existing wells with old and low water supply capacity, the number of population served recovered to 29,240 in 2013. According to interviews with EMAPICA and community people, water users have been satisfied with the water quality, which meets current water quality standards of Peru. Moreover, they felt their quality of life was improved due to improved water supply facilities and services. The water tower has been operating 15.3 hours per day, which provides the water supply to the intended community for 20 hours per day.

No negative impact on natural environment was observed. The land acquisition was properly implemented according to the related guidelines and regulations in Peru.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator	Baseline value (2007)	Target value (2009)	Actual value (2009)	Actual value (2013)
Indicator 1 (Education Component) Number of students studying in five (5) schools (Note 1) renovated	8,091	9,400	7,367	7,399
(Reference) Number of students studying in four (4) schools renovated by the Japanese grant aid	Total: 5,546 (1) San Antonio de Padua: 904 (2) John F Kennedy: 2,546 (3) Jose de Torre Ugarte: 915 (4) Julio C. Tello: 1,181	6,800	Total: 4,983 (1) 960 (2) 2,203 (3) 796 (4) 1,024	Total 5,044 (1) 1,088 (2) 2,332 (3) 775 (4) 849
Indicator 2 (Water Supply Component) Number of population served by water tower	18,000	26,000	26,000	29,240

Source: OINFE and EMAPICA.

Note 1: The categories of schools are: (i) primary school: San Antonio de Padua & Jose de Torre Ugarte, (ii) primary and secondary school: Julio Cesar Tello & Jose Carlos Mariategui, and (iii) vocational training school (secondary school): John F Kennedy.

3 Efficiency

The outputs for the education component were changed: the number of target school was decreased from 5 to 4 since bidding price was higher than the planned cost as a consequent of soaring steel price. However, the remaining one school was constructed by Peruvian government and Peru-Japan Countervalue General Fund (FGCPJ). Although the project cost was within the plan (ratio against the plan: 100%), the project period was longer than the plan (ratio against the plan: 131%) because of repetition of the tender process. The first tender for the education component fell through because a bid price exceeded the ceiling price of tender. Also the first tender for the water supply component was unsuccessful because there was no bidder. For this reason, the project was obliged to conduct re-bit for both components. Therefore, efficiency of the project is fair.

4 Sustainability

The daily operation and maintenance (O&M) of the schools component is carried out by each school. Meanwhile, the Regional Education Directorates and Local Education Management Units (DRE/UGEL) under the Ica Regional Government monitor budget execution by each school and provide necessary technical support for appropriate O&M by each school through provision of training. Moreover, OINFE of MINEDU supervises the activities of DRE/UGEL and provides technical advice to them. The DRE/UGEL assign O&M technical staff but most of the operators and technicians are not skilled enough in the field of architecture and engineering required for appropriate O&M of schools. In the schools, the O&M manuals for public schools have been used and the regular check-up and maintenance has been carried out by each school. Each school receives the O&M budget from MINEDU, the Ica Regional Government and the parents association. The necessary budget for maintenance

[2] The primary school classrooms and the lavatory facilities of Julio Cesar Tello School were not reconstructed because it was not included in the project plan. The secondary school facilities of Jose Carlos Mariategui School was already reconstructed by Peru-Japan Countervalue General Fund (FGCPJ), and reinforcement work for the primary school classrooms is under implementation. However, this work has been delayed due to a contractor's nonfulfillment of contract. At the time of ex-post evaluation, detailed design for the reinforcement of primary school classrooms of Jose Carlos Mariategui School was elaborated in order to complete the work.

[3] The ex-ante evaluation of the project also speculated "the provided educational facilities is expected to be used as shelters at the time of disaster." However, school buildings in Peru are not designated as shelters (and are not promoted for use) even at the time of disaster in order to guarantee the right to education and the continuity of educational services. The ex-post evaluation, therefore, did not confirm such effect.

of school infrastructure has been allocated from MINEDU to each school. However, the budget allocation for day-to-day O&M activities from Ica Regional Government to each school has been insufficient. This is because the Ica Regional Government including DRE/UGEL does not have sufficient institutional capacity in execution of the budget after the decentralization reform in the 2000's although the Regional Government has enough revenue source to be spent for O&M budget. Regarding this budget issue, the budget shortage for day-to-day O&M activities has been covered by the financial and human contribution of the parents association of each school. Therefore, the budget issue has not badly affected the O&M of the school component.

The O&M of the water supply component is conducted by EMAPICA. EMAPICA has 90 staff members in its technical department, and 12 staff members of them are directly engaged in the water supply facilities in the Manzanilla area. According to EMAPICA, it has sufficient number of staff, and their technical staff members are skilled with relevant technical training and conduct the O&M activities appropriately. However, EMAPICA concerns emergency cases such as unexpected blackout because they do not have an appropriate system to respond to such cases. EMAPICA has received stable revenue from water charge in the last three years, which covered the necessary O&M costs. Regarding the current status of O&M of project facilities, both school and water supply facilities have been maintained in a good condition.

This project has some problem in structural and technical aspects of Education Component, hence sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has partially achieved to provide the safe and appropriate environment to students and largely achieved to provide safe and stable water in the Ica Region. As to the Education Component, on the one hand, the project successfully provided safer and more resistant educational facilities for students and teachers; on the other hand, the total number of students in the target schools was not recaptured at the same level as 2007 before the earthquake. Its main reasons are: (i) relocation of students' family after the earthquake, (ii) incomplete reinforcement work of some primary schools, (iii) increasing competition with other private and newly opened schools, and (iv) introduction of new norms in the education sector such as limitation of students' number per class room and school district system. As to the Water Supply Component, the number of population who can obtain the water from the water towers has fully met its target value with 112% of achievement. The project beneficiaries such as teachers and students of the schools and the water users have been satisfied with the improved infrastructure by the project. The water users felt their quality of life was improved due to improved water supply facilities.

As for sustainability, the project has some problem in structural and technical aspects of Education Component since there is a weakness of administrative capacity and a lack of technical skills for O&M in DRE/UGEL staff level. For efficiency, the project period exceeded the plan due to re-tendering.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

<Education Component>

1) It is indispensable to strengthen the administrative and technical capacity of DRE/UGEL to sustaining project effectiveness. MINEDU, as a supervisory authority of DRE/UGEL, should take necessary measures, such as provision of more frequent training and technical advice, so that DRE/UGEL can support each school adequately to carry out their operation and maintenance activities. For example, regarding the technical issue, training on plumbing, electricity, carpentry and industrial security are recommended. Regarding the institutional issue, training on speeding up of documentation work and coordination among the regional government, DRE/UGEL and schools are recommended.
2) MINEDU should accelerate the delayed reconstruction plan of primary school classrooms of Jose Carlos Mariategui School in order to provide the safe and appropriate study environment.

<Water Supply Component>

1) It is important to continue providing the water supply services even if at the time of emergency like unexpected blackout because water supply is one of the most essential lifeline services. It is recommendable that EMPICA takes urgent measures, such as preparation of self/back-up generators at pumping stations in order to assure continuity of the water supply services under any circumstances.

Lessons learned for JICA:

<Education Component>

1) As for the indicators of grant aid projects for disaster reconstruction, the target number of students studying in renovated school buildings was set on the presupposition that the number would increase from 8,100 before the project (before the earthquake) to 9,400 in the target year. However, this target is very high considering the actual population (school-age population) trends in the school areas. The reconstruction of the schools does not necessarily guarantee the return and increase in number of students because of various factors such as relocation to outside the region, satisfaction of school facilities, competition with new/other schools and newly introduced policy.
2) The qualitative aspects also should be taken into consideration. In the project formulation phase, even in an emergency assistance, it is important to consider the reconstruction of integral educational facilities from the viewpoint of users' safety and appropriate educational environment.
   - It is desirable to reconstruct not only classrooms itself but also surrounding facilities such as lavatory facilities affected by the earthquake in order to offer a safe and adequate educational environment since lavatories are priority facility for safe and comfortable school environment, which sometimes becomes important factor when students choose schools.
   - In case of educational institution which has both primary and secondary schools, reconstruction projects should target both schools so that schools can equally secure safe school environment for either primary or secondary students.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Djibouti Office: February, 2014

Country Name	The Project for the Reinforcement of Maritime Transportation in Tadjoura Bay
Republic of Djibouti	

I. Project Outline

Background	In Djibouti, the road transport network was not sufficiently developed between the capital and the northern region. In order to reduce regional disparities and improve social conditions of the northern region, the government of Djibouti received a ferry from Germany in 1981, and opened ferry services between Djibouti, Tadjourah and Obock for the transport of people, vehicles, and goods. However, the ferry sopped operation in July 2004 due to its age, and failed to meet the transport demand, and as a result, the northern region faced a serious problem of inability of transporting water, fuels, and other products for daily use. Under this situation, the northern region was forced to rely on transport by private boats including dhows which provided irregular services with high price and with relatively low safety, or by inefficient road transport. The dhows were operated in a manner that the dhows embarked in the order of arrival and anchored until the number of passengers reached the capacity. Therefore, many passengers and goods stood by for a long time. The port facilities of Djibouti, Tadjourah and Obock have not been maintained for more than 30 years since starting operation, except parts of the Djibouti port. As there are cases that rubber fenders fell off, or were damaged, and pavement concrete on the slipway and the yard were torn up or washed. Therefore, the port facilities needed to be renovated and repaired.		
Objectives of the Project	To improve maritime transport capacity between Djibouti and the northern region（Tajourah and Obock）by constructing a new 40 meter ferry and procuring fenders for the existing ports of Djibouti, Tajourah and Obock, and thereby contributing to reducing regional economic disparity.		
Outputs of the Project	1. Project Site: Djibouti, Tajourah and Obock 2. Japanese side: Construction of a new ferry (40m) (including spare parts, and initial guidance for operation), transport of the ferry to the Djibouti port, trial navigation, and procurement of seven fenders for the Djibouti, Tajourah and Obock ports 3. Djibuouti Side: Renovation of the existing port facilities (Repair of the slipway at the Djibouti port, yard resurfacing at the Djibouti and Obock ports, and fender installment at three ports), allocation of staff (Ferry crew, staff in charge of operation at the Directorate of Maritime Affairs of the Ministry of Equipment and Transport), operation and maintenance expenses (including fuel costs), renovation of ferry terminals at the Djibouti, Tajourah, and Obock ports.		
E/N Date	16 January, 2008 (Detailed Design, D/D) 19 May, 2008	Completion Date	17 October, 2009
Project Cost	E/N Grant Limit: 15 million yen (D/D), 865 million yen	Grant Amount : 15 million yen (D/D), 858 million yen	
Implementing Agency	Directorate of Maritime Affairs of the Ministry of Equipment and Transport		
Contracted Agencies	The Shipbuilding Research Centre of Japan, The joint venture of Kitahama Zosen Tekko and Sankyo-techno Co., Ltd.		
Related Studies	Basic Design Study: May – December 2007, Detailed Design Study: Feburary - April 2008		
Related Projects (if any)	Japan's Cooperation: ・The Project for the development of function of Port (Grant Aid, 1988-1989) ・The project for the development of port facilities (Grant Aid, 1994-1996) Other Donors' Cooperation: ・German: Provision of a ferry boat (Grant Aid, 1981）		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Djibuouti's development policies, such as "efficient maritime transport and strengthening transport capacity to the northern region" as set in Poverty Reduction Strategy Paper (1999), Initiative Nationale pour le Développement Social (National Initiative for Social Development Initiative) (2008-2012), and Vision 2035 (2012-2035), and development needs for importance of regular, safe and economical ferry service to the northern region, as well as Japan's ODA policy for prioritizing basic infrastructure development at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to improve maritime transport capacity between Djibouti and the northern region（Tajourah and Obock）", as regular ferry services (three times per week between Djibouti and Tajourah, and twice per

week between Djibouti and Obock) have been carried out, and the number of passengers per annum has reached the target. Although the data on the annual goods transport volume was not obtained, the annual number of vehicles transported has almost reached the target. In addition, the time required for transport as well as waiting time have reduced compared with the existing dhows and land transport, and the convenience of the passengers has improved because of the availability of the regular ferry services. The existing dhows and small boats were laboring and very dangerous, however, the navigation of the ferry provided by the project is stable and has provided very comfortable services. While the existing dhows and small boats failed to meet the safety standard, the ferry constructed under the project meets the safety standard. Although the fare has increased compared with the existing dhows, the passengers interviewed said they are satisfied with the fare because of its convenience. In addition, the fare is economical compared with the land transport.

As for impact, transport of livestock products and marine products from the northern region has not been active, although they were expected to increase at the time of ex-ante evaluation. The marine products have not been transported because both of the ferry and the Djibouti port do not have cold storage facilities, and in the case of livestock products, the number of livestock itself has decreased due to the droughts. However, as a result of the operation of the ferry under the project, convenience of the people in the northern region has improved as they are able to obtain the commodities regularly.

Therefore, the effectiveness/impact is high.

Quantitative Effects

Indicators	2007 Before the project Actual value	2010 (Target year) Target value	2010 (Target year) Actual value	2012 (The latest full year) Actual value
Indicator 1: Annual number of passengers transported by regular service	0	26,021	n.a.	30,322
Indicator 2: Annual number of vehicles transported by regular service	0	1,169	n.a.	1,039
Indicator 3: Annual volume of goods transported by regular service	0	1,565 tons	n.a.	n.a.

Source: Directorate of Maritime Affairs

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were as planned (ratio against the plan: 99%, 98%). Therefore, efficiency of this project is high

4 Sustainability

The operation and maintenance of the facilities and equipment constructed/procured by the project have been carried out by the Directorate of Maritime Affairs of the Ministry of Equipment and Transport. Although a new division for ferry operation and management has not been established, contrary to the plan at the time of ex-ante evaluation, 17 additional staff members have been recruited (contract basis) which is sufficient for the ferry operation. There is no division responsible for maintenance in the Directorate of Maritime Affairs, and therefore, the large-scale maintenance on the ground (such a repair of ferry's hull, engine and others) other than the periodical inspection and maintenance were expected to be contracted and carried out by Port Autonomy International Djibouti (PAID) at the time of ex-ante evaluation. However, the large scale maintenance has not been contracted to PAID due to the privatization of PAID. PAID was privatized to be the Port of Djibouti in 2012, and the Port of Djibouti contracts out inspection activities to a Dutch company "Damen". Due to this arraignment, the government-owned ferry is also required to pay a service charge for inspection. In order to save the service charge, the large –scale inspection on the ground has been carried out by the ferry operation management and technical staff without obtaining cooperation from the technical staff of PAID, contrary to the expectation at the time of ex-ante evaluation.

There is no problem with the navigational capacity of the crew, as the person in charge of technical aspects transfers the navigation skills. However, crew members are not confident with how to respond to the breakdown during the navigation if any,and therefore want to have training opportunities by follow-up cooperation. In addition, due to the low salary, the motivation of the crew is low and reluctant to continue working as the crew of the ferry. The Directorate of Maritime Affairs (DMA) takes the following measures in order to strengthen the technical capacity of operation and maintenance; i)accept college students as trainees as a candidate of the DMA engineer and provide them the O&M related trainings and ii) hold the study meetings and trainings among the engineers working in the DMA to enhance their skills and knowledge on the O&M.

The financial data were not obtained. According to the Director general of the Directorate of Maritime Affairs, most of the budget allocated from the Ministry of Equipment and Transport to the Directorate of Maritime Affairs is payroll and therefore, little amount is allocated to maintenance. However, the director general also said the direction is that the section in charge of the budget for maritime affairs would be changed from the financial division of the Ministry to the Directorate of Maritime Affairs, and therefore, there is a prospect of improvement in budget allocation. A bank account was opened in May 2013 in the Central Bank on behalf of the Directorate of Maritime Affairs to ensure the transparent management of revenues from the ferry. Since September 2013, the recipe is properly registered.

As to the current status of maintenance, the function of the ferry has been kept so far. A maintenance plan has been prepared, and once-a-week regular inspection (on the non-operation day), and once-a-year inspection on the ground are carried out accordingly. However, the implementation agency has a problem that the budget to carry out the maintenance

plan cannot be secured, and therefore, the required consumables and spare parts cannot be purchased. For example, spare parts for main engines and generators cannot be purchased in Djibouti, and in addition, the budget for the purchase of those items are not available. Therefore, the technical staff is concerned with the situation that the ferry is operated without carrying spare parts with it. Further, there are problems at the port facilities: The fenders at the Tajourah port fell and the terminals at the target ports are not sufficiently maintained. In the meantime, the procurement of the spare parts is expected to be improved due to the above mentioned change in the budgeting procedure. In addition, as the Direction of Maritime Affairs has taken fiscal measures to receive the appropriate services, repair and maintenance service from the privatized Port of Djibouti is expected.

The waiting area at the Djibouti port owned by the Directorate of Maritime Affaires was removed due to expansion of the coastal guard's facilities. Without the waiting area, the passengers are forced to wait for boarding in an area where cars also stand by. The situation is dangerous and actually accidental contacts happen. Although he Directorate of Maritime Affaires is planning to build a fence to separate passengers and cars, still the measure does not seem appropriate. At the Tajourah and Obock ports, there is a concern of possible accident as children jump into water from the deck upon departure of the ferry. However, the situation at the Djibouti port is expected to be improved as the coastal guard has a concrete plan for development of the concerned area.

Thus, although some improvement is expected, currently there are problems in institutional, technical, and financial aspects as well as the current situation of the operation and maintenance, and therefore, sustainability of the effects of this project is low.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to improve maritime transport capacity between Djibouti and the northern region（Tajourah and Obock）", as regular ferry services (three times per week between Djibouti and Tajourah, and twice per week between Djibouti and Obock) have been carried out, and the number of passengers per annum and the annual number of vehicles transported has reached the target. In addition, as the time required for transport and the waiting time have reduced, and the convenience of the passengers has improved.

As for sustainability, there are some problems in institutional and technical aspects in the large scale repair, and for the continuity of crew and navigation techniques. In addition, the implementing agency has problems of insufficient maintenance budget and inability to purchase spare parts accordingly. Thus, there are problems in institutional, technical, and financial aspects as well as the current situation of the operation and maintenance. The relevance and efficiency of the project are high.

In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

Under the current situation of the operation and maintenance of the ferry, the Directorate of the Maritime Affaires is recommended to ask the Ministry of Equipment and Transport for securing the budget for the procurement of the necessary spare parts, and thus to take an ownership for the sustainability of the project effects. At the same time, measures are needed to improve the salary and other working conditions of the crew in order to motivate the crew to continue working for the ferry navigation. The Directorate of Maritime Affairs also needs to secure the waiting area for the passengers and thereby to improve the safety of the passengers.

Lessons learned for JICA:

The maintenance of the facilities to be borne by the Djibouti side has not been fulfilled as there are problems of budgeting capacity of the government as well as the delay in the procedure for disbursement from the Ministry of Finance. Therefore, at the planning stage, JICA needs to fully study and discuss the financial capacity of recipient countries, and on the items agreed, JICA needs to obtain commitment from the recipient countries.

The ferry arriving at the Obock port

The ferry arriving at the Tajourah port

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bhutan Office: Nov,2013

Country Name	The Project for Improvement of Equipment of Bhutan Broadcasting Service Corporation
Bhutan	

I. Project Outline

Background	Bhutan suffered an illiteracy rate of 40% and wide disparities between urban and rural districts. Broadcasting services would play a vital role in tackling this issue. In order for the Bhutan Broadcasting Service Corporation (BBSC) to carry out its responsibilities as Bhutan's sole broadcasting station, it needed to become able to transmit nationwide objective, real-time information on the status and progress of Bhutan's democratization process based on news gathered independently by BBSC. However, BBSC had problems in transmitting information. Videotapes of news recorded at regional centers/bureaus were transported by regular bus services and others to the headquarters (HQ) for nationwide broadcasting. Extreme difficulties remained in transmitting information to and from local districts in a timely manner due to underdeveloped road and communication networks and many regions needed several days to transport the tapes to HQ. Under these circumstances, the government of Bhutan recognizes that the provision of equal access to information for the entire nation as one of the issues in its transition to a democratic state.		
Objectives of the Project	To establish an expanded broadcasting system for broadcasting local news and events to the nation in a timely manner by procuring and installing a transmission system and other broadcasting equipment		
Outputs of the Project	1. Project Site: (1) HQ, (2) Regional Centers in Jakar, Phuentsholing, and Kanglung, and (3) Regional bureaus in Wangduephodrang and Paro Bureaus 2. Japanese side Procurement and installation of: - Master Control System (MCS) at HQ - 4WD SNG (Satellite News Gatherings) OB (Outside Broadcasting) van - transmission devices (5 sets of transmitters and 1 receiving apparatus) - news and production equipment for regional centers/ bureaus - equipment for continuity studio, and - maintenance equipment and tools. 3. Bhutanese side: - removal of existing equipment, - procurement /installation of satellite receiver equipment and renting of satellite links, - maintaining existing SNG receiver equipment, - securing space for installing transmission system, and signing a contract with Bhutan Telecom for renting its facilities, transmission links, etc., - transportation of news and production equipment to bureaus, - installation of equipment for Continuity Studio, and - providing chairs needed for operating the equipment		
E/N Date	30 May, 2008	Completion Date	5 November, 2009
Project Cost	E/N Grant Limit: 594 million yen, Contract Amount: 593 million yen		
Implementing Agency	Bhutan Broadcasting Service Corporation (BBSC)		
Contracted Agencies	Yachiyo Engineering Co., Ltd, and Mitsubishi Corporation		
Related Studies	Basic Design Study: August, 2007 – March, 2008		
Related Projects (if any)	Japan's Cooperation: - Project on Enhancement of the Bhutan Broadcasting Service (Technical Cooperation, 2005-2007) - Project on Capacity Development of Bhutan Broadcasting Service (Technical Cooperation, 2007-2010) - The project for Strengthening of News Reporting Capacity from Every Part of the Country (Grant Aid for Grass-roots human security projects, 2007) - The Project for the Improvement of TV Programs of Bhutan Broadcasting Service Corporation (Cultural Grant, 2005) - The Project of Reconditioned OB Van for Strengthening the program Production Facility of Rural Areas (Grant Aid for Grass-roots human security projects, 2005) - The Follow-up Cooperation for the Project on Enhancement of the Bhutan Broadcasting Service in Bhutan (Follow-up Scheme, 2011) Other Donors' Cooperation: - Government of India (GOI): Commencement of national broadcasting by renting free transponder for satellite links of GOI (2006-9), Construction of TV broadcasting center (2006-7), Procurement of		

	equipment for the new TV broadcasting center (2008) - DANIDA: Speeding up and expansion of existing micro lines (2008), Human resources master plan (2002-2007), Plan for mobilizing own resources (2003-2006)

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Bhutanese development policies, such as "Rural development is one of the most important agenda for poverty eradication, and TV broadcasting is regarded as the important means of information dissemination to rural areas" and "improvement of outreach and quality of BBSC to strengthen the linkage to national development objectives and strategies of creating a knowledge-based society" as set in the 5 year national development plan, BBSC's 10th Five Year Plan (2008-2013) and other documents, and development needs of strengthening of the function of BBSC, as the sole television broadcasting agency to play the highly important role for the remote communities to obtain necessary information, as well as Japan's ODA policy for prioritizing good governance including decentralization and media support at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to establish an expanded broadcasting system for broadcasting local news and events to the nation in a timely manner". The number of outdoor live broadcasting shows by using 4WD SNG OB van procured by the project has increased from 1-2 times a month to 6-10 times a month, and the outdoor live broadcasting show from outside capital has become possible. The number of broadcasted local news from regional centers/bureaus has also increased and the project has contributed to this increase to a certain extent, as the 2 bureaus (Kanlung and Gelephu – former Phuensholing) produce news/programs on their own (2 programs a month) by using the production equipment procured by the project. On the other hand, due to the restructuring of BBSC, at the rest of the three bureau offices (Jakar, Wandgi, and Paro), only Camjo (cameraman and reporter)[1] is assigned to collect and send news materials to the HQ. News/programs are not produced there. The production equipment of the three bureau offices has been shifted to the HQ (since mid 2010) to meet the increasing needs of news production at the HQ. The HQ has fully utilized the equipment to edit the local news materials sent by the Camjos working at 17 local offices[2]. Although this arrangement is different from what the project had originally planned, the equipment procured by the Project has contributed to the increase in the number of broadcasted local news. Regarding transmission, all regional programs with large volume and live programs prepared at the Kanglung and Gelephu are transmitted via the E1 terrestrial lines procured by the project and installed at Bhutan Telecom. Small-size news materials collected at the 3 centers (Jakar, Wangdi and Paro) are sent through the simple and high speed internet and E1 terrestrial lines are utilized only when the large volume of news/programmes need to be sent. BBSC thinks the regional news and program production and collection have become more efficient and cost effective by combining the E1 terrestrial lines for sending heavy volume news programs and the internet for light volume news materials.

As for impact, as a result of the project, BBSC is able to deliver accurate and relevant information for the nation at large. The live coverage of Parliamentary Elections in 2013 (public forums, election campaign news, ballot day, etc.) using the 4WD SNG OB van and the E1 lines was very effective to deliver accurate and relevant information on time to the nation at large. The election related public forums were done in Dzongkha which helped to educate the general public on the election.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Year 2007 (before the project) Actual value	Year 2011 (target year) Target value	Year 2011 (target year) Actual value	Year 2013 (ex-post evaluation year) Actual value
Indicator 1 Number of outdoor live broadcasting shows (by using 4WD SNG OB van)	1-2 times/month (capital area only)	3-8 times/month (including outside capital)	6-10 times/month in total (5-8 times/month from outside capital)	6-10 times/month in total (5-8 times/month from outside capital)
Indicator 2 Number of broadcasted local news from regional centers/ bureaus	2-3 times/day	4-5 times/day	5-10 times/day	15-20 times/day

Source: BBSC

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were as planned (ratio against the plan:100%, 100%). Therefore, efficiency of this project is high

4 Sustainability

The operation and maintenance of the equipment procured by the project have been carried out by BBSC. Currently BBSC has more than 300 staff, out of which 33 are dispatched to bureaus and centers . BBSC HQ thinks that the current staff allocation and institutional set-up are adequate reflecting the current situation. However, bureaus think that the bureau staff's capacity and expertise are not actually matched to the production itself.

[1] Currently Camjos have been assigned to 14 districts and Kanglung and Gelephu bureaus. BBSC will assign Camjo to 3 districts from August 1, 2013 (total districts where Camjos assigned would be 17) and plans to assign Camjo to all 20 districts in the future.

[2] Each Camjo (in 17 districts) sends 10-14 news and program materials in a month.

BBSC is technically capable to carry out repair and maintenance of the equipment. The defected equipment at the HQ is attended by the technical department for repair, while equipment at the bureaus are sent back to HQ for proper attendance. Lightning shock that has been causing damage of transmission equipment, is currently being attended by the follow-up cooperation of 2011, through which ligthining protection is set-up at bureaus and transmission sites. In addition, transmission channel addition, provision of new FPU and FPU tool-kit under the same follow-up will secure stable and effective transmission of news and programme sources from all over the country. The issue is the operation side of the equipment, especially on the production; bureau staff claims that they are required to deal with the equipment that they have not learned how to utilize since their expertise are different from production. In this sense, production capacity at the bureaus are limited and therefore needs to be strengthened while it is sufficient at HQ.

Financially, BBSC has been incurring operational losses consecutively although cash flow has been positive. At present, BBSC's own revenue from advertisement, announcements and sponsorships is limited, and the government provides the necessary annual budget including maintenance cost. BBSC is expected to be financially independent by 2016 and BBSC needs to work on strategies to generate more income, although there is no information on the details of this policy decisions yet. So far, BBSC has not made a financial plan for the equipment renewal (The expected year for renewal of the equipment under the project is 2016).

As to the current status of operation and maintenance, most of the equipment is fitted except one E1 encoder which could not be repaired. All equipment is targeted for regular check up. The technical department makes the budget proposal for the spare parts in half yearly, however, in the absence of professional equipment dealer in Bhutan, procurement of spares sometimes delays. Currently, the follow-up scheme for this project is ongoing as anti-lightning set-up in the project sites.

Thus, as this project has problems in each of the institutional, technical and financial aspect as well as the current status of operation and maintenance, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to establish an expanded broadcasting system for broadcasting local news and events to the nation in a timely manner". The number of outdoor live broadcasting shows by using 4WD SNG OB van procured by the project has increased. The number of broadcasted local news from regional centers/bureaus has also increased, though the equipment is partially used in a different manner than the originally intended manner.

As for sustainability, there are issues in institutional, technical and financial aspects as well as the current status of operation and maintenance. Institutionally, allocation of production staff to the bureaus is not fully adequate. There is no problem with the maintenance capacity, though the production capacity needs to be strengthened. Financially, although the government has provided necessary budget, BBSC needs to increase own revenue since BBSC is expected to be financially independent by 2016. Basically, the equipment is maintained properly, however, sometimes procurement of spare parts delays.

In light of the above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

As BBSC is expected to be financially independent by 2016 from the Royal Government,BBSC needs to work on financial strategy urgently including securing maintenance budget, equipment renewal and others, for the sustainability of the project effects.

Lessons learned for JICA:

This project can be used as a sample for examining the change in utilization of equipment provided under the grant aid scheme, through the course of policy changes over the years. Even though the detailed design is precise and well prepared before the project, the same design might not be applicable even after 3 years, depending on, for instance, technology advancement, management change, government's policy change, ruling party's change, introduction of a new government plan, and others.

It is therefore very important to consider such factors during the project design, to conduct monitoring and to provide support where flexible adjustment could be possible when such changes occur during and after the implementation stage.

Transmission for live broadcasting taking place at the JICA-supported SNG van during the biggest religious ceremony of Bhutan's Capital, Thimphu

Gelephu Bureau staff using the camera procured by the Grant support at Gelephu studio

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Madagascar Office: January, 2014

Country Name	Project for Reinforcement of Expanded Programme on Immunization
Republic of Madagascar	(Le Projet de Renforcement du Programme Elargi de Vaccination)

I. Project Outline

Background	In the Madagascar National Action Plan 2007-2012 (MAP: Plan d'action pour Madagascar), the reduction of infant mortality by half was one of the national goals of the health sector. The promotion of the Expanded Programme on Immunization has been prioritized to achieve the national goal. Preventive care, including vaccination, has been one of key activities to reinforce disease control. As a part of infectious disease control, it was necessary to improve vaccine management by the increased coverage of cold chain in order to increase child vaccination rate. However, the limited budget constrained to replace the aged cold chains and to newly install them at the health institutions not equipped.		
Objectives of the Project	To improve in the vaccine storage capacity of health institutions by replacement and installation of cold chain equipment at the target health institutions (note 1) in Madagascar, and thereby contributing to an increase in child vaccination rate. (note 1) 568 sites of the all the 22 Regional Office of Health and Family Planning (DRSPF: Directions Régionales de la Santé et Planning Familial), all the 87 District Service of Health and Family Planning (SDSPF: Service de District de la Santé et Planning Familial), 42 District Hospitals (CHD: Centre Hospitalier de District), 414 Basic Health Centers (CSB: Centre de Santé de Base), 1 Regional Reference Hospital (CHRR: Center Hospitalier Régional de Référence), 1 Pediatric Hospital (CHP: Centre Hospitalier Pédiatrique), and Service of Vaccination of Ministry of Health, Family Planning and Social Protection (SV: le Service de la Vaccination)		
Outputs of the Project	1. Project Site: the whole country of Madagascar 2. Japanese side 657 items of cold chain equipment, including switching type of electric refrigerator-freezers, electric refrigerator-freezers, electric/oil type refrigerator-freezers for ice packs, solar battery type refrigerator-freezers for ice packs) 3. Malagasy side: Clearance of existing equipment and preparation of installed places.		
E/N Date	June 12, 2008	Completion Date	September 21, 2009
Project Cost	E/N Grant Limit: : 228 million yen, Contract Amount: 175 million yen		
Implementing Agency	Implementing Agency : Division of Vaccination (SV: Service of Vaccination), Ministry of Public Health (the former Ministry of Health, Family Planning and Social Protection)		
Contracted Agencies	ITEC Corporation, Toyota Tsusho Corporation		
Related Studies	Basic Design Study: October 2007 – April 2008		
Related Projects (if any)	Japan's Cooperation: ・Expanded Programme of Immunization (EPI) (Grant Aid, 2003) Other Donors' Cooperation: ・Support on Expanded Programme on Immunization (World Health Organization, 2006-now) ・Support on Expanded Programme on Immunization (UNICEF, 2007-now) ・Immunization Service Support (Global Alliance for Vaccines and Immunization (GAVI), 2001-now)		

II. Result of the Evaluation[1]

1 Relevance

This project has been highly consistent with Madagascar's development policy, such as reduction of under 5 mortality rate and increase in the portion of children vaccinated for all target infectious diseases under the Madagascar National Action Plan 2007-2012, and development needs to increase storage capacity of cold chain equipment for vaccines, as well as Japan's ODA policy to support improvement of healthcare situation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has partially achieved its objectives, "to improve the vaccine storage capacity of health institutions by replacement and installation of cold chain equipment at the target health institutions in Madagascar."

According to SV, the Majority of the target health institutions which received cold chain equipment have utilized the equipment for storage of vaccines. The total number of health institution equipped with cold chain equipment increased from 1,753 in 2007 to 2,383 in 2013 and exceeded the target value in 2010*. The Week for Mother and Child health (SSME: Semaine de la Santé de la Mère et de l'Enfant) has been carried out twice a year in order to increase the vaccination ratio in Madagascar. However, the site survey for this ex-post evaluation found some broken cold chain equipment other than the 2 broken cold chain recorded in the report of SV. The fact indicates the possibility that reporting and monitoring of cold chain equipment at

[1] The site survey for this ex-post evaluation covered only 10 health centers.

health institutions is not done appropriately. Regarding indicator 3, the coverage ratio of health institutions with well-functioning cold chain equipment was expected to reach 92% in 2010 from 78% in 2007. In 2013, this ratio was calculated as 61% **. The capacity of cold chain equipment was 58% of the planned volume in 2013 which was lower than the target rate of 70% despite that the actual volume of vaccine stocked in 2013 considerably exceeded the planned volume. On the other hand, according to SV, CSBII Isotry Annexe and DRSP Vakinankaratra, the disposal rates of vaccines have generally been in declining trend to level expected at the time of installation of cold chain equipment. As for impact, the vaccination rate for the target infectious diseases dramatically improved during the period from 2007 to 2012: 72% to 78% for BCG, 59% to 84% for Measles, 63% to 86% for Polio, 0% to 86% for Hib type B. The expansion of vaccination attributed not only to the enhanced capacity of vaccine storage by cold chain equipment but also to sufficient procurement of vaccines supported by such donors as UNICEF, WHO and the GAVI Alliance.
Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicators	(Before the project) 2007 Actual	(After the project) 2010 Planned	2010 Actual	(Ex-post Evaluation) 2013 Actual
Indicator 1: No. of cold chain equipment installed by the project which are utilized for storage of vaccines	-	657	657	655
Indicator 2: No. of health institutions equipped with cold chain equipment*	1,753	2,059	2,059	2,383*
Indicator 3: Coverage ratio of health institutions with well-functioning cold chain equipment	78%**	92%**	N.A.	61%**
Indicator 4: The proportion of capacity of cold chain equipment against the planned volume of vaccines	-	70% (19,345,000cm^3***/ 27,632,216cm^3)	-	58% (19 345 000 cm^3***/ 33,080,000cm^3)
Indicator 5: Volume of vaccine stocked	-	(planned volume: 27,632,216cm^3)	56,057,000cm^3	47,590,000cm^3
Indicator 6: The proportion of actual volume of vaccines stocked against the planned volume	-	-	181.88%	143.86%

Source：Data provided by SV, CSBII Isotry Annexe, and DRSP Vakinankaratra

Note:* 2,383 health institutions with cold chain equipment among the total number of health institutions of 2,863 in Madagascar.
2,383 consist of 2,059 contributed by the project and 324 by another donor (UNICEF).
** 61% is “effective coverage” of cold chain, which is the percentage of health centers with functional cold chain. All equipment aged more than 8 years are considered as nonfunctional. The data of 2007(78%) and 2010(92%) were not calculated by the same denominator and principle as those of 2013.
*** This is based on the capacity of 2,059 health institutions targeted by the project.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 77%), project period exceeded the plan (ratio against the plan: 147%) due to the delay in delivery of equipment to some target health institutions caused by the limited accessibility in rainy season and the procedure requiring long process of budget disbursement of the Malagasy side. The outputs of the project were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation of cold chain equipment provided by the project has been carried out by each target health institution and SV while the EPI staff (le responsible PEV: Programme Enlargi Vaccination) at district level are responsible for the basic maintenance of facilities of CBSs. The current healthcare service system has been well-functioning to implement the Expanded Program on Immunization (EPI) in Madagascar. Also, the advanced strategy of “ACD (Atteindre chaque District) and ACV (Atteindre chaque Village)” (Reach to each district and reach to each village) endorsed promotion of vaccination throughout the country. Cold chain equipment, including refrigerators and freezers, do not require specialized knowledge and skills to use. Also, the EPI staff and technician of the Division of Facilities, Equipment and Maintenance (SIEM: Service des Infrastrucutures, Equipments et Maintenance) of the Ministry of Public Health have sufficient knowledge and skills to check and repair cold chain equipment. Also the medical staffs have been well trained and have sufficient knowledge and skills to implement EPI. As for the financial aspect, around 2 million MGA has been allocated to cover the maintenance cost since 2008. However, the budget to cover fuel cost is not sufficient and some health institutions have difficulty to afford fuel cost for the equipment. Although the majority of cold chain equipment has been fully utilized, some of them have been broken and not repaired. Unstable voltage can be one of the reasons for the troubles of electric refrigerators and freezers. The sharp increase in the fuel price and the shortage of electricity in rural areas has constrained full utilization of the equipment. In the case that the equipment cannot be used, the health staffs need to transfer vaccines to the nearest health institutions equipped with the cold chain equipment. As there are some problems in the financial aspects and the current status of operation and maintenance, the sustainability of this project effect is fair.

5 Summary of the Evaluation

The project has partly achieved its objective, “to improve in the vaccine storage capacity of health institutions” since the installation of cold chain equipment provided by the project partially contributed to the increase in the volume of vaccine stocked in Madagascar. Therefore, effectiveness/impact of this project is fair.

As for sustainability, there is no problem in maintaining cold chain equipment and implementing EPI in terms of institutional and technical sustainability, as the health care system have been well-functioning and the health staff and the technical staff has been well-trained. However, there are some minor problems observed in terms of financial aspect and current status of operation and maintenance due to the insufficient budget to procure vaccines and to cover maintenance cost for cold chain equipment and some malfunctioning cold chain equipment. As for efficiency, the project period exceeded the plan due to the procedure requiring the long process of budget disbursement.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- For full utilization of cold chain equipment installed by the project, it is necessary to ensure budget to cover the cost of operation and maintenance, including fuel and repair.
- For stable supply of vaccines, it is recommended to elaborate procurement plan of vaccines including budgeting and to consult with the donors to support EPI if necessary.

Lessons learned for JICA:

- At the planning stage, the specifications of cold chain equipment should have been more carefully considered in order to fully utilize cold chain equipment to keep quality of vaccines in any conditions. In order to cope with unstable electricity supply or higher fuel cost, it is better to add some back-up energy source such as solar power (PV) system.

The refrigerator donated by the Project

Health Center where Cold Chain was installed

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal Office: March, 2014

Country Name	Project for Construction of Brikama Fish Market
Republic of the Gambia	

I. Project Outline

Background	In Gambia, the agriculture sector, including fishery, has been prioritized in the national development plan. The Brikama Fish Market is located in a key location connecting between the coastal area and the inland area and has been functioning as a regional retail market covering not only Brikama area but also surrounding areas. The growing population in the coastal area increased the demand of food, including fresh fish. On the other hand, the inappropriate market facilities caused difficulties to keep hygienic and sanitary conditions for fresh fish. Therefore, establishment of supply system of fresh fish in the Brikama Area including the Brikama Fish Market, was the key development issue in the national fishery policy.		
Objectives of the Project	To reduce post-harvest loss of fish by construction of market facilities in Brikama area thereby contributing to increase and stabilization of supply of fish products in Brikama area.		
Outputs of the Project	1. Project Site: Brikama area 2. Japanese side 1) Construction: Fish retail market of 1,428m^2, fish stall, ice making plant, administration and other office space, public toilet, garbage depot, rainwater drainage and seepage system, concrete pavement, etc. 2) Soft component (Technical Assistance): establishment of operation and management system, establishment of ice making facility operation and management, and capacity building of retailer. 3. Gambian side: Provision of land, removal of existing facilities and retailers, wholesalers and venders, , works for incoming of lines of electricity, telephone and water pipes, fence and planting, procurement of furniture, fittings and cleaning equipment.		
E/N Date	June 20, 2008 Extension of EN: March 11, 2009	Completion Date	December 15, 2009
Project Cost	E/N Grant Limit: : 630 million yen, Contract Amount: 593 million yen		
Implementing Agency	Implementing Agency : Fisheries Department, Department of State for Fisheries, Water Resources and national Assembly Matters (signer of the agreement) Operating Agency : Management Committee of Brikama Fish Market		
Contracted Agencies	Overseas Agri-Fisheries Consultants Co., Ltd, Iwata Chizaki Construction Corporation		
Related Studies	Basic Design Study: July 2007– March 2008		
Related Projects (if any)	None		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Gambia's development policy, such as ensuring food security with an increase in the supply of marine products specified under "Vision 2020" and "Strategic Plan of the Fisheries Development 2009-2013", and development needs to upgrade the Brikama Fish Market, as well as Japan's ODA policy prioritizing support for agriculture and fishery sector, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is **high.**

2 Effectiveness/Impact

The project has largely achieved its objectives, "to reduce loss of fresh fish and to increase supply of fish products at Brikama Fish Market."

The loss of fresh fish in Brikama Fish Market reduced to 0% in 2010 from 10-15% in 2007. No loss of fresh fish at the Market has been sustaining at the time of ex-post evaluation. Also, freshness of fish at the Market improved owing to availability of sufficient volume of ice produced at the Market and cold storage. The ratio of volume of ice to volume of fish in the cool box used by the retailers or the venders at the Market improved for the same period. However, in 2013, the production volume decreased to around 3 tons/day which accounted for 60% of the target value because one of the plants had not been operating due to a defective spare part. The spare part was replaced and the plant resumed operations in the middle of November 2013. In terms of sales activities at the Market, most of fish stalls installed by the Project have been utilized. As a result, the number of fresh fish venders and retailers increased from 140 in 2007 to 236 in 2013. The number of dry fish retailers fluctuating by availability of dried fish in the Market. Since one of the main targets of the Project is to provide hygienic conditions for fresh fish retail, the cured fish and the processed fish retailers have been doing their business outside of the Project site.

The construction of new market facilities also improved business environment, particularly in rainy season. The improved layout of the Market increased efficiency of the market operation. On the other hand, there is a problem observed in waste water and drainage system that is not working correctly since there's a breakdown in the pump which requires frequent cleaning by the cleaning team when overflow is reported by the users. As for the impacts, the improved market facilities attract more customers which enable larger quantity of fresh fish trade. In addition, no loss of fresh fish improved profitability of retailers. According to the interviews with the retailers, their income from fish sales at the Market increased.

Therefore, effectiveness/impact of this project is **high.**

Quantitative Effects

Indicators	(Before the project) 2007 Actual	(After the project) 2010 Planned	2010 Actual	(Ex-post Evaluation) 2013 Actual
Indicator 1: Loss of fresh fish in Brikama Fish Market	10-15%	5%	0%	0%
Indicator 2: Ratio of volume of ice to volume of fish in the cool box (at retailer and vender)	Fish volume: Ice volume=1: 0.1-0.2	Volume of ice will be increased.	1:1*	1:1.18*
Indicator 3: Volume of ice production by Brikama Fish Market	0 ton	5 tons/day	4.5 tons/day	2.9-3 tons/day
Indicator 4: Sales volume of ice produced by Brikama Fish Market	0 ton	N.A.	4.5 tons/day	2.9-3 tons/day
Indicator 5: Storage volume of ice at Brikama Fish Market	0 ton	6 ton	4.5 ton/day	2.9-3 ton/day
Indicator 6: No. of fish stalls in use	-	Large: 40 sets Small: 100 sets	Large: 32 sets Small: 100 sets	Large: 39 sets Small: 100 sets
Indicator7: No. of retailers and venders in Brikama Fish Market	Fresh fish: 140 Cured fish: 40 Dry fish: 30 Fish processing: 10	Increase	Fresh fish: 226 Cured fish: 0 Dry fish: 18 Fish processing:0	Fresh fish: 236 Cured fish: 0 Dry fish: 26 Fish processing: 0

Note 1: * The figure for 2010 is estimation based on the volumes of production and sales of ice at the Market and the figure for 2013 is calculated by the date of field survey for the ex-post evaluation (January 1st - August 21st 2013).
Source：Brikama Fish Market

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 94%), project period slightly exceeded the plan (ratio against the plan: 107%) because of heavy rains during the rainy seasons of 2008 and 2009, downpour was reported especially in august 2009 and which had a negative impact on the soil and thus on the construction works. The project period slightly exceeded the plan. Therefore, efficiency of this project is **fair.**

4 Sustainability

The operation and maintenance of facilities and equipment constructed and installed by the project have been carried out by the operating agency, the Brikama Fish Market Management Committee. The Oversight Body and the Management Committee were established as planned. While the Oversight Body which is composed of the members from the Fishery Department, Brikama Area Council (BAC), and so on, is responsible for monitoring the compliance of market operation and activities, the Management Committee which is composed of the members from the Fishery Department, BAC, the Fish Market Manager, the Financial Manager, and market users of retailers and venders, is in charge of overall operation and maintenance of the Market. Sufficient number of staffs with sufficient knowledge and skills, who can repair minor breakdowns, has been assigned for the operation and maintenance of the market facilities. As for the financial aspect, the Market has been earning sufficient amount of revenues to cover the operation and maintenance cost. In 2012, the total revenue was 2.66 million GMD which was higher than the total expenses of 2.579 million GMD. In terms of current status of operation and maintenance of the facilities and equipment installed by the project, the drainage system and the water supply system are not maintained and operated as originally planned. Breakdown of pump in the drainage system and leakage of water system are not repaired. The Brikama Fish Market Management Committee cleans the drainage frequently to avoid overflow and bad odor and uses the alternative water supply system (combining pipe and tank) for the ice plant. The staff is experienced enough to cope with the minor problems in the current status of operation and maintenance and insure the sustainability of this project. No negative impact on natural environment and society was observed.

Therefore, the sustainability of the project is **high.**

5 Summary of the Evaluation

The project has largely achieved its objectives, “to reduce loss of fresh fish and to increase supply of fish products at Brikama Fish Market.” as the supply of ice and cold storage eliminated loss of fresh fish at the Market. The improved freshness of fish traded at the Market and the improved market facilities increased both venders and customers. On the other hand, the ice production had been below the target due to the non-functioning ice making plant. Also, the overflows in the drainage system have been a problem. Therefore, effectiveness/impact of this project is **High**.

As for sustainability, the operating agencies have no problem in the structural, technical and financial sustainability, as sufficient number of staff with adequate technical capacity being assigned, the plenty of revenue generated to cover the necessary expenses including the operation and the maintenance cost. However, there are some minor problems observed in terms of current status of operation and maintenance because of drainage system and water supply system are not maintained and operated as originally planned, but the Brikama Fish Market Management Committee cleans the drainage frequently to

avoid the overflow and the bad odor and uses alternative water supply system (combining pipe and tank) for the ice plant.

As for efficiency, the project period slightly exceeded the plan due to the heavy rains during construction.

In light of the above, this project is evaluated to be **highly satisfactory.**

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

[Oversight Body and Management Committee]

- To resolve the problem of congestion at the access road to Brikama Fish Market and also to prevent accidents, the oversight body and management committee has to discuss the best way to sensitize the users about the good organization and the respect of the layout in Brikama Market in general to avoid the anarchic occupation of the surrounding area.
- Brikama Fish Market has a well trained and experienced technical staff that is able to replace spare parts and repair minor breakdowns, however, it is highly recommended for the continuous activity and the sustainability of the equipment to have the support of the head office of the ice plants and cold storage maker company.

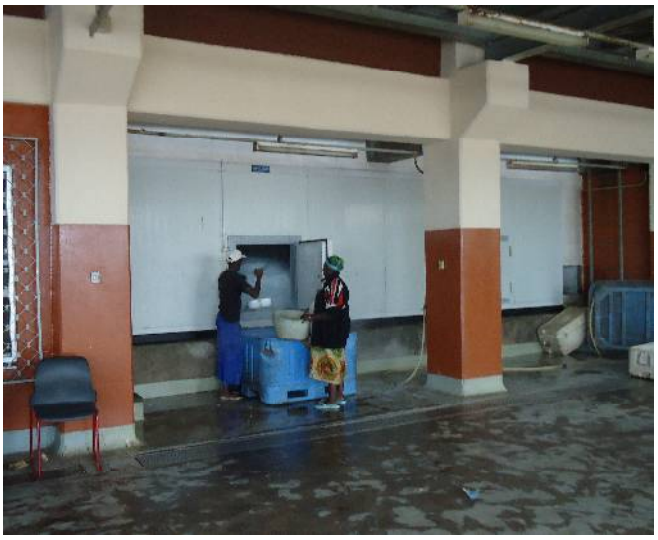
[BAC]

- It is necessary to settle up a long term plan to prevent the overproduction of waste at Brikama in general and especially at Brikama Fish Market

Lessons learned for JICA:

- It is necessary before the completion of the works to verify if the Water supply system at Brikama Fish Market is functioning effectively and to be sure if the pipes are solid enough to resist in case of soil subsidence because the market is actually supplying ice making machine by using a pipe connected to the water tab.
- It is necessary to put enough capacity on the drainage system at the basic design concept to avoid the overflow in case of overcapacity and also rain.

Retailers using fish stalls in Brikama Fish Market



Fish retailer buying ice from the ice storage facility

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Saint Lucia Branch Office/Dominican Republic Office: Month, 2013

Country Name	The Project for Improvement of Fishery Infrastructure in Anse La Raye
Saint Lucia	

I. Project Outline

Background	A catch of fish of Saint Lucia was 1,386 tons in 2005, which did not satisfy the domestic demands, and the country imported marine products. In west coast, where Anse La Raye is located, fishermen mainly practice small-scale fishery and the number of fishermen was 118 and that of registered fishing boats was 25 in Anse La Raye. Anse La Raye is 20 km distant from the capital Castries by land and had a high potential as a base to supply marine products to the metropolitan area. However, its function was declining due to generally obsolete facilities and a catch of fish was only 19 tons in 2000. In particular, a jetty was constructed for ferries and its height from the surface of the seal was not enough for the use of fishing boats. It was also damaged because it was very old and caused inconveniences for landing fish and mooring boats. Regarding the land facilities/equipment such as an ice making machine, refrigerators, fishing gear lockers, stores, etc., they became quite old since 20 years had passed after the constructions and caused loss after fishing. In addition, the Government of Saint Lucia aimed at developing fisheries in cooperation with tourism promotion.		
Objectives of the Project	To increase income by fishing and enhance employment through the improvement of fishery, augment in ice supply and tourists, and promotion of goods sales by developing fisheries facilities (jetty, fisheries complex, gear locker, workshop, venders' arcade, sanitation facilities, etc.) at Anse La Raye.		
Outputs of the Project	1. Project Site: Anse La Raye 2. Japanese side Construction of the following facility(s): (1) Civil Works:jetty and accessories ・up lifting facilities (2) Architectural Works:gear locker ・drainage ・fisheries complex ・workshop ・venders' arcade Protection works (the fronts of venders' arcade, fisheries complex, gear locker and workshop) and sand capping works (the front of venders' arcade) were conducted by the follow up cooperation in 2012 as middle-term countermeasures against erosion. 3. Saint Lucia side: ・implementation of Environment Impact Statement (EIA): Environment Impact Statement (EIS)/ Social Impact Statement (SIS) ・acquisition of permissions concerning environment/development ・securing of place for fish landing during the construction works and instruction for fishermen who practice small-scale fishery ・securing of temporary yard for construction ・removal of a jetty and existing fisheries facilities in the planned site ・securing of place for damping soils that are left after construction works ・connection of electricity, water and telephones, procurement of office equipment, furniture, etc. ・tax exemption at the customs for equipment to be imported to Saint Lucia		
E/N Date	May, 2008	Completion Date	February, 2010
Project Cost	E/N Grant Limit: : 536 million yen, Contract Amount: 526 million yen		
Implementing Agency	Implementing Agency : Ministry of Agriculture, Forestry and Fisheries Operating Agency : Department of Fisheries, Ministry of Agriculture, Lands, Fisheries & Forestry		
Contracted Agencies	Echo Corporation (consultant), TOKURA CORPORATION (construction)		
Related Studies	Basic Design Study: September 2006 – March 2007		
Related Projects (if any)	Japan's Cooperation: ・Fisheries Development Project (1st term) (GA, 1987, 290 million yen) ・Fisheries Development Project (2nd term) (GA, 1988, 360 million yen) ・Project for Construction of Fisheries Development Center (GA, 1995, 527 million yen) ・Project for Construction of Vieux Fort Fishery Complex (GA, 1997-1998, 200 million yen) ・Project for Improvement of Coastal Fisheries Development (GA, 2001, 130 million yen)		

II. Result of the Evaluation

1 Relevance
This project has been highly consistent with Saint Lucia's development policy, such as poverty alleviation and enhancement of GDP specified under "Plan for Managing the Fisheries of Saint Lucia", "Fisheries Development for 8 years 2001-2007" (at the time of preliminary study) and "Plans for Future" (at the time of ex-post evaluation). It has also been highly consistent with prioritized policies (increase in a catch of fish, improvement of post-harvest technologies and quality management, modern fishery management, development of new fishing grounds, promotion of entry into the fishery market by private enterprises, improvement fishery infrastructures/fishing boats/gears, enhancement of economic standards of fishermen and cooperation between fishery and tourism), and development needs to renovate old fishery facilities, as well as Japan's ODA policy for sustainable growth (supply of protein for the population and holding-down of expenditures in foreign currency resulted by import

of marine products specified under “Japan’s ODA Charter”, at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, “to improve efficiency of fisheries by renovation of facilities of Anse La Raye, increase in the number of tourists and promotion of goods sales”. Regarding improvement of landing works such as i) average time for landing fish, ii) average time for preparation before boats leave, and iii) labor for preparation and landing per boat as well as iv) decrease in the number of fishing boat repair in the area, it was confirmed that improvement in terms of quantitative factors has become clear through comparison of the figures i) before the project, ii) target year and iii) at the time of ex-post evaluation (refer to note1 of the below table).

As for the impacts, it was identified that i) demand of marine products has rapidly risen by the increase in the number of tourists with tourism events held every Friday and accordingly the market prices of the products rose by 8.14% at Anse La Raye in 2011 and ii) employment opportunities, such as selling of marine products and souvenir, have been enhanced for villagers as well as for fishermen in Anse La Raye.

No negative impact on natural environment and no land acquisition and resettlement has been reported. On the other hand, as a compressor of an ice making machine was damaged in 2012, production and sales of ice have been stopped since July 2012 and consequently, villagers have been obliged to buy ice at comparatively high price (Department of Fisheries is currently considering the method of repair and securing of repair cost). Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicators	(Before the project) 2007 Actual	(After the project) 2010 Planned	2010 Actual	(Ex-post Evaluation) 2012Actual
Indicator 1 Improvement of landing works (1) time for landing (average) (2) time for preparation before boats leave (average) (3) labor for preparation and landing per boat	(1) 1.5 hours (2) 1.5 hours (3) 6 people	(1) 0.5 hours (2) 0.5 hours (3) 2 people	(1) 0.75 hours (2) 0.75 hours (3) below 2-3 people	Same as left (note1)
Indicator 2 Decrease in the frequency of fishing boat repairs FRP fishing boats	Once in 2 weeks due to landing system of fish	Frequency of repair decreases due to the construction of a jerry		Frequency of repair drastically decreased. (Few repairs are required.)
(Supplementary Indicator) A catch of fish per year	Approximately 25 tons/year (note2)	A catch of fish increases from 25 tons per year at Anse La Raye.	30.99 tons/year	36.23/year (note3)
(Supplementary Indicator) Frequency of jetty use by fishing boats				About 25 regular fishing boats Besides, other fishing boats and tourist boats irregularly use the jetty.

Source : Implementation Review Study (A10), Implementation Review Study Report (p4-1)

note1: Although exact time was not obtained by the interviews with fishermen, majority of responses was that required time was reduced by more than 50%.

note2: The figure of 25 tons is an average between 1993 and 2000. There are no statistics available concerning a catch of fish at Anse La Raye between 2001 and Basic Design (BD) Study. In the BD report, it is mentioned that a catch of fish at Anse La Raye is estimated to be similar scale to that at Soufriére (85 tons), however, the average at Soufriére is approximately 100 tons between 1993 and 2005 and there is no clear ground for 85 tons. Thus, in this evaluation report, the average catch between 1993 and 2000 is mentioned.

note3: There are no statistics concerning a catch of fish at Anse La Raye between 2001 and 2008. After 2009, statistics have been prepared and figures of years 2010 and 2012 are based on the statistics.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 98%), the project period slightly exceeded the plan (ratio against the plan: 118%) because of the delay in procuring materials (cement) and high swell of the ocean. The outputs of the project were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

Regarding facilities and equipment provided by the project, the operation and maintenance of the fisheries complex, a jetty, a workshop and fishing gear lockers were transferred to Anse La Raye/Canaries fisheries cooperative (hereinafter referred to as “the fisheries cooperative”) from the implementing agency, Department of Fisheries, Ministry of Agriculture, Lands, Fisheries & Forestry in August 2010 and venders’ arcade has been operated and maintained by council of Anse La Raye. The implementation structure of Department of Fisheries is sustained and maintenance and management system between the department and the fisheries cooperative is also maintained. At present, Department of Fisheries has 39 permanent staff members and the current staff are able to implement necessary policies. On the other hand, the fisheries cooperative is in the process of institutional strengthening and does not fully function. As for the technical aspect, although roles of fisheries cooperative members are limited to daily operations, a system in which cooperative members receive technical supports such

as repair of freezers from Department of Fisheries and relevant corporation that refrigerates and processes marine products, has been established. Technicians/engineers, who received technical instructions particularly concerning facility repair during the project period, have techniques/skills to maintain, manage and repair equipment in the entire fisheries facilities in Saint Lucia. As to the financial aspect, the fisheries cooperative currently has very limited income and expenditures and balance sheet is not prepared due to the delay in selection of an external auditor. Main sources of income are sales of cooking gas and gears as well as facility (rest room) users fee from tourists, while main items of expenditure are salary for facility managers and purchase of materials and office supplies. For the current status of operation and maintenance, majority of machinery and equipment is regularly functioning, while part of equipment (ice making machine) is out of order and Department of Fisheries is currently considering the method of repair and securing of repair cost because the term of security and term of a guarantee by a manufacturer were over.

Therefore, there are some problems in the institutional and financial aspects and the current status of operation and maintenance and the sustainability of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to improve efficiency of fisheries by renovation of facilities of Anse La Raye, enhancement of ice supply, increase in the number of tourists and promotion of goods sales", though the ice supply does not increase due to a damage of an ice making machine. It was confirmed that i) average time for landing fish, ii) average time for preparation before boats leave, and iii) labor for preparation have been improved and positive impacts such as a rise in the market prices of the marine products and enhancement of employment opportunities have been observed. As for sustainability, while Department of Fisheries has sufficient personnel who are able to implement necessary policies, the fisheries cooperative is in the process of institutional strengthening. As for the technical aspect, technicians/engineers, who received technical instructions particularly concerning facility repair during the project period, have techniques/skills to maintain, manage and repair equipment in the entire fisheries facilities in Saint Lucia. As to financial aspect, the fisheries cooperative currently has very limited income and expenditures and the balance sheet is not prepared due to the delay in selection of an external auditor. For the current status of operation and maintenance, majority of machinery and equipment is regularly functioning, while part of equipment (ice making machine) is out of order. Therefore, there are some minor problems observed in terms of institutional and financial aspects as well as current status of operation and maintenance. Regarding efficiency, the project period slightly exceeded the plan.

In light of the above, this project is evaluated to be partially satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- Repair of Ice Making Machine
  It is difficult to secure the cost for repairing an ice making machine (USD 5,000 to exchange an entire compressor, USD1,000 to exchange pistons only). However, if the ice making machine functions, cost recovery is possible by the expected monthly profit of USD 100. It is necessary to consider acquiring finance including loans, if it is difficult to cover the cost by the government's budget.
- Strengthening of the Fisheries Cooperative
  As mentioned above, since monthly profit of USD 100 is expected by the operation of an ice making machine, it is necessary to immediately establish institutional management system including a general meeting, selection of a director, preparation of a balance sheet, inspection, etc. It is also needed to request Department of Union of Ministry of Agriculture, Lands, Fisheries & Forestry to provide supports for the establishment of the above mentioned system.
- Cooperation between Department of Fisheries and Department of Cooperative in terms of Strengthening of the Fisheries Cooperative
  Department of Fisheries is originally in charge of maintenance, management and effective utilization of facilities provided by grant aid, while Department of Cooperative is in charge of strengthening and supervision of the fisheries cooperative, which is entrusted to manage facilities. It is necessary that both departments establish cooperation system for capacity development of the fisheries cooperative.

Lessons learned for JICA:

- Transfer of Facility Management to Fisheries cooperatives
  In Saint Lucia, fisheries cooperatives are entrusted to manage facilities provided by grant aid. Institutional capacities differ depending on each cooperative and unconditional entrustment is considered to be risky. It is desirable that capacities of fisheries cooperatives be examined before entrusting and if the capacities are not satisfactory, it is adequate to entrust the management after strengthening cooperatives.
- Financing for repair cost of an ice making machine
  The cost for full-scale repair of an ice making machine is comparatively large, considering the budget of Department of Fisheries. The budget of the department is not enough to cover unexpected breakdowns. On the other hand, if the ice making machine functions, profits are expected and cost recovery is considered to be relatively easy. It is originally desirable for the Saint Lucia's side to take necessary measures including management of accumulated fund, which is generated by the profit of ice sales, as a separate account. In reality, however, it is difficult to realize such measures due to constraints of national accounts. Therefore, in case that a grant aid procures equipment (e.g. an ice making machine), which rarely fail but require a large amount of repair cost once they are damaged, and if they are expected to surely recover repair cost by their re-operations, it may be necessary for JICA to propose a work plan that establishes a system which incorporates a temporary loan for repair cost.

Jetty: preparation activities before boats leave and for landing of fish have been efficient.

Venders' arcade: Fishery activities and tourism have been promoted by the increase in the number of tourists.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Nepal Office: Month, 2013

Country Name	The Project for Construction of Primary Schools in Support of Education for All (Phase II)
Nepal	

I. Project Outline

Background	In Nepal, despite various efforts by the government including the launching of educational development programs, the country assessment of Education for All (EFA) indicated that the challenges still remained formidable towards attaining EFA goals: although Net Enrollment Rate (NER) had improved, it was difficult to achieve the target NER of 96% in 2009. Gross Enrollment Rate (GER) of 138.8% in 2006 needed to be improved to 100%. Among the 25,000 classrooms for primary schools of the target eight Districts of the project, 11.4% were constructed under the government project; the rest was constructed by communities. Many of the communities constructed schools were of low-quality or deteriorated and 20% were deemed inappropriate for continuous use. The needs of classroom construction were 7,600 in the target eight Districts, and 45,000 nationwide (75 Districts). The Government of Japan had been supporting the efforts of the Government of Nepal by extending grant aid for the construction of primary schools to procure construction materials for about 8,000 classrooms in total (including Phase 1 project).		
Objectives of the Project	The project aims to improve the educational environment of 370 primary schools in eight Districts by procuring construction materials for 740 classrooms and other school facilities to be constructed by School Management Committees (SMCs) with the participation of communities under funding support and technical guidance provided by the Government of Nepal. As a result, the project is expected to contribute to ensuring access to and enhancing the quality of primary education in Nepal.		
Outputs of the Project	1. Project Site: Baglung, Dhading, Gulmi, Kaski, Lalitpur, Palpa, Rupandehi, and Surkhet Districts 2. Japanese side: - Procuring construction materials necessary for constructing 740 classrooms in 370 classroom buildings, 362 toilets, 90 water facilities, and procurement of 11,420 sets of furniture 3. Nepali side: - Transportation of construction materials and equipment from depots to the sites, procurement of local construction materials, ensuring proper construction management including the appointment of engineers, sub-engineers, and depot managers in order that efficient management of the project is realized including technical guidance to communities, supervision, and monitoring of construction.		
E/N Date	16 September, 2008	Completion Date	4 November, 2009
Project Cost	E/N Grant Limit: 870 million yen, Contract Amount: 869 million yen		
Implementing Agency	Department of Education (DOE) of Ministry of Education and Sports (MOES) , (Currently, Ministry of Education)		
Contracted Agencies	Fukuwatari & Architectural Consultants Ltd., Sanpo International		
Related Studies	Basic Design Study: August, 2007 – March, 2008, Detailed Design Study: October 2008－January 2009		
Related Projects (if any)	Japan's Cooperation: The Support for Improvement of Primary School Management (Technical Cooperation, 2008-2011), The Project for Providing Materials and Equipment for the Construction of Primary Schools (Grant Aid, 1994), The Project for Providing Materials and Equipment for the Construction of Primary Schools Phase II (Grant Aid , 1996), The Project for Construction of Primary Schools under BPEP-II (Grant Aid , 1999), The Project for Construction of Primary Schools in Support of EFA (Grant Aid , 2005) Other Donors' Cooperation: Education for All; EFA (2004-2009): World Bank, ADB, Denmark, DFID, Finland, Norway, UNICEFF		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Nepali development policy, such as "to ensure equitable access to quality basic education for all children" as set in EFA National Plan of Action 2001-2015, School Sector Reform Plan (SSRP) 2009-2015, and other documents, the development needs for improvement of access to primary education and constructing school buildings and classrooms in rural parts of the country as well as Japan's ODA policy (as described in ODA Databook 2007), for prioritizing social infrastructure development at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has somewhat achieved its objectives, "to improve the educational environment of 370 primary schools in eight Districts by procuring construction materials for 740 classrooms and other school facilities to be constructed by SMCs, thereby contributing to ensuring access to and enhancing quality of primary education in Nepal.".

According to DOE, all construction of classrooms, toilets and water supply under this project was completed by 2010. Therefore, the project has provided safe and comfortable classrooms at primary education in the target eight Districts as

planned (740 classrooms). In addition to the project, the Government of Nepal has taken initiatives to continue the effort of classrooms construction by allocating annual budget to District Education Offices (DEOs). As a result, the number of students in the six Districts[1] has increased, and the project has contributed to the overall increase of the students. During the field visits, however, it was found that the number of students in some schools has not increased. Major factors include the availability of other community schools nearby, and new opening of boarding/private schools.

The classrooms are in good condition, and the construction of the new classrooms has provided wider, brighter and more spacious classrooms for students in most schools. The quality of classroom buildings is appreciated by the school teachers and SMCs. However, during the field visit, it was found that classrooms in some schools are not spacious enough for the increasing number of students, and other schools use the classrooms in a different manner than originally intended; for example, due to the less number of students, one classroom has been divided into two by a partition in two schools visited, and at one school, a classroom is divided into two rooms and one room was used as Principal's office.

Other facilities and equipment such as toilets and furniture are in good condition and no leaking of rain is observed during the field visit at the time of ex-post evaluation. However, some of the water supply facilities are not fully utilized due to insufficient water, or plenty availability of tap water.

As for impact, as a result of improvement in the school environment, students are more motivated to study according to the teachers and SMC members. During the field visits, members of SMCs, who are also parents of students and students said they were quite satisfied with the quality of primary education. According to the headmasters and teachers, through the participation in SMC's school construction and management, parents' awareness towards children's education has been enhanced, and they are cooperating in school management. However, low attendance rate is still found in some cases, and the teachers try to orient parents and guardians to send their students regularly to schools. Nevertheless, the project has some positive impact on improvement in the students' academic results and decrease in the dropout rate, according to the DEOs at the target Districts. The GER[2], NER and the dropout rate at the target Districts have improved (see table 1), and the increase in the available classrooms under the project has contributed to some extent, according to the DEOs. There is no negative impact on the natural environment including possible arsenic contamination in association with water supply facility construction under this project.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator	Year 2007 (before the project) Actual value	Year 2009 (target year) Target value	Year 2009 (target year) Actual value	Year 2013 (ex-post evaluation year) Actual value
Indicator 1 Number of classrooms constructed by the government and donors' support at the target eight Districts	4,438 classrooms	5,178 classrooms (17% increase, or additional 740 classrooms)	n.a.	More than 5,178 (740 additional classrooms were constructed by the project by 2010)
Indicator 2 Number of students who study at the schools in the target eight Districts including the target schools	203,170	237,270 (17%increase)	n.a.	441,537 at six Districts[3]
Indicator 3 (Supplement indicator) Average number of students/classroom at the target district (Note: indicator 2/1)	-	Terai*:50 Hill:45	n.a.	n.a[4]

Source: DEOs (Rupandehi, Palpa, Gulmi, Lalitpur, Baglung and Kaski)
* Terai: lowland plain

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were as planned (ratio against the plan: 100%, 100%). Therefore, efficiency of this project is high.

4 Sustainability

The operation and maintenance of the facilities constructed by the project are carried out by SMC of the target schools. Generally the role of SMC is considered to be school management, funding collection and monitoring of teachers and students'

[1] Data on other two Districts are not obtained.

[2] Major factor for this reduction was commencement of Student Tracking System from each DEO. At present, every school is entitled to submit each student's profile with students photograph. The student tracking system has been effective to get actual number of students in the school. Previously, school used to show more number of students than actual in order to get fund from DEO.

[3] Number of students in some of the visited schools is shown in the table below:

No. of students in some of visited schools					
Padsari PS		Bagaha LSS		Bhairav Janata HSS	
2009	2013	2009	2013	2009	2013
115	103	500	520	622	540

[4] Number of students per classroom depends upon nature and size of the school (primary, lower secondary, higher secondary). During field visit, in Terai, two schools in Rupandehi district were visted. In Padsari PS (103 students), average number of students per classroom was 20. In Bagaha LSS (520 students), average number of students per classroom was 62. In Plapa (hill district) in Bhagwati PS (96 students), average number of student/classroom was 19 whereas in Bhairav Janata HSS (540 students), average number of student/classroom was 45.

performance. The roles of SMC are somehow clear, as the roles and activities of the SMC are recorded in the meeting minutes. Every three years SMC holds General Assembly and nominates Chairperson among parents/community. During that time SMC's roles such as income generation, operation and maintenance, regularity of teachers etc are determined. SMC also holds meeting as per the need- once in two months or every quarter. According to the interview taken, they discuss on issues or problems of the school and identify solution in the meetings. However, there is no document/terms of reference that institutionalizes this practice. There are other institutional problems. Such as inappropriate procedure in SMC formation; SMC members are not always dedicated to manage the schools. Although most schools hire one person for the daily cleaning of the school, while the responsible person for maintenance and cleaning is not clear in some schools. Technically, initial guidance is provided by DEOs, and schools do not have technical difficulty in operation and maintenance. In order to strengthen the capacity of SMCs in planning and managing the school facilities, SMCs are encouraged to prepare School Improvement Plan (SIP). As the SIP has almost become mandatory for each school to receive funds from the DEOs, most SMCs submit SIP, and hence the capacity abovementioned has been somewhat enhanced.

There is a problem of insufficient budget for maintenance of facilities. Each DEO has an annual budget for maintenance which has increased every year. By submitting SIP, the maintenance budget is allocated to all schools from DEOs. In addition, DEOs have different categorized items for maintenance such as maintenance and rehabilitation fund for school facilities. Nevertheless, the budget of DEOs is insufficient to cover all schools in the Districts, and therefore, proper maintenance cannot be done in some schools. The school facilities including toilets and water supply facilities are basically in good condition, and the facilities are cleaned regularly. However, some furniture is broken down and has not been repaired due to lack of maintenance budget.

As the project has some problems in institutional and financial aspects as well as the current situation of operation and maintenance, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has somewhat achieved its objectives, "to improve the educational environment of 370 primary schools in eight Districts by procuring construction materials for 740 classrooms and other school facilities to be constructed by SMCs, thereby contributing to ensuring access to and enhancing quality of primary education in Nepal.", as the planned number of classrooms have been constructed, the educational environment has improved, and the GER, NER, and dropout rates have improved. As for sustainability, some problems were found in the institutional and financial aspects as well as the current status of operation and maintenance. In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

1. Annual budget allocation of DEO for new classroom construction and maintenance is good practice to sustain the educational environment of the school. However, it is recommended that DEOs increase the annual budget and particularly targets for maintenance and rehabilitation of school's infrastructure. Many schools visited were facing lack of maintenance fund.

Lessons learned for JICA:

Since the number of students in several community schools (as also observed in the schools visited) is reduced due to the increasing number of other community and private schools in the vicinity, proper identification of the location to construct school classroom at the planning stage is necessary to contribute to ensuring access to schools

Table 1 GER, NER*, and Dropout rate at national and district level

	GER			NER						Drop out		
	2007/08	2009/10	2012/13	2007/08		2009/10		2012/13		2007/08	2009/10	2012/13
				total	girl	total	girl	total	girl			
National	138.5	141.4	130.1	89.1	87.4	93.7	92.6	95.3	94.7	12.4	6.5	5.2
Lalitpur	177.8	122.0	100.5	95.5	94.2	98.3	98.2	97.9	98.7	13.9	6.2	4.8
Dhading	154.9	143.5	124.5	92.6	93.1	97.7	97.7	97.4	97.1	14.6	7.2	5.7
Kaski	159.7	140.8	121.7	96.9	95.4	98.4	98.5	98.6	98.6	8.7	3.0	4.6
Baglung	166.3	155.1	124.3	95.9	94.4	97.7	97.0	97.8	96.7	15.5	9.4	4.6
Gulmi	154.7	142.8	103.5	94.0	93.6	97.1	95.4	97.6	96.2	8.2	4.5	5.3
Palpa	164.7	143.2	103.7	95.9	95.4	97.2	97.3	97.4	97.6	8.1	3.8	4.8
Rupandehi	120.1	128.5	116.6	81.1	80.0	88.5	88.3	93.1	91.2	11.0	7.3	4.0
Surkhet	177.9	162.3	154.8	96.3	95.1	98.6	98.8	97.1	96.9	13.1	5.6	4.7

Source: Flash Report by the Ministry of Education

Students at Bagaha LSS

* Gross Enrollment Ratio (GER): Total enrollment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school age population corresponding to the same level of education in a given school year.
Net Enrollment Rate (NER): Enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population.

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal Office: February, 2014

Country Name	Project for Improvement of Boulbinet Small Fishing Port
Republic of Guinea	(Projet d'amélioration du port de pêche artisanale de Boulbinet)

I. Project Outline

Background	Boulbinet Small Fishery Port, which was one of the seven small fishing ports in Conakry city, a capital of Guinea, was constructed by the Japanese grant aid in 2000. Boulbinet Small Fishery Port was a model port for the country because the Port equipped with the largest landing facility in Conakry, and was designated as a landing port of fresh marine products for exporting to the EU countries. However, the existing capacity of Boulbinet Small Fishery Port could not meet the demand due to increase in number of port users including fishing boats and fish venders and volume of marine products.		
Objectives of the Project	To enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats by expansion of facilities of the Boulbinet Small Fishing Port, thereby contributing to expand distribution of marine products landed at Boulbinet.		
Outputs of the Project	1. Project Site: Conakry city 2. Japanese side 1) Land reclamation (3,880 m^2) and slipway 2) Berths (4 berths) 3) Ice making plant (capacity: 10 tons/day) and cold storage (capacity: 2 tons) 4) Smokehouse (2 building) 5) Storehouse for fishery equipment and store building (6 store buildings for 108 shops) 6) Space for fresh fish sales with 70 booths 7) Repair space: space for repair of fish nets and space for repair of fish boats 8) Toilets, 4 septic tanks, water receiving tank, and 2 waste yards 3. Guinean side: 1) Land reclamation 2) Removal of wastes in the site 3) Works for incoming lines of electricity, telephone and water pipes, fences and planting 4) Procurement of furniture and fittings		
E/N Date	(Stage I) 26 Nov., 2007 (Exchange of Verbal Note for Extension) 24 Oct., 2008 (Exchange of Verbal Note for 2nd Extension) 30 Mar., 2009 (Stage II)15 Sep., 2008 (Exchange of Verbal Note for Extension) 30 Mar., 2009	Completion Date	8 March, 2010
Project Cost	(Stage I) E/N Grant Limit: 448 million yen, Contract Amount: 445 million yen (Stage II) E/N Grant Limit: 321 million yen, Contract Amount: 317 million yen		
Implementing Agency	Implementing Agency: Minister of Fishery and Aquaculture (Ministère de la Pêche et de l'Aquaculture) Operating Agency: Directorate General of Boulbinet Small Fishery Port (DGPPAB)		
Contracted Agencies	ICONS Inc., Tokura Corporation		
Related Studies	Basic Design Study: Feb. 2006 – Sep., 2006, Detailed Design: Dec., 2006- Aug., 2007		
Related Projects	Japan's Cooperation: Project for Construction of Boulbinet Small Fishery Port (Grant Aid, 1998)		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with Guinea's development policy ("promotion of fisheries including small-scale fisheries" in Guinea Vision 2010 and Fisheries Sector Five-Year Development Plan 2011-2015), development needs ("expansion of Boulbinet Fishery Port in order to accommodate the growing fishing activities"), as well as Japan's ODA policy for Guinea with priority area of enhancement of support for the agricultural and fishery sectors from the viewpoint of food security at the time of both ex-ante and ex-post evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has achieved its objectives of "to enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats." Regarding the volume of marine products including fresh fish and smoked fish, since the operation of Boulbinet Port started in April 2010 due to delay of the project completion period, the actual figures in 2010 were not sufficient as expected. However, they met the targets in 2013. For example, the average volume of landing of fish at Boulbinet Port increased from 16.1 tons/day in 2004 to 18.0 tons/day in 2013. Similarly volume of smoked marine products at Boulbinet Port increased from 2.0 tons/day in 2004 to 2.9 tons/day in 2013. The main reason for increase in volume of marine products is that the number of fishing boats increased by approximately two times from 161 in 2004 to 308 in 2013 and the capacity of ice production, cold storage and smokehouse were expanded by the project. In addition, the waiting time of fishing boats at landing birth at peak time decrease in a quarter or less from average 45-50 minutes in 2004 to average 11 minutes in 2010. However, due to the increasing number of fishing boats more than planned, the waiting time in high season at the time of ex-post evaluation became longer than in 2010.

Also the project improved the sales facilities by constructing indoor space for fresh fish sales. Before the project, the venders used to sell fish in the open air market in an unsanitary environment, but after the project completion they were able to trade in the indoor market equipped with sanitary sales stands and sinks for washing fishes. Also the project newly installed 108 tenant spaces in the store building. In addition, supply capacity of ice to fishing boats and venders increased. For example, volume of ice production increased from 10 tons/day in 2004 to 16 tons/day in 2013 and percentage of fishery boats supplied ice improved from 44% in 2004 to 80% in 2013. The interview with the users of the Port indicated the improvement of freshness of marine products attributed to the above increase. Meanwhile there was a concern on capacity of ice production and utilization of store building. In the first case, ice making machine cannot be fully operated due to a shortage of water and electricity supply as well as deterioration of facility. For this reason, the ice production volume both in 2010 and 2013 did not met its target value. In this regard, the mitigation measures such as hiring water trucks to provide water and financing the fuel of the generators have been implemented by the Directorate General of Boulbinet Small Fishery Port (DGPPAB), but it was not sufficient to solve this issue completely. In the latter case, at the time of ex-post evaluation, the facilities were fully utilized except a part of store building that has been temporary converted into a prayers room because the other prayers room cannot accommodate the rapidly increase of the users. The Guinean authorities gave their engagement concerning the building of a mosque in a plot out of project site and to make the venders take back their place at the store building. Since 19 vendor's stalls are not in the store building, there are needs for further expansion of store building.

Regarding the effect on reduction in congestion in the Port, the situation has been improved by relocation of illegal and unauthorized shops and venders. Furthermore, there was an improvement of safety at landing as number of accident during landing decreased from 10 in 2004 to 2 in 2013. According to the interview results with fishermen, they also recognized this improvement.

As for the impacts, Boulbinet Port increased the volume of fresh fish distribution to domestic market from 3,451 tons in 2004 to 8,669 tons in 2012. Also Boulbinet Port has become a center of various activities like the business of food and other articles.

The land acquisition and temporary relocation of 3,389 users including small traders, venders, and fishermen were properly implemented according to the related guidelines and regulations in Guinea. Majority of temporary relocated users retuned to the Port and continued their commercial activities. No negative impact on natural environmental was observed.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Baseline value (2004)	Target value (2010)	Actual value (2010)	Actual value (2013)
Indicator 1 No. of fishing boats (Note 1) at Boulbinet Port	161 fishing boats	-	235 fishing boats	308 fishing boats
Indicator 2 Reduction of waiting time of fishing boats at landing birth at peak time	45-50 minutes (average)	10 minutes (average)	11 minutes (average) 11.9 minutes (high season) 10.1 minutes (low season)	21 minutes (high season and during the day when it is low tide)
Indicator 3 Average volume of landing of fish at Boulbinet Port	16.1 tons/day	17.6 tons/day	9.0 tons/day	18.0 tons/day(Note3)
Indicator 4 Production volume of smoked marine products at Boulbinet Port	2.0 tons/day	2.4 tons/day	1.5 tons/day	2.9 tons/day
Indicator 5 Production volume of ice	10 tons/day	20 tons/day	18 tons/day	16 tons/day
Indicator 6 % of fishery boats supplied ice	44%	90%	85%	80%(Note3)
Indicator 7 No. of shops opening at the store buildings (Note2)	-	108 shops	108 shops	89 shops
Indicator 8 No. of accidents during landing	10	8	5	2

Source: Minister of Fishery and Aquaculture

Note 1: The size of fishing boats: 12.0 – 19.5 meters.

Note 2: The six store buildings constructed by the project can accommodate maximum 108 shops in total.

Note 3: These data was estimated by the DGPPAB.

3 Efficiency

Although the project cost was mostly as planned (ration against the plan: 99%), the project period slightly exceeded the plan (ration against plan: 118%). This is due to the external factor that was linked to the socio-political turmoil occurred after the death of the former president of Guinea, especially between September and December 2009. In fact, there was an incident of discharging firearms in the vicinity and inside Boulbinet fishing port. Due to this incident, the contractors were forced to suspend the construction works for 4 months. Considering the above exceptional circumstances, the project period was deemed to be within the plan. The outputs of the project were produced as planned. Therefore, efficiency of the project is high.

4 Sustainability

The operation and maintenance (O&M) of the project facilities have been carried out by the Directorate General of Boulbinet Small Fishery Port (DGPPAB), and the National Directorate of Maritime Fish (DNPM) of the Ministry of Fishery and Aquaculture supervises DGPPAB. The Development Committee of Landing Port (CDD) under the National Union of Small Fishermen of Guinea (UNPAG) is responsible for cleaning and waste management of the Port and collection of service fees from users.

Regarding the institutional aspect, DGPPAB has sufficient number of staff including experienced technical staff. The annual maintenance program as well as daily and periodic maintenance plan was established. Regarding the technical aspect, the technicians of DGPPAB have good experience on O&M of refrigeration facilities with Freon cooler but do not master the new technology concerning the refrigeration facilities using ammoniac cooler. Also, there is no system of training to sustain technical level of the technical staff of DGPPAB. In this respect, JICA has announced the dispatch of a short term expert for the training of technical staff concerning the ammoniac refrigeration system in order to strengthen the technical capacity of DGPPAB staff. Regarding the financial aspect, it was planned that the operation cost for ice production including electricity and water charges was to be covered by the government budget and maintenance cost of the facilities was financed by the revenue of ice sales and facility use charges of the port business. However, no government budget has been allocated to the DGPPAB since absence of parliament due to delay of legislative elections after the coup d'état in 2008. Instead, DGPPAB has financed the O&M cost from the revenue of the port, but it is still not sufficient to cover the necessary O&M cost of the project facilities. Meanwhile, with the revenue of shop location fees, the CDD has been continuously allocating the sufficient budget to conduct cleaning works of the port. Regarding the current status of the project facilities, most of the project facilities have been normally operated. However, at the moment of ex-post evaluation there was a problem to find valve spare parts that should be replaced reason why the cold storage was not operating. Also a part of store building has not been utilized for initial purpose due to temporary occupation as a prayers room. Therefore, the project has some problems in the technical, financial aspects as well as the current status of project facilities. Hence its sustainability is fair.

5 Summary of the Evaluation

The project has achieved the project objectives of "to enhance production, storage, and sales facilities for marine products landed and to reduce congestion of fishing boats by expansion of facilities of the Boulbinet Small Fishing Port," as increase in volume of marine products, increase in number of fishing boats, increase in volume of ice production, and reduction in waiting time of fishing boats at landing birth at peak time after project implementation. The expansion of capacity of ice supply and cold storage together with improvement of sales facilities from outdoor to indoor led to the improvement of freshness of marine products. Also the project realized reduction in congestion in the Port by relocation of illegal and unauthorized shops and venders, and an improvement of safety at landing. Meanwhile there was a concern on capacity ice production and utilization of store building, that is, the issues on a shortage of water and electricity supply for ice making machine and a temporary occupation of a part of store building by prayers room. A positive impact was also identified, such as the increase in volume of fresh fish distributed form Boulbinet Port to domestic market.

As for sustainability, the project has some problems in the technical, financial aspects as well as the current status of project facilities since DGPPAB done not master the new technology concerning the refrigeration facilities using ammoniac cooler, the O&M budget was not sufficiently covered by the revenue of port business, and there are problems in spare parts. For efficiency, it is deemed that both project cost and the project period were within the plan.

In light of the above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- In order to insure the good use of the facilities of the fishing port and as planned in the basic design concept, it is highly recommended to the DGPPAB and the CDD to the strict application of the internal regulations of the fishing port of Boulbinet especially concerning the appropriate use of the facilities and make sure that after the construction of the mosque the vendors will take back their places in the store building.

Lessons learned for JICA:

- In order to avoid further congestions due to the increase of the number of port users, it is necessary to realize long term forecasts and make larger scope extensions to better absorb the demand regarding the growing number of the population in African capitals.

landing birth of Boulbinet Port

Ice plant with the ammoniac refrigeration system

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Papua New Guinea Office: March 2014

Country Name	
The Independent State of Papua New Guinea	The Project for Construction of Wewak Market and Jetty

I. Project Outline

Background	With regards to Wewak in the East Sepik province, the Project's target region, the Wewak Market provided the economic base for local gardening and fishing villagers who sold their products. Also the Wewak Jetty provided the main access by sea to the Wewak Market, serving as part of the transport infrastructure. The channels for distributing key products, which were available at the Wewak Market, were consisted of fishing communities of the inland areas, eastern coasts and Wewak islands and, as well as agricultural products, fresh fish and smoked fishes were distributed. However, the following issues had been raised: (i) the Wewak Market was a risk of collapse because it was constructed 27 years ago and was often in an unhygienic condition to use at the time of high tide and heavy rain, (ii) the Wewak Jetty, which was 47 years old, was partly destroyed by the earthquake in 2002 and was out of use since then, and (iii) the old ice block making machines had been removed after over 20 years of use and no service for supplying ice blocks to fishing operators was available.		
Objectives of the Project	To reconstruct market facilities, a jetty and an ice making plant, thereby contributing to promote and improve the trading activities by the retailers using the Wewak Market and the distribution of fish and vegetables in Wewak Town.		
Outputs of the Project	1. Project Site: Wewak in the East Sepik province 2. Japanese side 1) Construction of facilities: • 3 buildings for market with 304 table booths and 296 floor booths, administration building, Kiosk, public toilet, corridor between the market buildings, pavement of premise, exterior 2) Ice making plant, including ice making machine and ice storage 3) Replacement of jetty 4) Soft components: ➢ Improvement of collection and accounting of market place fees ➢ Improvement of garbage collection and disposal in the Market ➢ Elaboration of basic operation and management rules for the Market 3. PNG side: 1) Land reclamation 2) Removal of existing facilities and obstacles 3) Bank protection work 4) Works for incoming lines of electricity, telephone and water pipes, fences and planting 5) Procurement of furniture and fittings		
E/N Date	October 10, 2008	Completion Date	March 26, 2010
Project Cost	E/N Grant Limit: : 503 million yen, Contract Amount: 501 million yen		
Implementing Agency	Implementing Agency: National Fisheries Authority (NFA) Operating Agency: East Sepik Provincial Government		
Contracted Agencies	Konoike Construction Co., Ltd., Overseas Agri-Fisheries Consultants Co., Ltd.		
Related Studies	Basic Design Study: September 2007 – May 2008, Detailed Design Study: October 2008 – March 2010		
Related Projects	None		

II. Result of the Evaluation

1 Relevance

This project has been highly relevant with PNG's development policy ("promotion of fisheries including small-scale local fisheries" in the Medium-term Development Strategy (MTDS) 2005-2010 and MTDS 2010-2015), development needs ("promotion of fishery and trading activities in Wewak"), as well as Japan's ODA policy for PNG with priority area of rural development including support for small-scale fisheries at the time of both ex-ante and ex-post evaluation. However, some problems were observed in appropriateness of project design, in other words in specification of the Jetty, ice making machine and freezer at the time of ex-post evaluation. These problems were caused by insufficient examination of demand forecast of fresh fish in the project target area. Therefore, relevance of this project is fair. On the other hand, it is expected that the new Net Trap Project (Note1) by NFA will contribute to increasing the catch of fresh fish and the facilities would be fully utilized in the future as designed.

Note 1: The newly established Net Trap Project in late 2013 has being aimed by NFA to further utilize the Jetty and Market Ice making storage to store fresh fish for commercial and individual customers. At the time of ex-post evaluation, even though this project was in a trial phase, it was confirmed that fresh fish such as tuna was caught as much as the volume needing ice storage and the number of boats using the Jetty increased.

2 Effectiveness/Impact

The project has not achieved its objectives "to promote and improve the trading activities by the retailers using the Wewak Market and the distribution of fish and vegetables in Wewak Town." The number of retailers using sales booths at Wewak Market (indicator 5) increased by more than six times from 150 in 2007 to 1,000 in 2013, which fully met its target value. According to the interview results with market manager, sellers and buyers, the number of shoppers visiting the Market greatly increased as the newly constructed Market infrastructure attracted buyers and sellers. However, at the time of ex-post evaluation, it is confirmed that the market got excessively crowded, and the market sanitation was deteriorated due to the toilet and drainage problems occurring during rainy season. Regarding indicator 1, the number of banana boats landing at the Jetty in 2013 was 5 boats/day which did not reach the target value of 10 boats/day. The primary reason for this was that most of fishermen did not go fishing every day due to high fuel price and only catch and sell fish when necessary. Another reason was supposed that there was no official guideline set by the local government on usage of the Jetty and payment of its utility fees. Target values were also not achieved for indicator 2 and 3 (see the table below for the details). It is because that the demand of fresh fish and block ice is much lower than estimated at the planning stage. There was one reason of these low demands: the demand of smoked and dried fish was still high in the market because the conservable fish products were preferred by the customers due to a distance from their home to the market. At the time of ex-post evaluation, individual fishermen buy crushed ice from the Ice making facilities on need basis. For indicator 4, the ice storage, which has a capacity of storing 500 kg, was not in operation due to high cost of electricity(Note2). However, it does not hinder the market activities since the demand of ice is limited and there is no need of storing ice at the time of the ex-post evaluation.

Wewak Jetty is accommodating the small fishing boats and the Market is supplying ice blocks. Thus it has provided a preferable environment for freshness and food safety of fish products but the effect is not fully observed since the portion of fresh fish traded in the Market was the same level as at the planning stage. The effect on improvement of hygiene environment of the Market was realized by practicing daily collection (indicator 7) and provision of public toilets with frequent cleaning. However, it has been observed that the toilets were frequently blocked and the drains also overflowed especially during rainy season due to clogging up at the time of ex-post evaluation.

As for the impacts, according to the interview results with market manager and market users, it was identified that the amount of fish and vegetables and sales revenue of retailers at the Market were considerably increased.

The land acquisition was properly implemented in accordance with the related guidelines and regulations in PNG. According to the residents near the project site, the stone/cement wall that separates the sea from the market is not high enough to prevent high tides of water from crashing into the wall and over to the market's parameters, but no mitigation action has been taken to address this issue. No negative natural impact has been confirmed at the time of ex-post evaluation.

Therefore, effectiveness/impact of this project is fair.

Quantitative Effects

Indicator	Baseline value (2007)	Target value (2011)	Actual value (2011)	Actual value (2013)
Indicator 1: No. of banana boats landing at Wewak jetty	0 boat/day	10 boats/day	N.A.	5 boats/day
Indicator 2: Volume of ice production	0 kg/day	500 kg/day	N.A.	276 kg/day
Indicator 3: Sales volume of ice produced at Wewak	0 tons/week	2.5 tons/week	N.A.	1.6 tons/week
Indicator 4: Volume of ice storage	0 ton	1.8 tons	N.A.	NIL
Indicator 5: No. of retailers using sales booths at Wewak Market	150	600	N.A.	1,000(Note3)
Indicator 6: Amount of market place fee collected (collection rate)	Avg. 422.5 kinas/day (Approximately 50%)	—	N.A.	2,000 kinas/day (almost 100%).
Indicator 7: Frequency of garbage collection	Not regularly collected	Daily collection	N.A.	Daily collection

Source: National Fisheries Authority

Note 2: While 0.63 Kina/Kwh had been estimated at the time of project design, 0.77 Kina/Kwh was the actual cost at the time of ex-post evaluation.

Note 3: Estimation by the market manager. It is a maximum number venders during holiday period.

3 Efficiency

Although the project cost was mostly as planned (ratio against the plan: 99.6%), project period slightly exceeded the plan (ratio against the plan: 105.6%) because of time required on re-tender. The outputs of the project were produced as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of the Jetty and ice-making facilities have been carried out by Division of Fisheries and Marine Resources (East Sepik Provincial Government) since December 2012. Regarding the O&M of the Wewak Market, the Wewak Town Commission (the Wewak Urban Local Level Government: WULLG), which was a land owner of the Jetty and the Market, is in charge of the market management affairs as initially planned. A controversial management issue between the provincial government and WULLG were observed, but resolved at the time of ex-post evaluation. Regarding the institutional aspect, 2 O&M staffs are assigned for the Market and the Jetty, and 2 staffs of the Net Trap Project is supporting the operation

of the Jetty. The basic design suggested 3 O&M staffs to be assigned, but 2 O&M staffs are enough to meet the current workload. Regarding the technical aspect, the fee collection and accounting, and garbage collection were conducted by the local staff at a certain level. For O&M of the Jetty and ice making facilities, specific qualified engineers or qualified technical staffs were not needed. Regarding the financial aspects, at the time of ex-post evaluation the provincial government began supporting the Jetty O&M through its recurrent budgetary support in terms of paying for wages of the two staff including covering costs for fuel, electricity and maintenance when they are needed. However, the revenue collected by the Jetty and ice-making facilities is not sufficient to cover all O&M due to small demand of fresh fish and block ice. Meanwhile, the newly appointed market management WULLG is putting in place a financial accounting management system to be able to correctly keep financial records for the operations of the market. Support by NFA to ensure the new financial accounting system will be completed by the first half of 2014. As for the current status of O&M of the project facilities, the Kiosk which is a small store selling drinks and snacks to the market users has not been used since its insulation because no tendering for the retailer has occurred. Similarly the ice storage has not been used since its installation because of low demand for the service by fishermen, and at the time of ex-post evaluation it has also not been used due to meter problem. However, with the new Net Trap Project, the ice storage facilities are expected to be used as designed.

This project has some problems in financial aspects and the current status of O&M of the project facilities, hence sustainability of this project effect is fair

5 Summary of the Evaluation

The project has not achieved the project objectives "to promote and improve the trading activities by the retailers using the Wewak Market and the distribution of fish and vegetables in Wewak Town" at the time of ex-post evaluation. Although positive impacts were identified, such as the increase in amount of fish and vegetables and sales revenue of retailers at the Market, the number of boats landing at the Jetty, the volume of ice production and the volume of ice sales were not increased as expected. There are several factors that affected these results such as: (i) decrease in frequency of fishing by full-time fishermen due to high fuel price; (ii) no official guideline on usage of the Jetty and payment of its utility fees, (iii) limited demand for fresh fish in the local market. Since the majority of fish products sold in the Market are smoked and dried fish, quantify of fresh fish is the same level as at the planning stage. Therefore, the expected improvement of freshness and food safety of fish products is not achieved at the time of ex-post evaluation. On the other hands, the new Net Trap Project is being planned to increase the sales of fresh fish and utilize the ice storage in both Jetty and the Market. While the effect on improvement of hygiene environment of the Market was mostly realized by practicing daily collection and provision of public toilets with frequent cleaning, it has also been observed that the toilets were frequently blocked and the drains also overflowed in rainy season.

As for sustainability, the project has some problems in financial aspects and the current status of O&M of the project facilities. For efficiency, the project period slightly exceeded the plan due to re-tendering.

In light of the above, this project is evaluated to be unsatisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

- It is recommended to set up an official guideline on usage of the Jetty and payment of its utility fees and notify them to fishermen in order to increase the utilization of the Jetty.
- It is recommended to clean the toilets and drains more frequently especially during the rainy season in order to avoid overflow of wastewater in the market place.

Lessons learned for JICA:

- Targets of jetty utilization, ice production and ice storage were set higher than the actual demands. In the future project, it is necessary to carefully examine the custom of fishermen and the trend of trading activities by the retailers, and set the target at the time of designing project.

Sales booths at Wewak Market

Low utilization of the ice storage

Internal Ex-Post Evaluation for Grant Aid Project

conducted by Cambodia Office: December, 2013

Country Name	The Project for Improvement of Equipment for Demining Activities (Phase V)
Kingdom of Cambodia	

I. Project Outline

Background	It was estimated that 4 to 6 million mines still remain buried in Cambodia and it was expected to take a hundred years to complete the demining and clearing process. Consequently, securing the safety of people through demining, encouraging their return and resettlement, and providing mine victim assistance were recognized to be urgent issues in the nation's socio-economic development With respect to areas contaminated with mines and unexploded ordinances (UXO), 4,466km^2 was a commonly recognized area. In total, approximately 412km^2 of Cambodia had been cleared of mines (1992 to 2007), of which approximately 200km^2 was completed by the Cambodia Mine Action Centre (CMAC). As the equipment of CMAC became severely damaged due to intensive use and its deterioration, work efficiency would certainly drop under the present situation.		
Objectives of the Project	To promote demining activities of CMAC by procuring demining equipment such as mine and Unexploded Ordnance (UXO) detectors		
Outputs of the Project	1. Project Site: Banteay Meanchery Province, Battambang Province, Pursat Province, Pailin Province, Siem Reap Province, Oddar Meancheay Province, Kampong Thom Province, Preah Vihear Province, Kampong Cham Province, and Kratie Province 2. Japanese side - Mine Detectors (2 types): 388 and 100 sets - Mine/UXO Detectors (3 types): 27, 14 and 3 sets - Spare parts (Parts for rotary cutters and suspension of brush cutters, and parts for existing mine detectors and mine/UXO detectors): 1 set - Mobile Workshop: 1 - Loaded Tools for Vehicle Repair (for vehicle): 1 - Consumables for Periodic Maintenance (for the newly procured equipment): 1 sets 3. Cambodia side: - n.a.		
E/N Date	18 March, 2009	Completion Date	17 February, 2010
Project Cost	E/N Grant Limit: 548 million yen, Contract Amount: 512 million yen		
Implementing Agency	Cambodian Mine Action Centre (CMAC)		
Contracted Agencies	Ingerosec Corporation, ITOCHU Corporation and Marubeni Corporation		
Related Studies	Basic Design Study: July, 2008 – February, 2009, Detailed Design Study: April 2009 – June 2009		
Related Projects (if any)	Japan's Cooperation: - Strengthening of CMAC Function for Human Security Realization (Technical Cooperation, 2008-2010) - Advisors (Dispatch of Experts, 1999-2008) - Project for Improvement of Equipment for Demining Activities Phase 1-4&6（Grant Aid, 1998-2012） - Grant Aid for Research the project for Research and Development of Mine Clearances Related Equipment (Phase 1 and 2) （2005, 2007） Other Donors' Cooperation: - UNDP, UNICEF, USA, Germany and others		

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Cambodia's development policy , such as "to free Cambodia from the threat of anti-personal mines and Explosive Remnant of War (ERW)/UXO" as set in National Mine Action Strategy (2003) and National Mine Action Strategy (2010-2019) at the time of both ex-ante and ex-post evaluation. Also it has met development needs of clearing land contaminated with mines and UXO/ERW, as well as Japan's ODA policy (Country Assistance Program for Cambodia formulated in 2002) for prioritizing demining for realization of sustainable growth and stable society, at the time of both ex-ante and ex-post evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives, "to promote demining activities of CMAC by procuring demining equipment such as mine and UXO detectors". According to the database of CMAC, the equipment procured under the project has been active and fully used for all demining projects implemented by CMAC. The procured equipment has replaced the existing deteriorated equipment items which reached an end of the service life. The spare parts procured under the project contributed to prolong the life of the existing equipment. The brush cutters make demining operation more efficient after CMAC has changed the operation system. Previously, the brush cutter cleared everything on the ground including the grass and trees,

while brush cutters currently only cut bushes and big trees and people cut grasses instead[1]. This enabled brush cutters operate for less hours, and therefore, the brush cutters could be long lasting. According to CMAC, with the combination of operation of demining detectors, dog team, brush cutters and others, as well as the introduction of one-man one-lane operation system, the demining activities have become more efficient and productive[2]. As a result, the annual cleared land areas have expanded at a pace exceeding the CMAC's action plan after the completion of the project, and the equipment procured under the project have played a central role. In addition, with the renewed equipment available, the demining operators feel safe during the demining activities, according to a field manager of CMAC.

As for impact, the trend of death and injuries due to the mines/UXO have been decreasing. The data reported by Cambodian Mine/ERW Victims Information System showed that the number of victim has decreased from 352 victims in 2007 to 186 victims in 2012. The re-use of land areas after the demining has increased, which have been used for resettlement and agriculture. Furthermore, CMAC's experiences has contributed to many infrastructure development projects of the country, for instance, the Project for the Construction of Neak Loeung Bridge which is one of the biggest grant aid projects of JICA, CMAC has done a great job by removing many UXOs left over.

Therefore, effectiveness/impact of this project is high.

Quantitative Effects

Indicator	Year 2007 (before the project) Actual value	Year 2011 (Target year) Target value	Year 2011 (Target year) Actual value	Year 2012 (full fiscal year at the time of ex-post evaluation) Actual value
Indicator 1: Annual cleared area (km^2) by CMAC	27	54	52	76.7
Indicator 2: Accumulated cleared area (km^2) by CMAC	200	n.a	na	469.5
Indicator 3: The number of total detectors of CMAC, and the number of operational detectors among them (mine detectors and mine/UXO detectors)	Mine detectors Total: 2,570 Operational: 1,815 Usable*1: 1,562 Mine /UXO detectors Total: 115 Operational: 112	n.a.	Mine detectors Total: 2,740*2 Operational: 1,275 Mine /UXO detectors Total: 202 Operational: 137	Mine detectors Total: 3,127*3 Operational: 1,543 Mine /UXO detectors Total: 265 Operational: 216
Indicator 4 Operation hours of existing brush cutters	Average 1,600 hours/year	n.a	1,388h/year	1,443h/year

Source: CMAC

*1 1,815 includes 253 detectors under repair, which means the number of usable detectors at the time of BD was 1,562. Among usable 1,562 detectors, 795 were within the service life, and the rest (767) reached/almost reached the end of service life.

*2 During 2007 to 2011, some of the equipment were written-off, therefore, the stock-take in 2011 has figured 2,740 sets of mine detectors.

*3 This figure include the equipment procured under the Japanese Grant Aid "Project for Improvement of Equipment for Demining Activities" (Phase Ⅵ).

Note: The above indicators are set at the time of ex-post evaluation to measure the effect of the project.

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and the project period were within the plan (ratio against the plan: 93%, 69%). Therefore, efficiency of this project is high.

4 Sustainability

The operation and maintenance of the equipment procured by the project have been carried out by CMAC. CMAC has been continuing its activities as a government institution which directly reports to the Prime Minister. The Government of Cambodia has made use of CMAC to fulfill its mandate to clear mines. CMAC's operation is carried out based on a 5 year strategic plan. The number of personnel of CMAC including field operators is 1,749, which is sufficient to operate under CMAC's 5 year strategic plan (2014-2018). CMAC has total 32 maintenance staff, which is also sufficient for the maintenance activities.

There is no problem in technical aspect, as CMAC's staff has quite long experience of demining by using the same types of equipment procured under the project. Those experienced staff members transfer knowledge of operation and maintenance of the equipment to other members. In addition, the manufacturer provided training on how to use, maintain, and repair equipment upon delivering equipment to CMAC, and CMAC also carries out training for the use and maintenance of the equipment. Further, JICA has supported to strengthen CMAC's capacity by sending senior volunteers and by carrying out training courses under the technical cooperation project. CMAC's technical level is so high that CMAC transfers its technical knowledge of demining operation to other countries such as Columbia and Laos under the south –south cooperation of JICA. According to the interview at the CMAC's training center in Kampong Chhnang, Central Workshop and deminers, the manual of demining operation is very useful. The manual is in English and Central Work Shop has translated some manual in Khmer

[1] Those who cut grasses must wear Personal Protective equipment, and in addition, the machine is attached with safety device to protect fragments scatter during the running of machine. Thus, the safety of the activities is ensured.

[2] In addition, CMAC has introduced new methods of clearing mine into its operation including land release method –an efficient method for releasing suspected hazard area through non-technical survey, technical survey, and clearance.

which makes deminers who do not understand English feel easier to operate equipment.

Financially, CMAC has the limited funding from the government. Although the government has a mandate to clear land mines, and priority of government in demining field is high, allocation of the government's budget for this sector is not enough to cover all the activities. Instead, CMAC's budget including maintenance budget has been stably funded by donors. Most donors are funding CMAC for their operating cost, but no other donors than JICA has provided capital expenses (purchase of brush cutters, vehicles, mine detectors and others) while the deterioration of the equipment is relatively fast. Therefore, CMAC may face a problem of renewing equipment in future.

CMAC has no problem in the current status and practice of operation and maintenance. The equipment is maintained well by the Central Workshop (a department of CMAC). CMAC conducts stock-take twice a year for consumable items and once a year for equipment. During the stock-take, consumables and equipment are inspected, and if necessary repair and replacement of spare parts are conducted at the same time. The spare parts have been timely replaced.

As the project has some problems in financial aspect, sustainability of the effects of this project is fair.

5 Summary of the Evaluation

The project has largely achieved its objectives, "to promote demining activities of CMAC by procuring demining equipment such as mine and UXO detectors", as the accumulated cleared land areas has expanded with the efficient and effective use of the equipment procured under the project. Positive impacts have been identified in terms of decreasing trends of death and injuries due to the mines/UXO, and the re-use of cleared land.

As for sustainability, there is an issue of limited financial resources, however, there is no problem in the institutional setup of CMAC, and CMAC has high technical capacity. In addition, CMAC maintains the equipment well with appropriate procedures.

In light of the above, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:

It is recommended that CMAC try to secure own financial resource to purchase the spare parts as well as other demining equipment, because donors' support in providing the equipment and spare parts are becoming scarce. In order to sustain demining activities, CMAC is recommended to request the regular budget from Cambodian government or consider how to generate its own revenue in the future. For instance, CMAC could be the training providers to other countries by using high technical knowledge of demining as CMAC has already done under JICA's south-south cooperation. This might be one of the financial resources in the future. CMAC also could consider implementing commercial demining activities for some companies' land by charging fees.

Lessons learned for JICA:

The purchase/renewal of CMAC's equipment has been almost exclusively funded by Japan, and it is difficult to foresee how CMAC will procure equipment for demining activities if the Japanese government stops its grant aid for equipment and spare parts. In case a project in which sustainability is very much dependent on donors' funds, JICA could propose a pre-condition to a recipient government to secure budget for maintenance and renewal of equipment.

Brush Cutter cutting tree in a mine field in Banan district


Deep search activities at a Mine Field in Banan district