

Internal Ex-Post Project Evaluation 2010  
Evaluation Report

May 2023

Japan International Cooperation Agency  
(JICA)

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JR
23-09

## 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	Cambodia	Health / Health Care	The Project for Infectious Disease Control	0306300
G	2004	Ex-post Evaluation	Zambia	Water Supply	The Project for Groundwater Development and Sanitation Improvement in the Northern Province	0407000
G	2004	Ex-post Evaluation	Palau	Roads	The Project for Improvement of Interisland Access Road	0408800
G	2004	Ex-post Evaluation	Cambodia	Roads	The Project for Rehabilitation of Bridges along the Main Trunk Roads	0411600
G	2005	Ex-post Evaluation	Bolivia	Transportation / Traffic / General	The Project for the Rehabilitation of Japan-Bolivia Friendship Bridge in the Republic of Bolivia	0501400
G	2005	Ex-post Evaluation	Cambodia	Water Supply	The Project for Rural Drinking Water Supply in Kampong Cham Province	0503700
G	2005	Ex-post Evaluation	Zambia	Roads	The Project for the Improvement and Maintenance of Lusaka City Roads, Phase 3	0506100
G	2005	Ex-post Evaluation	Senegal	Broadcasting	The Project of Reinforcement of TV broadcasting capacity of Radiodiffusion Télévision Sénégalaise (RTS)	0506300
G	2005	Ex-post Evaluation	Mozambique	Education	The Project for the Construction of the Chimoio Primary Teacher Training Center	0507000
G	2005	Ex-post Evaluation	Bolivia	Agricultural Machinery	The Project of Equipment for the Rural Development of La Paz Prefecture	0507800
G	2005	Ex-post Evaluation	Samoa	Fisheries	The Project for Renovation and Extension for Apia Fisheries Wharf and Related Facilities	0508700
G	2005	Ex-post Evaluation	Cambodia	Health / Health Care	The Project for the Improvement of Mongkul Borey Hospital in Banteay Meanchey Province	0509000
G	2005	Ex-post Evaluation	Viet Nam	Health / Health Care	The Project for the Improvement of Hoa Binh General Hospital	0509200
G	2005	Ex-post Evaluation	India	Health / Health Care	The Project for Improvement Sardar Vallabhbhai Patel Post Graduate Institute of Paediatrics in the State of Orissa	0509400
G	2005	Ex-post Evaluation	Senegal	Education	The Project of Construction and Equipment of the Training School for Primary School Teachers	0509800
G	2005	Ex-post Evaluation	Paraguay	Education	The Project of Improvement of Educational Equipment for Vocational Education	0510500
G	2005	Ex-post Evaluation	Bolivia	Health / Health Care	The Project for Improvement of Medical Equipment in the Southern area of Beni Prefecture	0510600
G	2005	Ex-post Evaluation	Honduras	Roads	The Project of the Reconstruction of the Las Hormigas Bridge	0510700
G	2005	Ex-post Evaluation	Pakistan	Health / Health Care	The Project for the Renovation of Islamabad Children's Hospital	0511400
G	2005	Ex-post Evaluation	Palau	Fisheries	The Project for the Improvement of North Dock of Peleliu State	0513300
G	2006	Ex-post Evaluation	Pakistan	Transportation / Traffic / General	The Project for the Enhancement of Training Capabilities of Construction Machinery Training Institute	0600900
T	2003	Ex-post Evaluation	Cambodia	Water Supply	The Project on Capacity Building for Water Supply System	200601334
T	2002	Ex-post Evaluation	Laos	Health / Health Care	The Project for Strengthening for Health Services for Children (KIDSMILE)	200601472
T	2004	Ex-post Evaluation	Laos	Electrical Power	The Project on Lao Electric Power Technical Standards Promotion	200601477
T	2003	Ex-post Evaluation	Laos	Government / General	The Legal and Judicial Development Project	200601488
T	2004	Ex-post Evaluation	Laos	Government / General	The Project for Capacity Building in PIP Management	200601503
T	2002	Ex-post Evaluation	Viet Nam	Agricultural Processing	The Project for Strengthening of food Industries Research Institute	200601696
T	2004	Ex-post Evaluation	Viet Nam	Primary Education	The Project for Strengthening Cluster-Based Teacher Training and School Management	200601706

Type of Assistance	Project Start Year*	Type of Evaluation	Country	Sector/Theme	Project Name	Project Number
T	2004	Ex-post Evaluation	Viet Nam	Agriculture / General	The Project for Improvement of Plant Quarantine Treatment Techniques Against Fruit Flies on Fresh Fruits	200601747
T	2005	Ex-post Evaluation	China	Rivers / Erosion Control	The Human Resources Development Project for Water Resources	200601968
T	2000	Ex-post Evaluation	China	Forestry / Forest Preservation	The Model Afforestation Project in Sichuan	200601977
T	2001	Ex-post Evaluation	China	Social Welfare Services	The Project for Human Resources Development of Rehabilitation Professionals	200601990
T	2000	Ex-post Evaluation	Paraguay	Population / Family Planning	The Project for Strengthening Continuing Education in Nursing and Midwifery in the South of the Republic of Paraguay	200603624
G	2006	Ex-post Evaluation	Angola	Water Resources Development	The Project for Emergency Rural Water Supply in Neighboring Provinces of Luanda	0604900
G	2006	Ex-post Evaluation	Guatemala	Water Supply	The Rehabilitation Project for Water Purification Plant in Inland Areas (Phase 3)	0607100
G	2006	Ex-post Evaluation	Honduras	Roads	The Project of the Rehabilitation of Agua Caliente Bridge	0607400
G	2006	Ex-post Evaluation	Honduras	Government / General	The strengthening of the fire-fighting capacity project	0607500
G	2006	Ex-post Evaluation	Viet Nam	Health / Health Care	The Project for Improvement of Safety Laboratory for National Institute of Hygiene and Epidemiology	0608400
G	2006	Ex-post Evaluation	Zambia	Health / Health Care	The Project for the Improvement of Expanded Programme on Immunization (Phase 2)	0609300
G	2006	Ex-post Evaluation	Guatemala	Health / Health Care	The Project for the Improvement of Major National Hospitals in Metropolitan Area	0609500
G	2006	Ex-post Evaluation	Zambia	Health / Health Care	The Project for Malaria Control	0611500
G	2006	Ex-post Evaluation	Mozambique	Health / Health Care	The Project for Malaria Control	0613500
G	2006	Ex-post Evaluation	Bolivia	Transportation / Traffic / General	The Project of Equipment for Expansion of Local Roads	0613800

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Cambodia office: October, 2011

Country	The Project for Infectious Disease Control
Cambodia	

## I. Project Outline

Project Cost	E/N Grant Limit: 905 million yen 1 <sup>st</sup> Phase: 395 million yen 2 <sup>nd</sup> Phase: 232 million yen 3 <sup>rd</sup> Phase: 278 million yen	Contract Amount: 767 million yen 1 <sup>st</sup> Phase: 364 million yen 2 <sup>nd</sup> Phase: 152 million yen 3 <sup>rd</sup> Phase: 251 million yen
E/N Date	1 <sup>st</sup> Phase: August 2003 2 <sup>nd</sup> Phase: August 2004 3 <sup>rd</sup> Phase: August 2005	
Completion Date	November 2006	
Implementing Agency	Ministry of Health of the Kingdom of Cambodia	
Related Studies	Basic Design Study: October 2002-May 2003	
Contracted Agencies	Consultant(s)	Japan International Cooperation System
	Contractor(s)	N/A
	Supplier(s)	(1 <sup>st</sup> Phase) SEM Corporation (2 <sup>nd</sup> Phase) Iwatani Corporation Ogawa-Seiki Co. Ltd.,(3 <sup>rd</sup> Phase) Toyota Tsusho Ogawa-Seiki Co. Ltd.
Related Projects (if any)	<p>Japanese cooperations: JICA Technical Cooperation:</p> <ul style="list-style-type: none"> <li>- Maternal Child Health (MCH) Project (1995-2004), MCH Project Phase II (2000.04-2005.03)</li> <li>- Tuberculosis (TB) Control Project (1999.08-2004.07) TB Control Project Phase II (2004.08-2009.07)</li> </ul> <p>Grant Aid:</p> <ul style="list-style-type: none"> <li>- The Project for Improvement of Maternal and Child Health Service (1998)</li> <li>- The Project for Improvement of the National Tuberculosis Center (1999.8-2001.3)</li> <li>- The Project for Improvement of Medical Equipment of the Siem Reap Hospital (2000.4-2001.3)</li> <li>- The Project for Reduction of Infant Mortality Rate and Disease Rate (2001)</li> <li>- The Project for the Construction of National Maternal and Child Health Center (1995.12-1997.3)</li> </ul> <p>Other donors' cooperations: World Bank, UNICEF, AusAID, Center for Disease Control (CDC)/Atlanta, The Global Alliance for Vaccines and Immunization (GAVI)</p>	
Background	<p>Due to the instabilities of political situation and battered economy, people in Cambodia have suffered the poor health status. Poor logistic system of Expanded Programme on Immunization (EPI), and lack of vaccines and related equipment made it difficult to improve the EPI coverage for children. Infant Mortality Rate (IMR) and under-five mortality rate of Cambodia were worse compared with other South-East Asian countries. With the support from foreign donors, Royal Government of Cambodia (RGC) made much effort to combat with these problems. The Directly Observed Treatment with Short-course chemotherapy (DOTS), one of such support was successfully conducted with the JICA TB control project since 1999. However in order to tackle with the epidemic of TB and other vaccine preventable diseases, such as polio and measles, vaccine, drugs, reagents, and related medical supplies and equipment were still insufficient. Therefore, RGC requested the government of Japan for grant aid to improve the immunization rate and increase the TB smear detection rates.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To improve the immunization rate by improving logistics of EPI (through procurement of vaccines and cold chains etc. ) as well as to increase the TB smear detection rates by procuring anti-tuberculosis drugs and test reagents for smear examination of sputum (The ultimate goal is to prevent the infectious diseases such as TB, and vaccine preventable diseases)</p>	
	<p><b>Outputs</b></p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Procurement of EPI vaccines and cold chains equipment, anti-tuberculosis drugs and test reagents for smear examination of sputum and other EPI logistic equipments</li> </ul> <p>Cambodia Side</p> <ul style="list-style-type: none"> <li>- Provision of safety storage for procured goods</li> <li>- Distribution of drugs and equipments through existing Health delivery system</li> <li>- Securement of the location for incinerator and training of people who deal with incineration of used injections, etc.</li> </ul>	



## II. Result of the Evaluation

### Summary of the Evaluation

With the donors' assistance, the EPI showed the successful results, and target indicators for infectious diseases and MCH were improving. However, further improvement was needed, especially in the field of MCH and communicable diseases.

This project has largely achieved its objectives of improving the immunization rate of measles and polio by improving logistics of EPI, and increasing the TB case detection rate by procuring anti-tuberculosis drugs and test reagents. As a result, the project has achieved the target value of immunization rate for measles and polios for children under one year as well as TB case detection rate of smear (+) pulmonary TB. Furthermore, the appropriate system as well as the network to manage cold chain equipment has been set up under the EPI program of the Ministry of Health. As for sustainability, it was observed that the project has some problems in developing and designing O&M record system for cold chain equipment, particularly motorbikes and pickups, and late disbursement of O&M budget is also a challenge for the project due to part of technical and financial aspect. Therefore, the sustainability of this project is fair.

For relevance, the project has been highly relevant with Cambodia'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, project period exceeded the plan. In the light of above, this project is evaluated to be satisfactory.

#### 1 Relevance

The project has been consistent with Cambodia's national health sector strategic plan (National Strategic Development Plan (NSDP 2006-2010) as well as the Second National Health Sector Strategic Plan (2008-2015) which focused on MCH and other infectious diseases, development needs in decreasing the mortality and morbidity of TB, HIV/AIDS and MCH-related diseases, as well as Japan's ODA policy, at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

#### 2 Efficiency

Project cost was within the plan (85% against plan). However, project period exceeded the plan due to the fact that it took more time for drug procurement (ratio against plan: 119%, 119% and 97% for each phase). Therefore, efficiency of the project is fair.

#### 3 Effectiveness/Impact

This project has achieved its objectives, for the target value of the year 2010 as shown in the table below, of improving the immunization rate of measles and polio for children under one year by improving logistics of EPI, and increasing the TB case detection rate of smear (+) pulmonary TB by procuring anti-tuberculosis drugs and test reagents. Considering the fact that other donors, such as UNICEF and WHO have also been contributing to EPI programme, it is more correctly to say that the project has achieved its objectives with the combined efforts of such donors contributing to EPI programme.

As for the logistic management, through visiting and interviewing with staff of HCs (some HCs were randomly selected from very remote area, mountainous area, area along Tonle Sap and borders, and from HCs under Operational District (OD) which showed the low immunization rates in the most recent EPI record), it is considered that health staff can properly manage the cold chains and other equipment since the appropriate system and network to manage cold chain equipment has been set up. Especially for the HC level, one or two staff of each HC was assigned to be responsible for EPI program. It is deemed that the cold-chains equipment are appropriately used and managed in most of HCs.

Therefore, effectiveness/impact of this project is high.



Vaccine storage for distribution and outreach activity



Vaccine storage for routine immunization at HC

#### Quantitative Effects

Indicator(unit)	Baseline value (2002:BD Year)	Baseline value 2005-2008	Target value (2010:Target year)	Actual value (201 :Target year)
% of children under one year immunized against Measles	na	79%	85%	93%
% of children under one year immunized against Polio	na	na	90%	92%
TB case detection rate of smear (+) pulmonary TB (%)	57% (*)	66%	>70%	79%

Data source: pp.24 – 25 of Health Strategic Plan (2008-2015) , MOH Cambodia, April 2008 and Annual Report of EPI Program 2010

(\*) Data source from WHO report 2008 p.93 country profile Cambodia

#### 4 Sustainability

There is no problem in the institutional aspect in terms of EPI logistics; however, the project has some problems in current status of operation, maintenance, and management, such as the poor electricity conditions in Sre Ambil OD, improper usage of refrigerators at some HCs, potential shortage of spare parts of cold chain equipment and poor O&M recording. As for the technical aspect, trainings for health staff on EPI, TB smear examination and DOTS have been properly conducted on a regular basis and health staff has acquired sufficient knowledge and skills, but they have some difficulties to repair the major defects of fridges. As for the financial aspect, the budget allocation on EPI implementation has been smoothly done and O&M budget has been properly allocated through Annual Operation Plan (AOP), but there is a minor problem that the disbursement of O&M budget toward HCs is delayed.

Therefore, sustainability of this project is fair.



Guideline board for minor repair

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

- The Ministry of Health should check the utilization condition of installed equipment on a regular basis, as the iceliner refrigerator installed in Sre Ambil OD was left unused without any maintenance for a long time because of the poor electricity condition. More importantly, the Ministry of Health should take into consideration on using the existing inventory that have been submitted by PHD annually as an effective tool to monitor the condition of installed equipment and provide necessary feedback to provincial level.
- The Ministry of Health should provide O&M staff of HC, OD and PHD with the instruction and know-how to make record or check-list in order to check and follow-up the condition of equipment.
- Somehow, O&M budget is not setting with high priority compared to other important programs of the Ministry and the procedure of budget disbursement is late than the plan due to government procedure, So, the Ministry of Health should consider to decentralize budget to the provincial level by using Decentralization and Deconcentration Mechanism.

#### Lessons learned for JICA:

- The one of the important factors to improve the EPI programme is whether the effective logistic management system from the central level to the HC level can be established. Therefore, it is imperative that the present logistic management system as well as the absorptive capacity of partner country should be carefully examined, so that the foreign assistance can properly fit into the feasible and manageable framework for his/her EPI programme.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Zambia office: October, 2011

Country	The Project for Groundwater Development and Sanitation Improvement in the Northern Province
Zambia	

### I. Project Outline

Project Cost	E/N Grant Limit: (1) 491 million yen; (2) 286 million yen	Contract Amount: (1) 490 million yen; (2) 285 million yen
E/N Date	(1) June 2004; (2) July 2005	
Completion Date	(1) January 2006; (2) February 2007	
Implementing Agency	Ministry of Energy and Water Development (MEWD) *Note: Mandate of rural water supply and sanitation has been transferred to Ministry of Local Government and Housing (MLGH) since 1994.	
Related Studies	Basic Design Study: March - July 2003; Detailed Design Study: September 2004 - March 2005	
Contracted Agencies	Consultant(s)	Japan Techno
	Contractor(s)	Nissaku
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	Japanese cooperations: The Project for Groundwater Development and Sanitation Improvement in Southern Province Phases 1 & II (JICA Grant Aid, 1985 and 1988); Project of Capacity Development for Maintenance of Rural Water Facilities (JICA Technical Cooperation, 2005-2007); Sustainable Operation and Maintenance Project for Rural Water Supply (SOMAP 2) (JICA Technical Cooperation, 2007-2010); The Project for Support in National Roll-out of Sustainable Operation and Maintenance Programme (SOMAP 3) (JICA Technical Cooperation, 2011-2016); Other donors' cooperations: National Rural Water Supply and Sanitation Programme – Support to Northern Province (AfDB, ongoing)	
Background	Rural access rate to water supply and sanitation services was still low at around 30%. Northern province has quite good amount of rainfall (1,000-1,400mm/year), but many villagers got water from hand dug shallow wells or rivers, which caused water-borne diseases, water-fetching burden on women, low economic activities, etc. Also, the province is distant from the capital (800km away), and thus was relatively underdeveloped compared to other regions. Under such circumstances, the government of Zambia requested Grant Aid from Japan.	
Project Objectives	Outcome To ensure sustainable supply of safe water by development of deep well water supply facilities in seven districts in Northern Province.	
	Outputs Japanese Side - 163 deep wells with hand pumps and related facilities ( <i>Note: the planned number of wells was 175</i> ) Phase 1: total 60 wells in Mbala, Mpulungu and Luwingu Phase 2: total 103 wells in Mpika, Chinsali, Isoka, Nakonde and Mbala - Equipment for survey and excavation and for maintenance activities - Software component: workshop and training for capacity development of district- and sub district-level water committees (D-WASHE and Sub-WASHE) and formulation of village-level water committees (V-WASHE) Zambia Side - Engineers, drilling staffs, drilling technique instructors - Existing drilling equipment - Local cost	

### II. Result of the Evaluation

Summary of the Evaluation
<p>Northern province in Zambia, being distant from the capital and thus relatively underdeveloped, was suffering from lack of supply of safe drinking water. People living in these areas had been originally using hand dug shallow wells or rivers.</p> <p>This project has partially achieved its objective of sustainable supply of safe water through construction of deep wells and capacity development for water management, as shown in the larger amount of safe water supply right after the project completion (2007) than planned at the ex-ante evaluation, and the improved technical capacity of contractors and drilling engineers/technicians. However, the amount of safe water at the time of the ex-post evaluation could not be confirmed as the data was not available. As for sustainability, while no problem has been observed in structural and technical aspects of operation and maintenance of the project facilities/equipment, some problems have been observed in terms of financial aspects due to relatively low collection rate of maintenance fees from households, and current status of operation and maintenance in that some hand pumps are broken down.</p> <p>For relevance, the project has been highly relevant with Zambia's National Development Plans, the National Rural Water Supply and Sanitation Programme (NRWSSP), development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation.</p> <p>For efficiency, although the project cost and the project period were within the plan, the number of wells constructed was less than planned due to increasing cost of materials.</p> <p>In the light of above, this project is evaluated to be partially satisfactory.</p>

**1 Relevance**

The project has been highly relevant with Zambia's development plans (development of water and sanitation infrastructure aimed in the National Water Policy 1994, the Sixth National Development Plan 2011-2015 and Water Supply and Sanitation Programme 2007-2015), development needs (improvement of low access rate of water supply), as well as Japan's ODA policy (Country Assistance Policy for Zambia 2002), at the time of planning and ex-post evaluation. Therefore, its relevance is high.

**2 Efficiency**

Both project cost and project period were within the plan. However, the quantity of the output was decreased from the planned 175 deep wells to actual 163 deep wells due to a rise in fuel price and an appreciation of the Zambian kwacha against the US dollar. Therefore, efficiency of this project is fair.

**3 Effectiveness/Impact**

The amount of safe water supply (liter/minute/well) was achieved beyond the target value in the target year (2007); however, the data of the ex-post evaluation was not available. The functioning rate of hand pumps are kept more than 80 %, though 20% out of them was requiring repair, and the rate is based on the observation of only ten locations in 2010 and more comprehensive or updated data was not available. Besides the use of the wells, based on a JICA study in 2010, it was found that technical capacity of contractors and drilling engineers/technicians were improved through the soft component of the project.

The rural rate to water supply still remains low (percentage of rural population with access to safe and reliable water within 500 meter is 6-20% by district), however, according to the implementing agency, the number of people who has access to safe and reliable water has been increased through this project. People living in these areas had been originally using hand dug shallow wells or rivers, which causes water-borne diseases, water-fetching burden on women, low economic activities, etc. Therefore, this project contributed to improve their living standard of rural population.

No negative impact was observed in terms of the natural environment. However, based on the survey conducted by AfDB, ground water in Northern Province contains high level of iron, which affects people's use of water from wells. One possibility of the increase in the iron content is corrosion of the borehole, but this has not been proved and confirmed scientifically. Thus, the issue is currently not considered as a negative impact caused by this project, but rather an inhibiting factor against maximization of effectiveness / impact of the project. AfDB has facilitated Provincial Support Team (PST), which is in charge of supervising operation and maintenance of boreholes at provincial level, and some other donors to form a working group to look into the issue. Therefore, effectiveness of the project is fair.

**Quantitative Effects**

Indicator(unit)	Baseline year (2003) (Actual value)	Target year (2007) (Planned value)	Target year (2007) (Actual value)	Ex-post evaluation year (2010) (Actual value)
Amount of safe water supply (liter/person/day)	0	30	Not available	Not available
Amount of safe water supply (liter/minute/well) <i>Note: water safety is determined by national water quality standard, except iron (can be &gt;2mg/liter)</i>	0	More than 10	Average: 45.2 Mpika: 42.5 Chinsali: 55.1 Isoka: 29.9 Nakonde: 29.1 Mbala: 68.3 Mpulungu: 42.4 Luwingu: 49.2	Not available
Functioning rate of hand pumps	-	-	-	8 out of 10 sites (wells) (80%) observed as of January 2010

Source: PCR, Post observation report (Jan 2010)

**4 Sustainability**

The project has some problems in financial aspect due to the lack of commitment of households: maintenance fee of protected boreholes is to be collected from households, but collection rate is relatively low at 12-52%. Also, the implementing agency has some problems in the status of operation and maintenance due to breakdown of some hand pumps and some village-level maintenance groups not active as of January 2010, and unavailability of updated information from them. However, no problem has been observed in structural/technical aspects of the implementing agency due to the good structure of operation and maintenance with allocation of necessary staffs, and the retention of trained staffs as well as trainings for new staffs provided by the on-going AfDB project. Therefore, sustainability of the project is fair.

**III. Recommendations & Lessons Learned**

Recommendations for the Implementing agency:

- It is recommended that efforts of AfDB against the issue of iron containment are linked up with a scientific research institution within Zambia for their possible collaboration in this matter.
- The data on water supply conditions should be readily available at the central ministry level by functioning the Information Management System (IMS). It is recommended that IMS should be developed as soon as possible.
- MLGH is recommended to investigate causes for inactive village-level maintenance groups and low collection rate of maintenance fees from them, and to take actions to improve village-based maintenance of wells and pumps accordingly.

Lessons learned for JICA:

As for the iron contents, this issue has been already shared among other donors. JICA is going to implement the research/survey to find out the current status and provide technical advice to cope with this problem through the on-going technical cooperation project (2011-2016).

## Internal Ex-Post Evaluation for Grant-Aid Project

conducted by Pacific Department (Palau Representative Office): October, 2011

Country	The Project for Improvement of Interisland Access Road
Palau	

### I. Project Outline

Project Cost	E/N Grant Limit: 771 million yen	Contract Amount: 748 million yen
E/N Date	1 <sup>st</sup> Phase: June 2004, 2 <sup>nd</sup> Phase: June 2005	
Completion Date	1 <sup>st</sup> Phase: December 2005, 2 <sup>nd</sup> Phase: November 2006	
Implementing Agency	Ministry of Resources and Development (Bureau of Public Works is in charge of the maintenance)	
Related Studies	Basic Design Study: October 2003 to March 2004	
Contracted Agencies	Consultant(s)	Joint-venture of the Nippon Koei Co., Ltd., and the Oriental Consultants Co., Ltd.
	Contractor(s)	Nishimatsu Construction Co., Ltd.
	Supplier(s)	N/A
Related Projects (if any)	Other donors' cooperations: Taiwan(Grant-Aid - Road Rehabilitation / Pavement), U.S.A.(Grant-Aid - Road Construction)	
Background	<p>The Republic of Palau with a population of 19,129 (according to the 2000's national census) consists of several small islands. Four causeways which connect four islands of metropolitan area of Palau have been dilapidated. (More than 60 years have passed after the construction) With the increased volume of traffic, the highway capacity has become insufficient causing frequent occurrence of traffic accidents. There were blockades due to the deteriorated road surface and water-covered road during heavy rain, so that the limited road safety facilities were becoming an issue. Technical barriers and the budgetary limitations had made it difficult for the government of Palau to implement the large-scale project to remedy such situations. Therefore, the government of Palau requested the government of Japan for grant aid to renovate these causeways. The preliminary study conducted by JICA in March 2003 has led to the conclusion that it is urgently needed to extend and renovate the causeways considering the magnitude of benefits to local communities.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To decrease the transportation deficiency and to ensure the smooth operation of transportation by the extension and renovation of four causeways (including Minato Bridge) which connect four islands of metropolitan area of Palau</p>	
	<p><b>Outputs</b></p> <p>Japanese side</p> <ul style="list-style-type: none"> <li>- Extension and renovation of Meyungs Causeway (for the length of 0.67km)</li> <li>- Extension and renovation of Airai Causeway (for the length of 0.73km)</li> <li>- Extension and renovation of Malakal Causeway (for the length of 0.51km)</li> <li>- Extension and renovation of interisland access roads of Malakal Island (for the length of 1.63km)</li> <li>- Renovation of Minato Bridge (for the length of 0.075km)</li> </ul> <p>Palau side</p> <ul style="list-style-type: none"> <li>- To conduct the EIA (Environmental Impact Assessment) and necessary administrative proceedings</li> <li>- To secure the land for construction</li> <li>- To connect the electric power line to the temporary facilities</li> <li>- To relocate the underground telecommunication lines</li> </ul>	

### II. Result of the Evaluation

#### Summary of the Evaluation

The State of Koror, which commands 70% of total population of Republic of Palau, where the governmental organizations and business districts are concentrated, is consisted of Koror island, and some part of Malakal Island, Ngerekebesang Island and Babeldaob Island. Four causeways, which connect four islands of metropolitan area of Palau, were constructed in 1930's, and have been dilapidated. Technical barriers and the budgetary limitations had made it difficult for the government of Palau to implement the large-scale project to remedy such situations. However, in order to deal with the increasing volume of traffics and to secure the safety transportation, it is urgently needed to extend and renovate those causeways.

This project has largely achieved its objectives, in ensuring the smooth operation of transportation by the extension and renovation of four causeways. After the project, even though the volume of traffics has continuously been increasing, the number of cases for the damages on the roads has been decreased. With the widening of the roads and better pavement condition, the traffic jams have been alleviated, and segregation of sidewalk from roadways has increased the safety for pedestrians. As for sustainability, there are some minor problems such that the medium scope of renovation has been delayed due to the budgetary constraints and the inadequate maintenance skills of engineers of some roads. For relevance, the project has been highly relevant with Palau'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 periods exceeded the plan.

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

### 1 Relevance

The project is highly relevant with Palau's development plan to upgrade the main trunk roads of metropolitan area to promote the economic growth, development needs in renovating the four causeways (including Minato Bridge) which connect four islands of metropolitan area of Palau, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Efficiency

The project cost was within the plan (ratio against the plan 97%); however the project periods exceeded the plan (ratio against the plan 120%). One of the reasons of this extension of project period is that it took time to construct the retaining wall of inverted T-section as the construction work was only possible in the limited period of tidal range. Therefore, the efficiency of the project is fair.

### 3 Effectiveness/Impact

This project has largely contributed to its objectives in ensuring the smooth operation of transportation. Due to the unavailability of data, it was not possible to quantitatively verify the increased safety by the actual number of traffic accidents. However, with the interview of those concerned at the Bureau of Public Works and the Bureau of Public Safety, and with the site visits, it is considered that the project has achieved its objectives. After the project, even though the volume of traffics has continuously been increasing, the number of cases for the damages on the roads has been decreased. With the widening of the roads and better pavement condition, the traffic jams have been alleviated, and segregation of sidewalk from roadways has increased the safety for pedestrians. Furthermore, the project has also contributed to the tourism, the one of the major industries of Palau, by improving the accessibility to the resort areas. Therefore, the effectiveness/impact of the project is high.



Full view of Meyungs Causeway

#### Quantitative Effects

Indicators	Baseline value (2003:Basic Design year)	Target value (2008:Target year)	Actual value (2008:Target year)	Actual value (2011:Ex-post evaluation year)
(1) Improvement of robustness evaluation (The causeway will be renovated after the expected durable life of 50 years)	No indicator set as baseline value	Proxy indicator  Actual performance of road renovation	Between the year 2006~2011 Meyungs Causeway : 0 time Malakal Causeway : 1 time (pipe explosion) Airai Causeway : 2 times (Sagging roads due to the washout of riprap revetment)	
(2) Improvement of safety (The number of traffic accident occurred outside of drive way)	Number of traffic accidents in the metropolitan area of Koror State. (annual average for the past 7 years) 183 cases/year		Number of traffic accidents in the metropolitan area of Koror state. (No records in 2008) Year    Number of case 2006     58 2007    128 2009     97 2010    127	Number of traffic accidents in the metropolitan area of Koror state. Year 2011 147 cases (from January to August)

(Data Source : Questionnaire and Interviews with the Bureau of Public Works and Palau National Police Agency)

Reference:

①Number of vehicles registered to Police Department

year	2007	2008
number	6040	6306

(Data Source: Palau National Police Agency)

②Number of tourists to Palau by year (Unit: number of population)

Year	2003	2004	2005	2006	2007	2008	2009	2010
Number	63,328	89,161	80,578	82,239	88,175	79,25	71,887	85,593

(Data Source: Palau Visitors Authority)

### 4 Sustainability

Four causeways, the road and bridge renovated by this project have been mostly well-maintained since its completion on November 2006. According to the interviews with those at the Bureau of Public Works, Division of Facilities and Maintenance, some minor problems has been identified, such that the surface asperity of the renovated road and some delays of renovation work on Malakal Causeway. These are mainly due to the inadequate maintenance skills, lack of qualified engineers of asphalt concrete (mixing and application), and the budgetary constraint. There are no other problems in institutional aspect. Therefore, the sustainability of the project is fair.



Malakal Causeway (After the renovation of pipe explosion)

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:  
It is necessary to enhance the training program especially for engineers in order to improve their maintenance skills.

Lessons learned for JICA:  
In order to increase the sustainability of the project, much focus should be given to the soft components, such as the trainings of those engineers at the project site.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Cambodia Office: October, 2011

Country	The Project for Rehabilitation of Bridges along the Main Trunk Roads
Cambodia	

## I. Project Outline

Project Cost	E/N Grant Limit: 1 <sup>st</sup> Phase 152 million yen 2 <sup>nd</sup> Phase 844 million yen	Contract Amount: 1 <sup>st</sup> Phase 150 million yen 2 <sup>nd</sup> Phase 829 million yen
E/N Date	1 <sup>st</sup> Phase: November 2004      2 <sup>nd</sup> Phase: June 2005	
Completion Date	June 4, 2007	
Implementing Agency	The Ministry of Public Works and Transport (MPWT)	
Related Studies	Basic Design Study: February 2004 to December 2004 Detailed Design Study: June 2004 to August 2004 (October for draft explanation)	
Contracted Agencies	Consultant(s)	Katahira & Engineers International
	Contractor(s)	Obayashi Corporation (1 <sup>st</sup> Phase) , Maeda Corporation (2 <sup>nd</sup> Phase)
	Supplier(s)	N/A
Related Projects (if any)	Japanese cooperations: Grant Aid: The Project for Improvement of Bridges on National Highway Route 6A(2000-2001) Other donors' cooperations: Counter Part Fund: National Road No.2 Rehabilitation Project(2003-2005)	
Background	As of 2003, with the support from foreign donors, many roads renovation had been progressed (60% of main trunk roads for 1,200km were renovated until then). However, there was still a great demand for renovation, especially bridges along those main trunk roads which connect regional centers to Phnom Penh City. Therefore, the government of Cambodia requested the government of Japan for grant aid to rehabilitate and replace bridges to secure and facilitate the safe and sustainable transportation.	
Project Objectives	<b>Outcome</b> To secure and facilitate the safe and sustainable transportation of goods and population by rehabilitation and replacement of the bridges along the main trunk roads located in the Municipality of Phnom Penh, and the Kandal and Takeo Provinces.	
	<b>Outputs</b> Japanese Side - Replacement of the Ta Khmau II Bridge, the Prek Ho Bridge, and the Slakou Bridge, and the rehabilitation of the Chruoy Changwar Bridge. Cambodia Side - Relocation of electric power lines, telephone cables, communication wires, water pipes, removal of landmines and unexploded bombs and dismantlement of the existing three bridges.	

## II. Result of the Evaluation

Summary of the Evaluation
<p>Despite the efforts of the government of Cambodia to rehabilitate roads and bridges, there was still a great demand for renovation, especially those main trunk roads which connects regional centers to Phnom Penh City. In this regard, a number of bridges including Ta Khmau II Bridge, Prek Ho Bridge, Slakou Bridge, and Chruoy Changwar Bridge needed to be rehabilitated for the improvement of traffic condition of such main trunk roads.</p> <p>This project has largely achieved its objective: the safe and sustainable transportation of goods and population along the main trunk roads located in the Municipality of Phnom Penh, the Kandal and Takeo Provinces have been secured and facilitated. Average actual velocity for transit of the three of the four bridges and traffic regulation for large vehicles have been achieved their target values. As for sustainability, there are some problems observed in the technical aspects due to lack of qualified engineers and operation and maintenance (O&amp;M) manuals especially in the local authorities.</p> <p>For relevance, the project has been highly relevant with Cambodia'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 project period was within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>



## 1 Relevance

The project has been highly relevant with Cambodian development plan (National Strategic Development Plan (2006-2010)), development needs in strengthening transport network along the main trunk road in order to connect all corners of the country to integrate the economy, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

## 2 Effectiveness/Impact

This project has largely achieved its objectives of securing and facilitating the safe and sustainable transportation of goods and population by rehabilitation and replacement of the bridges along the main trunk roads located in the Municipality of Phnom Penh, and the Kandal and Takeo Provinces. As shown in the table below, the average actual velocity for transit of the three of the four bridges and traffic regulation for large vehicles have been achieved their target values. Lower average velocity of transit for the Chruoy Changwar Bridge is due to the traffic congestion for entering the capital of Phnom Penh.

Based on the interviews of MPWT and the Department of Public Work and Transport (DPWT), it is considered that the bridge rehabilitation has contributed to the improved convenience of transportation for surrounded communities as well as their safety awareness: neither traffic impassability days nor traffic accident on the bridges has been recorded in 2010 and 2011.

It is difficult to judge if the project has contributed to decrease in traffic vibration, noise and emission because data was not available; however, there are no complaints from the public relating to vibration and noise.

Therefore its effectiveness/impact is high.

### Quantitative Effects

Indicator(unit)	Baseline value (2004: Basic Design year)	Target value (2007: Target year)	Actual value (2007: Target year)	Actual value (2011: Ex-post evaluation year)
1) Average velocity for transit				
The Ta Khmau II Bridge	26 km/h	35 km/h	40km/h	40km/h
The Prek Ho Bridge	15 km/h	40 km/h	40km/h	40km/h
The Slakou Bridge	14 km/h	50 km/h	60km/h	60km/h
The Chruoy Changwar Bridge	42km/h	60 km/h	35km/h	35km/h
2)Traffic regulation for large vehicles	Vehicles weighted less than 10 tons	Vehicles weighted up to 20 tons	Vehicles weighted up to 20 tons	Vehicles weighted up to 20 tons

(Data Source: Actual measurement by the survey team)



Ta Khmau II Bridge



Prek Ho Bridge



Slakou Bridge



Chruoy Changwar Bridge

## 3 Efficiency

Both project period and project cost was within the plan (ratios against the plan 97% and 98% respectively). Therefore, efficiency of this project is high.

## 4 Sustainability

At the time of the post-evaluation, no problem has been observed in institutional and operation, and financial aspects, as well as current status of operation, maintenance and management. However, MPWT should take necessary steps to solve issues in technical aspects due to the insufficient number of qualified engineers and lack of O&M manuals for bridges. The structure of implementing agency has been improved by creating the maintenance team. O&M is currently carried out through bimonthly meeting between MPWT and Ministry of Economic and Finance (MEF) based on the annual plan of road maintenance and management, and it is planned to establish the monitoring team to conduct regular inspection. As for the financial aspect, MPWT assured that the implementing agency would secure the necessary budget for O&M; although, detailed information on the amount of the budget is not available. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

- It is recommended that the MPWT should officially form monitoring team as soon as possible to conduct the regular inspection and monitoring of road condition properly.
- It is recommended that the capacity of current maintenance staff of MPWT should be strengthened to become the qualified engineer through additional trainings.



# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia Office: October 2011

Country	The Project for the Rehabilitation of Japan-Bolivia Friendship Bridge in the Republic of Bolivia
Bolivia	

## I. Project Outline

Project Cost	E/N Grant Limit:351 million yen	Contract Amount:338 million yen
E/N Date	July, 2005	
Completion Date	March, 2007	
Implementing Agency	Administradora Boliviana de Carreteras (ABC) (~Nov.2006: called as Servicio Nacional de Caminos)	
Related Studies	Basic Design Study: April 2004-November 2004	
Contract Agencies	Consultant(s)	Central Consultants Inc.
	Contractor(s)	Hazama Corporation
	Supplier(s)	N/A
Related Projects (if any)	Other donors' cooperations: BID, CAF, IIRSA(Initiative for Regional Integration of South American Infrastructure)	
Background	Preparation of road network was in delay due to Bolivia's topographical reason. Only 7 % (4,283km) out of national trunk road (approximately 60,000 km) was paved. This was the bottleneck against economic development. East-West Corridor, which includes the route of La Paz-Cochabamba-Santa Cruz, was given priority among four (4) axes as Export Corridor (East-West, West-South, North-South, South) by IIRSA(Initiative for Regional Integration of South American Infrastructure). Thus, East-West Corridor, which Japan-Bolivia Friendship Bridge is located, was significantly important in terms of road network and promotion of economic activities. Besides, the Bridge required the renovation to cope with its deterioration. It was established in 1964 and was partially renovated in 1988 and 2000. Moreover, the number of vehicles with heavy load capacity, which pass the Bridge, was increasing.	
Project Objectives	Outcome To promote regional economy through activated freight traffic and passenger transportation wayside of the road by renovating the Japan-Bolivia Friendship Bridge	
	Outputs Japanese Side - Renovation of Japan-Bolivia Friendship Bridge Bolivia Side - Provision of necessary site for construction, Implementation of traffic control	

## II. Result of the Evaluation

Summary of the Evaluation
<p>For activating freight traffic and passenger transportation wayside of the road, renovating the Japan-Bolivia Friendship Bridge was considered urgent at the time of ex-ante evaluation.</p> <p>This project has achieved the objective of promoting the regional economy through activated freight traffic and passenger transportation wayside of the road by renovating the Japan-Bolivia Friendship Bridge due to the increase in volume of transportation on the bridge. As for sustainability, there was no problem observed in the project due to the proper work of the executing agency which is responsible for operation and maintenance (O&amp;M). 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 as well, both the project cost and project period were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>
1 Relevance
<p>This project has been highly relevant with the Bolivian development plan (road construction for economic activities prioritized in "Plan Bolivia"), development needs ("Transportation infrastructure improvement for economic activities"), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period were within the plan (ratio against plan: 96%, 88%). Therefore, efficiency of the project is high.</p>

### 3 Effectiveness/Impact

This project has largely achieved its objectives of promoting the regional economy through activated freight traffic and passenger transportation.

The volume of transportation expected was achieved at both target year and ex-post evaluation. The numbers of cars per day has been increased from 4,101 (Year 2004) to more than 6,309 (Year 2009) although the statistical data cannot be shown yet for the year of ex-post evaluation (Year 2011).

The increase of passenger vehicle and trailer is much more than target value (Status Quo” of 2004). Moreover, based on interviewing with the truck drivers that crossed the Japan-Bolivia Friendship Bridge, they (drivers) are satisfied with the renovated bridge because of more convenient transportation/better access.

In the light of above, its effectiveness/impact is high.



Increasing traffics on Friendship Bridge

#### Quantitative Effects

Indicator	baseline value (2004 )	target value (2009)	actual value (2009)	actual value (2010 or 2011)	
Current volume of transportation is kept: cars/day					
Passenger Vehicle	2,583	Status Quo	5,129	Status Quo	
Bus	Small	176	Status Quo	114	Status Quo
	Large	118	Status Quo	140	Status Quo
Truck	Small	111	Status Quo	Status Quo	Status Quo
	Medium	248	Status Quo	Status Quo	Status Quo
	Large	406	Status Quo	Status Quo	Status Quo
Trailer	One axis	31	Status Quo	303	Status Quo
	Two axes	204	Status Quo	286	Status Quo
	Three axes	211	Status Quo	317	Status Quo
Others	16	Status Quo	19	Status Quo	
Total	4,101	Status Quo	6,309	Status Quo	
Safety is promoted.					
Number of minor collision	N/A	Decreased	Decreased	Decreased	

(Source: Interview results to truck drivers that crossed the bridge, ABC and Statistical information provided by the ABC)

Note: “Status quo” shows the level of traffic volume that is considered to be about the same as the baseline level.

### 4 Sustainability

The structure of executing agency is considered appropriate for continuity of project effectiveness although it has been partially changed from the implementation period due to its restructuring: Concentrated responsibility in refined number of staffs; Currently, the newly created Santa Cruz branch is fully in charge of the bridge maintenance from routine/inspection of commission work to private company to large scale maintenance. The executing agency has no problem in the technical aspect because it commissions O&M to private companies that are capable, and necessary inspections are conducted by ABC staff. Also in the financial aspect, because the O&M of the bridge are covered within ABC’s annual budget and additional fund to be allocated when necessary maintenance work is recognized, no major concern was to be found. In addition, the executing agency has no problem in the status of operation and maintenance because there are not any serious issues in O&M by the commissioned private companies under the management of regional branch’s handlings except cracks on pavement and bending of steel members of bridge observed by inspection. However, ABC has evaluated that these deteriorations would not affect overall structure of the bridge and the transportability. Therefore sustainability of this project is high.



Frequent Traffics of Trucks and Trailers on Friendship Bridge

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- As maintenance work (routine, periodic, emergency) can extend lifetime of bridge, contributing decrease in total maintenance cost in longer term, the executing agency is expected to carry out inspection constantly and repair work when necessary.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Cambodia office: October, 2011

Country	The Project for Rural Drinking Water Supply in Kampong Cham Province
Cambodia	

## I. Project Outline

Project Cost	E/N Grant Limit: 1 <sup>st</sup> Phase 434 million yen 2 <sup>nd</sup> Phase 431 million yen	Contract Amount: 1 <sup>st</sup> Phase 337 million yen 2 <sup>nd</sup> Phase 285 million yen
E/N Date	1 <sup>st</sup> phase: June 10, 2005 2 <sup>nd</sup> Phase: June 12, 2006	
Completion Date	January 30, 2008	
Implementing Agency	Department of Rural Water Supply (DRWS), Ministry of Rural Development (MRD)	
Related Studies	Basic Design Study: September 2004 to February 2005	
Contracted Agencies	Consultant(s)	1 <sup>st</sup> Phase: Kokusai Kogyo Co. Ltd. 2 <sup>nd</sup> Phase: Kokusai Kogyo Co. Ltd.
	Contractor(s)	1 <sup>st</sup> Phase: Urban Tone Co. Ltd. 2 <sup>nd</sup> Phase: Nissaku
	Supplier(s)	1 <sup>st</sup> Phase: Urban Tone Co. Ltd. 2 <sup>nd</sup> Phase: N/A
Related Projects (if any)	<p>Japanese cooperations:</p> <p>JICA Development Study:</p> <ul style="list-style-type: none"> <li>- The Study on Groundwater Development in Central Cambodia (2000-2002)</li> <li>- The Study on Groundwater Development in Southern Cambodia (2001)</li> </ul> <p>JICA Grant Aid:</p> <ul style="list-style-type: none"> <li>- The Project for Rural Drinking Water Supply in Peri-Urban of Phnom Penh City (Phase 1&amp; Phase 2) (2005)</li> <li>- The Project for Rural Drinking Water Supply in Memot District of Kampong Cham Province (2011)</li> </ul> <p>Other donors' cooperations:</p> <ul style="list-style-type: none"> <li>- Construction of water well by foreign donors, such as UNICEF, ADB, World Bank, EU, Plan International, IMF</li> </ul>	
Background	<p>In Kampong Cham Province, Cambodia, many villagers in the targeted districts are engaged in the subsistent farming, and poor transportation in the limited roads has hampered smooth distribution of goods. Access to safe water supply and sanitation services was limited in such rural areas. Rural population (average population: 826 per village in the targeted area) used to get water from hand dug shallow wells, rivers or ponds which causes water-borne diseases and burdens on villagers for fetching water. In these circumstances, the improvement of access to the safe water was the pressing needs, especially in Kampong Cham Province. Therefore, the government of Cambodia requested the government of Japan for grant aid to ensure rural drinking water supply in the province.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To ensure sustainable supply of safe drinking water by constructing the deep well water supply facilities and capacity development in drilling wells as well as operation and maintenance of those facilities to the people in four rural districts of Kampong Cham Province. (Four districts are Memot District, Ponhea Kraek District, Dambae District and Tboung Khmum District)</p>	
	<p><b>Outputs</b></p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Constructed 355 deep wells with hand pumps and related facilities (Planned quantity was 380 wells)</li> <li>- Equipment for survey and excavation and Iron removal device</li> <li>- Equipment for maintenance activities</li> <li>- Software component: workshop and training for capacity development for O&amp;M and hygiene education for staff of Provincial Department of Rural Development (PDRD) as well as rural population.</li> </ul> <p>Cambodia Side</p> <ul style="list-style-type: none"> <li>- Engineers, drilling staff, drilling technique instructors</li> <li>- Existing drilling equipment</li> <li>- Local cost</li> </ul>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>Access to safe water supply and sanitation services was very limited in rural areas whose population used to get water from hand dug shallow wells, rivers or ponds. This often causes water-borne diseases and burdens on villagers for fetching water. Therefore, the improvement of access to the safe drinking water is the pressing needs in Kampong Cham Province.</p> <p>The Project has achieved its objective: It has ensured the sustainable supply of safe drinking water through constructing the deep well water supply facilities and capacity development in drilling wells as well as operation and maintenance of those facilities to the people in four rural districts of Kampong Cham Province. For the sustainability, no problem has been observed in institutional &amp; operational/technical aspects. However, some problems have been observed in financial aspect and current status of maintenance of implementing agency due to insufficient budget for conducting site monitoring to the constructed wells. For relevance, the project has been highly relevant with development plan and needs as well as Japan's ODA policy. For efficiency as well, both the project cost and the project period were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

### 1 Relevance

The project has been consistent with Cambodia's development plans, such as National Strategic Development Plan (2006-2010/2009-2013), Rural Water Supply and Sanitation Sector Investment Plan 2005-2015 (SIP), development needs (eg. limited access to the safe drinking water in the rural area), as well as Japan's ODA policy ("Country Assistance Policy for Cambodia in 2004) both at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Efficiency

Both project cost and project period was within the plan (ratios against the plan 72% and 94%, respectively). Therefore, the efficiency of this project is high. The total number of wells was 25 less than planned due to the population decline in some targeted villages.

### 3 Effectiveness/Impact

The project has largely achieved its objectives of ensuring sustainable supply of safe drinking water by constructing the deep well water supply facilities. At least 74,550 populations were served by water supply, and for all (100%) of the 355 wells, Water and Sanitation User's Groups (WSUGs) were established by 2010 and were maintained in 2011. As a result, the project has almost achieved the target value of 75.7% (81,860) of population served by water supply and has achieved 284 WSUGs respectively. As for the capacity development in drilling wells as well as operation and maintenance of those facilities to the people, it was confirmed that most WSUGs have sufficient knowledge and skills for daily inspection, cleaning, light repair and collection of fees. And the number of patients who contracted the water-borne diseases (diarrhea, dysentery and skin diseases) has been decreasing in Memot District. According to the interview with WSUGs and PDRD, it is confirmed that the people wash their body more often than before. It is deemed that the personal hygiene / hygiene management of the rural population have been gradually improving. Furthermore, the standard and simple hand pump of this project was adopted by other donors and NGOs. Therefore, its effectiveness/impact is high.

#### Quantitative Effects

Indicator(unit)	Baseline Value (2004)	Target* Value (2010)	Actual Value (2010)	Actual Value (2011)
1) Percentage of population served by water supply	9.5% (9,000)	75.7% (81,860)	(72.07%)** (74,550)	(71.85%)** (74,550)
2) Ratio of No. of WSUG* established against No. of deep wells constructed	0%	80% (284 / 355wells)	100% (355WSUG / 355 wells)	100% (355 WSUG / 355 wells)

Data Source: DRWS/MRD, Population Statistics of District Offices

\*Target value was adjusted according to the number of wells actually constructed.

\*\*The actual value of population served by water supply in 2010 and 2011 is calculated by using total numbers of constructed wells (355) X number of residents for one well (210) / Actual total number of population in the well-constructed villages in 2010 (103,443) and in 2011(103,759)



Japanese funded well in good condition with well maintained by the residents and providing safe water all year without dry up



The residents including children and the poor gains much benefits through having access to safe and stable source of water



This is private shallow ring well located near the JICA well usually used for only washing and taking a bath.

### 4 Sustainability

No problem has been observed in institutional and technical aspects of the implementing agency. PDRD and District of Rural Development (DOD) have sufficient capacity, and WSUGs can conduct daily inspection, cleaning, light repair, and collection of O&M fees from users, as the type of hand pump procured in this project is simple and standard, and thus it is easy to find spare parts for repair. The project has some problems in financial and current status of operation and maintenance aspects of implementing agency such that the PDRD and DOD rarely conduct site monitoring to the constructed wells due to insufficient budget. Therefore, sustainability of the project is fair.



Maintenance by WSUGs

## III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

- The government/MRD should approve enough budgets for maintaining the wells including for regular site monitoring which is very important for the sustainability of the facilities.
- The DOD/PDRD should conduct site visit to the well regularly and provide necessary support and advice to WSUGs with regard to hygiene management and maintenance of the facilities.

#### Lessons learned for JICA:

- The selection of national standard and simple hand pump does contribute to the sustainability of the project because it is easy for the people to find spare parts for repair.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Zambia office: October, 2011

Country	The Project for the Improvement and Maintenance of Lusaka City Roads, Phase III
Zambia	

## I. Project Outline

Project Cost	E/N Grant Limit: 679 million yen	Contract Amount: 678 million yen									
E/N Date	July, 2005										
Completion Date	November, 2006										
Implementing Agency	Ministry of Local Government and Housing (MLGH)										
Related Studies	Basic Design Study: August 2004 (Implementation Review Study)										
Contracted Agencies	Consultant(s)	Japan Engineering Consultants									
	Contractor(s)	Shimizu Corporation									
	Supplier(s)	N/A									
Related Projects (if any)	Japanese cooperations: The Project for the Improvement and Maintenance of Lusaka City Roads, Phase I (1995) and Phase II (2000) (JICA Grant Aid)										
Background	In Lusaka City, the capital of Zambia, 47% (750km) of total 1,600km roads were unpaved, and the rest got low-cost pavement 25 years ago. Roads were heavily damaged. Following the rapid growth in population and socio-economic activities, rehabilitation of city roads was urgent. The preceding phases of the project (Phase I and II) improved a total 51km of arterial, industrial and commercial roads as well as connection roads to compounds. However, large portions, especially collector roads, still remained in poor conditions.										
Project Objectives	<b>Outcome</b> To ensure year-round smooth traffic by improving four selected collector roads in the City of Lusaka.										
	<b>Outputs</b> Japanese Side Improvement of four collector roads in Lusaka City. <table border="1" data-bbox="327 981 791 1149"> <tr> <td>Bauleni Road</td> <td>1.08km</td> </tr> <tr> <td>Kaleya-Ngombe Road</td> <td>0.88km</td> </tr> <tr> <td>Kasangula Road</td> <td>5.26km</td> </tr> <tr> <td>Chitanda Road</td> <td>3.32km</td> </tr> <tr> <td>Total</td> <td>10.50km</td> </tr> </table> Zambia Side <ul style="list-style-type: none"> <li>• Relocation of two poles along Kasangula road</li> <li>• Coordination with related organizations (bus companies, police, utility companies)</li> </ul>		Bauleni Road	1.08km	Kaleya-Ngombe Road	0.88km	Kasangula Road	5.26km	Chitanda Road	3.32km	Total
Bauleni Road	1.08km										
Kaleya-Ngombe Road	0.88km										
Kasangula Road	5.26km										
Chitanda Road	3.32km										
Total	10.50km										

## II. Result of the Evaluation

Summary of the Evaluation
<p>In Lusaka City, nearly half of the roads were still unpaved and many roads were heavily damaged, and thus rehabilitation of city roads was urgent.</p> <p>Following the two preceding phases, this project has largely achieved the objective of ensuring year-round smooth traffic as shown by the fact that vehicle travel speed mostly achieved the target and that there is no impassability any more. As for sustainability, there was no serious problem observed in structural, technical and financial aspects for continuity of the project effectiveness as well as the current good status of operation and maintenance: the project roads are generally well maintained under the outsourced contract by Lusaka City Council, which allocates a budget for road maintenance.</p> <p>For relevance, the project has been highly relevant with Zambia'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 as well, both the project cost and project period were almost within the plan. In the light of above, this project is evaluated to be highly satisfactory.</p>

I Relevance
<p>The project has been highly relevant with Zambia's development plan (infrastructure development strategies as set in national development plans: 2006-2010 and 2011-2015), development needs (urgent rehabilitation of unmaintainable roads), as well as Japan's ODA policy (Country Assistance Policy for Zambia in 2002), at the time of planning and ex-post evaluation. Therefore, its relevance is high.</p>



## 2 Efficiency

Both project period and project costs were as planned (ratio against the plan: 100%, 100%). Therefore, efficiency of this project is high.

## 3 Effectiveness/Impact

The project has largely achieved its objectives as shown by the good surface conditions which ensured year-round smooth traffic flows as anticipated in the ex-ante period.

Regarding vehicle travel speed, data was not available from Lusaka City Council (LCC) that is in charge of operation and maintenance of the roads developed by the project, since they do not collect such data officially. However, based on the driving survey by JICA at the time of the ex-post evaluation, it was found that the average travel speed was slightly lower than the target value, i.e., 40Km/h target value against 35Km/h actual in the survey at the ex-post evaluation. This could be attributed to the fact that Kaleya-Ngombe road recorded the lowest average travel speed presumably because of the prolonged curve it has towards Ngombe. However, on the other roads (Bauleni road, Kasangula road and Chitanda road), the target was achieved.

Also, it was observed that the project roads generally have good surface conditions. Based on interviews with residents and shop owners near the project sites, it is understood that the improvement of the roads have contributed to better living environment of the compounds, providing them better access to social facilities such as schools and clinics, and that economic activities involving transportation and shops have increased as a result of the project.

No significant negative impact was observed in terms of the natural environment. There were no resident relocations reported.

Therefore, effectiveness/impact of this project is high.

### Quantitative Effects

Indicator(unit)	2004 (Baseline year)	Target value	Actual value	
		2008	2008(Target year)	2011 (Ex-post evaluation year)
Vehicle travel speed (km/h)	approx. 20	approx. 40 <sup>(*)</sup>  *intended for commune travel time by bus	not available	Bauleni Road: 40 Kaleya-Ngombe Road: 20 Kasangula Road: 40 Chitanda Road: 40 Average: 35
Number of days of impassability on bus routes (days/year)	83	-	not available	No days impassable.

Data Source: Project site visit and assessment on 6 October 2011



**Bauleni Road.** This road leads to community market and schools. Road is effectively used as Public Bus route (Blue mini-buses are shown). The project roads are generally well maintained.



**Kasangula Road.** This road is effectively functioning as by-pass between two trunk roads within the Lusaka City. The project roads are generally well maintained.



**Chitanda Road.** This road leads to schools. Road is effectively used as Public Bus route (Blue mini-buses are shown) and providing safety to the students. The project roads are generally well maintained.

## 4 Sustainability

The organization responsible for operation and maintenance of city roads in Lusaka City is Technical Department of LCC. No major concerns were noted in the structural, technical and financial aspects of the implementing agency as well as current status of operation and maintenance: routine maintenance of city roads is outsourced to private companies through performance contracts, and LCC allocates a budget for it. The roads developed by the project have generally good surface conditions. Although Bauleni road has some problems in maintenance (i.e., erratic maintenance by the contractor on some of the portions is reported), it is not a serious problem for continuity of the project effects. Therefore, sustainability of this project is high.

## III. Recommendations & Lessons Learned

Recommendations for the Implementing agency:

It is recommended that LCC supervise the outsourced maintenance contractor's performance more frequently, as during the site interview, some road users and residents raised concern on the erratic maintenance carried out by the contractor on some of the portions.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal office: October, 2011

Country	The Project of Reinforcement of TV broadcasting capacity of Radiodiffusion Télévision Sénégalaise (RTS)
Senegal	

### I. Project Outline

Project Cost	E/N Grant Limit: 726 million yen	Contract Amount: 724 million yen
E/N Date	June, 2005	
Completion Date	September, 2006	
Implementing Agency	Radiodiffusion Télévision Sénégalaise (RTS)	
Related Studies	Basic Design Study: March, 2004 to August, 2004	
Contracted Agencies	Consultant(s)	Yachiyo Engineering Co.
	Contractor(s)	N/A
	Supplier(s)	Kanematsu Corp.
Related Projects (if any)	<p>Japanese cooperations:            Grant Aid: Construction of new building of RTS (1986/1987) and Provision of TV programs to RTS “<i>Foruniture de programmes de TV à la RTS</i>” (1989)            Technical Cooperation: Dispatch of long-term expert (1993-1995) and trainings in Japan            Other donors’ cooperations:            Italy: grant aid for replacement of obsolete equipment granted by Japan (1998)            World Bank: Satellite transmission (2000)            Taiwan: grant aid for editing equipment and vehicles (2002)</p>	
Background	<p>TV broadcasting by ground wave is one of the essential media to provide necessary living information to the people in Senegal because of the low literacy rate. RTS is the sole public land broadcasting organization in Senegal, which covers 80% of the national land, to broadcast programs in not only French but also various ethnic languages including Wolof language. In order to promote information transmission to the public through public broadcasting, RTS has been implementing “Plan de développement de la RTS 2003-2006” (The Development Plan of RTS 2003-2006) aiming at vitalization of information communication, digitalization, diversification of contents, and promotion of efficiency. In particular, the efficient production of TV programs dubbed in ethnic language, including Wolof, was a key issue for RTS in order to disseminate information nationwide since the limited number of population in the country understand French, the common language of Senegal, and were literate. Under this situation, the government of Senegal requested the government of Japan to support replacement of the obsolete analogue equipment by digital one, which is necessary for efficient dubbing and improvement of the quality.</p>	
Project Objectives	<p>Outcome</p> <p>To improve and continue TV broadcasting by RTS by replacement of equipment for TV broadcasting.</p>	
	<p>Outputs</p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Main control system</li> <li>- TV studio system and lightning equipment</li> <li>- News Studio and lightning equipment</li> <li>- Field recording system, editing systems, audio post production system, format conversion system, and measurement instrument and spare items</li> </ul> <p>Senegal Side</p> <ul style="list-style-type: none"> <li>- Demobilization of existing equipment</li> <li>- Installation of temporary studios</li> <li>- Construction for expansion of power supply to the editing room</li> <li>- Interior finish work of the editing room</li> <li>- Preparation of temporary yard for equipment</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>The obsolete facilities and equipment which were basically analog system had hampered high quality TV program production by RTS, including dubbing the TV programs in ethnic language. Therefore, it was a key issue for RTS to introduce a digital system in order to modernize the program production and to improve production technology.</p> <p>This Project has achieved the increase in the number of hours and programs broadcasting in ethnic languages (Wolof, Fulani, Soninké, Sérère, and Mandingue) by utilizing the upgraded equipment and technologies. As for sustainability, problem has been observed in terms of financial, technical and operation and maintenance aspects due to the limited capacity to maintain the digital equipment, the insufficient own revenue from the operation, and the lack of regular maintenance of some equipment. For relevance, the project has been highly relevant with Senegal’s development policy, development needs, as well as Japan’s ODA policy. For efficiency as well, both the project period and the project cost were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

<b>1 Relevance</b>				
This project has been highly relevant with the Senegal's development plan (Vitalization of information communication as set in the RTS Development Plan), development needs (the needs for living information through the TV broadcasting among the people in Senegal), as well as Japan's ODA policy, at the time of planning and ex-post evaluation. Therefore its relevance is high.				
<b>2 Efficiency</b>				
Both project period and project costs were within the plan (ratio against the plan: 100%, 91%). Therefore, efficiency of this project is high.				
<b>3 Effectiveness/Impact</b>				
The Project has achieved its objectives of the increase in the number of hours and programs broadcasting in ethnic languages by RTS. The number of hours broadcasting in ethnic languages increased from 28 hours/month in 2004 to 32 hours/month in 2006, and it further increased to approximately 52 hours/month in 2011 which was higher than the target value of 48 hours/month.. In addition, as of 2011, RTS broadcasts 20 minutes news in Wolof language twice a day for every day, 10 minutes news and information program in 5 languages (Wolof, Fulani, Soninké, Sérère, and Mandingue) twice a day for Monday to Friday, and 30 minutes information program in the 5 languages once a month. Because the equipment installed by the Project increased the productivity of RTS, RTS can produce more programs. During the period from the project completion to the time of ex-post evaluation, RTS produced at least 10 to 15 new programs in total with using the equipment installed by the Project. Therefore, its effectiveness/impact is high.				
<b>Quantitative Effects</b>				
	2004 (Base Year)	2006	2011 (Target Year)	
Indicator: No. of hours broadcasting in ethnic languages, including Wolof language, except French by RTS	(Actual) 28 hours/month	(Actual) 32 hours/month	(Plan) 48 hours/month	(Actual) Approximately 52 hours/month
(Source: JICA Follow-up Survey Report, April 2011)				
<b>4 Sustainability</b>				
Although RTS utilized the equipment provided by the Project well, some of them have not functioned or malfunctioned due to the degradation by sand dust as well as insufficient regular maintenance of the digital equipment installed by the Project. Those damaged equipment are now replaced or repaired by the JICA's follow-up Grant Aid Assistance and their lives are expected to extend to 2016. The structure of implementing agency is sustained in the similar manner of the implementation period and the technical level of the maintenance staff is sufficient for operate and maintenance of the conventional equipment. However, the skills and knowledge of the maintenance staff are not enough to properly operate and maintain the digital equipment despite that one of them is now attending a training program in Japan in order to improve his technical knowledge as a part of the JICA's follow-up assistance. In addition, RTS relies on the government financial support due to the insufficient own revenue to cover the necessary operation and maintenance cost including cost to purchase spare parts and regular maintenance. In 2010, RTS received the government subsidy of 2 billion CFA. Therefore, sustainability of the project is fair.				

### III. Recommendations & Lessons Learned

**Recommendations for Implementing agency:**  
It is strongly recommended that RTS should make efforts to ensure sufficient annual budget for operation and maintenance cost. Also RTS is needed to implement regular maintenance required by the technical guides for each equipment in order to ensure their expected lives. In addition, it is necessary for the government of Senegal to continuously provide financial support for RTS in order to cover their operation and maintenance cost as a public broadcasting organization.



News Studio replaced by the Project



Main Control System replaced by the Project



# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Mozambique Office: October 2011

Country	The Project for the Construction of the Chimoio Primary Teacher Training Center
Mozambique	

## I. Project Outline

Project Cost	E/N Grant Limit: 945 million yen	Contract Amount: 945 million yen
E/N Date	June,2005	
Completion Date	March,2007	
Implementing Agency	Ministry of Education and Culture	
Related Studies	Basic Design Study: August, 2004 - March, 2005 Detailed Design Study: August, 2005 - March, 2007	
Contract Agencies	Consultant(s)	Matsuda Consultants International Co.,Ltd.
	Contractor(s)	Dai Nippon Construction
	Supplier(s)	Included in Contractor as one package
Related Projects (if any)	<p>Japanese cooperaions: Grant Aid Restoration Project for Sibtwotowini Teacher training center (FY1999), Reconstruction Project for Xai-Xai Teacher training center (FY2004),Construction Project for primary and secondary school in Maputo-City (FY2001) Construction of primary schools by Grassroots Grant Aid (Total 10 schools) Other donors' cooperations: (Manica Province) Integrated assistance for basic education (GTZ), Teacher Training (ADPP) (Nationwide) Financial support for education sector (13 donors), Education Sector Fund (FASE, Common Basket Fund /10donors)</p>	
Background	<p>Mozambique remained as one of the LLDCs (as of 2002) although its economy had been moderately growing through external assistance after the end of civil war. Its budget condition was considerably severe and the living standard of its people stayed low as shown in low health/education indices compared with neighboring countries. Life expectancy at birth, infant mortality rate, adult literacy rate and school attendance rate were below the average among Sub-Saharan countries. Thus, poverty alleviation among its population was challenge. In this situation, the government of Mozambique prepared the absolute poverty alleviation plan that held education sector as one of the priorities. In the strategic education plan, which was prepared according to the above mentioned poverty alleviation plan, "Quality Improvement of Education" was one of the challenges. Based on them, construction of primary teacher training center in all provinces was promoted as one of the measures to improve teachers both in quantity and quality.</p>	
Project Objectives	Outcome	To increase the number of certified primary teacher in Manica Province by construction of primary teacher training center in Chibata in Gondola District of the province.
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Construction of facilities (the floor area of 9,058.2 m<sup>2</sup>), including administration building, class rooms, special class rooms, music hall, workshop, gymnasium, cafeteria, toilets, dormitories, affiliated primary schools, service rooms, guard's room, and water tower.</li> <li>- Procurement of equipment, including office equipment and supplies, desks and chairs, teaching materials, equipment for workshop, gymnastic equipment, equipment for cafeteria, equipment for dormitories, equipment for affiliated primary schools, and mini-bus, pick-up truck.</li> </ul> <p>Mozambique Side</p> <ul style="list-style-type: none"> <li>- Construction site, construction of fence and gate, necessary water supply, electricity in site, etc.</li> <li>- Development of ditches and landscape, procurement of furniture, fixtures and consumable goods, etc.</li> </ul>

## II. Result of the Evaluation

### Summary of the Evaluation

In Mozambique, improvement of quantity and quality of teachers was an urgent issue toward equal opportunity of education, as the number of teachers could not suffice the increasing students in primary education, while the percentage of uncertified teacher was increasing. This grant aid project targeted Manica Province, where approx. 60% - the highest percentage in the country - of teachers were uncertified because there was no teacher training center.

This project has achieved the outcome "to increase the number of certified primary teacher in Manica Province" due to the fact that achievement is considerably more than planned in target year (for example, the number of newly certified teachers trained by the teacher training center constructed in this project was 410 against planed value 200 in 2008). As for sustainability, some problems have been observed in terms of technical, financial, and current status of operation and management aspects due to the fact that there are some uncertainty in necessary technical level, operational mechanism for technical assistance and in guarantee of financial resources. For relevance, the project has been highly relevant with Mozambique's development policy (National Five Year Plan, Strategic Plan for Education Sector), development needs (teacher training strategy) 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 the Mozambique development plan (National Five Year Plan, Strategic Plan for Education Sector, Teacher Training Strategy), development needs (teacher training for primary education), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Efficiency

Although project cost was as planned (ratio against plan: 100%), project period slightly exceeded the plan (ratio against plan: 111%). Therefore, efficiency of this project is fair.

### 3 Effectiveness/Impact

The project has largely achieved its objective, to increase the number of certified primary teachers in the Manica Province. The number of newly certified teachers in all curricula of EP who were trained by IFP de Chibata (the teacher training center constructed by this project) considerably exceeded the target level in both the target year and the nearest year to the ex-post evaluation (which is also the year that data was available) (410 in 2008, 420 in 2010 against 200 as planned), though the data on the number of non-certified teachers retrained by IFP de Chibata was not available. Moreover, the number of uncertified teachers who were trained by distance education of IFP de Chibata and now work at primary schools in remote area, as well as the number of female teachers who were newly trained for all EP curricula by IFP de Chibata have been in increasing trend. Therefore, the effectiveness/impact of the project is high.



Well maintained administration building, mini-bus, official vehicle

#### Quantitative Effects

	2004 (Basic Design)	2007 (Actual Value)	2008 (Target Year)		2009 (Actual Value)	2010 (Actual Value)
Number of newly certified teachers in all EP curricula trained by IFP de Chibata	0	319	(Target Value) 200	(Actual Value) 410	349	420
Number of non-certified teachers retrained by IFP de Chibata	0	(Actual Value)	(Target Value) 200	(Actual Value)	-	-
Number of uncertified teachers trained by distance education of IFP de Chibata and work at primary schools in remote area	0	0	N.A.	120	229	200
Number of female teachers who were newly trained for all EP curricula by IFP de Chibata	0	129	N.A.	205	152	194
Percentage of certified teachers to all teachers in primary education in Manica Province	35.1%	41.3%	N.A.	46.9%	46.0%	53.1%

IFP de Chibata: Primary Teacher Training Center constructed by this Grant Aid project

(Source: Result of Interview and questionnaire to Ministry of Education, Education Department of Manica Province, and IFP de Chibata)

### 4 Sustainability

The structure of implementing agency and related agencies for O&M of this project is generally good. It has been, based on the information obtained from Ministry of Education and Culture, Manica Provincial Education Office and IFP de Chibata, partially changed from the plan at the ex-ante evaluation as IFP established four new sections (In-service Training, Distance Education, School Administration Training, Research) under the supervision of Vice Principal in charge of in-service teacher training in order to meet the needs of trainees, while it is considered enough for continuity of project effectiveness. However, IFP has some problems in the technical aspect due to insufficient technical level of technical staffs. Also it has some problems in financial aspect due to uncertainty in financial resource for O&M without budget allocation from Ministry of Education and Culture. In addition, the site visit revealed that while the facilities developed by this project were generally in good condition, the maintenance of some facilities such as dry toilet was not sufficient.



Well organized library

Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

- From the viewpoint of importance on primary teacher training, continuous budget allocation on IFP de Chibata is necessary although no budget was allocated from Ministry of Education and Culture in 2010 and 2011.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia Office: October 2011

Country	The Project of Equipment for the Rural Development of La Paz Prefecture
Bolivia	

## I. Project Outline

Project Cost	E/N Grant Limit: 683 million yen	Contract Amount: 683 million yen
E/N Date	July, 2005	
Completion Date	December, 2006	
Implementing Agency	La Paz Prefectural Office Department in charge: DDDP O&M Organization: SEDCAM, SEDEPPAR, SDEETI	
Related Studies	Basic Design Study: November 2004 (August 2004 - December 2004), September 2005 - October 2005 (Project formulation study)	
Contract Agencies	Consultant(s)	Pacific Consultants International Co., LTD. (Basic Design) Taiyo Consultants Co., Ltd.
	Contractor(s)	N/A
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Technical Cooperation</p> <ul style="list-style-type: none"> <li>- Development Study: "The Study for Agricultural/Rural Development in Achacachi Region, La Paz Prefecture"</li> <li>- Technical Cooperation Project: "Achacachi Regional Development Project"</li> </ul> <p>Grant Aid</p> <ul style="list-style-type: none"> <li>- Agricultural Development Project in Achacachi Region (Facilities)*Completed only first half period of construction due to political instability</li> </ul>	
Background	<p>In Bolivia, economic gap between urban and rural is large as the poverty rate shows (Urban: 51%, Rural: 92% as of 1995). The productivity in agriculture was relatively low among neighboring countries while its agricultural sector occupies 15.7% of GDP (2001) and 43.9% among working population (2001). Achacachi in La Paz prefecture, located at high land, is the area where its population suffer from poverty due to the low agricultural productivity under sever natural environment. 39% of total households in La Paz prefecture was categorized as extremely poor. 74% of households in rural area in La Paz was categorized as extremely poor and 22% was as poor. Majority of population in Achacachi is indigenous people.</p>	
Project Objectives	<p>Outcome</p> <p>To repair the roads, construct bridges, and repair irrigation canal in Achacachi, La Paz prefecture by procurement of necessary equipment for infrastructure preparation and provision of construction training.</p>	
	<p>Output(s)</p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Procurement of necessary equipment for basic infrastructure preparation in Achacachi: Construction machinery (Bulldozer, Wheel Loader, etc.), Vehicles (Dump Truck, Motorcycle, etc.), Supporting machinery (Concrete Mixer, Vibratory plate compactor, etc.), Research equipment (Total station, Measuring staff, etc.), Building materials (Concrete pipes, Sluice gate, etc.),</li> <li>- Training on management skills for canal construction (Soft Component)</li> </ul> <p>Bolivia Side</p> <ul style="list-style-type: none"> <li>- Implementation of infrastructure preparation in Achacachi: Road repair: Trunk road 40.1 km, Connection road 3.1km, Construction of bridge: 5 steel bridges, Repair of irrigation canal: 52.1km of 4 systems</li> </ul>	

## II. Result of the Evaluation

### Summary of the Evaluation

Achacachi in La Paz prefecture, located at high land (4,000m above sea level), is the area where its population suffer from poverty due to the low agricultural productivity under sever natural environment. Majority of population is indigenous people. Therefore, preparation of basic infrastructure is expected to alleviate poverty for local residents through providing job opportunities as well as improving agricultural productivity.

This project has partially achieved repairing of the roads, constructing of bridges, and repairing of irrigation canal in Achacachi, La Paz prefecture by procured equipment necessary for infrastructure preparation due to the delay in irrigation canal because of lack of budget although roads and bridges have been completed at the ex-post evaluation.

As for sustainability, some problems have been observed in terms of structural/technical/financial/current status of operation and management aspects due to the delayed full utilization of the prepared motorcycles because of procedural issue, no existence of registration system and the plan that manages the equipment although O&M cost is covered by whole prefectural O&M budget upon each necessity and current status of operation and maintenance is generally good.

For relevance, the project has been 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, the project period was 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 the Bolivian development plan (“Bolivia National Development Plan-Freedom, Democracy, Sovereignty and Productivity for Better Life”, “Plan for Agricultural and Forest Revolution” etc.), development needs (Agricultural/Rural infrastructure (roads, irrigation facilities) improvement in Indigenous/rural areas), as well as Japan’s ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

2 Efficiency

Although the project cost was as planned (100% against plan), the project period exceeded the plan(138% against plan). Therefore, efficiency of the project is fair.

3 Effectiveness/Impact

Although repairing of irrigation canal has not been achieved the target value (actual value:11.7km) due to financial scarcity of Bolivian side stemming from insufficient budget of each municipality that is in charge of small scale irrigation canal, the targeted situation of road repair (43.2km) and bridge construction (5 points) has been achieved as shown below.



The road by the prepared equipment of this project. Volume of traffic doubled.



(Right Photo) Quecca Bridge, constructed by the prepared equipment of this project. Creating easier access from Chachacomani to La Paz.

The following changes because of this project have been reported; Drastic alleviation (halving) in transportation cost for 37,000 population in Achacachi of La Paz prefecture(for example, decrease in travel distance by Quecca bridge enabled reduction in bus and taxi fares when going to La Paz), Increase (double) of traffic volume, Better distribution of agricultural products to markets through trucking, Better access to Omasuyo district, Los Andes district and La Paz, Improvement of regional transportation (Bus, Taxi), Increase of number of students who can commute to schools in Chachacomani community. Therefore, its effectiveness/impact is fair.

It was reported that the prepared equipment contributed to the construction of other roads (160km including this project covered road) in Omasuyo district.

Quantitative Effects

	baseline value 2004(Year of BD)	target value(2011)	actual value(2011) same as ex-post evaluation(2011)
Length of road repair -Trunk road 40.1km -Connection road 3 1km	N/A	43.2 km -Trunk road 40.1km -Connection road 3.1km	(actual value)43.2Km • Trunk road 40.1km • Connect road 3.1km
Bridge construction points	N/A	5 points	(actual value) 5 points
Length of irrigation canal	N/A	52.1km	(actual value)11.7Km (total52.1km(BD)) • Tamaraya: 4.5km(plan4.5km) • Butuni: 1km(Plan19km) • Beren:2km(Plan13.5km) • Corbabuto:4.2km (Plan15.1km)

(Sources: Interview results to the related staffs of SEDCAM, SEDAG, SEDEPPER and AUPA/representative of local residents.)

4 Sustainability

The responsibilities for operation and maintenance (O&M) of the construction equipment are given to SEDCAM , SEDEPPAR, SDEDETI, according to each sector.

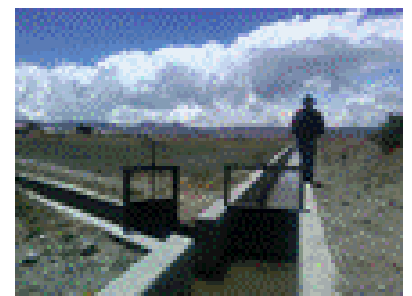
The structure of O&M agencies sustained substantially in the similar manner of the implementation period although it was partly changed in name due to entity conversion. This is considered enough for continuity of project effectiveness.

Each O&M agency has some problems in the technical aspect due to low remaining rate of the trained staffs by soft component of the Project and low participation of such staffs in O&M activities although each agency conducts O&M activities with its holding appropriate technical staffs in general.

The cost of O&M is covered with the each departmental budget in charge under implementing agency together with union due of AUPA. It was confirmed that SEDCAM reserves the budget for maintenance including procurement of necessary parts of whole equipment. As for SEDEPAR and SEDDETI, O&M budget for this Project is raised from whole prefectural O&M budget upon each necessity. Currently, any concerns are not appeared as for departmental level. However, as for AUPA has some problems in the financial aspects due to its unpredictable future collection of union due.

Current status of operation and maintenance, based on the interview with each department director and engineers, generally good. But O&M agencies have some problems in the status of operation and maintenance due to the following facts that the prepared motorcycles have not been fully utilized because of the delay in obtaining of number plate till 2011, that SEDDETI and SEDEPPAR do not have the registration system that manages the equipment, and that their participation level in the O&M activities is low. However, the site visit revealed that local residents are highly aware of as well as take care of constructed facilities by the prepared equipment.

Therefore, sustainability of the project is fair.



Irrigation facility in Tamaraya by the prepared equipment of this project as well as other Japanese ODA(Grass roots GA, Human security GA)

### **III. Recommendations & Lessons Learned**

Recommendations for Implementing agency:

SEDEPPAR is suggested to coordinate with municipalities and assist the plan especially on rehabilitation of irrigation canal.

Lessons learned for JICA:

The key factor for success on O&M is the high awareness and functioning control by local residents. Participation from local residents in project with consideration of residents' characteristics is considerably important.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Fiji office (Samoa office): October, 2011

Country	The Project for Renovation and Extension for Apia Fisheries Wharf and Related Facilities
Samoa	

### I. Project Outline

Project Cost	E/N Grant Limit: 707 million yen	Contract Amount: 706 million yen
E/N Date	July, 2005 (Extension: March, 2006)	
Completion Date	December, 2006	
Implementing Agency	Ministry of Agriculture and Fisheries	
Related Studies	Basic Design Study: October 2004 to March 2005	
Contracted Agencies	Consultant(s)	ECOH Corporation
	Contractor(s)	Penta-Ocean Construction
	Supplier(s)	N/A
Related Projects (if any)	<p>Japanese cooperations:            Trainings in Japan; dispatch of expert; JOCV/SV; Project for the Second Development of Apia Port (2000); Project for Construction of a Tugboat for Apia Port (2000)</p> <p>Other donors' cooperations:            AusAID (Samoa Fisheries Project, 1999-2001)</p>	
Background	<p>Apia Fisheries Wharf (wharf structure as well as fisheries market) is the only landing port for Samoa that boasts the fishing industry (no other fishery facilities exist in Samoa except two small-scale ice compartments to support the small-sized self-support fisheries). Apia Fisheries Wharf and related fishery facilities were constructed in 1978 through 1982 with the support of Japanese Grant Aid. Since then, they have been playing an important role to develop fishing industries of Samoa. However, those facilities were deteriorated, being damaged by cyclone disasters across the ages, some renovation work was essential to recover its original function. In order to cope with the decreasing trend of fish catches, it was urgently needed to increase the efficiencies in operation and workload by improving such working environment. With the renovated facilities, the landing, storage and distribution of fish catches was expected to be streamlined for both small-scale fisheries and commercial-based fishing industries of Samoa. Therefore, the government of Samoa planned this project for renovation and extension of Apia Fisheries Wharf and requested the government of Japan for grant aid.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To improve the efficiency in landing, storage and distribution of fish catches by renovation and an extension for Apia Fisheries Wharf and related facilities as the center for fisheries, Samoa's key industry.</p>	
	<p><b>Outputs</b></p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Civil engineering facilities: Dredging of jetty-type wharf, Land reclamation, Removal of blockade, Reformation of steep ramp, Provision of ancillary facilities</li> <li>- Architectural Facilities: Renovation of Fisheries Center Administration Building, Fish Market Building and Fish Market Administration Office</li> </ul> <p>Samoa Side</p> <ul style="list-style-type: none"> <li>- Provision of temporary construction yard to be used during the construction period</li> <li>- Secure the land for disposing of boulders removed from the water area</li> <li>- Secure the supply of a communication network, electric power, water supply, etc.</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>Samoa is a small island country, where fishery is indispensable for livelihood of its people and development of national economy. The Wharf before this project was small and thus facing difficulties to let fishing boats turn around efficiently. Also, facilities for selling fish catches were insufficient</p> <p>This project has mostly achieved the project objectives of improving efficiency of fishery industry through renovation and extension of the Wharf and related facilities including fish market and Fisheries Center. As for sustainability, some problems have been observed in terms of financial and current status of operation and maintenance aspects due to lack of funding for maintenance and some difficulties in practicing maintenance.</p> <p>For relevance, this project has been highly relevant with Samoa's development policy, needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency as well, both the project cost and project period were within the plan. In the light of above, this project is evaluated to be highly satisfactory.</p>

**1 Relevance**

This project has been highly relevant with Samoa's development policy (strengthening of the fishery sector that is the key industry of the country for food supply and acquisition of foreign currency), development needs (development of fishery facilities and environment), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

**2 Efficiency**

Both project cost and project period were as planned (ratio against plan: 100% for both). Therefore, efficiency of this project is high.

**3 Effectiveness/Impact**

This project has mostly achieved its objectives (outcomes) of improving efficiency of landing, selling of fish at the fish market and other fishery-related activities. Although quantitative data to support improved efficiency of landing (i.e., shortening of working hours) were not available, based on interviewing with Offshore Division, Ministry of Agriculture and Fisheries, it was confirmed that the facilities such as the wharf, fish market and Fisheries Center developed by this project have been operated effectively and thus efficiency of the work has been improved. The fish handling volume at the fish market has not increased due to factors including decrease in fish catches. However, it was confirmed during the site visit that utilization rates of the landing wharf and the preparation wharf have been improved. Also, the larger floor space of the fish market, with the designated area for fish selling, has eased the crowded condition, improved the hygiene condition, and increased business opportunity for fish sellers including women, who have consequently increased their income. Therefore, effectiveness/impact of this project is high.



Revetment constructed during the project implementation to protect the port from high tide water

**Quantitative Effects**

	2004 (Basic Design year) (Actual value)	2009 (Target year) (Target value)	2009 (Target year) (Actual value)	2011 (Ex-post evaluation year) (Actual value)
Indicator 2 Increase in the number of fishermen who use the fish market	90 persons on Sunday (2003)	Not mentioned	70 persons on Sunday	70 persons on Sunday
Indicator 3 Increase in fish handling volume at the fish market	519 tons (2003)	Not mentioned	Approx. 530 tons	Approx. 520 tons
Indicator 4 Improvement of adequacy of the landing wharf and the preparation wharf (ratio of gap between required- and actual berth length to required berth length)	33%	Not mentioned	Not available	100% (by visual confirmation)
Indicator 5 Increase in the number of meetings of many kinds at the Fisheries Center	Not mentioned	Not mentioned	10-15 meetings/month (with monthly fluctuation)	10-15 meetings/month (with monthly fluctuation)

(Source: interviews with Offshore Division, Ministry of Agriculture and Fisheries )

**4 Sustainability**

Based on interviewing with Fisheries Division of Ministry of Agriculture and Fisheries and site visits, it was confirmed that there is no problem in the structural aspect, and maintenance staffs has carried out periodic check continuously since the ex-post situation study. On the other hand, some problems were observed in the aspects of Operation & Maintenance and Finance such as the slow repair process (following periodic checking) due to difficulties to ensure sufficient maintenance budget and unavailability of some spare parts in Samoa. Therefore, sustainability of the project is fair.

**III. Recommendations & Lessons Learned**

Recommendations for Implementing agency:  
Ministry of Agriculture and Fisheries should continue its efforts to ensure maintenance budget.



## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Cambodia office: October, 2011

Country	The Project for the Improvement of Mongkul Borey Hospital in Banteay Meanchey Province
Cambodia	

### I. Project Outline

Project Cost	E/N Grant Limit: 683 million yen	Contract Amount: 678 million yen
E/N Date	August, 2005	
Completion Date	March, 2007	
Implementing Agency	Ministry of Health of the Kingdom of Cambodia Provincial Health Department (PHD) of Banteay Meanchey	
Related Studies	Basic Design Study: November, 2004 to April, 2005	
Contracted Agencies	Consultant(s)	Azusa Sekkei Co. Ltd.,
	Contractor(s)	Konoike Construction Co. Ltd.
	Supplier(s)	Marubeni Corporation
Related Projects (if any)	<p>Japanese cooperations:</p> <p>JICA Technical Cooperation</p> <ul style="list-style-type: none"> <li>- Project for Human Resources Development of Co-Medicals (2003.9-2008.9)</li> <li>- Project on Promotion of Medical Equipment Management System (2006.1-2008.12)</li> </ul> <p>JICA Grant Aid</p> <ul style="list-style-type: none"> <li>- Project for Renovation of National Technical School for Medical Care (2004.8-2006.2)</li> </ul> <p>NGOs: URC, US-CDC, CARE, SEVA CFDS, VSO, RACHA</p>	
Background	<p>In Cambodia, due to the continued civil war between the 1970s and the 1990s, improvement of medical facilities/equipment and development of human resources in Health Sector has been one of the major issues. In 2002, Ministry of Health (MOH) made the master plan "Health Sector Strategic Plan 2003-2007", in which Cambodia set improving health service deliveries as a priority issue. It includes upgrading, improving medical facilities/equipment as well as human resource development.</p> <p>Mongkul Borey Hospital (MB Hospital) was established in 1964 with support from the Japanese government. Since then, the Japanese government had supported the hospital by dispatching nurses and doctors until 1975. During and after the conflict period, with renovations several times, MB hospital was designated as the top referral hospital (CPA3: tertiary health institution) with operating rooms in Banteay Meanchey (BM) province; however, MB hospital had difficulties in providing appropriate services to its patients because the building of hospital was decrepit after four decades of its establishment, and medical equipment needed to be renovated. Under this circumstance, the Cambodia government requested the Japanese government for grant aid.</p>	
Project Objectives	<p>Outcome</p> <p>To improve medical services of MongKul Borey Hospital by constructing the hospital facilities and procurement of equipment.</p>	
	<p>Outputs</p> <p>Japanese Side</p> <p>Construction of emergency care ward, X-ray ward, operating ward, surgery ward, obstetrics and gynecology ward</p> <p>Provision of Equipment to be installed to the constructed wards.</p> <p>Cambodia Side</p> <p>Preparation of the site for the construction and leading electricity into the new building.</p>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>MB Hospital, established in 1964 with support from the Japanese government and was designated as the top referral hospital in Banteay Meanchey (BM) province, was facing difficulties to provide appropriate services to the patients because of the aged hospital building and medical equipment.</p> <p>This project has largely achieved the objective of improving medical services of MB Hospital as shown in the positive trend of basic hospital performance indicators. As for sustainability, almost all of main medical equipment has been maintained appropriately, however, some problems have been observed in terms of financial, and current status of operation, maintenance and management aspects, due to insufficient budget allocation to secure enough number of medical and administration staff, and maintain some medical equipment in need for repair, and slow procurement of spare parts. For Relevance, the project has been relevant with Cambodia'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 as well, both the project cost and project period were almost within the plan.</p> <p>In the light of above, this project evaluated to be highly satisfactory.</p>



### 1 Relevance

The project has been highly relevant with Cambodian Health Sector Strategic Plan (2003-2007, 2008-2015) aiming at improving the quality of health service delivery, development needs for better health services, as well as Japan's ODA policy at the time of both planning and ex-post evaluation. Therefore, its relevance is high.

### 2 Efficiency

Both project period and project cost were within the plan (ratios against the plan 99% and 98%). Therefore, efficiency of this project is high.

### 3 Effectiveness/Impact

This project has largely achieved its objective of improving medical services of MB Hospital as shown in basic hospital performance indicators including the numbers of admitted patients, deliveries and echography as well as bed occupancy rate year by year. The decrease in the number of planned operations can be explained that 1,176 cases before the project (year 2004) included free cataract surgery for the poor provided by an NGO which was actively working in MB hospital in that year. Although the exact figure is not available, the number of operations excluding those surgery cases is considered to be increasing as well. Also, based on the interviews with Director of BM PHD, the capacity of MB hospital to deliver the medical services as CPA3 has greatly improved: the number of patients referred from lower level health institutions and other Operational Districts (OD) in BM province as well as in other provinces has increased. Therefore, it can be said that the referral system of BM province has been improved. According to the Director, satisfaction of patients with the hospital has also improved, because of its upgraded services and its responses to issues and suggestions from patients with support of NGOs. Therefore, effectiveness / impact of this project is high.

#### Quantitative Effects

Indicator(unit)	Baseline value 2004 (Basic Design year)	Target value 2007 (target year)	Actual value 2007 (target year)	Actual value 2010 (at ex-post evaluation)
Number of admitted patients (inpatients)	1,903 patients / year	To be increased	6,418	16,152
Number of delivery	421	To be increased	447	776
Number of planned operations	1,176 cases / year	To be increased	461	513
Number of Echography	NA (None)	Become available	673	1,060

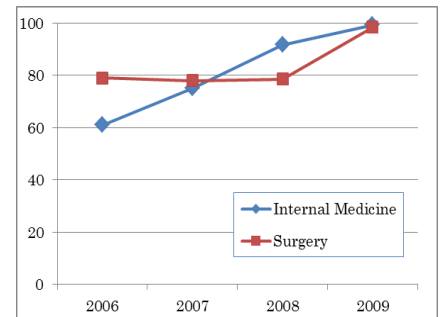
Data Source: interview with Director of MB hospital.



Obstetrics and Gynecology Ward



Ventilator Electric



Data source: MB Hospital  
Average bed occupancy rate (%)

### 4 Sustainability

Some problems have been observed in financial aspects, and current status of operation, maintenance and management to maintain facilities and medical equipment. Although almost all of main medical equipment has been maintained appropriately, MB hospital has difficulties to ensure enough funding for repair of some equipment and for recruiting new medical and administrative staffs mainly due to insufficient budget allocation from MOH. Also, services by the local agent for local procurement are often delayed.

No problem has been observed in structural and technical aspects of the MB hospital as it secures enough technicians to maintain facilities and equipments. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

Through the Annual Operational Plan (AOP), the Ministry of Health should take into consideration in allocating sufficient budget for the hospital to maintain and repair the equipment.

#### Lessons learned for JICA:

Careful consideration should be given to determine the equipment procurement on whether the partner country could assure the allocation of budget for regular maintenance, human resources, maintenance contract with the local agency for procurement of the spare parts of installed equipment.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Vietnam Office: October, 2011

Country	The Project for the Improvement of Hoa Binh General Hospital
Viet Nam	

## I. Project Outline

Project Cost	E/N Grant Limit: 967 million yen	Contract Amount: 941 million yen
E/N Date	August, 2005	
Completion Date	March, 2007	
Implementing Agency	Hoa Binh General Hospital	
Related Studies	Basic Design Study: November 2004 - July 2005	
Contracted Agencies	Consultant(s)	Nihon Sekkei – Medical Engineering Planning (JV)
	Contractor(s)	Toda Corporation
	Supplier(s)	Sirius Corporation
Related Projects (if any)	Japanese cooperation: The Project for Strengthening Health Service Provision in Hoa Binh Province (2004-2009) (JICA Technical Cooperation)	
Background	Hoa Binh province is located in the mountainous North West region, where health conditions were poorer than other areas in the Northern Vietnam. Hoa Binh General Hospital was the only secondary health institution in the province, while the tertiary institution was located in Hanoi, two-hour away by car. Due to old and obsolete facilities/equipment and poor human resources, the Hospital could not play a role as a secondary health institution. Therefore, the government of Vietnam requested the government of Japan for grant aid to renovate the Hospital.	
Project Objectives	<b>Outcome</b> To improve medical services of Hoa Binh General Hospital by construction of facilities and procurement of medical equipment.	
	<b>Outputs</b> <b>Japanese Side</b> <ul style="list-style-type: none"> <li>- Facilities: High Tech Block (operation theaters, laboratory, ICU, etc) and Mechanical Block (incinerator, sewage treatment, etc.)</li> <li>- Equipment: X ray, sterilizers, centrifuge, etc.</li> <li>- Software component: awareness raising and technical transfer in operation and maintenance and medical waste treatment</li> </ul> <b>Vietnam Side</b> <ul style="list-style-type: none"> <li>- Demolition of existing wards</li> <li>- Connection of utilities (approx. 500m)</li> <li>- Drainage</li> <li>- Others (blinds, general furniture, etc)</li> </ul>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>Hoa Binh General Hospital had difficulties in playing a role of the only secondary health institution of Hoa Binh Province, where health conditions were poor but there was no tertiary institution, because of its old and obsolete facilities/equipment and poor human resources. Therefore, the renovation of the Hospital was of urgent need at the time of ex-ante evaluation.</p> <p>The project has largely achieved its objectives as expected in the basic design. It has achieved the improved medical services of Hoa Binh General Hospital. Nowadays, the Hospital has been playing a leading role in the health system of the province, supporting 9 district hospitals in transferring new technique, providing refresh training for hospital staff and enhancing the function of referral system. As for sustainability, several problems have been observed in maintenance of facility and medical equipment due to difficulties in budget allocation.</p> <p>Regarding the relevance, the project has been highly relevant with Vietnam's and the province's development policy, development needs as well as Japan' ODA policy at the time of both ex-ante and ex-post evaluation. For the efficiency, project cost and implementation period were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Vietnam's development plan, namely the Five-year Plan (2001-2005 and 2006-2010) of the Health Sector Development of Vietnam, development needs, namely the Action Plan of Health Sector of Hoa Binh Province, as well as Japan's ODA policy (Country Assistance Program for Vietnam), at the time of planning/ ex-post evaluation. Therefore, the relevance is high.</p>
2 Efficiency
<p>Both project period and project cost were within the plan. Therefore, efficiency of this project is high.</p>

### 3 Effectiveness/Impact

This project has largely achieved its objective of improving medical services of Hoa Binh General Hospital as shown in the improvement in basic hospital performance indicators (such as the number of referred patients and the number of examinations) year by year. Also, based on questionnaire answers by- and interviewing with officers of Department of Health (DOH) of Hoa Binh Province and of Hoa Binh General Hospital, the examination and treatment capacity was increased by the new facilities and equipment, and efficiency of services was improved by centralization of medical care. Furthermore, education and training for primary health institutions as well as collaboration with tertiary health institutions have improved. A JICA technical cooperation project also utilized by use of the equipment to strengthen the referral system in the province. In consequence, it is deemed that the project contributed to the improvement of the referral system and training of medical staff belonging to other hospitals in the Province. Therefore, the effectiveness/impact is high.

#### Quantitative Effects

Indicator(unit)	2003 (BD year)	2007 (Target year)	Actual results	
			2007 (Target year)	2010
No. of patients referred from lower-level health institutions (cases/year)	335	Increase	2,338	6,334
No. of X ray photography (cases/year)	3,300	Increase	26,741	43,444
No. of ultrasonic examinations (cases/year)	8,800	Increase	25,124	29,315

Data source: DOH Hoa Binh Province/Hoa Binh General Hospital



High Tech Block of Hoa Binh General Hospital



Operation theater



Patients at Clinical Imaging Department

### 4 Sustainability

The institutional aspect of operation and maintenance (O&M) of the facilities and equipment developed by this project has no problem. However, some problems were observed in technical, financial and operation and maintenance aspects mainly due to insufficient staff capacity for preventive maintenance and repair of high-tech medical equipment and the difficulty in allocating sufficient O&M budget. Despite the increasing trend in hospital revenue, the allocation of budget from the central and local governments has been unchanged in current years, and the balance between total revenue and expenditure is still in red. As the budget approval is time-consuming, regular maintenance is not yet done at the time of ex-post evaluation, and replacement of spare parts is still slow. Although some equipment such as biochemical analyzer and anesthesia apparatus with ventilator are taking time to repair, most of provided equipments are in good condition. Therefore, sustainability of the project is fair.

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

The budget allocation to O&M is not sufficient, which is leading to slow response in replacing spare parts and repairing broken down equipments. Thus, it is recommended that the hospital should try further to ensure necessary budget for O&M.

#### Lessons learned for JICA:

This project is a good example of combination of grant aid and technical cooperation in a way that the facilities and equipment developed by the grant aid project created an incentive for the recipient organization to be proactive in the technical cooperation project and thus to strengthen their capacity in a sustainable way.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by India office: October, 2011

Country	The Project for Improvement Sardar Vallabhahai Patel Post Graduate Institute of Paediatrics in the State of Orissa
India	

### I. Project Outline

Project Cost	E/N Grant Limit: 830 million yen	Contract Amount: 830 million yen
E/N Date	August, 2005	
Completion Date	March, 2007	
Implementing Agency	Sardar Vallabhahai Patel Post Graduate Institute of Paediatrics	
Related Studies	Basic Design Study: April - December 2004	
Contracted Agencies	Consultant(s)	Yokogawa Architects & Engineers
	Contractor(s)	Sumitomo Mitsui Construction
	Supplier(s)	Ogawa Seiki
Related Projects (if any)	N/A	
Background	According to Indian Government's statistic reviews, the state of Orissa indicated lower in health indicators compared to national average. In particular, child health in Orissa State was considered as one of the most important areas of concern to Indian Government. Sardar Vallabhahai Patel Post Graduate Institute of Paediatrics (hereafter the SVP Hospital) is the top referral hospital in the state for child health related problems and functions as a medical institute to educate Orissa State's medical students for Paediatric treatments. However, the Hospital could not achieve its full function with the state of facilities and medical equipment at the time of 2002. Therefore, Grant Aid was requested to the government of Japan.	
Project Objectives	<b>Outcome</b> To improve the medical services and post-graduate medical education of the SVP Hospital through the construction of a new hospital building and development of medical equipment.	
	<b>Outputs</b> <b>Japanese Side</b> <ul style="list-style-type: none"> <li>- Construction of facilities including Outpatient Department (OPD)/Lab building and Operation Theatre (OT)/Ward building with 9-bed neonatal intensive care unit (NICU) and 12-bed paediatric intensive care unit (PICU)</li> <li>- Procurement of equipment including X-ray machine, operating tables, respirators, etc.</li> <li>- Soft Component for development of medical equipment maintenance system and trainings</li> </ul> <b>India Side</b> <ul style="list-style-type: none"> <li>- Site clearance</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>The SVP Hospital had difficulties to fulfill its functions as the top referral hospital in child health in Orissa State and as a medical institute to educate Orissa State's medical students for paediatric treatments due to the poor conditions of facilities and medical equipment.</p> <p>This project has largely achieved its objectives of improving medical services and post graduate medical education at the SVP Hospital as shown in the full utilization of the facilities and equipment developed by this project, and the increased acceptance of post graduate students. As for sustainability, there was no serious problem observed in terms of structural, technical and financial aspects as well as current status of operation and maintenance (O&amp;M) due to the sustained operation and maintenance structure, qualified staffs and allocation of necessary O&amp;M budget, and good maintenance of equipment through maintenance contracts with authorized firms who have supplied such equipment.</p> <p>For relevance, the project has been highly relevant with India's development policy, needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, project cost and implementation period were within the plan.</p> <p>Considering above factors, this project can be evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with India's Five Year Plans (10th Plan 2003-2007 and 11th Plan 2008-2012 as well as state level health initiatives such as Orissa Vision 2010, aiming at reduction of infant mortality rates), the ground needs of Orissa State for tertiary medical services in paediatrics, and Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project period and project cost were within the plan. Therefore, efficiency of this project is high.</p>

### 3 Effectiveness/Impact

This project has largely achieved its objectives of improving the medical and post graduate services of the SVP Hospital as shown in the full utilization of the facilities and equipment developed and the improvement of major hospital performance indicators including the achievement of the target number of ICU patients as well as the increase in the number of inpatients and outpatients and the number of surgery. Although the number of referral cases was not available, the rapid increase in ICU admission shows increase in patients referred from primary/community healthcare centres. Also, it was observed that the construction of a new hospital building integrated the principal hospital functions, ensuring the provision of necessary equipment, and thereby achieving a better educational environment for the postgraduate doctors (PGD) the number of which has shown increase from 8 PGDs per year in 2003/04 to 12 PGDs per year in 2009/10, as well as in 2010/11.

Based on statistics of Orissa State, it is deemed that the child health conditions have improved (90 per 1,000 live births in 2003 to 65 per 1,000 live births in 2009), and this project is considered to have contributed to such improvement.

Therefore the effectiveness/impact of this project is high.

#### Quantitative Effects

Indicator(unit)	Baseline value (2003-04: year of Basic Design)	Target value (2007-08: target year)	Actual value	
			(2007-08: target year)	(2010-11: ex-post evaluation)
No. of ICU patients	216	Increase	985	1,972
No. of referral cases from lower-level health institutions	3,895	Increase	n.a.	n.a.
No. of acceptance of post graduate doctors**	8***	-	8	12

Sources: Defect Inspection Report (2009) and SVP Hospital

Note: \*\* this indicator was not designated as an effect indicator in the Basic Design Study report.

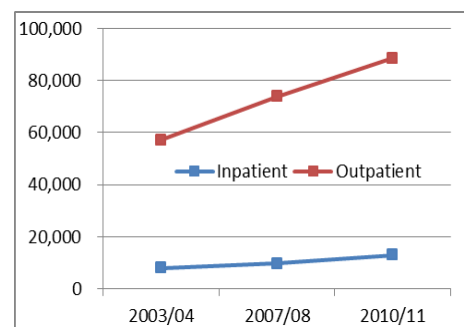
\*\*\* 24 Post Graduate Doctors (PGDs) in the Basic Design Study is the accumulative figure in the course of 3 years (8 PGDs per year).



Outpatient Building



NICU



Number of inpatient and outpatient Source: SVP Hospital

(The above photos were taken at the time of project completion in 2007)

### 4 Sustainability

The O&M of the facilities and equipment of the SVP Hospital has been well institutionalized and practiced by qualified staffs who receive continuous capacity building, and with sufficient budget allocation from Orissa State for annual maintenance contract (AMC) and comprehensive maintenance contract (CMC) of equipment with authorized firms who have supplied such equipment, and for maintenance of buildings and facilities.

In this way, this project has no problem in structural, technical, financial, and current operation and maintenance aspects of the implementing agency; therefore its sustainability is high.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Senegal office: October, 2011

Country	The Project of Construction and Equipment of the Training School for Primary School Teachers
Senegal	

### I. Project Outline

Project Cost	E/N Grant Limit: 642 million yen	Contract Amount: 587 million yen
E/N Date	September, 2005	
Completion Date	January, 2007	
Implementing Agency	Directorate of Planning and Reform of Education (DPRE), Ministry of Education (MOE)	
Related Studies	Basic Design Study: January, 2005 - August, 2005	
Contracted Agencies	Consultant(s)	Sekkei Keikaku Inc.
	Contractor(s)	Toda Corporation
	Supplier(s)	N/A
Related Projects (if any)	<p>Japanese cooperations: Grant Aid: Project of Construction of Class Rooms for Primary School (Phase I-IV, 1991, 1993, 1997, and 2001) Other donors' cooperations: World Bank (PDEF loan), UNICEF (Development of teaching method for EFI), AFD (projects for quality improvement of teachers, construction and renovation of class rooms for elementary schools in Dakar Province, improvement of educational opportunities, and Budget Support for PDEF)</p>	
Background	<p>Senegal aimed at attaining the goal of 100% of primary enrollment rate by 2010 through the Program of Education and Training Development (PDEF: Programme de Développement de l'Éducation et de la Formation). Due to the efforts, the number of primary schools and the pupils rapidly increased. As of the year of 2003/04, the total number of pupils reached 1.4 million while the number of primary schools exceeded 6,000 in the country. PDEF also addressed the increase in the number of teachers by the newly recruited teachers of 20,000 for the following decade. In the light of this policy, the Ministry of Education implemented trainings for volunteer teachers in order to cope with the rapid growing number of pupils. However, enhancement of trainings for volunteer teachers was an urgent need because of the limited number and quality of the existing training program.</p>	
Project Objectives	Outcome	To improve the number of volunteer teachers trained and the quality of training by the construction of facilities and the installation of educational equipment for the Training School of Primary School Teachers (EFI: l'École de Formation de Instituteurs) of Dakar
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Construction of pedagogical building and auditorium (total floor space of 2,621.78m<sup>2</sup>)</li> <li>- Installation of equipment: pedagogical materials and teaching materials</li> <li>- Soft component: development of manuals for maintenance of the facilities and equipment, trainings for maintenance staff, trainings for staff who will be in charge of hygiene education for students of EFI</li> </ul> <p>Senegal Side</p> <ul style="list-style-type: none"> <li>- Land preparation, laying of electricity, water pipes, phone lines, and construction of exterior and fence</li> </ul>

### II. Result of the Evaluation

Summary of the Evaluation
<p>In Senegal, the number of pupils rapidly expanded since the primary enrollment rate reached about 80% in 2003/04 under the national goal of 100%. In order to cope with the growth of the number of pupils, EFIs aiming at promotion of the volunteer teacher system were established in each province. However, the training program with 6 month period had not been sufficient for newly recruited volunteer teachers to develop their capacity enough. In particular, the reinforcement of training for volunteer teachers at EFI Dakar was the key issue in Dakar Province with the growing needs for additional teachers due to the concentration of population.</p> <p>This project has mostly achieved its objectives of the increase in the number of volunteer teachers trained and the improvement of its quality. EFI has annually trained 275 newly recruited volunteer teachers with utilizing the facilities and pedagogical materials installed by the Project. As for sustainability, the training facilities and equipment have been mostly well operated and maintained despite of some problems in terms of institutional and technical aspect, because of the replacement of school director and a staff in charge of general affairs, who are responsible for management of the facilities and equipment. Also there has been no problem in financial aspect. For relevance, the project has been highly relevant with Senegal's development policies, development needs, as well as Japan's ODA policy. For efficiency, both the project period and the project cost were within the plan. In the light of above, this project is evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Senegal's development policies including the Poverty Reduction Strategy Paper (PRSP) and PDEF, the development needs of training volunteer teachers for primary schools in the target area and the entire country, as well as Japan's ODA policy. Therefore, its relevance is high.</p>



## 2 Effectiveness/Impact

This project has mostly achieved the expected outcomes as planned. In 2007, the annual number of trainees at EFI Dakar increased to 498 which exceeded the target value of 324 as well as the capacity of EFI Dakar, because of the policy of MOE to accept all the applicants without entrance examination until 2008/09. Since 2009/10, the enrollment of EFI Dakar reduced to 275 due to the policy change to accommodate the trainees within its capacity which is reasonable to ensure favorable conditions for the trainings. EFI Dakar produced the certified volunteer teachers of 1,158 in total since 2007/08, and contributed to the improvement of training volunteer teachers in Senegal. The number of teachers in Senegal increased from 22,301 in 2000 to 50,369 in 2010. There was no change in the annual course hours of 768 hours before and after the project despite of the target value of 960 hours. In future, it is expected to be increased with the planned extension of training period at EFIs.

As qualitative effect, due to the newly installed facilities and equipment by the Project, the training environment of EFI Dakar has been largely improved after the project. Since it was used to be located at a space within the building of the National Personnel Authority before the project, the new facilities and equipment installed by the project have been highly appreciated by the trainees. In addition, the project contributed to the capacity improvement of in-service teachers through the trainings for them at EFI Dakar. The design of the facilities constructed by the project is compatible to implement the trainings for in-service teachers in order to fill the insufficient training period of the existing course for newly recruited volunteer teachers. MOE adopted the design of EFI Dakar as a model of integration of trainings for newly recruited and in-service teachers. Therefore, its effectiveness/impact is high.

### Quantitative Effects

	2004 (Base Year)	2007 (Target Year)		2011 (Ex-Post Evaluation)
Indicator 1 : The increase in the annual number of volunteer teachers to be trained at EFI Dakar	(Actual) 282	(Plan) 324	(Actual) 498	(Actual) 275
Indicator 2 : The Increase in the annual course hours at EFI Dakar	(Actual) 768 hours	(Plan) 960 hours	(Actual) 768 hours	(Plan) 768 hours

(Source : EFI Dakar)

## 3 Efficiency

Both project period and project costs were within the plan (ratio against the plan: 91% and 94%). Therefore, efficiency of this project is high.

## 4 Sustainability

According to the site visit and the interview with EFI Dakar, it was confirmed that the facilities and equipment installed by the Project have been properly utilized. Based on the manuals and guidance for the proper maintenance by the soft component of the project, the teaching and administrative staff of EFI Dakar carry out daily maintenance of them. However, there is a certain concern in the institutional and technical aspects due to the replacement of the school director and the staff of general affairs. Although it was planned that the school management committee of the affiliate primary school for teaching practice by EFI Dakar was going to be responsible for the maintenance of EFI Dakar as well, the local government (Commune) under the supervision of the Inspection Bureau of Academy (IA: Inspection d'Académie) has been employing a cleaner for EFI Dakar in the actual situation. In terms of the financial aspect, EFI Dakar has been making efforts to compensate for the lack of budget by the rental of the auditorium to the local communities while MOE has increased the budget allocation to EFI Dakar since 2008/09. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

It is strongly recommended that MOE should continuously allocate the budget for operation and maintenance of EFI Dakar in order to sustain the adequate environment of high quality training of volunteer teachers. On the other hand, EDF Dakar is required to assign necessary staff and to continue the proper maintenance of the facilities and equipment.



Appearance of EFI Dakar



Class Room of EFI Dakar and Equipment provided by the Project  
(The equipment are protected from sand dust)

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Paraguay office: October, 2011

Country	The Project of Improvement of Educational Equipment for Vocational Education
Paraguay	

## I. Project Outline

Project Cost	E/N Grant Limit: 647 million yen	Contract Amount: 638 million yen
E/N Date	September, 2005	
Completion Date	February, 2007	
Implementing Agency	Technical College and Vocational Training Center "Pte. Carlos A. Lopez" (CEV) (Supervision: Ministry of Education and Culture, MEC)	
Related Studies	Basic Design Study: January, 2005 - July, 2005	
Contracted Agencies	Consultant(s)	Joint Venture of INTEM Consulting Inc. and Yokogawa Architects & Engineering Inc.
	Contractor(s)	Iwata Chisaki Construction Corporation
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	Japanese cooperations: Technical Cooperation for CEV (1978 - 1983), Dispatch of 38 Senior Volunteers to CEV (1993 - Now) Grant Aid for CEV (1978)	
Background	In Paraguay, since the accession of the Mercosul, export pressures by the neighboring countries, including Brazil, have been growing. Thus, human resource development through enhanced vocational and technical education was an urgent need to enhance the industrial sector. CEV was the largest vocational institute under the Ministry of Education and Culture (MEC) of the country. It had 9 specialized areas with around 400 students and 40 teaching staff. Japan had supported CEV through various ODA schemes, including grant aid, technical cooperation project, and dispatch of senior volunteers. However, the facilities and equipment installed by the Japanese grant aid had been already obsolete. Therefore, the Government of Paraguay requested the Government of Japan to support replacement those obsolete facilities and equipment in order to meet the recent needs for vocational training in the country.	
Project Objectives	Outcome	To improve vocational training environment by replacement of facilities and equipment of CEV.
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Construction of facilities: Printing and Computer Building (Approximately 1,100m<sup>2</sup>) and Pipework Building (Approximately 400m<sup>2</sup>)</li> <li>- Installation of training equipment for the training courses of printing, carpenter, construction, electricity, electronics, auto-mechanics, machinery, pipework and cold storage and common use</li> </ul> <p>Paraguay Side</p> <ul style="list-style-type: none"> <li>- Land preparation / Construction of exteriors / Lead-in work of telephone line</li> </ul>

## II. Result of the Evaluation

Summary of the Evaluation
<p>CEV is a key vocational training institute in Paraguay, which is specialized in industrial technical training. Although CEV has produced many human resources for the industrial sector, it faced problems including the insufficient number of class rooms and training equipment to accommodate the increasing number of students. The obsolete training contents accompanied by aging training facilities and equipment have been harming a quality of vocational training at CEV. Therefore, it was a key issue for CEV to improve vocational training environment in order to continue a needs-oriented human resource development for the industrial sector of Paraguay. This Project has achieved renewal and improvement of training curriculums, introduction of curriculums for information technology and an increase in practical training hours. As a result, the Project brought about an impact of higher demand for CEV alumni in the labor market. Hence, it is considered that the expected outcomes were realized by the Project. As for sustainability, problem has been observed in terms of financial aspect due to the insufficient budget allocation from the MEC, while the facilities and equipment replaced by the Project have been well-maintained and well-utilized by teaching staff of CEV who had sufficient technical level. For relevance, the project has been highly relevant with Paraguay's development policy, development needs, as well as Japan's ODA policy. For efficiency, the project period slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Paraguay's development policy to improve reliability of vocational training and public educational institutes, development needs for development of industrial human resource, as well as Japan's ODA policy. In addition, in 2011, enhancement of technical education and vocational training, including improvement of training contents to meet the market needs, has been growing in importance since "the Technical Education and Vocational Training Improvement Plan" was announced in order to realize "the economic growth with employment creation and improvement of income distribution which was one of the strategic goals set in "the Socio-economic Strategic Plan". Therefore its relevance is high.</p>
2 Efficiency
<p>Although the project cost was within the plan (ratio against plan: 99%), the project period slightly exceeded the plan (ratio against plan: 106%). Therefore, efficiency of this project is fair. There were some changes in outputs of the Japanese side: addition of fire protection equipment, cancelation of installation of generators for existing facilities, reduction of number of common equipment due to</p>



fluctuation in exchange rate and financial reasons. However, these changes did not affect the project effect.

### 3 Effectiveness/Impact

The Project has mostly achieved its objective of improvement of vocational training environment at CEV as expected. Curriculums of the training courses supported by the Project have been updated and improved every year as needed basis. Also, the IT course was newly introduced in 2007. In addition, the portion of actual hours for practical training against required hours increased from 59.5% in 2004 to 70.0% since 2007, which attained 80% of the target value. The ratio of the number of students enrolled against quota for each course also increased to 88.9% in 2007. The decrease in the ratio to 81.3% in 2011 was induced by the decreases in the number of students enrolled in the carpenter course and the pipework course due to the lower needs in the labor market. Thus, CEV offers short-term curriculums for these courses depending on the labor market needs. The environment improvement through the replacement of training facilities and equipment by the Project also enabled teaching staff of CEV to apply new technologies and skills as well as to meet updated needs. As a result, the both of the teaching capacity and the satisfaction level of students at CEV improved. The main factor for those project effects can be attributed to supports of the senior volunteers dispatched by JICA, including adequate assessment of needs for replacement of training equipment at each course. The senior volunteers also contributed to enhancement of teaching capacity at CEV. Besides these effects, the improvement of training environment and contents brought about the increase in employment rate for alumni of CEV to 90% from 51.8% during the period from 1999 to 2003. Currently, most of CEV alumni found a job within 1 year after graduation. In particular, the needs for the alumni of the automobile course have been growing. On the other hand, the employment places of the CEV alumni have become diversified. Since many inquiries from recruitment officers of companies implies the growing needs for the CEV alumni in the labor market, the Project contributed to the technical human resource in Paraguay. Therefore, its effectiveness/impact is high.



Training equipment for auto-mechanics course

of needs for replacement of training equipment at each course. The senior volunteers also contributed to enhancement of teaching capacity at CEV. Besides these effects, the improvement of training environment and contents brought about the increase in employment rate for alumni of CEV to 90% from 51.8% during the period from 1999 to 2003. Currently, most of CEV alumni found a job within 1 year after graduation. In particular, the needs for the alumni of the automobile course have been growing. On the other hand, the employment places of the CEV alumni have become diversified. Since many inquiries from recruitment officers of companies implies the growing needs for the CEV alumni in the labor market, the Project contributed to the technical human resource in Paraguay. Therefore, its effectiveness/impact is high.

	2004 (Base Year)	2007 (Target Year)		2011 (Ex-post Evaluation)
Indicator 1 : The number of hours for practical training (Actual hours / Hours required)	(Actual) 59.5%	(Plan) 88.5%	(Actual) 70.0%	(Actual) 70.0%
Indicator 2 : Ratio of the number of students enrolled against quota for each course	(Plan) 81%	(Plan) 90%	(Actual) 88.9%	(Actual) 81.3%

(Source: CEV)

### 4 Sustainability

According to the site visit and interviews with CEV, the facilities and equipment replaced by the Project has been appropriately maintained and effectively utilized for vocational training at CEV. Although there is no specialized maintenance personnel in CEV, no critical problem has been observed since the regular maintenance and minor repair, which are recorded in a maintenance record book, are carried out by the teaching staff. In addition, the sufficient technical level of the teaching staff enables timely repair of training equipment and avoids interruption of practical training sessions. The technical sustainability is backed up by supports of the senior volunteers including trainings for maintenance of the equipment, application of state-of-art technologies, curriculum development to effectively utilize the training equipment provided by the Project. In terms of the financial aspect, the School Support Committee has been coping with the cost to cover the insufficient budget allocated by the MEC, although the MEC should be responsible to allocate necessary budget for operation of CEV. In addition, the maintenance budget has been limited to 50% of the total budget allocated by the Ministry since 2011. On the other hand, CEV has not assessed actual costs for maintenance of the facilities and equipment. CEV needs to improve management of budget and to finance the lack of budget for maintenance. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

In order to develop technical human resources according to the market needs, it is strongly recommended that the Ministry of Education and Culture will allocate CEV necessary budget for maintenance as committed by the Ministry at the time of basic design for the Project. On the other hand, CEV is required to make efforts to request appropriate maintenance plan and budget based on the actual expenditure and to secure financial source for necessary maintenance. In addition, it is expected that CEV will continuously develop updated curriculums based on detail assessment of the labor market needs and innovate new programs to meet with wider needs in the labor market in order to differentiate CEV from other vocational training institutes and to develop technical human resource with higher value.

### Lessons learned for JICA:

Strategic coordination between grant aid project and dispatch of long-term expert or senior volunteer is useful to enhance effectiveness and to ensure sustainability of grant aid project through appropriate needs assessment, effective project formation and implementation, useful follow-ups to promote impacts and sustainability.



Printing and Computer Building

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia office: October, 2011

Country	El Proyecto de Mejoramiento de los Establecimientos de Salud en la Zona Sur del Departamento de Beni
Bolivia	

### I. Project Outline

Project Cost	E/N Grant Limit: 847 million yen	Contract Amount: 847 million yen
E/N Date	August, 2005	
Completion Date	July, 2007	
Implementing Agency	Prefectura del Beni	
Related Studies	Basic Design Study: December, 2004 - July, 2005	
Contracted Agencies	Consultant(s)	System Science Consultants
	Contractor(s)	Hazama Corporation
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	Japanese cooperations: Technical Cooperation - Study on Enhancement of District Health System for Beni Prefecture in the Republic of Bolivia (2001-2003) - Project for Strengthening Regional Health Network in Santa Cruz Department (FORSA) (2001-2006)	
Background	In Bolivia, performance of health indicators such as infant mortality rate, maternal mortality rate and under-five child mortality rate was poor. In particular, Beni Prefecture, the target prefecture of this project, was located in the low-lying land of the upper Amazon in the north of the country, and was underdeveloped with poor access to primary health services. The health situation of Beni Prefecture is shown in the high level of total fertility rate and deaths of under-five children from diseases that could have been prevented with early detection, rapid cure and good care at home. Therefore, the realization of equal access to primary health services was an urgent issue.	
Project Objectives	<b>Outcome</b> To improve regional health services through establishing a more solid regional health network by the integrated development of facilities and equipment at prefectural hospitals, health centers, clinics and practical nurses' schools in three (3) districts in Beni Prefecture.	
	<b>Outputs</b> <b>Japanese Side</b> - Rehabilitation of 5 health centers, 1 clinic, 1 practical nurses' school, new construction of 2 clinics, and expansion of 2 hospitals - Soft component for improvement of maternal health services, strengthening of the referral system, etc. <b>Bolivia Side</b> - Site preparation, procurement of necessary furniture/equipment for 25 health institutions (1 practical nurses' school, 7 health centers, 14 clinics and 3 prefectural hospitals) and assignment of health personnel	

### II. Result of the Evaluation

Summary of the Evaluation
<p>Located in the low-lying land of the upper Amazon in the north of Bolivia, Beni Prefecture was underdeveloped with limited access to primary health services. In order to improve health status of the people, ensuring equal access to health services was an urgent issue.</p> <p>This project has achieved its objective, "to improve regional health services through establishing a more solid regional health network by the integrated development of facilities and equipment at prefectural hospitals, health centers, clinics and practical nurses' schools in three districts in Beni Prefecture". The achievement is shown in the increased provision of medical services using equipment developed at prefectural hospital and health centers (i.e., large increase in the number of medical examinations), which reached the expected level both in the target year and the year before the ex-post evaluation. As for sustainability, some problems have been observed in terms of structural and technical aspects and current status of operation and maintenance (O&amp;M) due to insufficient staff assignment to health institutions and consequent lack of preventive maintenance and non-implementation of periodic check and maintenance plans of equipment, while no problem has been found in the financial aspect. 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, project period exceeded the plan. In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>This project has been consistent with Bolivia's development policy (sectoral development plan in health movements for right to health and right to life, and socio-economic development plan of Beni Prefecture), development needs (equal access to primary health services), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Although the project cost was as planned (ratio against plan: 100%), project period exceeded the plan (ratio against plan: 133%). Therefore, efficiency of the project is fair.</p>

### 3 Effectiveness/Impact

The provision of medical services using the facilities and equipment developed by this project has mostly achieved the expected level in both the target year and the year before the ex-post evaluation (when the latest data is available as of the ex-post evaluation). Also, based on interviewing with the Department of Health of Beni Prefecture and the health statistics collected, it is considered that satisfaction of patients with medical services, that of nursing school students with the learning environment in which they can provide sufficient services with confidence, as well as that of instructors who provide nursing education with the teaching environment that enhances students' willingness to learn and understanding.

Therefore, effectiveness/ impact of this project is high.



A hospital constructed by this project

#### Quantitative Effects

Indicators	Basic Design Year (2004)	Target Year (2007) (Planned value)	Target Year (2007) (Actual value)	Latest Year (2010) (Actual value)
1) Improvement of access to health institutions				
<u>(i) Provision of medical services by prefectural hospitals and health centers</u>				
a. Number of examinations	a. 14,332	a. Increase	a. 24,510	a. 25,184
b. Number of operations	b. 71	b. Increase	b. 76	b. 105
c. Number of cases of dental treatment	c. 4,941	c. Increase	c. 6,258	c. 7,608
d. Number of cases of Caesarean section	d. 18	d. Increase	d. 20	d. 64
<u>(ii) Improvement of access to appropriate medical services by rehabilitation of health centers/ clinics and development of equipment</u>				
a. Number of examinations	a. 4,822	a. Increase	a. 9,019	a. 13,230
b. Number of operations	b. 38	b. Increase	b. 21	b. 52
c. Number of cases of dental treatment	c. 1,239	c. Increase	c. 298	c. 1146
d. Number of cases of Caesarean section	d. 19	d. Increase	d. 21	d. 42
<u>(iii) Enhancement and expansion of regional health network by construction of new clinics</u>				
a. Number of examinations	a. 570	a. Increase	a. 764	a. 5,210
b. Number of cases of dental treatment	b. 109	b. Increase	b. 0 (*)	b. 0 (*)
2) Improvement of quality of regional health services by strengthening cooperation among health institutions				
a. Number of referred patients	a. 96	a. Increase	a. 124	a. 389
b. Number of field (traveling/visiting) postpartum checkups	b. 396	b. Increase	b. 424	b. 600
3) Improvement of educational environment of practical nursing schools	No library, no laboratory, lacking equipment	Improve	Sufficient facilities/ equipment	Sufficient facilities/ equipment

Note: \* A background factor behind the zero case of dental treatment is a lack of dentists who are willing to be stationed in remote areas.

Sources: Interview with Health Department of Beni Prefecture, Bolivia Health Information 2005-2010, and health statistics.

### 4 Sustainability

The O&M of the equipment developed at each health institution is under responsibility of the district in charge. Although such structure of the implementing agency is sustained in the similar manner to the ex-ante evaluation, some problems have been observed such as insufficient staff allocation to health institutions where O&M is carried out, and unclear management responsibility for O&M. In the technical aspect for O&M, while, in case of breakdown of equipment, the implementing agency can receive services from private companies with maintenance capabilities (budget for it is available, too), some problems have been observed in that health institutions fail to carry out preventive maintenance due to no staff assigned specifically for maintenance of equipment. As for the financial aspect, the implementing agency has no problem as city-level governments ensure annual budget for development of medical infrastructure and maintenance of equipment. Based on the site visits and interviews with related personnel, it was found that the facilities and equipment was well-maintained and most equipment was utilized. However, the project has some problem in the status of O&M due to lack of periodic check of equipment and the absence of equipment maintenance plans.

Therefore, sustainability of this project is fair.



Medical equipment procured by this project

However, the project has some problem in the status of O&M due to lack of periodic check of equipment and the absence of equipment maintenance plans.

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing Agency:

- The implementing agency (Health Department of Beni Prefecture) is recommended agree with the city council of the city that received the project equipment on who is responsible for management of the equipment in a written form in order to clarify O&M responsibility for the equipment.
- The city councils of the cities that received the project equipment are recommended to secure in its annual implementation plan the budget for maintenance of medical equipment, and to share such information with health institutions.
- The Health Department of Beni Prefecture is recommended to take a lead of human resources development to ensure necessary quantity and quality of personnel for sustainability of project effects.
- The city governments of the cities that received the project equipment are recommended to build a system in which the annual budget and operation planning process promotes participation of medical personnel and reflects their will to the administration level, so that issues required in health institutions' annual operation plans are taken into consideration.

#### Lessons learned for JICA:

- Ensuring staff allocation: in addition to conclusion of official documents on the implementing agency's commitment to staff allocation, a system to guarantee actual recruitment of necessary personnel is important as well.
- Participatory planning of annual operation plans: preparation of annual operation plans with participation of medical personnel is crucially important as it leads to appropriate design including selection of equipment through comprehension of actual situation in the technical aspect.

## Internal Ex-Post Evaluation for Grant-Aid Project

conducted by Honduras Office: October, 2011

Country	“El Proyecto del Mejoramiento del Puente Agua Caliente” and “El Proyecto de Reconstrucción del Puente Las Hormigas”
Honduras	

### I. Project Outline

Project Cost	E/N Grant Limit : 788 million yen 1 <sup>st</sup> Phase (Puente de Las Hormigas) : 499 million yen 2 <sup>nd</sup> Phase (Puente de Agua Caliente) :289 million yen	Contract Amount : 779 million yen 1 <sup>st</sup> Phase (Puente de Las Hormigas) :497 million yen 2 <sup>nd</sup> Phase (Puente de Agua Caliente) :282 million yen
E/N Date	1 <sup>st</sup> Phase : August 2005, 2 <sup>nd</sup> Phase: June 2006	
Completion Date	1 <sup>st</sup> Phase : February 2007, 2 <sup>nd</sup> Phase: December, 2007	
Implementing Agency	Ministry of Public Works, Transport and Housing (Secretaria de Obras Publicas, Transporte y Vivienda (SOPTRAVI) )	
Related Studies	Basic Design Study: January - August 2005	
Contracted Agencies	Consultant(s)	Katahira & Engineers International
	Contractor(s)	Hazama Corporation
	Suppliers(s)	N/A
Related Projects (if any)	<p>Japanese cooperations: Grant-Aid Project:El Proyecto para la Reconstrucción de los Puentes en la Zona de Tegucigalpa(1999-2002), El Proyecto para la Construcción de los Puentes Ilama y Democracia(1999-2003), El Proyecto para la Construcción de los Puentes de la Carretera de Libramiento de Choluteca(1999-2002), El Proyecto de Reconstrucción del Puente Guasaule(1999-2002)</p> <p>Other donors' cooperations: After the devastations by the Hurricane Mitch in 1998, World Bank, IDB, AusAID, Government of Sweden and Government of Spain provided assistance to the rehabilitation of roads and bridges.</p>	
Background	<p>With the support of foreign donors, Honduras has almost recovered from the devastations by the Hurricane Mitch. In terms of road transportation, there are still more work to be done at the time of ex-ante evaluation. The traffic regulations and load restriction in some of main trunk roads had still been put in force because some bridges are still impromptu facilities. It was said that only 65.6% out of the entire length of 3,200 km had been renovated as of at the end of 2004. On the other hand, there was a pressing need to put distribution in place to cope with the increasing volume of the international cargos. This was attributable to the accelerated demands of international distribution of agricultural products among Central-American countries under the Sistema de Integracion Centroamericana (SICA). Under such circumstances, it has become imperative for the Government of Honduras to rehabilitate two bridges located along the Logistic Corridor.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To strengthen the main trunk roads and to secure the safe and sustainable transportation of goods and population by rehabilitation and replacement of two bridges along the Logistic Corridor</p>	
	<p><b>Outputs</b></p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- 1<sup>st</sup> Phase : Puente de Las Hormigas</li> <li>- (45.0m, Removal of whole set of existing bridge. Construction of new bridge for replacement)</li> <li>- 2<sup>nd</sup> Phase : Puente de Agua Caliente</li> <li>- (46.3m, Removal of upper part of existing bridge and bridge pier. Construction of new upper part of bridge and bridge pier for replacement)</li> </ul> <p>Honduras Side</p> <ul style="list-style-type: none"> <li>- To secure the land for construction, temporary office, storage space for construction materials</li> <li>- To relocate the electric power lines, communication lines and water pipes</li> <li>- To construce the Bailey Bridge to be used for the roundabout way (Puente Las Hormigas)</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>Government of Honduras has put much effort to the road maintenance and improvement. However, there are still more work to be done to upgrade the road condition. It is said that only 65.6% out of main trunk roads with entire length of 3,200km, have been renovated as of at the end of 2004. On the other hand, there is a pressing need to gain the broad distribution to cope with the increasing volume of the international cargos. This is attributable to the accelerated demands of international distribution of agricultural products among Central-American countries under the SICA. Under such circumstances, it has become imperative for the Government of Honduras to rehabilitate two bridges located along the Logistic Corridor.</p> <p>This project has largely achieved its objectives; strengthening the main trunk roads and securing the safe and sustainable transportation of goods and population by rehabilitation and replacement of two bridges along the Logistic Corridor. The velocity for transit and weight limit of passing vehicle have been achieved their target values. As for sustainability, sufficient number of staff has been allocated to maintain the roads condition and no problems have been observed in institutional, technical, financial as well as operation &amp; maintenance aspects. For relevance, the project has been highly relevant with Honduras'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, as well, both the project cost and project period were within the plan. In the light of above, this project is evaluated to be highly satisfactory.</p>



**1 Relevance**

This project is highly relevant with Honduras development plan (ex. Poverty Reduction Strategic Paper), development needs in improvement of road condition and maintenance in order to stimulate the economy domestically and internationally, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

**2 Efficiency**

Both project period and project cost was within the plan (ratio against the plan 98% and 94% respectively).Therefore, efficiency of this project is high.

**3 Effectiveness/ Impact**

This project has largely contributed to decrease the vehicles' transit time over the bridge and to improve the traffic flow. And the increase of the weight limit for passing vehicle has facilitated the sustainable and increasing transportation of goods and population. Interviews with those in charge at the implementing agency, it was confirmed that the project has also contributed to increasing the international transportation of goods. And main trunk roads have been strengthened and the safe and sustainable transportation of goods and population has been secured. Furthermore, it was observed that the embankment stabilization for Puente de Las Hormigas has led the mitigation of flood damage and the resolution of dust dispersion by roads. Therefore, its effectiveness/impacts is high.



Puente de Las Hormigas



Puente de Agua Caliente

**Quantitative Effects**

Indicators	Name of the bridge	Baseline value (2004:Basic Design year)	Target value (2007/2008:After completion)	Actual value (2008:Target year)	Actual value (2011:Ex-post evaluation year)
(1) Increase of velocity for transit	Puente de Las Hormigas	Below 10km/h	2007 (Designed)80km/h	80km/h	80km/h
	Puente de Agua Caliente	Below 30km/h	2008 (Designed)80km/h	80k /h	80km/h
(2) Weight limit of passing vehicle	Puente de Las Hormigas	32.7 ton	2007 40.9 ton	40.9 ton	40.9 ton
	Puente de Agua Caliente	32.7 ton	2008 40.9 ton	40.9 ton	40.9 ton

(Data source : SOPTRAVI)

**4 Sustainability**

With the sufficient number of staff allocated with specific terms of reference, the current operational and maintenance including the cleaning is properly conducted through whenever necessary. In case of maintenance and repair, the experienced private contractors selected under the bidding system is in charge with technical expertise under the supervision of Department of Maintenance and Repair (Fondo Vial) As for the financial aspect, it is likely that implementing agency can secure and complement the additional budget if the repair is urgently needed. It has been observed by site visits that two bridges have maintained the favorable condition. There are no problems in institutional, technical, financial and operation and maintenance aspects. Therefore, sustainability of the project is high.



Puente Las Hormigas



Puente Agua Caliente

**III. Recommendations & Lessons Learned**

**Recommendations for Implementing agency:**

Considering the possible effects by the climatic change such as hurricane in Honduras, it is recommended that the regular check-up on maintenance should be conducted in order to protect the bridge from such disasters by early detection of any damage. Such regular check-up system will eventually lead to the extension of expected lifetime of bridges.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Pakistan Office: October, 2011

Country	The Project for the Renovation of Islamabad Children's Hospital
Pakistan	

## I. Project Outline

Project Cost	E/N Grant Limit: 647 million yen	Contract Amount: 583 million yen
E/N Date	August, 2005	
Completion Date	March, 2007	
Implementing Agency	Pakistan Institute of Medical Sciences (PIMS)	
Related Studies	Basic Design Study: November 2004 - March 2005	
Contracted Agencies	Consultant(s)	K.I.T.O Architects & Engineers
	Contractor(s)	Tobishima Corporation
	Supplier(s)	Itochu Corporation, Iwatani Corporation
Related Projects (if any)	The Project for Construction of Islamabad Children's Hospital (1982 and 1983) (JICA Grant Aid), Islamabad Children's Hospital (1986-1993) (JICA Technical Cooperation), The Project for Rehabilitation of the Children Hospital Islamabad (2003) (JICA Grant Aid)	
Background	In Pakistan, there was an increasing need for the neonatal, infant and child health services due mainly to a high population growth rate during the last three decades which is still estimated to be close to 2% per annum. Islamabad Children's Hospital, a tertiary health institution and an educational hospital constructed in 1885 with assistance from Japan, had two surgery beds per operating room considering insufficient number of medical staff. However, under the circumstances where the Hospital dealt with more advanced surgery than before and the application of international standards more strictly for infection prevention, the surgery beds had to be separated and the quantity and quality of the facilities had to be improved. Therefore, the government of Pakistan requested the government of Japan for grant aid to develop facilities for surgery.	
Project Objectives	Outcome	To improve medical service provided by Islamabad Children's Hospital by construction of a new operation theater, renovation of the existing operation theaters and procurement of related medical equipment.
	Outputs	<p>Japanese Side</p> <p>Construction of an operation theater, renovation of the existing operation theaters, rehabilitation of waste water treatment facilities, and replacement of medical equipment</p> <p>Pakistan Side</p> <p>Site clearance, temporary construction works, relocation of existing facilities and pipelines</p>

## II. Result of the Evaluation

Summary of the Evaluation
<p>In response to the increasing need for the neonatal, infant and child health services, Islamabad Children's Hospital needed to provide better services in terms of quantity and quality, but the existing facilities and equipment of operation rooms were insufficient.</p> <p>This project has achieved the improvement of medical services of the Children's Hospital due to the fact that the average number of operations per day increased to 24 in 2011 from the figure of 15 that was recorded at the time of the ex-ante evaluation, and a general feeling of satisfaction among the doctors and the patients on the provision of facilities under the project and quality of treatment extended. As for sustainability, problems have been observed in terms of structural, technical, financial and current status of operation and maintenance aspects due to several factors including the abolishment of the Ministry of Health, the former parent Ministry of the PIMS in June 2011, understaffing for maintenance and unavailability of manuals and refresher trainings for technical staff. Nevertheless, the PIMS is currently working on these issues such as formulation of policies/procedures of a new administrative agency, and the situation in operation and maintenance has much improved compared to the observation made last year.</p> <p>For relevance, the project has been highly relevant with Pakistan'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 as well, both the project cost and the project period were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Pakistan's development plan (decrease in child and maternal mortality as set in national five-year plans up to 1998, Medium-term Development Framework 2005-2010, Vision 2030), development needs (need for better child health care and importance of Islamabad Children's Hospital as a top referral not only for the region but also for nationwide), as well as Japan's ODA policy (decrease in child and maternal mortality and strengthening health services and infrastructure) at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period were within the plan (ratio against plan: 90%, 100%). Therefore, efficiency of the project is high.</p>

### 3 Effectiveness/Impact

This project has largely achieved its objectives. In the quantitative aspects, the number of surgery cases has shown a sharp increase in 2010 from the time of Ex-Ante. The number of tests has also shown a rise. However, operation waiting time was below the expected level at ex-post evaluation due to several reasons including the tremendous increase in outpatients and the consequent shortage of manpower, which also caused underutilization of OT5, one operation theater out of the three developed by this project. Currently, budget to employ additional human resources to run OT5 is not available due to the overall financial crunch of the country, but this issue is under consideration of PIMS with the related authorities. The number of ultrasonic tests did not increase due to installation of ultrasonic machines in other hospitals as well. In the qualitative aspects, there is a greater trust of patients in the health delivery services and in the ability of Islamabad Children's Hospital to handle complex cases in an expert manner. The inflow of patients from as far as Afghanistan reflects its visible effect and its position as the leading tertiary care hospital for child health for very large catchment areas. There is no apparent negative impact on the environment through the disposal of the waste water emitted from the hospital, though monitoring of quality of discharged water is currently not conducted. However, the PIMS has submitted a request to the government for budget appropriation for Hospital Waste Management. Therefore, its effectiveness / impact is high.



Operation Theater equipment has made doctors task of conducting operation easy



Pediatric surgeon examining report of patient suffering from upper lip cleft

#### Quantitative Effects

Indicator(unit)	2004 (BD year)	Plan	Actual results		
		2010 (Target year)	2009/2010* (Target year)	2011 (Ex-post evaluation year)	
No. of operations, minor & major (cases/year and cases/day)	4,500 per year or 15 per day	5,400 per year or 18.75 per day	6,699 per year	24 per day	
Waiting time for operation (months)	6	4.5	6	6	
No. of diagnoses and tests	X-ray (per day)	54-59	69-74	182	Not available
	Ultrasonic (per day)	12-15	18-23	13	
	Clinical test (per year)	189,400	353,500	338,567	Not available
Amount of waste water treatment (m <sup>3</sup> /day)	0	20	20	20	

Source: Statistics Section PIMS and Health Management Information System in Islamabad Children's Hospital.

Note: \* Pakistan's fiscal year (July to June)

### 4 Sustainability

In the structural aspect, there is some uncertainty due to the abolishment of Ministry of Health under which PIMS used to be positioned. Currently the PIMS is in the phase of finalizing the policies and procedures with a new administrative/supervising agency. Apart from that, the project is facing problems in the technical aspect due to inadequate assignment of engineering staff for the upkeep of the equipment and unavailability of manuals and refresher trainings for the staff. Similarly the deficient budget has hindered the timely replacement of essential equipment and spare parts with the result that the O&M standards have become difficult to maintain. Nevertheless, these problems have not seriously affected the continuity of the project effectiveness as it was observed that the day to day working of the hospital is well managed and the number of surgical operations diagnoses/ tests has been increasing to date (see Effectiveness/Impact above). Therefore, the sustainability of the project is fair.

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- The PIMS's efforts for effective utilization of OT5 should be accelerated in order to meet rising demand of the patients requiring surgical procedures.
- Continuous efforts to ensure proper and sustainable funding for operation and maintenance.
- Human Resource Development and Strategy (on the number of staff and refresher training) is required especially in the fields of neurosurgery, trauma and plastic surgery exclusively for Islamabad Children's Hospital.



## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Pacific Department (Palau Representative Office): October, 2011

Country	The Project for the Improvement of North Dock of Peleliu State
Palau	

### I. Project Outline

Project Cost	E/N Grant Limit: 581 million yen	Contract Amount: 577 million yen
E/N Date	December 2005 (Extension: October 2006)	
Completion Date	February 2007	
Implementing Agency	Ministry of Resources and Development, Department of Marine Resources	
Related Studies	Basic Design Study: July 2005 to January 2006	
Contracted Agencies	Consultant	Echo Corporation
	Contractor	Penta-Ocean Construction Co., Ltd.
	Supplier	N/A
Related Projects (if any)	Project for the Development of the Fishing Community in Peleliu State (1998) Project for the Improvement of Fishery Infrastructure in Kayangel State (2002) Embassy of Japan Grant Assistance for Grassroots Project(GCP) for Peleliu State Emergency Boat	
Background	<p>The Republic of Palau consists of many small islands with population of 19,129 (according to the 2000's national census). The State of Peleliu which constitutes 3% of total population has 5% of total fishing hauls of Palau, next to the Koror State and the Airai State. And the stimulation of the fishing industry was the key for its regional development of the State.</p> <p>North Dock in the Peleliu State, which has served as a major base for promoting the fishing industry, has had multiple function, such as the port of landing of fish catches, the supply and refill base for boats and the anchorage areas for passengers and cargos. Having been deteriorated across the ages, the North Dock could not serve well enough to meet the current demand. In order to secure the smooth distribution of goods and population, and thus to activate the fishing industry, it is imperative, therefore, to renovate the North Dock.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To increase the efficiency in landing of fish catches and in operation of regular liners by renovation and upgrading the North Dock of the Peleliu State such as renovating the fishing boats dock, dredging of anchorage and water channel and having beacons equipped, etc.</p>	
	<p><b>Outputs</b></p> <p>Japanese side</p> <ul style="list-style-type: none"> <li>- To extend and renovate the existing pier</li> <li>- To dredge the water channel and anchorage</li> <li>- To have beacon equipped</li> </ul> <p>Palau side</p> <ul style="list-style-type: none"> <li>- To provide the temporary construction yard to be used during the construction period</li> <li>- To secure the land for disposing of boulders removed from dredging and construction waste soil</li> <li>- To obtain the approvals related to the administrative proceedings, such as banking</li> <li>- To renovate the existing roads ( in case of any defects due to the construction)</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>In the Republic of Palau, 70% of total population is concentrated on the Koror State, thus strong ties with the State in supply of fishery products and transportations, is absolutely imperative for rural states to vitalize the local economy. Main industries in the State of Peleliu are tourism and fishery; however, the port facilities such as the North Dock had not served well to meet the current demand. Vessels often had to wait at off-island while the port has been congested with many vessels. Or the large vessels had to slow down at the certain tidal range. Such inconveniences and insufficient capacity of the North Dock has become an issue for the regional development of the Peleliu State.</p> <p>The project has achieved its objectives in reduction of waiting time at off-island and increasing number of days for large vessel laden with to travel, thus the economy of the state has been activated by increasing the efficiency in landing of fish catches and in increasing the number of tourists, As for the sustainability, there are some problems such that engineers have not received sufficient trainings to maintain the skills for dredging and bathymetry, and costly maintenance work such as dredging has been often procrastinated due to the budgetary constraint. For relevance, the project has been highly relevant with Palau'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 almost as planned.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

#### 1 Relevance

The project is highly relevant with Palau's development plan in increasing the employment and the revenues of the fishing industry and improving the port facilities and distribution channels to cope with the domestic demands, development needs in securing the smooth distribution of goods and population by renovation of North Dock, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

## 2 Efficiency

Both project cost and project period were almost as planned (ratio against the plan 99% and 100% respectively). Therefore, efficiency of this project is high.

## 3 Effectiveness/Impact

This project has largely achieved its objectives in increasing the efficiency in landing of fish catches and in improving the operation of regular liners. As a result, the waiting time for vessels at off-island was reduced, the large vessels can travel on a daily basis, and time required for vessels to travel over the port was reduced. According to the interviews with those concerned at the Peleliu State Government, (1) with the pier expansion, many vessels can berth along with large vessels and safety of operation and landing has been improved; (2) reduction of waiting time for vessels at off-island has greatly contributed to saving time for storage work, at the same time, fishing products can easily be stored in fresh condition; and (3) the time of distribution for the fish product to the point of consumption, Koror, was minimized.

Furthermore, the project has also stimulated the economy by increasing the number of tourists, by activating fisheries (number of fishing vessels increased from 18 in 2008 to 22 in 2011), by securing the supplies of ordinary goods. In addition, it was confirmed that the aid to navigation equipped at the off-shore has helped increase the safety for vessels to travel in the harbor.

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



Expanded part and large vessel



Aid to navigation

### Quantitative Effects

Indicators	Baseline value (2005:Basic Design year)	Target value (2008:Target year)	Actual value (2008:Target year)	Actual value (2011:Ex-post evaluation year)
1) Reduction of waiting time at off-island	Impossible to berthing while the vessel is tied up.	Possible to berthing	No waiting time at off-island	No waiting time at off-island
2) Number of days for large vessel laden with to travel	44 days	323 days	365 days	365 days
3) Time required for large vessel to travel (5.5km)	55 minutes	30 minutes	15-30 minutes	In general, 15 to 30 minutes If the low tide coincides with spring tide, the ship needs to travel in slow pace (30 to 60 minutes) to protect the body.

(Data Source : Questionnaires and interviews with those concerned of Peleliu State Government)

### Additional information : The number of tourists by year who visited Peleliu Island

Year	2008	2009	2010
Number of tourists	1,069	2,955	3,875

(Data Source : Provincial Office of Peleliu State Government)

## 4 Sustainability

The North Dock has been well-maintained since its completion on February 2007. According to the interviews with those concerned at the Peleliu State Government and the site visits, it was confirmed that there was no problem on institutional and operational aspect; however, some problems on the technical and financial aspects, and current status were identified. Engineers have not received the sufficient trainings to maintain skills for dredging and bathymetry, and costly maintenance work such as dredging has been often procrastinated due to the budgetary constraint. Therefore, the sustainability of the project is fair. No dredging has been done after the completion of the project, and the large vessels should slow down at the limited tidal range, but this has not had any negative impact on the port operation.



Partially delaminated concrete

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

In order to cope with the situation of which large vessels should slow down at the certain tidal range, it is recommended that the project should take into consideration of the cost-effective way for dredging, such as simply vacuuming up the seabed sand. And it is recommended that the Department of Marine Resources should secure the budget for such dredging work.

### Lessons learned for JICA:

Dredging project often requires the large scale of funds as well as the procurement of specialized equipment. It is recommended, therefore, that JICA should also think of alternative measures which may fit into the technical capacity of counterpart agency, such as the measure of simply vacuuming up the seabed sand.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Pakistan Office: October, 2011

Country	The Project for the Enhancement of Training Capabilities of Construction Machinery Training Institute
Pakistan	

### I. Project Outline

Project Cost	E/N Grant Limit: 890 million yen	Contract Amount: 848 million yen
E/N Date	May, 2006	
Completion Date	February, 2007	
Implementing Agency	Construction Machinery Training Institute (CMTI) (renamed to CTTI: Construction Technology Training Institute in 2005)	
Related Studies	Basic Design Study: August 2004 - February 2005 Detailed Design Study: February 2006 - January 2007	
Contracted Agencies	Consultant(s)	Construction Project Consultants – Yachiyo Engineering (JV)
	Contractor(s)	Tobishima Corporation
	Supplier(s)	Itochu Corporation
Related Projects (if any)	Japanese cooperations: Construction Machinery Training Centre (JICA Technical Cooperation, 1985-1990), Construction Machinery Training Institute (Third Country Training Program, 2006-2010), The Construction Project for the Construction Machinery Training Centre (JICA Grant Aid, 1984), The Project for Expansion of Construction Machinery Training Institute (JICA Grant Aid, 1995)	
Background	In Pakistan, there was a huge demand for infrastructure development, and thus for capable human resources for operation and maintenance of construction machinery. Since its opening in 1985 with assistance from Japan, CTTI trained 9,200 persons up to the time of the ex-ante evaluation of this project. However, due to recent rapid modernization of construction machinery, CTTI needed to open new courses, which required new facilities and equipment.	
Project Objectives	Outcome To enhance training capabilities of Construction Machinery Training Institute (CMTI), Islamabad, by development of facilities and equipment for new training courses.	
	Outputs Japanese Side - Construction of training and dormitory buildings and procurement of equipment necessary for opening of three new courses: (i) Vehicle Mechanic, (ii) Vehicle Electrician, and (iii) Welding and Fabrication. Pakistan Side - Machinery yard (952m <sup>2</sup> ), site clearance, and connection to existing infrastructures.	

### II. Result of the Evaluation

Summary of the Evaluation
<p>In response to the huge demand for infrastructure development, and thus for capable human resources for operation and maintenance of construction machinery that was being modernized rapidly, CTTI needed to open new courses, which required new facilities and equipment.</p> <p>This project has largely achieved the enhancement of training capabilities of CTTI through development of facilities and equipment for the three new training courses, due to the fact that those courses, since opened in 2008, have produced total 316 graduates who are capable of handling highly-mechanized construction works demanded by the construction industry. As for sustainability, there was no problem observed in the project due to the appropriate operation structure, qualified human instructors, good financial conditions to run training, and appropriate operation and maintenance practices of CTTI.</p> <p>For relevance, the project has been highly relevant with Pakistan'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 as well, both the project cost and project period were within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Pakistan's development plan (infrastructure development as set in national five-year plan 2005-2010), development needs (human resource development for construction machinery), as well as Japan's ODA policy (priority on infrastructure development), at the time of planning/ ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period was within the plan (ratio against plan: 95%, 100%). Therefore, efficiency of the project is high.</p>

### 3 Effectiveness/Impact

The project has largely achieved its purpose of developing the human resource for operation and maintenance of construction machinery. The number of graduates from the three new training courses is mostly satisfactory in the target year. Based on information from the implementing agency, it is considered that the contents of the new training, which includes latest mechanized technology exactly compatible with the market demand, are highly appreciated by construction companies. As shown in the fact that 955 CTTI graduates have been employed by domestic and foreign-invested companies (including Japanese companies), more trained operators, mechanics and supervisors are now available in the market to the construction companies as compared to the past, and thus most of the construction work is now extensively mechanized. For example, rehabilitation of the last year's flood damaged roads is almost all mechanized. By supplying its graduates to many construction companies, CTTI has contributed to such trend. In addition, the Third-Country Training Course "International Course on Operation and Maintenance of Construction Machinery" has also benefited from this project as it has used the facilities/equipment developed by this grant aid project since Japanese Fiscal Year 2008. Therefore its effectiveness/impact is high.

#### Quantitative Effects

Indicator(unit)		2004 (BD year)	(Actual value)				Total
			2008	2009	2010*	2011	
No. of graduates from new training course	Vehicle mechanic	0	27	28	29	28	112
	Vehicle electrician	0	25	24	27	0	76
	Welding and fabrication	0	49	28	25	26	28

Source: CTTI. Note: \*The target year set in BD (three years after the project completion). The target value has not been specified in BD.

Number of graduates from the Third Country Training Course: 18 (JFY2005), 20 (JFY2006), 19 (JFY2007), 20 (JFY2008), 20 (JFY2009).



A practical training going on utilizing the equipment and facilities



A classroom lecture on the course

### 4 Sustainability

This project has no problem in structural, technical and financial aspects and operation and maintenance status of the implementing agency as we observed the current status as follows. 1) Current organizational settings for O&M are very appropriate according to number of trainees, workshop facilities and machines, 2) This institution has qualified instructors on its faculty strength to teach classes of Diploma of Associate Engineer in civil, Mechanical, Auto & Diesel Technology and short courses, 3) Financial resources required to sustain project effectiveness have been secured by Government of Pakistan and expected to be secured for future as well. And 4) All the facilities available in this Institute are maintained regularly and kept in worthy condition. Furthermore, CTTI has made their best effort in their current capacity, such as holding evening trainings, to meet the increasing demand for trainings. Therefore sustainability of this project is high.



The facility kept clean and well maintained

### III. Recommendations & Lessons Learned

#### Recommendation for Counterpart Agency:

It is recommended that CTTI increase the number of trainings as the demand for trainings is much higher. CTTI has already made their best effort in their current capacity, such as holding evening trainings and maintaining the equipment and other training facilities in excellent conditions. Therefore, it is recommended to CTTI to seek the way to increase the number of trainings by formulating the future plan for the training and calculation of necessary additional input for convincing relevance ministries or donors to fund them.

#### Column: Combined Factors for the Success:

This project is very successful because they could establish the positive spiral as follows. This spiral starts from the capable and highly motivated personnel of CTTI. Because of these personnel, CTTI have maintained their equipment and other facilities in excellent conditions, which enables them to provide the training courses of high quality. CTTI has a good reputation, shows their achievement and the more demands for the training comes up which helps Ministry of Communication to allocate required budget and support to CTTI, and this enables CTTI to maintain the equipment and facility appropriately for providing the high quality training courses.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Cambodia office: October, 2011

Country	The Project on Capacity Building for Water Supply System
Cambodia	

## I. Project Outline

Project Cost	293million yen	
Project Period	October 14, 2003 - October 13, 2006 (3 years)	
Implementing Agency	Phnom Penh Water Supply Authority (PPWSA), Ministry of Industry, Mines and Energy / Department of Potable Water Supply (MIME/DPWS)	
Cooperation Agency in Japan	Ministry of Health, Labour and Welfare, Waterworks Bureau of Kitakyushu City, Yokohama and Nagoya and Tokyo Metropolitan Government, Hokkaido University, Japan Water Works Association (JWWA)	
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Technical Cooperation</p> <ul style="list-style-type: none"> <li>- The Study on Phnom Penh Water Supply System (1993), The Master Plan of Great Phnom Penh Water Supply (Phase 2) (2006), The Project on Capacity Building for Water Supply System Phase 2</li> </ul> <p>Grant Aid Projects</p> <ul style="list-style-type: none"> <li>- The Project for Improvement of Water Supply Facilities (Phase 1 &amp; 2) (Completion, 1999), The Project for Expansion of Phum Prek Water Treatment Plant (Completion, 2003), The Project for Improvement of Water Supply System in Siem Reap Town (Completion 2006)</li> </ul> <p>JICA Loan</p> <ul style="list-style-type: none"> <li>- Niroth Water Supply Project (Co-finance with AFD)</li> </ul> <p>Other donors' cooperations:</p> <ul style="list-style-type: none"> <li>- France: Chamkar Mon WTP and Expansion of Chrouy Changva,</li> <li>- World Bank, ADB: Rehabilitation of 6 Provincial Towns Waterworks</li> </ul>	
Background	<p>Water supply facilities in Cambodia have been renovated by the assistance from foreign donors including JICA, and the capacity to distribute the water has been greatly improved, especially in the urban areas of Phnom Penh and Siem Reap. Therefore, there was a great need to strengthen the capacity of MIME/DPWS which are responsible for Human Resources Development (HRD) on water supply system. With regard to this need, in response to the request from the government of Cambodia, the Japanese Government decided to implement the technical cooperation to improve (i) capacity to operate and maintain the water supply facilities in PPWSA and (ii) staff training system for water supply system in Cambodia.</p>	
Inputs	Japanese Side	Cambodia Side
	<ol style="list-style-type: none"> <li>1. Experts: 3 Long-term experts and 32 Short-term experts</li> <li>2. Trainees Received: 29 CPs in Japan</li> <li>3. Third-Country Training: 12 CPs in Thailand</li> <li>4. Equipment: 19.3 million yen for procurement from Japan and US\$82,283 for local procurement</li> <li>5. Local Cost: US\$174,076</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff Allocated: 50 personnel (11 from MIME and 39 from PPWSA)</li> <li>2. Buildings and facilities: Project Office with utilities at PPWSA compounds</li> <li>3. Local cost: US\$12,420 for transportation and accommodation for training and OM cost for training center</li> </ol>
Project Objectives	Super Goal	
	Access to safe water will increase in urban area.	
	Overall Goal	
	Capacity to operate and maintain water supply facilities will be improved in urban area	
	Project Purpose	
<ol style="list-style-type: none"> <li>1) Capacity to operate and maintain water supply facilities will be improved in PPWSA.</li> <li>2) Staff training system for the water supply system will be improved in the Kingdom of Cambodia.</li> </ol>		
Outputs		
Output 1: Capacity to control the distribution of treated water will be improved in PPWSA.		
Output 2: Appropriate operation and maintenance techniques in the Phum Prek water treatment plant will be mastered.		
Output 3: Water quality monitoring system will be improved in PPWSA.		
Output 4: Training programme based on human resources development plan will start in PPWSA.		
Output 5: Training programme based on the needs of provincial waterworks will be conducted.		

## II. Result of the Evaluation

Summary of the Evaluation
<p>Under the supports of the Japanese government and other donors, the water supply system in Phnom Penh had expanded its capacity from 65,000 m<sup>3</sup>/day in 1993 to 235,000 m<sup>3</sup>/day in 2003. Japan, World Bank and ADB were starting to reconstruct the water supply facilities in the major provincial waterworks. With this rapid expansion of water supply facilities, there was an urgent need of human resources development for PPWSA; however, MIME/DPWS which is responsible to improve capacity of provincial waterworks did not have enough experiences to conduct capacity building.</p> <p>This Project has achieved its purposes of improving the capacity to operate and maintain water supply facilities in PPWSA, and the staff training system for the water supply system in Cambodia. And the Project has achieved its overall goal of improving the capacity to operate and maintain water supply facilities in urban area. As for sustainability, the project has no problems in policy background,</p>



structural aspects of implementing agency. The capacity of MIME and provincial waterworks, especially for PPWSA has been greatly improved through the trainings conducted by the project. As for the capacity of other provincial waterworks, the on-going project namely, “Capacity Building for Water Supply System Phase 2” has focused on the training for those staff of 8 provincial waterworks. For relevance, the project has been highly relevant with the development policy of the Kingdom of Cambodia, development needs, as well as Japan’s ODA policy. For efficiency, both project cost and project period were mostly as planned.

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

**1 Relevance**

This project has been highly relevant with Cambodian development policy, such as the Cambodia Millennium Development Goals (CMDGs), National Strategic Development Plan (2006-2010), Rectangular Strategy Phase II, National Water and Sanitation Sector Financing Strategy for Cambodia and the National Policy on Water Supply and Sanitation. The project has also been consistent with the development needs, to strengthen the capacity of MIME/DPWS, as well as Japan’s ODA policy, at the time of both ex-ante and project completion. Therefore, its relevance is high.

**2 Effectiveness/Impact**

The project has largely achieved its purpose with combined efforts of other donor’s assistant such as France, World Bank and ADB. It should be noted that the MIME/PPWSA has taken the initiatives to manage the donor coordination according to “the Study on Phnom Penh Water Supply System (1993)” and “the Master Plan of Great Phnom Penh Water Supply (Phase 2) (2006)” developed by Japan. As for the project purpose of (i) improving capacity to operate and maintain water supply facilities in PPWSA, the targeted indicators have been achieved, such that the non-revenue water ratio decreased to 5.85% in 2010 from 17.1% in 2003, the water distribution was conducted in accordance with the demands, and the quality of water in all of the three Water Treatment Plants (WTPs) operating in Phnom Penh satisfied with the WHO’s Drinking Water Quality Standard. As for the purpose of (ii) improving staff training system for the water supply system, the project has also achieved its target indicators in fostering the main trainers for training the staff of provincial waterworks and training more than 200 staff by conducting 13 training courses based on the long-term human resources development program. As for the overall goal, treated water quality of Phnom Penh and eight WTPs were complied with required standard and for most of water supply facilities in the urban area utilization rates are more than 60%. As for the super goal, according to the national census of 2008, 72% of urban population has access to safe drinking water (the data includes not only the pipe-water, but also other water sources), and this is very close to the CMDG target, 80% for 2015. Some positive impacts have also been observed such that the technical information has been exchanged between DPWS and provincial Waterworks, and that MIME has started promoting the establishment of the Cambodian Waterworks Association. No negative impact has been observed. Therefore, its effectiveness/impact is high.



OJT on the maintenance of distribution facilities



OJT on how to use laboratory equipment for water quality analysis at PPWSA



OJT training for staff of provincial waterworks on operation and maintenance of pumping facilities

**3 Efficiency**

Both project period and project cost were mostly as planned (ratio against plan 100%, 98% respectively.) Therefore, efficiency of this project is high.

**4 Sustainability**

The project has no problems in policy background, structural aspects of implementing agency. The capacity of MIME and provincial waterworks, especially for PPWSA has been greatly improved through the trainings conducted by the project. As for the capacity development of provincial waterworks, the on-going project namely, “Capacity Building for Water Supply System Phase 2” has taken over the trainings. With the good performance of telemeter system, the financial situation of PPWSA is quite good. Furthermore, the facilities and equipment installed by the project are generally in good condition and in use with appropriate maintenance. Therefore, the sustainability of the project is high.

**III. Recommendations & Lessons Learned**

Lessons learned for JICA:  
 The strong initiative of the government on donor coordination is the key to achieve the intended objective through effectively binding efforts of all stakeholders.



# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Laos office: October, 2011

Country	The Project for Strengthening for Health Services for Children (KIDSMILE)
Laos	

## I. Project Outline

Project Cost	608 million yen	
Project Period	November, 2002 - October, 2007	
Implementing Agency	Ministry of Health (MOH), Vientiane Provincial Health Office, and Oudomxay Provincial Health Office (PHO)	
Cooperation Agency in Japan	National Center for Global Health and Medicine	
Related Projects (if any)	Other donors' cooperations: <ul style="list-style-type: none"> <li>• World Bank: The Health System Reform and malaria Control Project (1995-2001)</li> <li>• Asian Development Bank: The Primary Health Care Project including Oudomxay provinces (until 2000)</li> <li>• WHO: Technical and financial supports</li> </ul>	
Background	Under the serious situation for high maternal and child mortality rates the government of Lao PDR has been making efforts to achieve the Millennium Development Goals (MDGs) by 2015. On the other hand, due to the limited coverage of the health service network in the country, people in remote communities had limited access to the health services. Therefore, the government of Lao PDR requested the government of Japan for technical cooperation to strengthen maternal and child health services in the country.	
Inputs	Japanese Side	Laos Side
	<ol style="list-style-type: none"> <li>1. Experts 8 experts in 4 areas for Long term, 37 experts in 18 areas for Short term</li> <li>2. Trainees Received: 42 persons in 14 courses</li> <li>3. Third-country training: 90 persons</li> <li>4. Equipment: 52 million yen</li> <li>5. Local Cost: 0.92 million yen</li> <li>6. Others: 50 million yen</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff allocated: 72 counterparts in MOH, Vientiane Provincial Health Office, and Oudomxay Provincial Health Office.</li> <li>2. Equipment: None</li> <li>3. Buildings and facilities: project office space in MOH, Vientiane Provincial Health Office, and Oudomxay Provincial Health Office.</li> <li>4. Others: 218 million kip.</li> </ol>
Project Objectives	<b>Overall Goal</b> <ol style="list-style-type: none"> <li>1. The health standard of children is improved in the target provinces (Vientiane and Oudomxay).</li> <li>2. Practical systems established by the Project are utilized beyond the central level and the target provinces.</li> </ol>	
	<b>Project Purpose</b> Management system for child health services is strengthened among the MOH and the target provinces (Oudomxay and Vientiane) with various levels' participation.	
	<b>Outputs</b> <ul style="list-style-type: none"> <li>- Training information system is established at the target provinces and at central level.</li> <li>- The network system is strengthened at the target provinces and at central level.</li> <li>- Minimum Requirements (MR) and Integrated Management for Childhood Illness (IMCI) are established at the target provinces and at central level.</li> <li>- Capacity of Information, Education and Communication (IEC) is improved at the target provinces and at central level.</li> <li>- Activity cycle of planning, implementation, monitoring, evaluation and feedback are carried out at the target provinces and at central level.</li> </ul>	

## II. Result of the Evaluation

### Summary of the Evaluation

In order to reduce maternal mortality rate and child mortality rate, strengthening of health network as well as improvement of health management system were key issues in Laos.

This project has achieved the increase in the access of under-5 population and the improvement of quality of health services at both provincial and district health facilities through strengthening management system for child health service in the target provinces. The Project also achieved the decrease in the under-5 mortality rates for the overall goal of improving the health standard of children in target provinces while the Project partially achieved the nationwide extension of the health management system such as Minimum Requirement (MR) for another overall goal of utilizing practical system established by the project. As for sustainability, some problems have been observed in terms of financial, technical and institutional aspects due to the limited budget and technical skills.

Also the weak management affects the continuity of some of IEC activities and Training Information System (TIS). For relevance, the project has been highly relevant with Lao development policy, development needs as well as Japan's ODA policy. For efficiency, project cost 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 the National Socio-Economic Development Plan (NSEDP) and the Health Strategy 2020 to improve health service coverage, development needs for capacity development in child health care to reduce infant and child mortality, as well as Japan's ODA policy at the time of planning/project completion. Therefore, its relevance is high.

### 2 Effectiveness/Impact

The Project has achieved its project purpose of the increase in under-5 population having the health services at provincial or district facilities and the decrease in the dissatisfaction rate health services users at those health facilities, and well functioned MR, which is a quality management system to improve district hospitals in the two target provinces.

For the overall goal, improvement of health standard of children in the target provinces was verified at the time of ex-post evaluation despite the limited statistical data (the latest national population census in Laos is year of 2005). In Vientiane Province, according to the Vientiane PHO, the under-5 child mortality rate decreased to 35 per 1,000 live births in 2011 from 50 per 1,000 live births in 2002. In Oudomxay, according to the health service record at the Oudomxay Provincial Hospital, there were only 40 cases of the under-5 child mortality during 2006-2010. The Project also partially achieved another overall goal. The system established by the Project, such as MR and the Communication Network have been utilized nationwide and IMCI which was promoted by the Project is further smoothly implemented. In particular, MR, which had been developed by the Project for district hospital, has been expanded to health centers by MOH. Therefore, its effectiveness/impact is high.

### 3 Efficiency

While inputs were appropriate for producing outputs of the project and project period was as planned (ratio against plan: 100%), project cost slightly exceeded the plan (ratio against plan: 122%). Therefore, efficiency of the project is fair.

### 4 Sustainability

The Lao health policy incorporated the development of the MRs guideline and its nationwide extension as well as the nationwide Child Health Campaign. However, while the structure of executing agency has been sustained since the implementation of the Project, some constraints such as the limited number of staff and double assignment of administrative and technical works affect continuity of the activities for improvement of health management. In terms of technical aspects, the personnel trained by the Project still keep their skills and knowledge about MRs, IMCI or the Communication Network and they are training other personnel through the on the job training basis (OJT). IEC is partially sustained through utilization of the IEC skills introduced by the Project for community health education. However, the activities of TIS are not sustained any more due to insufficient communication and coordination among the different sections within PHOs. Also the limited technical skills of staff in charge hamper the extension of activities related to IEC. In terms of financial aspects, while the high continuity of MRs and IMCI activity is likely to be ensured because of the approach which intensely focused on strengthening management capacity and required less amount of budget, the activities of IEC and Communication Network, rely on the financial supports by the donors due to the limited budget for PHOs and the District Health Offices (DHOs). Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

In order to ensure and enhance the sustainability of the project effects, it can be recommended that regular monitoring and supervision by MOH for PHOs, and by PHOs for DHOs are necessary to be institutionalized. In order to strengthen the management of delivering health services, such regular monitoring and supervision is important to promote good communication among those organizations as well as deeper understandings by local health staff on meaning of each activity.

### Lessons learned for JICA:

In order to promote the nationwide extension of the systems developed by JICA's cooperation, as in the case of MR, it is necessary to involve the central level at early stage. It results to have an impact for decision making of policy level in order to prioritize the activities related to the project outcomes in the policy and to standardize and incorporate them into routine work without extra budget. In addition, close coordination and communication among MOH and Development Partners are important to develop an integrated policy, strategy and standards in order to avoid duplications and inconsistency and to efficiently mobilize financial resources from government or other donors.



Child Illness Check Up at District Hospital



MR Monitoring Chart of District Hospital

## Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Laos office: October, 2011

Country	The Project on Lao Electric Power Technical Standards Promotion
Laos	

### I. Project Outline

Project Cost	About 395 million yen	
Project Period	January 18, 2005 to January 17, 2008 Extension period: January 18, 2008 to March 17, 2008 for 2 months	
Implementing Agency	Department of Electricity (DOE) of Ministry of Energy and Mines (MEM), Electricite du Laos (EDL)	
Cooperation Agency in Japan	Japan Electric Power Information Center, INC.	
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Technical Cooperation</p> <p>Project on Electric Power Technical Standard Establishment (2000-2003)</p> <p>Project on Improvement of Power Sector Management (IPSM or STEPIII) (2010-2013) (On going)</p> <p>Individual Expert: Power Policy Advisor to Support the Department of Electricity, MEM (2009-2012)</p> <p>ODA Loan</p> <p>Mekong Region Electricity Network Planning (Pakxan-Thakek-Pakbo 115kV Power Transmission line)(2006-2011)</p>	
Background	<p>In the electricity sector in Lao PDR, there was no technical standard existed despite the fact that many international donor agencies and power producers developed electric facilities including power plants in the country. Department of Electricity (DOE) under the Ministry of Energy and Mines (MEM), therefore, drafted the power technical standard under a JICA technical cooperation project namely, the Project on Electric Power Technical Standard Establishment (STEPI) for the period of 2001 to 2003. Then, the Lao Electric Power Technical Standard (LETS), which defines and authorizes the technical standard to construct/install the electric power facilities, was completed and adopted into the Ministerial Degree of Electricity law in February, 2004. However, DOE did not have sufficient capacity to promote, utilize and enforce the LETS. Under such circumstances, the government of Lao PDR requested the government of Japan for another technical cooperation, which resulted in the implementation of this project that was thus called STEP II.</p>	
Inputs	Japanese Side	Laos Side
	<ol style="list-style-type: none"> <li>Experts: 3 Long-term experts and Short-term experts (about 50MM) in 8 fields</li> <li>Trainees Received: 11 CPs trained for 6 fields in Japan.</li> <li>Equipment: 19,3 million yen for procurement from Japan and 82,283 US dollar for local procurement</li> <li>Local Cost: 174,076 US dollar</li> </ol>	<ol style="list-style-type: none"> <li>Staff allocated : 22 personnel (12 from DOE and 10 from EDL)</li> <li>Buildings and facilities: both at DOE and EDL compounds</li> <li>Local Cost : 22,100 US dollar</li> <li>Equipment: Utilized What was provided by JICA during STEP I</li> </ol>
Project Objectives	Overall Goal	
	Power sector's activities and power facilities' safety are improved.	
	Project Purpose	
The LETS (Lao Electric Power Technical Standard) is enforced within public and private sectors.		
Outputs		
Output1: Complementary guideline and manuals relating to the LETS is drawn.		
Output2: Through on the job training, knowledge and training skills of counterparts of DOE and EDL as trainers are upgraded.		
Output3-1: DOE staffs obtain necessary knowledge and skills as inspectors and transfer those knowledge and skills to Provincial Department of Industry and Handicraft (PDIH) staff.		
Output3-2: EDL engineers obtain necessary knowledge and skills in order to apply the LETS to their works.		
Output4-1: Responsible division for the LETS is established.		
Output4-2: Mechanism for monitoring and evaluating implementation of the LETS is formulated.		
Output5: Awareness on the LETS of public and private sectors is increased.		

### II. Result of the Evaluation

Summary of the Evaluation
<p>With the supports from foreign donors including Japan, many power plants were constructed throughout Lao PDR. The Electric Power Technical Standards (LETS) developed by the support of Japan's technical cooperation was enacted in 2004. However, there were not sufficient numbers of engineers or technicians to promote and implement the standards in the government sector as well as the private sector.</p> <p>This project has partially achieved its project purpose of enforcing the LETS with public and private sectors as it was observed that the designated power plant projects were inspected in accordance with the LETS but action plans to comply with the LETS have not been prepared as expected. The overall goal of improving power sector's activities and power facilities' safety has also been partially achieved as shown in the fact that some of DOE and EDL power facilities with more than 1MW capacity are inspected in accordance with the LETS but accident database and reporting system have not yet been established. As for sustainability, some problems have been observed</p>

in terms of structural, technical, and financial aspects due to the on-going restructuring of DOE, non-implementation of the training mechanism after the project, and the insufficient budget allocation to continue the activities established by the project.

For relevance, the project has been relevant with Lao development policy, development needs, and Japan's ODA policy. For efficiency, both project cost and project period slightly exceeded the plan.

In the light of above, this project is evaluated to be partially satisfactory. It should also be noted that the achievements and impacts generated by this project have been effectively succeeded by the currently on-going project, "The Project for Improvement of Power Sector Management (IPSM or STEP III)" for the period of 2010 to 2013.

#### 1 Relevance

This project has been highly consistent with the development policy of Lao PDR (the 5<sup>th</sup> and 6<sup>th</sup> National Socio-Economic Development Plans (2001-2005/2006-2010)) to increase rate of electrification and promotion of electric power selling, development needs (human resources development who deal with the promotion/implementation of the LETS), as well as Japan's ODA policy, at the time of both ex-ante evaluation and project completion. Therefore, its relevance is high.

#### 2 Effectiveness/Impact

This project has somewhat achieved the project purpose and overall goal. For the project purpose, designated power plant projects were inspected in accordance with LETS but action plans to comply with LETS have not been prepared for all those designated power plant projects. The overall goal of improving power sector's activities and power facilities' safety has also been partially achieved. After the project completion, the application of the LETS was extended to other power facilities with more than 1MW capacity, which are currently inspected using the LETS, but it is difficult to judge if LETS are compiled by all facilities more than 1MW due to unavailability of data. Accident database are established and analyzed only for the limited number of facilities. For those facilities without accident database, the operational condition has been checked using a check sheet on a daily basis. Therefore, its effectiveness /impact is fair.



Low voltage 22 kV Transformer

#### 3 Efficiency

While inputs were appropriate for producing outputs of this project, the project cost was higher than the plan (ratio against plan: 125%) and the project period is slightly longer than the plan (ratio against plan: 105%). Project period was extended for two months to support the Japanese ODA Loan project constructing transmission lines to maximize the benefit for both projects by providing additional technical trainings for technicians in terms of electric power transmission. The project cost was exceeded due to the project period was extended. Therefore, efficiency of this project is fair.

#### 4 Sustainability

This project is consistent with the power policy of Lao PDR in an ongoing manner as described in the 7<sup>th</sup> NSEDP. However, the project has some problems in institutional, technical and financial aspects of the implementing agencies. As for the institutional aspect, the structure of implementing agency has been sustained in similar manner with the implementation period. However, the institutional framework such as the training mechanism developed by the project has not been implemented yet. This relates to the problems of technical aspect of which trainers trained and qualified by the project have some difficulties to keep up (or brush up) with their knowledge and skills. Reference documents for the guideline such as the check list are being currently developed by the subsequent project (IPSM or STEP III). Some efforts have been made to finance the operation by collecting examination fee from other source; however, the implementing agency has only limited budget to proceed with the activities, such as organizing OJT for DOE/EDL trainers and produce updated PR material. Therefore the sustainability of this project is fair.

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- DOE need to consider the financial supports to conduct the LETS activities.
- To further improve technical knowledge and skills of the LETS's trainers and inspectors, the suitable training program including OJT needs to be developed and conducted.
- Even though the LETS was adopted, distributed and disseminated to the public and private sectors, the practical implementation of the LETS should be seriously monitored by MEM.
- It is recommended DOE and EDL to make further efforts to inspect and make action plan to comply with the LETS by all power facilities.
- It is recommended DOE and EDL should order electric power plant (facility) to establish accident database and submit accident reports for safe operation of power facilities.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Laos office: October, 2011

Country	The Legal and Judicial Development Project
Laos	

## I. Project Outline

Project Cost	About 265 million yen	
Project Period	May 26, 2003 to May 25, 2006. Extension period: May 25, 2006 to May 24, 2007 (1 year). Additional extension period: May 25, 2007 to March 31, 2008 (10 months).	
Implementing Agency	Ministry of Justice (MOJ), Office of the Public Prosecutor General (OPP)*, People's Supreme Court (PSC) (*change the name to be the Office of Supreme People's Prosecutor (OSPP))	
Cooperation Agency in Japan	International Cooperation Department, Research and Training Institute of the Ministry of Justice, Nagoya University	
Related Projects (if any)	Japanese cooperations: Technical Cooperation: Project for Human Resource Development in the Legal Sector (2010-2014) Other donors' cooperations: MOJ: Legal Sector Master Plan, supported by UNDP	
Background	In order to cope with promoting the market-oriented economy under the New Economic Mechanism (NEM), there was a pressing need to strengthen the legal framework. However, because the legal education had been suspended until the late 1980's, there were only few human resources who specialized the market-oriented economic reform and the capacity of human resources of legal field in Lao PDR was much limited. Furthermore, only few relevant legal documents and judicial references were available to deal with legal affairs. Therefore, the government of Lao PDR requested the government of Japan for technical cooperation to enhance legal knowledge, and strengthen practice of legal and judicial officers.	
Inputs	Japanese Side	Laos Side
	<ol style="list-style-type: none"> <li>Experts: 4 Long-term experts in 3 fields for 91.5MM in total, and 16 short-term experts in 5 fields for 3.97MM in total.</li> <li>Trainees Received: 95 CPs trained in Japan</li> <li>Equipment: PCs, Office Supplies, Books amounting for US\$47,872.00</li> <li>Local Cost: US\$297,870.00</li> </ol>	<ol style="list-style-type: none"> <li>Staff Allocated: 35 CPs assigned</li> <li>Buildings and facilities: Project Offices in MOJ, OPP and PSC with utilities</li> <li>Others: salary of CP and utility charges for the offices.</li> </ol>
Project Objectives	Overall Goal	
	<ol style="list-style-type: none"> <li>Continuous trainings for legal and judicial officers, by lecturers and materials based on the project outputs, are established by legal and judicial authorities.</li> <li>Practice of public prosecutors and local judges are improved.</li> </ol>	
	Project Purpose Institutional capacity of the legal and judicial authorities* in order to enhance legal knowledge and practice of legal and judicial officers is strengthened. (* MOJ, OSPP and PSC)	
Outputs		
Output 1: Textbooks and dictionary on civil and commercial law, made up through a series of workshops and seminars, are available to legal and judicial officers. Output 2: Legal database system loaded with all laws and presidential ordinances is available to officers of central government agencies. Output 3: Public Prosecutor's manual prepared by a working group in the Office of Public Prosecutors is available to public prosecutors. Output 4: The statute book and the judgment writing manual are available to local judges. Output 5: Experienced lecturers in civil and commercial law increase in number.		



## II. Result of the Evaluation

### Summary of the Evaluation

The Lao government continued to strengthen the legal and judicial sectors through streamlining the regulatory laws and legal framework. However, formulation of laws and relative processes did not progress as planned at the central level, and the capacity of human resources of legal field was much limited. Furthermore, only few manuals for prosecutors and judicial references for justices have been available in practice. Shortage of those human resources as well as the unavailability of such manuals and references often prevented the prompt and fair solution of cases.

This project has achieved its project purpose of strengthening institutional capacity of legal and judicial authorities in order to enhance the knowledge and practice of legal and judicial officers, as shown in Laotian lecturers who became able to handle trainings themselves as well as officially-approved textbooks and manuals. As for the overall goal, the project has somewhat achieved it by establishing continuous trainings for legal and judicial officers and improving the practices of public prosecutors and local judges though data was not available to fully verify the achievement of the target.

As for sustainability, some problems have been observed in terms of technical and financial aspects of the implementing agencies: further improvement of some practical skills is needed for their staffs, and the budget from the government for human resources development is limited. However, there are no problems of policy, institutional and operational aspects.

For relevance, the project has been highly relevant with the development policy of Lao PDR, development needs, as well as Japan's ODA policy. For efficiency, the originally-planned inputs were not sufficient for producing the outputs and both project cost and 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 the development plans (5<sup>th</sup> and 6<sup>th</sup> of National Socio-Economic Development Plan (NSED) (2001-2005/2006-2010) of Lao PDR in strengthening the legal framework), and development needs such as the establishment of the firm legal framework and human resources development in the legal and judiciary field, as well as Japan's ODA policy, at the time of planning /project completion. Therefore, its relevance is high.

### 2 Effectiveness/Impact

This project has achieved its project purpose of strengthening institutional capacity of the legal and judicial authorities in order to enhance legal knowledge and practice of legal and judicial officers. Lecturers trained in this project are capable of teaching in trainings, seminars and workshops, and the textbooks and manuals developed by this project were approved and utilized as reference books by MOJ. It should be also noted that the process to develop such documents has served to strengthen the capacity of working group members.

As for the overall goal, the project has somewhat achieved it by establishing continuous trainings for legal and judicial officers, and improving practice for public prosecutors and local judges. Manuals developed by the project were distributed to relevant authorities and used as a reference in their practices. Since the project completion, approximately 1,000 legal and judicial officials, according to the interviews, have been trained by lecturers who use the materials as reference for trainings though data was not available to verify whether it achieved the target number or not. According to the interviews, members of some working group formed under the project also acquired the knowledge and skills on researching and drafting. Unavailability of some quantitative information could be covered by the qualitative information mentioned above. Therefore, its effectiveness/impact is high.



Training course at OSPP



Textbooks and manuals kept in MOJ



Training course at PSC

### 3 Efficiency

Both project cost and project period exceeded the plan (ratio against plan: 133% and 161%) due to the extension of the project period to complete the planned outputs (e.g., dissemination seminars for the materials produced). Although the inputs were appropriate in terms of quality, the quantity of the originally-planned inputs was not sufficient for producing the outputs. Therefore, efficiency of this project is low.

### 4 Sustainability

As for sustainability, some problems have been observed in terms of technical and financial aspects of the implementing agencies. It was found that further improvement of skills in terms of court's doctrine and normative documentation as well as updating of some reference books produced by the project is needed. Also, the database developed by this project has been partially sustained after the project due to few staffs with knowledge to update it and being not widely utilized by relevant officers. In the financial aspect, the budget constraint from the government for human resources development for prosecutors and judges needs to be resolved. However, there are no problems of policy, institutional and operational aspects. The project is consistent with the Legal Sector Master Plan of Lao PDR in an ongoing manner, especially with the capacity development of human resources in the legal sector. Also, the structure of the implementing agencies has been sustained in a similar manner with the implementation period, and it is considered appropriate for continuity of the project effectiveness. Therefore, sustainability of the project is fair.



### **III. Recommendations & Lessons Learned**

#### Recommendations for Implementing agency:

- MOJ, OSPP, and PSC should allocate budget to conduct more trainings and seminars with materials developed by the project to further utilize the outcomes of this project to enhance capacity of related staff.
- MOJ should find out the corresponding OS to the database and Lao Language, to update the database more often and to open to the public to be used by wide range of related staff.
- MOJ, OSPP, and PSC should continue to revise and disseminate the materials and database based on actual situation and amended of law and policy.
- All relative organization such as MOJ, OSPP, and PSC should work closely to develop human resources development in the field of legal, and to share information after the project. The close relationship between the relative organizations should be carried out through the on-going project for Human Resource Development in Legal Sector.

#### Lessons learned for JICA:

- It is imperative that the project should train the sufficient number of human resources who can manage to utilize the database developed by the project. Otherwise the database developed by the project might have been left unused or not effectively utilized after the project termination.
- Development of reference materials to be used by relevant officials is proven to be effective under the situation that only few materials for prospectors and judicial references for justices have been available in practice. Furthermore, the process to develop such documents has served to strengthen the capacity of working group members of the project as well.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Laos office: October, 2011

Country	The Project for Capacity Building in PIP Management
Laos	

## I. Project Outline

Project Cost	273 million yen	
Project Period	November, 2004 - October, 2007	
Implementing Agency	Committee for Planning and Investment (CPI) (currently the Ministry of Planning and Investment (MPI))	
Cooperation Agency in Japan	IC-Net Limited (Proposal-based Technical Cooperation Project: PROTECO)	
Related Projects (if any)	Japanese cooperation: Technical Cooperation Project: Project for Enhancing Capacity of Public Investment Program Management (PCAP II) (March 2008 - August 2011)	
Background	In Laos, the Ministry of Planning and Investment (MPI) has responsibility to assess new Public Investment Program (PIP) projects and also to monitor and evaluate the on-going PIP projects on a regular basis. However, MPI and the Provincial Departments of Planning and Investment (DPIs) had limited capacity of project management, so that domestically funded PIP projects have been arbitrarily planned and implemented. Also, it was difficult to verify the contribution of PIP to the achievement of goals in the national development plan. Consequently, there was a huge gap between the national development plan and implementation of the PIP. Therefore, the government of Laos requested the government of Japan technical cooperation for capacity building in PIP management.	
Inputs	Japanese Side	Laos Side
	<ol style="list-style-type: none"> <li>1. Experts None for Long term, 11 experts in 8 areas for Short term</li> <li>2. Trainees Received: None</li> <li>3. Equipment: 11 million yen</li> <li>4. Local Cost: 41 million yen</li> <li>5. Others: 3 million yen</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff Allocated: 11 counterparts</li> <li>2. Equipment: None</li> <li>3. Buildings and facilities: project office space, meeting room, training room in CPI</li> <li>4. Others: Salary of Department of Evaluation (DoE), Department of General Planning (DGP), Department of International Cooperation (DIC) staffs, administrative costs and other miscellaneous costs.</li> </ol>
Project Objectives	Overall Goal Effectiveness and efficiency of PIP planned and implemented by the Lao Government improve.	
	Project Purpose PIP projects are appropriately appraised, monitored and evaluated.	
	Outputs Output 1: Appraisal, monitoring and evaluation method which are suitable to Laos are developed. Output 2: Staff at supervising agencies attain knowledge and skills for PIP management appraisal, monitoring and evaluation. Output 3: PIP projects are managed under the newly developed methods at the designated monitor provinces and ministry. Output 4: Organization-based coordination network in PIP management is established and functioning appropriately.	

## II. Result of the Evaluation

Summary of the Evaluation
<p>In order to adequately implement PIP projects* in Laos, it is critical for MPI to strengthen the capacity to assess, monitor and evaluate new and ongoing PIP projects. The Project has contributed to the proper implementation of PIP projects through the development of manuals and the trainings, but partly achieved the increase in the number of PIP projects to be assessed and evaluated in line with the manuals developed by the Project for the project purpose of execution of appropriate appraisal, monitoring and evaluation of PIP projects due to the limited capacity and budget at local level. And the Project also partly achieved the increase in the proportion of the projects to be reported from project owners to DPIs in line with PIP for overall goal of improving effectiveness and efficiency of PIP planned and implemented by the Lao government. As for sustainability, some problems have been observed in financial aspect of the executing agency due to budget constraints after the PCAPII but no problem has been observed in the term of policy background, structural and technical aspects due to the activities of PCAPII. For relevance, this project has been highly consistent with Lao's development policy, development needs and Japan's ODA policy at the time of ex-ante evaluation and project completion. For efficiency both the project period and the project cost were as planned. In the light of above, this project is evaluated to be satisfactory.</p> <p>(Note) * In order to avoid confusion, the PCAP III going to start from March 2012, utilizes the terms of "public investment projects" instead of PIP projects.</p>

### 1 Relevance

This project has been highly consistent with the 6th National Socio-Economic Development Plan (2006-2010) aiming at improving and enhancing state management or governance, development needs for capacity development of public investment planning and implementation, as well as Japan's ODA policy to support improvement of administrative capacity and institutional building at the time of ex-ante evaluation and project completion. Therefore, its relevance is high.

### 2 Effectiveness/Impact

Although the planned outputs were largely achieved by the Project, the project purpose was partially achieved by the time of project completion. While the number of PIP projects to be assessed and evaluated according to the manuals developed by the Project increased from nothing in 2005/06 to 115 in 2007/08. The number of middle scale PIP projects to be processed in line with the manuals and handbook, and to be submitted to the National Assembly was 9 out of 16 in 2007/08 in the monitoring provinces, which was lower than the plan (all the projects to be processed). Also, the number of inception or progress reports on the PIP project required by the manuals could not achieve the target (all of the projects), some of them were submitted although. That was because of the limited capacity and budget at local level for proper project management defined by the Project. It may attribute to the insufficient level of target value of the output 2 to contribute to the achievement of the project purpose despite that the planned outputs were largely achieved. The overall goal, which aims at improving effectiveness and efficiency of PIP, was partially achieved by the time of ex-post evaluation although the PCAP II, the second phase of this Project, continuously supported the nationwide extension of the enhanced project management of PIP. Despite that the target value was 100% of public investment projects, more than 70% of the listed investment projects were reported from the project owners to DPIs and more than 60% of projects were assessed in line with the required manner. Besides the expected impact, according to the interviews with the Department of Evaluation (DOE) of MPI, the Project brought about positive impact on the mind and attitude of officials concerned to enhance their responsibilities, in particular in DOE. Therefore, its effectiveness/ impact is fair.



Manual and handbook revised by PCAP II (based on PCAP)

### 3 Efficiency

Both the project period and project costs were as planned (ratio against plan: 100%, 80%), Therefore, efficiency of this project is high.

### 4 Sustainability

The policy framework for the PIP management developed by the Project is endorsed by the Prime Minister Decree No. 58. The decree stipulated that MPI is authorized to conduct and supervise appraisal, monitoring and evaluation of PIP at central level whereas DPIs are authorized agent at provincial level. Subsequently, the Public Investment Law came into effect in December 2009 specifying responsible organizations and legal procedures, also assessment of PIP projects shall comply with technical aspects and tools determined by MPI. From the institutional and operational aspect, MPI and DPIs have the sufficient number of competent staff to carry out the PIP management in line with the manuals developed by the Project though there is still a room to improve the number of public investment projects to be assessed, monitored and evaluated adequately. Also MPI and DPIs continued capacity development for the PIP management since PCAP II supported the nationwide extension of the PIP management through the trainings for ministerial and provincial officers. From the financial aspect, MPI has been making efforts to ensure sufficient budget for continuously conducting trainings and the proper PIP management, including assessment, monitoring and evaluation of the projects, but it is still uncertain. In terms of capacity development to extend the PIP management nationwide, MPI and DPI need continuous efforts to implement training for central and local officials after the completion of PCAP II. Therefore sustainability of this project is fair.



Training Program at MPI (organized by PCAP II)

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

The PIP manuals and handbooks should be revised and updated according to changes in government regulations and actual situations of development of the country. Also, continuous capacity development of officers in charge of the PIP management is essential along with dissemination of PIP manuals and handbooks. In particular, combination of training and "on the job training (OJT)" is effective for enhancement of their capacity. MPI needs to monitor performance of them in order to get feedback for improvement the PIP management including timely revision of PIP manuals and handbooks. Also sharing experiences in the Project of DPI is essential through future trainings by MPI for local officials in order to effectively enhance capacity of DPIs. Furthermore, it is required to ensure sustainable budget for trainings and PIP managements and operational system for further improvement of PIP management.

### Lessons learned for JICA:

The project purpose gave DOE clear duty and responsibility of PIP management which highly motivated them to proactively participate in the Project. Therefore, a proper project design, including activities more directly linked to responsibilities of counterpart staff, can bring about their stronger commitment and more proactive participation in project activities. In addition, it is key to carefully consider levels of target values of indicators since inconsistency and inappropriateness of target value of indicators for outputs and the project purpose can harm achievement of the project purpose.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: October, 2011

Country	The Project for Strengthening of food Industries Research Institute
Viet Nam	

## I. Project Outline

Project Cost	605 million yen	
Project Period	September 2002 - September 2007	
Implementing Agency	Food Industries Research Institute (FIRI)	
Cooperation Agency in Japan	N/A	
Related Projects (if any)	Japanese cooperation: Dispatch of JICA experts to FIRI in food processing techniques (April-September 1999)	
Background	In Vietnam, small- and medium-scale food processing enterprises (SMEs) have played an important role in economic development by production of high value added agricultural products and by processing, distribution and consumption of farm surpluses. Also, after the realization of the ASEAN Free Trade Area (AFTA), the production of high value-added processed foods with quality has become more important for Vietnam to have a comparative advantage in the area. FIRI is a national institute in charge of researches for producing high value added foods, diversifying processed foods and offering technical instructions to food processing SMEs. However, FIRI lacked financial source, skill, equipment and capable researchers to fulfill its function nationwide.	
Inputs	Japanese Side	Vietnam Side
	<ol style="list-style-type: none"> <li>1. Experts: 8 for Long term, 21 for Short term</li> <li>2. Trainees Received: 36</li> <li>3. Equipment: 116 million yen</li> <li>4. Local Cost: 8 million yen</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff allocated: 49 persons</li> <li>2. Equipment: Laboratory equipment</li> <li>3. Local Cost: 271,722 US dollar</li> <li>4. Buildings and facilities of FIRI</li> </ol>
Project Objectives	Overall Goal The food processing technologies are improved in small-and medium-scale food processing firms in Vietnam.	
	Project Purpose FIRI's capability of developing food processing technology is strengthened and the function of Food Industries Research Institute (FIRI) as an institute which offers required information for certification is strengthened.	
	Outputs Output 1: The characteristics of quality of major processed foods in Vietnam are clarified Output 2: FIRI researchers improve their ability of application for the utilization of microorganisms and enzymes. Output 3: FIRI researchers improve their ability to examine and analyze the components and the qualities of the processed foods required for the domestic certification. Output 4: FIRI researchers improve their capability for the technical guidance in the quality control and food processing to small- and medium-scale food processing firms.	

## II. Result of the Evaluation

Summary of the Evaluation
<p>FIRI is a national institute in charge of researches for producing high value added foods, diversifying processed foods and offering technical instructions to food processing SMEs. However, FIRI lacked financial source, skill, equipment and capable researchers to fulfill its function nationwide.</p> <p>This project has well achieved the project purpose of strengthening FIRI's research and information dissemination capabilities as shown in the approval of four utility solutions (intellectual property rights) of food processing techniques, 44 technical guidance to food processing SMEs, as well as the acquisition of the ISO accreditation. In consequence, the project has continued to achieve the overall goal of improving SMEs' food processing techniques. As for sustainability, some problems have been observed in terms of financial aspects due to lack of budget for spare parts of expensive laboratory equipment items.</p> <p>For relevance, the project has been highly relevant with Vietnam's development policy, development needs, as well as Japan's ODA policy. For efficiency as well, the project period was as planned but the project cost were much higher.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

I Relevance
<p>This project has been highly relevant with Vietnam's development policy "promotion of small- and medium-scale food processing enterprises as set in the Scio-Economic Development Plans 2001-2005 &amp; 2006-2010", development needs "high quality food processing nationwide" as well as Japan's ODA policy for Vietnam, at the time of both ex-ante evaluation and project completion. Therefore, its relevance is high.</p>

## 2 Effectiveness/Impact

This project has largely achieved the project purpose of strengthening FIRI's research and information dissemination capabilities for its target indicators: it applied for intellectual property right on six utility solutions of food processing techniques by the end of the project, and four of them have been approved (example: generic method of improving strain). Also, technical guidance on food processing was given to SMEs 44 times. In March 2007, the FIRI laboratory was certified according to VILAS259 (Viet Nam Lab. Accreditation Scheme, same as ISO17025 – calibration and testing laboratories).



Entrance to the laboratory



Doing analysis

The achievement level of the overall goal of improving SMEs' food processing techniques is high, too. Since the terminal evaluation of this project in May 2007, FIRI has been transferring technologies related to Project results to 21 food processing SMEs. Some SMEs have tried to apply the technologies to make their products more marketable and profitable. For example, some SMEs could make the color of fermented sour shrimp sauce (their product) more attractive and shorten the time of fermentation.

Therefore, effectiveness/impact of this project is high.

### Achievement of the project purpose and the overall goal

Outcomes	Indicators (planned)	Actual
Overall goal Food processing technologies are improved in food processing SMEs in Vietnam	20 SMEs receive technology transfer by FIRI and their processing techniques are improved.	<u>At ex-post evaluation</u> 21 SMEs received technology transfer by FIRI and processing techniques of some of them were improved.
Project purpose FIRI's capability of developing food processing technology is strengthened and the function as an institute which offers required information for certification is strengthened	(i) 6 utility solutions are applied (ii) 40 proceedings are presented. (iii) 35 times technical guidance are given to food processing SMEs.	<u>At project completion</u> (i) Same as plan; 4 of them were approved. (ii) Same as plan (iii) 44 times technical guidance

Sources: terminal evaluation report, expert completion report, interviews with counterparts and observation of the operation of the laboratory at FIRI

## 3 Efficiency

While inputs were appropriate for producing outputs of the project and project period was as planned (ratio against plan 100%), project cost was significantly higher than the plan (ratio against plan: 159%) due to an increase in the number and fields of Japanese experts after the mid-term evaluation because necessary activities to achieve Output 4 had not been fully undertaken by the time of mid-term evaluation. Therefore, efficiency of the project is fair.

## 4 Sustainability

No problem has been observed in policy background, technical and structural aspects of the executing agency. However, the project has some problems in financial aspects of the executing agency due to lack of budget for spare parts of expensive laboratory equipment items. This issue is considered to be more important when the executing agency becomes self-reliant after 2013 according to Decree 96/2010/ND-CP (September 2010) on the status of national scientific and technological research and development organizations, and thus the agency has to be more business-oriented and efficient in its operation. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

When FIRI has to be more business-oriented, the staff has to improve the quality of the research, technology transfer to SMEs, the efficiency in operating the equipment. To some extent, such transform will be a good chance for FIRI to improve its efficiency as a whole. To have a successful transformation, FIRI can consider seeking more support from Ministry of Industry and Trade (supervising ministry) or business consultant to development business plan. A marketing/business development division can be established to get more clients for technology transfer and testing service and allow researchers focusing on the quality of their work rather than collecting more business.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: October, 2011

Country	The Project for Strengthening Cluster-Based Teacher Training and School Management
Viet Nam	

## I. Project Outline

Project Cost	357 million yen	
Project Period	September, 2004 - September, 2007	
Implementing Agency	Ministry of Education and Training (MOET) and Bac Giang Department of Education and Training (DOET)	
Cooperation Agency in Japan	N/A	
Related Projects (if any)	Japanese cooperations: The Project for Improvement of Facilities of Primary Schools in the Northern Mountain Region (JICA Grant Aid, 2000); Grant Aid for Grassroots Projects (construction of primary school buildings including three schools in Bac Giang); Japan Overseas Cooperation Volunteers to Bac Giang	
Background	In Vietnam, the government introduced a new concept “student- centered education” and the “new curriculum” to improve quality of primary education. These new concept and curriculum required improvement of the existing teacher training system combined with training of- and strengthening of relationship with school management and local education administration.	
Inputs	Japanese Side	Vietnam Side
	<ol style="list-style-type: none"> <li>Experts 10 experts (98MM)</li> <li>Trainees Received 27 persons</li> <li>Equipment approx. 36,000 US dollar</li> <li>Local Cost 60 million yen</li> </ol>	<ol style="list-style-type: none"> <li>Staff Allocated 27 persons</li> <li>Equipment None</li> <li>Local Cost None</li> <li>Buildings and facilities Project office in Bac Giang and Hanoi</li> </ol>
Project Objectives	Super Goal Quality of education will be improved through strengthening teachers’ quality and education management in line with Education for All (EFA) in nation-wide.	
	Overall Goal A developed Model through technical cooperation project will be applied to other provinces as the national model.	
	Project Purpose An effective Model to apply new curriculum will be developed in the pilot province (Bac Giang province).	
	Outputs <ol style="list-style-type: none"> <li>A system to improve teaching method will be developed in the pilot province. (Target: teachers)</li> <li>A system to support improvement of teaching method will be developed in the pilot province. (Target: principals and local education officers)</li> <li>The preparation to apply the Model to other provinces is made.</li> </ol>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>To realize the new concept “student- centered education” and the “new curriculum” introduced to primary education in Vietnam, a new model of teacher training, combined with training of- and strengthening of relationship with school management and local education administration, was needed.</p> <p>This project has mostly achieved the project purpose of developing an effective model to apply new curriculum in the pilot province as shown in the fact that all of the five pilot schools now apply the model and all the other schools in the pilot province are in progress of applying it; however, not yet really met the expectation of the project overall goal in making the project developed model to be applied to other provinces as the national model due to the fact that the governing agency (MOET) is still in progress of studying/selecting the suitable model for primary education in Vietnam through several models including such of this project model. As for sustainability, there has been advanced progress in the pilot province in implementing activities for sustaining the project achievements, though shortage of necessary budget and human resources to scale up those activities to make the model nationwide. Despite this fact, the necessity of development of student-focused teaching method which is the core of this project model has been recognized by MOET deeply, and has become the direction of education development in Vietnam.</p> <p>For relevance, the project has been highly consistent with Vietnam’s Education Development Strategy and policy, development needs as well as Japan’s ODA policy. For efficiency, project cost exceeded the plan.</p> <p>In the light of above, this project is evaluated to be partially satisfactory.</p>



### 1 Relevance

This project has been highly relevant with Vietnam's development policy "improvement of quality of primary education" as set in the Education Development Strategic Plan 2000-2010, development needs "improved training system to cope with the new concept and curriculum" as well as Japan's ODA policy, 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 – development of the model in the pilot province - for its target indicators: although the achievement level was limited at the time of the terminal evaluation, it was raised to the satisfactory level by the time of the project completion. Through interview with Bac Giang DOET and several pilot schools, it was found that the project model, which consists of training for teachers and training for school management (principals and local education officers) through existing Professional Teachers Meeting (PTM), has been applied and developed at the five pilot schools in Bac Giang, and all of the other schools in Bac Giang are now in progress of adjusting and applying the model at their schools under the instruction of Bac Giang DOET.



Class applying the project model

Although overall goal - application of the model in other provinces as a national model - was somewhat achieved for a target indicator "1) level of recognition on effective model for the new curriculum", the achievement of the other target indicator "2) number of seminars/workshops on the new curriculum" is still limited

(five workshops) with participation of other provinces in Northern of Vietnam but without participation from Central and Southern Vietnam. Overall, the model has not yet become the national model because (1) the new teaching method developed under this project requires big change in thinking way, thought of educational managers, especially the long time-existing habit of teaching of teachers, which is very difficult and takes time (2) shortage of human and financial resource for the expansion (see *Sustainability*), and (3) MOET has been in progress of studying the model for Vietnam's primary education based on several models developed by different projects which are supported by different international donors. MOET has issued a direction on curriculum of primary education that reflected the spirit of the model developed by this project, but there is no action to implement it.

As for the super goal of improving quality of education through strengthening teachers' quality and education management in line with Education for All (EFA) in nation-wide, the interview with MOET revealed the enhanced awareness of the EFA concept among MOET, local education administration, school management and teachers, respectively.

Therefore, its effectiveness/impact is fair.

### 3 Efficiency

While inputs were mostly appropriate for producing outputs of the project and project period was within the plan (ratio against plan: 100%), the outputs were not fully produced within the project period because Output 3 (for application of the model in other provinces) was added in the middle of the project implementation, and project cost was higher than the plan (ratio against plan: 115%). Therefore, efficiency of the project is fair.

### 4 Sustainability

The project has some problems in structural and financial aspects of the executing agency. In the structural aspect, shortage of human resources and changes of key persons at both central and pilot provincial levels have made the continuation of the project effects difficult. In the financial aspect, although the executing agency allocates budget for dissemination of the model to non-pilot schools with support of a NGO, there is no budget allocated to continue the Working Group (a group of resource persons trained in the project for promotion of the model). However, no problem has been observed in policy background and technical aspects of the executing agency. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

For the project-developed model to be further disseminated and adopted as the national model among several candidate models, the following actions are recommended.

- MOET is expected to pursue the process of studying/selecting the suitable model for primary education in Vietnam with a more concrete plan and resource mobilization for the implementation of the selected model nationwide.
- Bac Giang DOET is expected to develop and make appropriate adjustment of the project materials which would fit with the real condition of schools in Bac Giang, in order to enhance the application and development of project model in Bac Giang, and also outside of Bac Giang.
- Pilot schools in Bac Giang are expected to apply the project model adjusting it to fit with the real condition of schools, esp. to enhance the PTM which is considered very effective way for improving capacity of teachers, ability of students, and dissemination of project teaching method. Besides, they are encouraged to share their experiences more with non-pilot schools in Bac Giang and out of Bac Giang for further dissemination and development of the project model.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Vietnam office: October, 2011

Country	The Project for Improvement of Plant Quarantine Treatment Techniques Against Fruit Flies on Fresh Fruits
Viet Nam	

## I. Project Outline

Project Cost	206 million yen	
Project Period	March 2005 - February 2008	
Implementing Agency	Post Entry Quarantine Center No. II (PEQC), Plant Protection Department (PPD), Ministry of Agriculture and Rural Development (MARD)	
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries	
Related Projects (if any)	Japanese cooperation: JICA Third country training on Plant Quarantine for Laos, Cambodia, Myanmar in 2009 and 2010	
Background	In Vietnam, agriculture sector accounts for 30% of Vietnam's export (2003). Among agricultural products, tropical fruits such as dragon fruits, specialty fruits of Vietnam, are one of the most potential sources of foreign currency revenue. However, export of tropical fruits was hampered by pest such as fruit flies in dragon fruits. Thus, establishment of pest control was an urgent need. The plant quarantine system had already been institutionalized, but disinfestation techniques were poor; thus, the government of Vietnam requested the technical cooperation to JICA.	
Inputs	Japanese Side	Vietnam Side
	<ol style="list-style-type: none"> <li>1. Experts: 1 for Long term, 6 for Short term</li> <li>2. Trainees Received: 10</li> <li>3. Equipment: 110 million yen</li> <li>4. Local Cost: 3 million yen</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff Allocated: 24 persons</li> <li>2. Equipment: none</li> <li>3. Local Cost: 1,238 million Vietnamese dong (77,000 US dollars)</li> <li>4. Buildings and facilities</li> </ol>
Project Objectives	Overall Goal Vietnamese staff is capable of appropriately applying disinfestations method on general tropical fruits.	
	Project Purpose Vietnamese staff is capable of applying disinfestations techniques of fruit flies that complies with international standard to improve Vietnamese dragon fruit's access to international market.	
	Outputs Output 1: Rearing method for fruit flies in laboratory is established. Output 2: Method for vapor heat treatment (VHT) disinfestations and its condition are determined. Output 3: The system which stores examination data and analysis results is built and utilized by Vietnamese counterparts	

## II. Result of the Evaluation

Summary of the Evaluation
<p>In Vietnam, export of tropical fruits was hampered by pest such as fruit flies in dragon fruits. Thus, establishment of pest control was an urgent need. The plant quarantine system had already been institutionalized, and PEQC was responsible for it, but disinfestation techniques were poor.</p> <p>This project has well achieved the successful conduct of necessary disinfestation tests for fruit flies on dragon fruits by PEQC researchers alone, for the project purpose of "Vietnamese staff is capable of applying disinfestations techniques of fruit flies". The test results led to the lifting of import ban of dragon fruits by several countries including Japan. Also, it is taking the first steps to achieve the overall goal by starting tests of other fruits such as mangoes and milk apples. As for sustainability, although a problem has been observed in terms of structural aspects due to insufficient decision-making power given to the executing agency, no problem has been observed in policy background, technical and financial aspects.</p> <p>For relevance, the project has been relevant with Vietnam's development policy, development needs, as well as Japan's ODA policy. For efficiency as well, both the project period and the project cost were as planned.</p> <p>In the light of above, this project is evaluated to be highly satisfactory</p>

1 Relevance
<p>This project has been highly relevant with Vietnam's development plan (improvement of quality of export agricultural products as set in the Socio-Economic Development Plans and Five-Year Development Plan for Agriculture and Rural Development 2001-2005 and 2006-2010), development needs (improvement of disinfestations techniques for tropical fruits), as well as Japan's ODA policy "Country Assistance Program for Vietnam 2004", at the time of planning/ project completion. Therefore, its relevance is high.</p>

## 2 Effectiveness/Impact

This project has achieved the project purpose of improving the counterparts' capability of disinfestations techniques of fruit flies as well as overall goal of applying disinfestations method on general tropical fruits.

At the time of the project completion, Vietnamese counterparts could exercise Vapor Heat Treatment methods, a disinfestation method identified as effective, of dragon fruit, without presence of Japanese experts. And at the time of the ex-post evaluation, the PEQC's capability of disinfestation is sufficient enough to extend its scope from dragon fruits to other fruits such as mangoes and milk apples (tests for mangoes have already been carried out, and those for milk apples are planned).

As a result, fruit-import countries including Japan have lifted a ban on import of dragon fruits, and Vietnam is rapidly increasing dragon fruits export.

In addition, disinfestation information and techniques have been disseminated from PEQC to various interested parties, including the private sector and neighboring countries through various events, seminars and media. The JICA Third Country Training has also contributed to the dissemination. Therefore, its effectiveness/impact is high.



Testing on mangoes (overall goal)

### Achievement of the project purpose and the overall goal

Outcomes	Indicators (planned)	Actual
Overall goal (Disinfestation capability on general tropical fruits)	Vietnamese staff is capable of planning and implementing disinfestations test against fruit flies on tropical fruits.	(At ex-post evaluation) Mangoes – tests on-going; Star apple fruits – tests planned.
Project purpose (Disinfestation capability on dragon fruits)	80% of Vietnamese counterparts is capable of planning and implementing fruit flies disinfestations test on dragon fruit.	(At project completion) PEQC successfully exercised disinfection tests without participation of Japanese experts.

Source: project completion report, interviews with counterparts and observation of the operation of the laboratory at PEQC

## 3 Efficiency

Both project period and project cost were mostly as planned (ratio against the plan: 74%, 100%) and inputs were appropriate for producing outputs of the project, and inputs were appropriate for producing outputs of the project. Therefore, efficiency of this project is high.

## 4 Sustainability

The project has some problems in structural aspects due to its insufficient decision-making power for timely purchase of spare parts and maximal use of their income (i.e., there is a risk that long approval process in the government, the decision-maker, may hamper timely purchase of spare parts and securing of self-income, which may cause shortage of operation and maintenance cost for testing equipment). However, no problem has been observed in policy background, technical and financial aspects of the executing agency.

Having been supported by the current fruit export policy of Vietnam, PEQC staffs have maintained the reference documents and databases, trained new staffs, and applied the learned techniques and provided equipment for testing of mangoes. The government budget allocation can, though in a minimum way, maintain the activities established by this project. Therefore, sustainability of the project is fair.

## III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

In order to further expand its activities, it is recommended that PEQC consider the following actions:

- PEQC should propose a concrete management plan in using spare parts so that they can predict to what time they can conduct experiments with remained spare parts provided by the project.
- PEQC should consider a mechanism which allows them to find resources for both financial aspects (e.g. consultation fees) and technical aspects (maintain the equipment, develop knowledge for young researchers). It is suggested that if it is difficult to receive fees from private companies in return to technologies from PEQC because of procedure of the government, they can consider other mechanisms such as receiving maintenance services, sharing spare part when needed to conduct the test without any interruption.

### Column: Positive Impacts on Private Sector

This project provided a lot of chances to private sectors. Before the project, private companies did not know the disinfestation techniques well, and it was prohibited to export dragon fruits from Vietnam to other many countries like Japan and Korea. Since the completion of this project, PEQC has conducted various seminars and workshops, as well as a JICA Third Country Training, to disseminate the acquired disinfestation techniques. These have led to new collaboration with private companies including Japanese ones. For example, a commercial scale disinfestation facility of a Japanese fruit importing company was established and operated in Binh Duong Province, and PEQC regularly provide them with technical support and monitoring. PEQC has also prepared management and technical guidelines for them. Another Japanese company also expressed their intention to receive technical transfer from PEQC.

Although, before the project, dragon fruit export was limited, the export volume reached 400 tons in 2010 and 300 tons in the first 6 months of 2011. Total export value is estimated at 1,5 million USD for the first 6 months 2011. Main importers are the US, Japan and Korea, where most of people were not easily able to eat dragon fruits a few years ago. This project has possibilities to make dragon fruits popular in these countries. Therefore it has positive influences on not only Vietnamese fruits farmers, but also import and export companies, and consumers in foreign countries.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office: October, 2011

Country	The Human Resources Development Project for Water Resources
China	

## I. Project Outline

Project Cost	910.5 million yen	
Project Period	July 1, 2000 to June 30, 2005 (Extension Period: July 1, 2005 to June 30, 2007)	
Implementing Agency	Human Resources Development Center, Ministry of Water Resources (Beijing Water Resources Training Center in Shane will be used for the training purpose.)	
Cooperation Agency in Japan	Ministry of Land, Infrastructure, Transport and Tourism Japan Institute of Construction Engineering	
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Grant Aid Project: Provision of Equipment on Flood Countermeasures (洪水対策支援機材)(1999)</p> <p>Technical Cooperation Project: The Pilot Scheme for Technological Development on River Information System Project in China (June1993 - May 1998)</p> <p>Follow-up project (June1998 - May 2000)</p> <p>The Irrigation and Drainage Engineering Training Center Project in the People's Republic of China (June 1993 - June 1998) Follow-up Project (June1998 - June2000)</p>	
Background	<p>In the People's Republic of China, the people have continuously suffered from the frequent occurrence of floods, sediment disaster, etc. Under "the 9<sup>th</sup> Five-Year Development Plan (1995-2000)" and "the Long-Term Development Plan up to the year 2010", the government of China proclaimed the policy to strengthen the water resource facilities as a basis of economic development. The Ministry of Water Resources has set the priority issues, such as the increase of reservoir capacity by renovating the aging dams, watershed protection by strengthening the linkage between flood control facilities and sediment control facilities, and the quality improvement and proper maintenances of those facilities. The Human Resources Development Center was established in 1997 as a base to work out the priority issues.</p> <p>Under such circumstances, the government of China requested to the Japanese government of the technical cooperation on the human resourced development in which instructors are trained through training courses in the field of training program management, water resource management, construction management and sabo engineering (sediment control). The project was implemented from July 2000 for the period of seven years (including two years as an extension).</p>	
Inputs	Japanese Side	Chinese Side
	<ol style="list-style-type: none"> <li>Experts: 9 Long-term experts for 4 areas 43 Short-term experts for 5 areas</li> <li>Trainees Received: 38 CPs</li> <li>Equipment Provision: 112 million yen</li> <li>Local Cost: 161 million yen</li> </ol>	<ol style="list-style-type: none"> <li>Staff Allocation: 7 CPs for full-time, 30 CPs for part-time, interpreters, accountants and other administrative staff</li> <li>Buildings and facilities: Project Office for experts and training facilities</li> <li>Local Cost: About 13 million Yuan (cumulative amounts up to the year 2004)</li> </ol>
Project Objectives	Overall Goal	
	Knowledge and skills of personnel in charge of water resource are increased.	
	<p>Project Purpose</p> <p>Training courses of water resources for instructors, who train middle and primary level engineers, on training program management, water resource management, construction and management and sabo engineering (sediment control) are improved, and 2000 instructors in these fields are trained at the for Human Resources Development Center, Ministry of Water Resource. (Hereinafter referred to as "the center").</p>	
Project Objectives	Outputs	
	Output 1: Training system of the Center is improved.	
	<ol style="list-style-type: none"> <li>1) Training management system is formulated.</li> <li>2) Learning materials and educational facilities are fully utilized among related training centers.</li> <li>3) Exchanges of information among training centers under the Ministry of Water Resources and related organizations are promoted.</li> </ol>	
Project Objectives	Output 2: Training courses for the instructors who train middle and primary level engineers are established.	
	<ol style="list-style-type: none"> <li>1) Teaching materials for the training are improved.</li> <li>2) Training facilities are improved.</li> </ol>	
	<p>Output 3: Instructors who train middle and primary level engineers for each training field are trained.</p> <ol style="list-style-type: none"> <li>1) Skill level of trainers is raised.</li> </ol>	



## II. Result of the Evaluation

### Summary of Evaluation

This project was aimed to improve the facility management for flood control and sediment control and to mitigate the damages caused by the flood and draught by strengthening the human resources in the water resources management.

This project has achieved its project purpose of improvement of training courses of water resources for instructors, who train middle and primary level engineers, on training program management, water resource management, construction management and sabo engineering (sediment control), and training of 2000 instructors in these fields at the center. At the time of terminal evaluation, 2,371 instructors received the trainings and more than 90% of them have now working as trainers. As for the overall goal of increasing the knowledge and skills of instructors in charge of water resource, 12,745 instructors have received training for the period of 2007 to 2010. And 15,746 instructors have been newly qualified as the middle or upper level engineers in the same period. As for sustainability, the project has no problems in policy background, structural, technical and financial aspects of the implementing agency. For relevance, the project has been highly relevant with the development policy of China, development needs, as well as Japan's ODA policy at the time of ex-ante and ex-post evaluation. For efficiency, the project period was longer than the plan, but it was deemed as relevant for the technology to be taken root in the trainees. In the light of above, this project is evaluated to be highly satisfactory.

### 1 Relevance

This project is highly relevant with development policy of the government of China, "ex. strengthening of water resources infrastructure, conservation of ecosystem, human resources development of water resources management and the infrastructure development for flood control as a basis of economic development", development needs, "ex. to human resources development in the field of water resource management, as well as Japan's ODA policy, "ex. to assist the water resources management and forest conservation in order to protect the ecosystem on a global scale", at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Effectiveness/Impact

The project purpose of training 2,000 instructors has been achieved at the time of Terminal Evaluation. According to the center, more than 90% of those instructors have been working as trainers. As for the overall goal of cumulative number of trainees has reached to 12,745 achieving the target of more than 10,000 for the period of five years. During the period of 2007 to 2010, 15, 476 instructors have been newly qualified as middle level or upper level engineers.

Out of those, 8,164 instructors were trained by the project and all of them have engaged in the training-related works. Furthermore, the questionnaire survey conducted by the center revealed some positive impacts by the project, such that the center provided the technical assistance to the formulation of water resources management plan with trainers trained by the project, and expanded in application of advanced technology, such as for safety improvement, observation, water-saving, etc. Therefore, the effectiveness/impact of this project is high.



Trainings on sustainable water resource management (2010)

#### 1) Trainings of Trainers 【At the time of Terminal Evaluation】

Training Subject	Number of trainings conducted	Targeted number of trainees	Actual number of trainees
Training Management	7	200	367
Water Resources Management	8	800	883
Construction Management	10	700	793
Sediment Control	4	300	328
Total		<b>2,000</b>	<b>2,371</b>

Data Source: Human Resources Development Center for both 1) and 2)

#### 2) Actual performance of training for 5 years 【At the time of Ex-post Evaluation】

Year	Number of trainees		Total
	Mid-Level	Upper-level	
2007	1,513	564	2,077
2008	2,140	592	2,732
2009	2,570	738	3,308
2010	3,782	846	4,628
Total	10,005	2,740	<b>12,745</b>

### 3 Efficiency

While inputs were appropriate for producing outputs of the project, the project period was longer than the plan (ratio against plan: 140%). Therefore, efficiency of the project is fair.

It should be noted that the extension of the project period was deemed relevant because it requires a good amount of time to respond to the increasing needs of human resources development and the dissemination of positive effects.

### 4 Sustainability

Under the 10<sup>th</sup> Five-Year Development Plan, the water resource management is one of priority areas. According to the center, the structure of implementing agency has been strengthened even after the termination of the project, since the number of instructors was increased by ten and collaboration with other technical agencies and regional training centers has been further strengthened. The center has played the important role as a core center for human resources development of water resources. As for the technical aspect, the center itself has originally developed the training program; the center has provided the in-service trainings for instructors and the maintenance of training equipment have been properly managed. As for the financial aspect, the annual budget of more than 5 million Yuan will be allocated from the Ministry of Water Resources as the budget for training education. The project has no problem in structural, technical and financial aspects and current status of the implementing agency. Therefore, sustainability of this project is high.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office: October, 2011

Country	The Model Afforestation Project in Sichuan
China	

## I. Project Outline

Project Cost	About 932 million yen	
Project Period	July 1, 2000 - June 30, 2005 (extension period July 1, 2005 - Oct. 31, 2007)	
Implementing Agency	Responsible Agency: Sichuan Forestry Department Implementing Agencies: Forest Bureau, Liangshan Yi Autonomous Prefecture, Forest Bureau of Xichang City, Forest Bureau of Xide Country, Forest Bureau of Zhaojue Country	
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries, Forestry Agency	
Related Projects (if any)	Japanese cooperations: JICA Japanese Overseas Cooperation Volunteer JICA Development Studies: The Study on Reforestation in Anning Watershed in Sichuan Province (Sept 2000-July 2002) China: The Nature Forestland Protection Program (Aero seeding, Artificial planting, Mountain closure) The Land Conversion from Farmland back to Forestland Program Other donors' cooperations: World Bank: Project for the Preservation and Development of Forest Resources(1995-2000),Project for the Development of Forest Industries in the Deprived Areas (1999-2004)	
Background	<p>In Anning River basin, the forest destruction by deforestation, overgrazing and overcultivation, and serious soil erosion had been progressed and the conservation forest of that area had been urgently needed. As it is mentioned in the Sichuan Provincial Ecological Environment Construction Master Plan as well as the National Ecological Environmental Construction Master Plan, the Anning River basin is designated as the priority areas to implement the afforestation by the Chinese Government.</p> <p>Under these circumstances, the Chinese Government requested Japan to implement the project to establish the model afforestation area and model forestry nursing in the Anning River basin, as well as to train soil and water conservation for technical officers and the afforestation and nursing for local people. This is to protect the project area from the serious soil erosion, to promote the economic development for those minorities and to alleviate the poverty of local communities, especially farmers.</p> <p>It should be also noted that what was urgently needed is to develop the suitable way to improve the survival and preservation of nursery plants, since, in the Anning River area; it was very difficult to afforest the area because of its climatic and topographical constraints (such that the area is located more than 2,900 above sea level and the annual rainfall of the area is recorded as more than 400 mm.)</p>	
Inputs	Japanese Side	Chinese Side
	<ol style="list-style-type: none"> <li>Experts: 10 Long-term experts (5 fields) 11 Short-term experts (5 fields)</li> <li>Trainees Received: 30 CPs trained</li> <li>Equipment: 7.9 million yen</li> <li>Local Cost: 14 million Yuen (approximately 180 million yen)</li> </ol>	<ol style="list-style-type: none"> <li>Staff Allocated: 45 personnel (selected from Sichuan, Liangshan Yi Autonomous Prefecture, Xichang city, Xide country and Zhaojue country)</li> <li>Buildings and facilities: Project Office(5 offices) Land for forestry nursery(2 sites), Land for afforestation (3 sites in the city and countries), Training facilities (one site)</li> <li>Local Cost: Project management costs</li> </ol>
Project Objectives	Overall Goal Based on Sichuan Provincial Ecological Environment Construction Master Plan, afforestation activities are carried out by the government and local people in Anning River basin in a sustainable way.	
	Project Purpose A basis of self-sustained afforestation activities is established in Xichang city, Xide country and Zhaojue country in Anning River basin.	
	Outputs <ul style="list-style-type: none"> <li>- Output 1: Techniques for raising seedlings for afforestation which are suitable for natural and social conditions in the Project Area are developed.</li> <li>- Output 2: Techniques for afforestation aimed for soil and water conservation which are suitable for natural and social conditions in the Project Area are developed.</li> <li>- Output 3: Technical officers, who manage, carry out and extend nursing and afforestation activities are trained.</li> <li>- Output 4: Nursing and afforestation techniques are extended to the local people.</li> <li>- Output 5: The importance of forest conservation is understood by local people.</li> </ul>	



## II. Result of the Evaluation

### Summary of the Evaluation

The project was aimed to protect the project area in the Anning River basin from the serious soil erosion, to promote the economic development for minorities and to alleviate the poverty of local communities, by establishment of the model afforestation and model forestry and nursing in the Anning River basin, and by conducting the trainings on soil and water conservation for technical officers.

This project has achieved its project purpose of establishment of the basis of self-sustained afforestation activities in Xichang city, Xide country and Zhaojue country in Anning River basin. It is confirmed by the questionnaire survey that more than planned target of 500ha has been reforested at the time of terminal evaluation and that the reforested area has been increased even further at the time of ex-post evaluation. Survival rates and preservation rates for nursery plant have achieved their targets of 75% and 70% respectively in all targeted areas. As for the overall goal, “Based on Sichuan Provincial Ecological Environment Construction Master Plan, afforestation activities are carried out by the government and local people in Anning River basin in a sustainable way”, the forest coverage ratio in the Liangshan Yi Autonomous Prefecture was 43% which is higher than the planned ratio of 42.5%. As for the sustainability, the project has no problem in policy background, structural and technical aspects of the implementing agency. And the relevant budget has been continuously secured although the projection amount is not available.

For relevance, the project has been highly relevant with the development policy of the People’s Republic of China, development needs, as well as Japan’s ODA policy at the time of ex-ante and ex-post evaluation. For efficiency, project period was longer than the plan, but it was deemed as relevant for firm establishment of the technique of nursing and afforestation. In the light of above, this project is evaluated to be highly satisfactory.

### 1 Relevance

This project has been highly relevant with development policy of the government of China, “ex. environmental conservation on forest ecology in Sichuan”, development needs “ex. to develop the conservation forest to protect the forest from wasteland and soil erosion caused by the deforestation“, as well as Japan’s ODA policy, “ex. to assist the water resources management and forest conservation in order to protect the ecosystem on a global scale”, at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Effectiveness/Impact

This project has achieved its project purpose of establishment of the basis of self-sustained afforestation activities in Xichang city, Xide country and Zhaojue country in Anning River basin. It is confirmed by the questionnaire survey that more than planned target area of 500ha has been reforested at the time of terminal evaluation and that the reforested area has been increased even further at the time of ex-post evaluation. The forest coverage ratio in Liangshan Yi Autonomous Prefecture has achieved 43% which is higher than the planned target of 42.5%. This is mainly due to that the reforestation was continuously conducted by the government and local population. Furthermore, women’s participation to the afforestation activities has promoted their understandings toward forest conservation and suppressed their deforestation to be used for fuel. In addition, the afforestation activities have helped to increase their income.

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

#### 1) Reforested areas 【At the Terminal Evaluation】

7,859 Mu=524ha

Year	Xichang city	Xide Country	Zhaojue Country	Total
2001	45	35	-	80
2002	340	1,188	753	2,281
2003	955	995	1,788	3,738
2004	1,260	500	-	1,760
Total	2,600	2,718	2,541	<b>7,859</b>

#### 2) Forest coverage ratio in Liangshan Yi Autonomous Prefecture =43% 【At the ex-post evaluation】

Conservation Forest : 78,473 ha

To close hillsides to facilitate afforestation: 130,147 ha

Forestland nursing : 2.85 million ha

Strengthening of the achievements of the land conversion from farmland back to forestland program: 109,006 ha

Data Source: Sichuan Forestry Department



Xide Country



Mixed forest in the Live Fence of the Zhao Zhaojue Country



Forestry Nursery in Liangshan Yi Autonomous Prefecture

### 3 Efficiency

While inputs were appropriate for producing outputs of the project, project period exceeded the plan (ratio against the plan: 146%) Therefore, efficiency of the project is fair.

It should be noted that the extension of the project period was deemed relevant because it requires a good amount of time to firmly establish the technique of nursing and afforestation for those technicians and local population.

#### 4 Sustainability

In China, based on the forest ecology and forest development plan, the government of China and the Sichuan local government has consistently maintained the afforestation as one of the important projects along with the six priority projects, such as the conservation of natural forest, protection of plant and animal. It is confirmed by the questionnaire survey that the structure of implementing agency has been almost sustained as the major center to provide technical consultation, training and policy implementation, although there was a slight change of marginal level. Furthermore, in the technical aspect, it is confirmed that the implementation agency has been upgrading skills so that they has been awarded the prize for the technical advancement. The techniques of nursing and afforestation introduced by the project will be maintained through the technical manuals distributed by forest bureau of Liangshan Yi Autonomous Prefecture and Sichuan Forestry Department, and the training program for managers and technicians systematically planned up to 2015.

As for the financial aspect, the relevant budget has been continuously secured although the projection amount is not available. In the light of the above, this project has no problem in policy background, structural, technical and financial aspects of the implementing agency. Therefore, sustainability of this project is high.

### III. Recommendations & Lessons Learned

Lessons learned for JICA:

For the smooth and sustainable afforestation, it is essential to win the full understanding of local community and to work in collaboration with them. It is recommended, therefore, that the interests and intentions of those local communities should be taken into consideration at the planning stage of afforestation. This was effectively exercised in this particular project, where the interests and intentions of those farmers and local people have been captured through the rural survey and they were clearly reflected on the afforestation plan. In the implementation process, the project has not only introduced the afforestation techniques to those local people, but it has also guided them to increase their income through the afforestation activities for poverty alleviation.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by China Office: October, 2011

Country	The Project for Human Resources Development of Rehabilitation Professionals
China	

## I. Project Outline

Project Cost	602 million yen	
Project Period	November 2001 - October 2006 (Extension Period: November 2006 - March 2008)	
Implementing Agency	Responsible Agency: The China Disabled Person's Federation Implementing Agency: China Rehabilitation Research Center (CRRC)	
Cooperation Agency in Japan	International University of Health and Welfare, National Rehabilitation Centers for Persons with Disabilities, Japanese Physical Therapy Association, Japanese Association of Occupational Therapists	
Related Projects (if any)	Japanese cooperations: Grant-Aid: Establishment of Rehabilitation Research Centre for the Physically Disabled (1985-1988) Technical Cooperation: Project on Rehabilitation for Physically Disabled in China (1986-1993)	
Background	<p>It was estimated that there were more than 60 million disabled persons in China. This was attributable to the drastic increase of traffic accidents, and the work-related injuries and illnesses with rapidly growing economy. The estimated number of working Physical therapists (PT) as of 2002 was 5,640 (nation-wide). More than 30,000 PT/Occupational Therapist (OT) were additionally needed to meet the demands of 35,210 by the year 2010. Before the project, human resources development for the rehabilitation professionals had been conducted at the university (non-credit course), but the education for medical rehabilitation professionals for PT and OT in 4-year university level had not been available. Therefore, there had been a great demand to establish the program for 4-year university level which meets the international standard for PT and OT.</p> <p>The China Rehabilitation Research Center (CRRC), constructed by the Japanese grant aid assistance, has been playing the important role since its inception in 1988, serving to promote the human resources development as well as the research development in the field of rehabilitation. It was expected to serve as the core center of rehabilitation training field.</p>	
Inputs	Japanese Side	Chinese Side
	<ol style="list-style-type: none"> <li>Experts: Chief Advisor (14 experts were dispatched all told in short-term basis), 2 Long-term experts (in 2 fields), 37 Short-term experts (in 16 fields)</li> <li>Trainees Received: 15 CPs trained</li> <li>Equipment : 164 million yen</li> <li>Local Cost: 15 million yen</li> </ol>	<ol style="list-style-type: none"> <li>Staff Allocated: 15 personnel (In addition, 121 teachers / instructors and staff of educational management fields were assigned.)</li> <li>Buildings and facilities: Class rooms for multimedia, experiment, computer, practical training, voice training, electrical reference, dormitory for students, project office for experts</li> <li>Local Cost: for preparation of teaching materials, for teachers' allowance and reward, utilities and managerial costs, etc.</li> </ol>
Project Objectives	Overall Goal Physiotherapists/Physical therapists and occupational therapists provide service throughout the People's Republic of China.	
	Project Purpose The education for medical rehabilitation professionals is upgraded from the level of technical school to the level of 4-year university.	
	Outputs Output 1: Curriculums meeting international standards at the level of 4-year physiotherapy/physical therapy & occupational therapy university are developed. Output 2: Highly qualified teaching professionals in the fields of medical rehabilitation (medicine, nursing, speech therapy, prosthesis & orthosis) are produced. Output 3: The education skills of teaching professionals are improved. Output 4: The level of management related to education is improved. Output 5: Teaching materials and educational equipment are prepared and utilized. Output 6: The education of 4-year university is implemented. (*newly added at the mid-term evaluation)	

## II. Result of the Evaluation

### Summary of the Evaluation

In the People's Republic of China, under the 10<sup>th</sup> Five-Year Development Plan (2001-2005), it was proclaimed that the government of China sets the human resources development in the field of rehabilitation and regional rehabilitation projects as priority issues. In concrete terms, the government of China was going to support to improve the physical function and capability of disabled persons by improving the training service system, aiming that more than 5.1 million people with disabilities will regain enough strength.

The project purpose of upgrading the education for medical rehabilitation professionals from the level of technical school to the level of 4-year university has been achieved. At the time of terminal evaluation, the approximately 40 PTs or OTs have graduated from the university as a regular student every year since 2004. As for the overall goal, the number of PT and OT has been increased, and this implies that the rehabilitation services by PT and OT has been expanding throughout the China. As for the sustainability, the project has no problems in structural, technical and financial aspects of the implementing agency.

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

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

### 1 Relevance

This project has been highly consistent with the development policy (e.g. strengthening of support for persons with development disabilities, disability services, strengthening of human resources development for rehabilitation, strengthening of regional services of rehabilitation), and development needs of trainings of rehabilitation therapists, as well as Japan's ODA policy, at the time of planning/project completion. Therefore, its relevance is high.

### 2 Effectiveness/Impact

This project has achieved its project purpose of upgrading the education for medical rehabilitation professionals from the level of technical school to the level of 4-year university. The number of graduates from 4-year level university for PT and OT (indicator 1), and the capabilities of instructors (indicator 2) have achieved its target, respectively. In 2010 and 2011, 38 instructors graduated from the university and have engaged in the work as trainers as shown in the table 1 on the right.

Approval of OT curriculum by the World Occupational Therapist Federation in 2006 have served to prove the good quality of those graduated and have promoted the PT and OT education as the model to be replicated to other area (as for PT, there is no curriculum system). As for the capability of instructors as shown in the table 2, it is deemed that their capabilities have been proved to be very high. More than half of instructors have graduated from the university as a regular student. Some of them participated in the long-term training course in Japan and completed the masters' degree.

According to the questionnaire survey of CRRC, the quantities of curriculum and its qualities for the 4-year level PT and OT were appropriate. Teaching materials including the publication materials, printing materials, demonstration materials and audio-visual aids, etc. were developed through the project, and much effort was made to upgrade such materials in 2010 and 2011.

Brush-up trainings for instructors were conducted by the CRRC and JICA experts for the succeeding project namely, "Project for Human Resource Development of Rehabilitation in the Central and Western Region". Annually, 30 to 40 students were enrolled as the regular student for the university program established by the project. As for the overall goal, the number of PT and OT has steadily increased at CRRC and it is deemed that the rehabilitation services by PT and OT has been expanded throughout China. Therefore, the effectiveness/impact of this project is high.

#### 1. Number of graduates (PT and OT)

Year of enrollment	Number of graduates	Employment Status
2006 Graduated 2010	38	All employed
2007 Graduated 2011	38	All employed

#### 2. Capability of instructors (Average Points)

Year	Evaluated by Students	Self assessment
2004	4.4	4.3
2005	4.5	4.4
2006	4.5	4.4
2007	4.6	4.5
2008	4.5	4.4
2009	4.6	4.5
2010	4.6	4.4
2011	4.6	4.5

Note: Score range from 5 to 0 and the bigger number implies the fineness.

Data source: 1)、2) Questionnaire survey at CRRC



Lectures by the JICA experts



The instructor trained by the project (central) has given the lecture at the university.



Various kinds of education materials produced by the project

### 3 Efficiency

While inputs were appropriate for producing outputs of the project, the project period exceeded the plan (ratio against plan: 128%). Therefore, efficiency of the project is fair. It should be noted that the extension of the project period was deemed relevant because it requires a good amount of time to strengthen the capacity of instructors and to improve the educational management.

#### 4 Sustainability

In China, under the Plan for the persons with disabilities and rehabilitation as well as the 12<sup>th</sup> Five-Year Plan (2011-2015), it was proclaimed that the government of China sets the human resources development in the field of rehabilitation and regional rehabilitation projects as priority issues.

The structure of implementing agency and the Metropolitan Medical University are sustained in the similar manner of the implementing period. The implementing agency has no problem in the technical aspect because the trainings to upgrade the instructors capacity has been continuously conducted and teaching materials have been revised occasionally. The implementing agency has no problem in the financial aspect because CRRC has generated the revenues through the clinical practices, and the Metropolitan Medical University has generated the revenues from tuitions and subsidies by the government. Therefore, sustainability of this project is high.

# Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Paraguay office: October, 2011

Country	The Project for Strengthening Continuing Education in Nursing and Midwifery in the South of the Republic of Paraguay
Paraguay	

## I. Project Outline

Project Cost	685 million yen	
Project Period	February, 2001 - February, 2006	
Implementing Agency	Ministry of Public Health and Social Wellbeing (Ministerio de Salud Pública y Bienestar Social)	
Cooperation Agency in Japan	Ministry of Health, Labour and Welfare, National Center for Global Health and Medicine, St. Mary Hospital, Tenshi College	
Related Projects (if any)	Japanese cooperations: Technical Cooperation Project: Project for Strengthening Continuing Education in Nursing and Midwifery (February 2008 - January 2011)	
Background	In Paraguay, the improvement of reproductive health was one of the priorities in the national health policy aiming at realizing the society with universal high quality health services. However, the southern region, where the larger rural population were scattered, had not received significant assistance by the international donors while the healthcare services in the northern, central and eastern regions of the country, where the population were concentrated, have been improved by the international assistance. Therefore, the government of Paraguay requested the government of Japan technical cooperation for human resource development in perinatal care in order to improve the health care service in the southern region, in particular in the three provinces of Ñeembucú, Misiones and Itapúa. Although the number of target provinces decreased to two (Ñeembucú and Misiones) due to the delay of progress after starting the project, it expanded to four provinces including Itapúa and Caazapá since the progress of the project was higher than the plan at the time of mid-term evaluation and the government of Paraguay requested the expansion of the target provinces.	
Inputs	Japanese Side	Paraguay Side
	<ol style="list-style-type: none"> <li>1. Experts 10 experts in 8 areas for Long term, 8 experts in 5 areas for Short term</li> <li>2. Trainees Received: 16 trainees</li> <li>3. Third Country Training: None</li> <li>4. Equipment: 109 million yen</li> <li>5. Local Cost: 84 million yen</li> <li>6. Others: 28 million yen</li> </ol>	<ol style="list-style-type: none"> <li>1. Staff allocated: 18 counterparts</li> <li>2. Equipment: None</li> <li>3. Buildings and facilities: project office space in Asuncion, Itapúa and Caazapá</li> <li>4. Others: approximately 14 million yen (751 million Gs)</li> </ol>
Project Objectives	Overall Goal The continuous education system which is established in the target 4 provinces will be disseminated nationwide.	
	Project Purpose The continuous education for nurse and midwife is established and functioned in the 4 target provinces.	
	Outputs Output 1: The model of the continuous education for nurse and midwife is established in the pilot areas. Output 2: The monitoring standards for the continuous education is established and applied in the pilot areas. Output 3: The national test for nurse and midwife is developed. Output 4: The continuous education for nurse and midwife is institutionalized.	

## II. Result of the Evaluation

Summary of the Evaluation
<p>The 4 target provinces in the southern region of Paraguay had serious problems in maternal health care, including higher ratios of delivery at home and higher perinatal mortality rate than the national average. Therefore, it was essential to improve skills of birth attendants including assistant midwives and nurses at the health centers.</p> <p>The Project has achieved the executing rate of 100% for post monitoring for midwives and nurses who completed the continuous education training at all the health institution in the target provinces for the project purpose of establishment of the continuous education system for nurse and midwife in the target provinces. And the Project also achieved the dissemination of the continuous education system developed by the Project to 15 provinces for the overall goal of nationwide dissemination as an expected outcome. As for sustainability, the continuity of the continuous education trainings are ensured by the national policy prioritizing human resource development for health care services, the improved management capacity of INEPEO (the National Institution of Continuous Education for Nursing and Midwifery) and CREPEOs (the Regional Centers of Continuous Education for Nursing and Midwifery), the enhanced implementation capacity of coordinators and facilitators for the continuous education trainings as well as availability for financial resources despite of some problems of INEPEO including the limited independency of budget execution and the insufficient number of technical staff. For relevance, this project has been highly consistent with Paraguay's development policy, development needs and Japan's ODA policy at the time of ex-ante and ex-post evaluation. For efficiency as well, both the project period and the project cost were as planned. In the light of above, this project is evaluated to be highly satisfactory.</p>



### 1 Relevance

This project has been highly consistent with in the National Development Plan (2003-2008) aiming at improvement of reproductive health and child healthcare as well as the national health policy for improvement of healthcare services in remote areas, development needs in the county and the target areas for improvement of healthcare services by nurses and midwives, and the Japan's ODA policy including to support enhancement of healthcare and education for the poor. Therefore, its relevance is high.

### 2 Effectiveness/Impact

The Project Purpose, which did not have the clear target value, was largely achieved since the ex-post performance monitoring for nurses and midwives who had completed the continuous education training, including the checklist for infant health checkups, has been implemented at all the health institutions in the target provinces though the training monitoring format developed by the Project has not been widely used due to its complication. For the overall goal with target of the nationwide dissemination in 18 provinces, the continuous education system established by the Project was disseminated to 15 provinces in the country. In addition, INEPEO will be one of the counterpart organizations of the Project for Strengthening Primary Healthcare System, which will be started in February 2012, for the continuous education of nurse and midwife in order to make use of the outcomes resulted by the technical cooperation by JICA, including this project. Based on the experience and issues recognized through this project, it is expected that the coming project will revise the training programs and monitoring tools and make necessary adjustment for the continuous education system which can be applicable to the situations at local level, including budget and staff. Therefore, its effectiveness/ impact is high.

### 3 Efficiency

Both project period and project costs were mostly as planned and inputs were appropriate for producing outputs of the project. Therefore, efficiency of this project is high.

### 4 Sustainability

For the policy aspect, although the continuous education for health staff is continuously focused in the Socioeconomic Strategic Plan, a long-term action plan for INEPEO has not been developed. In addition, the role and responsibility of INEPEO in the continuous education in Paraguay have not been clear yet while other institutions also provide similar trainings. For technical and financial aspects, there is no problem on implementation of continuous education trainings due to the sufficient management capacity of INEPEO and CREPEOs, the enhanced capacity of coordinators and facilitators for trainings as well as utilization of financial resources from local governments or international donors. However, INEPEO cannot independently control and execute own budget due to the institutional reform of the Ministry of Public Health and Social Wellbeing in 2010. Also INEPEO does not have the sufficient number of technical staff. Furthermore, there is a concern about future institutional framework of INEPEO, which was newly established for the Project, due to the limited organizational power and some cases of weaker coordination with other related directorates in the Ministry after the project completion. On the other hand, it is expected that the institutional capacity and activities of INEPEO and CREPEOs will be enhanced through the implementation of the coming PHC project by JICA. Therefore sustainability of this project is fair.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

It is strongly recommended that the Ministry of Public Health and Social Wellbeing prepare a mid-term action plan and allocate sufficient budget for the nationwide dissemination of the continuous education system established by the Project to all the 18 provinces in the country as well as for the extension of activities by INEPEO. Also, INEPEO will be required to continuously support the local facilitators and follow up trainings and monitoring at local level in order to sustain the system. In addition, it is inevitable for INEPEO to expand the number of technical staff and to enhance their capacity for development of new training programs and materials based on the continuous education program. For CREPEOs, it is strongly recommended to secure budget for continuous education by provincial government since CREPEOs depend on external funds for their activities despite that they are one of internal organization within the Provincial Health Departments.

### Lessons learned for JICA:

INEPEO was established for the implementation of the Project. However, since INEPEO did not have enough power to coordinate among the relevant directorates in the Ministry, it took a lot of works for setting up coordination and cooperation among them for the implementation of continuous trainings and monitoring. After the project completion, such coordination and cooperation have been weakening in some cases. Therefore, it is necessary to carefully discuss and confirm implementation arrangement before starting a project in order to smoothly implement planned activities within a limited project period, to firmly result expected outcomes, as well as to ensure sustainability of those outcomes.

In addition, in the case that there are similar type organizations, it is key for a project to clearly define roles and responsibilities of the counterpart organization and to differentiate its activities until the project completion in order to ensure sustainability. Also, coordination with such similar organizations is essential to avoid duplication of activities. Thus, it is necessary for the coming PHC project to carefully consider an implementation arrangement for continuous education trainings in the target areas before starting.



Continuous Education Training at INEPEO



Training Material for Continuous Education

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by South Africa office (Angola Field Office): October, 2011

Country	The Project for Emergency Rural Water Supply in Neighboring Provinces of Luanda
Angola	

### I. Project Outline

Project Cost	E/N Grant Limit: 432 million yen	Contract Amount: 344 million yen
E/N Date	July, 2006	
Completion Date	March, 2008	
Implementing Agency	National Water Directorate (DNA: Direccção Nacional de Águas), Ministry of Energy and Water (MINEA: Miniséro de Energia e Águas)	
Related Studies	Basic Design Study: July, 2005 to March, 2006	
Contracted Agencies	Consultant(s)	Japan Engineering Consultants Inc.
	Contractor(s)	N/A
	Supplier(s)	1 <sup>st</sup> lot: Toyota Tsusho Corporation, 2 <sup>nd</sup> lot: Sojitz Corporation
Related Projects (if any)	Other donors' cooperations: Construction of water supply and sanitation facilities in 11 provinces, including in Bengo and Cuanza Sul (2005-2008)	
Background	In Angola, social infrastructure to sustain the people's life was destroyed and devastated by the civil war which had continued until April 2002 since the independence of the country in 1975. In particular, rural population has been suffering from harsh living conditions, such as chronic water shortage and water-borne diseases caused by unsanitary water. After the end of the civil war, the government of Angola aspired to expand the coverage ratio of water supply in the country to 70% in "the Strategy for Development of Water Sector 2002-2016" (Stratégia para o Desenvolvimento do Sector das Águas). In particular, development of water facilities was an emergent issue for the provinces of Bengo and Cuanza Sul where many internal displaced persons (IDPs) returned and most population were affected by the civil war. Although the government of Angola developed a plan to develop water supply facilities, the fiscal difficulties constrained to implement it by themselves. Therefore, the government of Angola requested the government of Japan grant aid to support the implementation of the plan.	
Project Objectives	Outcome	To secure stable supply of safe water in the target areas by provision of drilling equipment for development of deep wells in the 70 villages located in Bengo Province and Cuanza Sul Province.
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Construction equipment for deep wells (Drilling machines, boring tools, high pressure air compressor equipped on board of truck, hand pumps, etc.)</li> <li>- Training equipment (parts of hand pump)</li> </ul> <p>Angola Side</p> <ul style="list-style-type: none"> <li>- None for the Project but for construction of deep wells, including cost for geophysical surveys, drilling works, consulting services, spare parts of hand pumps, and so forth.</li> </ul>

### II. Result of the Evaluation

Summary of the Evaluation
<p>This Project aimed at construction of deep wells of 77 in Bengo and 100 in Cuanza Sul. The coverage ratio of water supply was 12% in Bengo and 3% in Cuanza Sul, and developments of underground water had been still limited in these provinces. Since most of population in the two provinces could not have access to safe water, construction of water supply facilities was urgent needs there.</p> <p>This Project has achieved stable supply of safe water to more than 100,000 inhabitants in the 70 target villages of the two provinces. At the time of ex-post evaluation, the coverage of water supply exceeded 40% in the both provinces. In addition, the Project contributed to a decrease in water-borne diseases and improvement of living conditions in the target areas. However, the number of constructed deep wells by the construction equipment provided by the Project was below the planned target due to delays of construction works by the Angola side. As for sustainability, no problem was observed basically. The construction equipment provided by the Project have been well-maintained by experienced and skillful technicians and utilized for surveys of underground water and construction of deep wells. In addition, the operation and maintenance system for the developed deep wells by the Project, including collection of water charge, has been developing through establishment of water management committees by village users. For relevance, the Project has been highly relevant with Angola's policy for development of underground water, development needs for water supply utilizing underground water, as well as Japan's ODA policy. For efficiency, the project period slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Angola's development policies of "the Strategy for Development of Water Sector 2002-2016" and "the Plan of Exploration of Underground Water Resources 2002-2006" (Plano de Exploração de Recursos Hídricos Subterrâneos), development needs for securement of safe water by development of rural water supply facilities utilizing underground water, as well as Japan's ODA policy. Therefore its relevance is high.</p>
2 Efficiency
<p>Although the project cost was within the plan (ratio against plan: 80%), the project period exceeded the plan (ratio against plan: 131%) due to the time consuming delivery of the equipment provided by the Project, caused by the congestion in the port of Angola, the delay</p>

of custom clearance, as well as coordination among the related ministries of Angola. Therefore, efficiency of this project is fair.

### 3 Effectiveness/Impact

The Project has partly achieved its objective to ensure stable supply of safe water in 70 target villages. Since it took longer time to coordinate between the central and provincial governments and to select contractors, the construction of deep well to be implemented by the Angola side has been behind schedule. The total number of deep wells developed was far below the planned target: 39 wells in 2009 and 108 wells in 2011. The delays of construction brought about slower achievement of expected outcomes. However, according to DNA, the equipment installed by the Project have been utilized for groundwater surveys and deep well construction besides this Project despite of no concrete data provided by DNA. As a result, the Project has been contributed to promotion of groundwater development in the target provinces. Whereas the total population with stable access to safe water in the target villages exceeded 93,000 persons as of 2011, the coverage ratio of water supply increased to 43% in Bengo and 45% in Cuanza Sul. In addition, improvement of living conditions through safe water supply in the target villages resulted in indirect impacts, such as a decrease in the case of diarrhea among the people utilizing the developed deep wells and reduction of the case of cholera in Cuanza Sul. Therefore, its effectiveness/impact is fair.

	2005 (Base Year)	2009 (Target Year)		2011 (Ex-post Evaluation)
Indicator 1 : The number of deep wells developed	(Actual) N.A.	(Plan) 177 wells in the 70 target villages	(Actual) 39 wells	(Actual) 108 wells (Bengo: 60, Cuanza Sul: 48)
Indicator 2 : The population who can stably use safe water in the target villages	(Actual) Bengo: 0 Cuanza Sul: 0	(Plan) Bengo: 29,932 Cuanza Sul: 67,599	(Actual) N.A.	(Actual) Bengo: 31,700 Cuanza Sul: 61,403
Indicator 3: The coverage ratio of water supply in the target provinces	(Actual) Bengo: 12% Cuanza Sul: 3%	(Plan) Bengo: 31% Cuanza Sul: 19%	(Actual) N.A.	(Actual) Bengo: 43.3% Cuanza Sul: 44.6%

(Source: DNA and Provincial Directorates of Energy and Water of Bengo and Cuanza Sul)

### 4 Sustainability

There is no problem observed in operation and maintenance of the equipment installed by the Project. The equipment have been well maintained and utilized for underground surveys as well as construction of deep wells by technicians of the Department of Water Supply and Sanitation (DAAS: Departamento de Abastecimento de Águas e Saneamento) and the Unit of Groundwater (NAS: Núcleo de Água Subterráneo). DNA is responsible for budgeting to construct water supply facilities. Under the coordination with the Provincial Directorates of Energy and Water (DEPA: Direção Provincial de Energia e Água), DAAS, a department under DNA, is in charge of water source surveys while NAS, an accounting entity of DNA, is engaged in construction works, including drilling of wells. The sufficient budget (2.27 million USD in 2011) for exploration of underground water and maintenance for the equipment in the both provinces of Bengo and Cuanza Sul has been ensured. Although there was no change in an organizational structure for construction of water supply facilities and no problem in technical level of technicians of DAAS and NAS, there is still room to improve time consuming implementation process due to the lack of office facilities and management system of DPEAs. In terms of the deep wells developed by the equipment of the Project, the operation and maintenance systems managed by the village users have been established through activities by the extension workers of the Social Mobilization Group under DPEAs in order to establish the water committees and to conduct technical trainings for operation and maintenance of water facilities. During the period from 2005 and 2011, 4 Social Mobilization Groups were organized and the extension workers were trained by supports of UNICEF. In particular, the water charge system has been established in Bengo. In the province, while 37 water management committees have been functioning to collect water tariff, the voluntary village meetings for management of water supply facility have been held in the villages where the water management committee has not been established yet. Despite that the level of water tariff differs according to conditions of each village within a range between 1 and 2 USD per month, there was no problem observed in collection of water tariff. Therefore, sustainability of the project is high.

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

In the target provinces, the construction of deep wells has been promoted by utilization of the equipment installed by the Project since DNA and DPEA have experienced technical staff. However, smooth and quick implementation of a groundwater exploration plan is indispensable to meet the needs for safe water in these provinces. Therefore, it is strongly recommended that DNA and DPEA shall facilitate coordination among the relevant organizations and strengthen their implementation arrangements. In particular, it is necessary for DPEA to improve its management, including expansion of technical and management staff as well as infrastructure development such as internet environment and in-house power generator.

### Lessons learned for JICA:

In the case that an implementing agency has enough technical level and experiences, grant aid project whose support is limited to installation of equipment, enables the implementing agency to construct deep wells autonomously, maintain the equipment adequately, and utilize those equipment effectively and sustainably. In addition, the construction cost can be reduced under responsibility of a recipient country. Therefore, the construction of deep wells by the recipient side is preferable from aspects of efficiency and sustainability of construction project. Also, human resource development of DAAS and dissemination activities to villagers supported by UNICEF contributed to enhancement of villagers' awareness concerning operation and maintenance of deep wells despite of no soft component to support operation and maintenance by villagers under this Project. Thus, in order to ensure sustainability of project effect, it is necessary to separately implement supports for sustainable operation and maintenance of deep wells by villager users, or to incorporate a strategic linkage with activities supported by experienced donors into a project.



Drilling Machine installed by the Project



Deep well developed by the equipment provided by the Project and the Users

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Guatemala Office: October 2011

Country	The Rehabilitation Project for Water Purification Plant in Inland Areas (Phase III)
Guatemala	

## I. Project Outline

Project Cost	E/N Grant Limit: 660 million yen	Contract Amount: 644 million yen
E/N Date	June, 2006	
Completion Date	February, 2008	
Implementing Agency	Institute for Promotion of Municipality (INFOM)	
Related Studies	Basic Design Study: August 2005-March 2006	
Contracted Agencies	Consultant(s)	Kyowa Engineering Consultants Co., Ltd.
	Contractor(s)	Hitachi Plant Technologies, Ltd.
	Supplier(s)	N/A
Related Projects (if any)	<p>Japanese cooperations: Grant Aid</p> <ul style="list-style-type: none"> <li>- The Rehabilitation Project for Potable Water Plant in Inland Areas (Phase I) (1998-2000)</li> <li>- The Rehabilitation Project for Potable Water Plant in Inland Areas (Phase II) (2001-2003)</li> </ul> <p>Other donors' cooperations: BID(=IADB), KfW, GTZ, EU, FIS</p>	
Background	Provision of safe potable water in Sanarate, Salamá, and Cabañas was not sufficient due to the inadequate functioning of the water purification plants caused by deterioration. The water purification plants in those municipalities were the final three (3) among twenty-five (25) water purification plants to be renovated in "Action Plan for Improvement of water purification plants in Inland Areas".	
Project Objectives	<p>Outcome</p> <p>To provide safe drinking water and to improve hygienic environment in municipality of Sanarate, Salamá, and Cabañas by increasing production amount of, and improving the quality of, the water through rehabilitation of water purification plants.</p>	
	<p>Outputs</p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Rehabilitation of water purification plants in Sanarate, Salamá, and Cabañas</li> <li>- Soft component :Establishment of O&amp;M system through capacity development</li> </ul> <p>Guatemalan Side</p> <p>Local cost; Request to donors; Allocation of staffs and budget for O&amp;M; Revision of Water Charges and its enforcement; Securing of Water Sources for future; Technical Advisory by INFOM for local cities on O&amp;M of Purification Plant.</p>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>In municipalities of Sanarate, Salamá, and Cabañas, provision of safe drinking water was not sufficient due to the inadequate functioning of the water purification plants caused by deterioration.</p> <p>This Project has partially achieved its objectives of provision of safe drinking water and the improvement of hygienic environments in those three municipalities through rehabilitation of water purification plants, as shown in the fact that the targeted quantity of drinking water has been mostly achieved while quality of drinking water has not fully been achieved at one of the three purification plants which cannot operate accurately due to problems mentioned in relation to sustainability below. As for sustainability, problems have been observed in terms of structural, technical, financial and operation &amp; maintenance aspects such as frequent turnover of staffs, loss of some operation manuals, lack of continuous/further trainings for front-line operators, lack of budget allocation for maintenance by the municipalities, and improper operation of the plants sometimes. For relevance, the project has been highly relevant with Guatemalan development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency as well, both the project cost and project period were almost as planned. In the light of above, this project is evaluated to be partially satisfactory.</p>
1 Relevance
<p>This project has been highly relevant with the Guatemalan development plan (Action Plan for Improvement of water purification plants in Inland Areas), development needs (Insufficient provision of safe potable water in local cities), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>



## 2 Effectiveness/Impact

This project has somewhat achieved its objectives of increasing production amount of purified water at three water purification plants under this project. The targeted quantity of drinking water has been achieved at the time of ex-post evaluation. In terms of water quality, the plants in Sanarate and in Cabañas reached targeted quality although the plant in Salamá has not fully reached the targeted situation due to failures to control turbidity during rainy seasons. Based on interviewing with Municipalities, it is deemed that two of the water purification plants has improved operating environment systematically to improve the functioning and increase drinking water production, while the other one has been partially improved. The limited improvement in the quality of the water at one site (Salamá) is due to lack of consciousness with the standard operating procedures because some manuals and trainings are lacking (see 4.Sustainability): sometimes the use of necessary chemicals is not appropriate in terms of quantity to ensure water quality. Based on the interview with population in three sites, it was observed that local residents in Sanarate and Cabañas think improvements of hygiene (e.g. less contamination/infection route because of safer water) have been brought after the project. Also, no negative impact on the environment was observed although detailed information was unavailable. Therefore, effectiveness/impact of this project is fair.



Incoming water distribution system in Sanarate



Slow filtration system in Salamá

### Quantitative Effects

Indicator	baseline value (2005 )	target value (2009)	actual value (2009)	actual value (2011)
<b>Amount of Purified Water</b>				
Sanarate	5,180m <sup>3</sup> /day	6,650 m <sup>3</sup> /day	N.A.	6,653 m <sup>3</sup> / day
Salamá	2,070 m <sup>3</sup> /day	4,490 m <sup>3</sup> /day	N.A.	4,493 m <sup>3</sup> / day
Cabañas	1,040 m <sup>3</sup> /day	1,560 m <sup>3</sup> /day	1,156 m <sup>3</sup> / day	1,555 m <sup>3</sup> / day
<b>Quality of Purified Water in terms of Turbidity</b>				
Sanarate	Some cases of below Guatemalan Standard	No cases of below Guatemalan Standard	N.A.	No cases below Guatemalan standard
Salamá	ditto	ditto	N.A.	Some cases below Guatemalan standard
Cabañas	ditto	ditto	No cases below Guatemalan standard	No cases below Guatemalan standard

(Source: Interview and site Visits to the Municipalities and Water Purification Plants in Salamá, Cabañas and Sanarate, INFOM)

## 3 Efficiency

Although the project cost was as planned (ratio against the plan: 98%), the project period slightly exceeded the plan (ratio against the plan: 101%). Therefore, efficiency of the project is fair.

## 4 Sustainability

The water purification plants are operated and maintained by three Municipalities (Sanarate, Salamá, and Cabañas), respectively. Although the structure of these operation and maintenance (O&M) agencies is sustained in the similar manner of the implementation period, it has some problems for continuity of project effectiveness due to unstableness of staffing stemming from frequent personnel reshuffle. Also they have some problems in the technical aspect due to the fact that some of the necessary manuals have not been available (lost). Under this project, training in O&M was provided to staffs of the three plants as the soft component, and the remaining rate of the trained staffs is relatively high. However, it was recognized that no training to front-line operators is conducted after the completion of the project due to insufficient budget. Without manuals and continuous training, staffs have difficulties to put what they learned into practice. Furthermore, the O&M agencies have serious problem in the financial aspect caused by failures to set adequate level of water rates (tariff) to cover O&M cost as well as to raise local residents' awareness of such fair water rates. As for the current status of operation and maintenance, the municipalities have some problems due to insufficient data utilization (Sanarate and Salamá), sometimes insufficient water quality (only Salamá), some problems of facilities that have not been fixed yet (Salamá and Cabañas), no comprehensive analysis on water quality in collaboration with INFOM (all three plants), etc., although the situation in detail varies depending on each municipality. Therefore, sustainability of the project is low.



Incoming water holding tank in Cabañas

## III. Recommendations & Lessons Learned

- Recommendations for Implementing agency:
- The municipalities are suggested to treat the O&M problems with sense of professionalism and serious commitment to high quality O&M. Related to this, below are suggestions in more detailed manner.
- The municipalities are suggested to make improvements in the O&M of purification plants by acquiring essential manuals again and improving compliance with them, including proper use of chemicals needed in the necessary quantities to ensure good water quality.
- The municipalities are suggested to provide constant training on O&M of purification plants to those operators who are responsible for and are involved specifically in the actual O&M activities, especially permanent staff, so that they implement the O&M activities properly with confidence.
- The municipalities and INFOM are suggested to coordinate in order to provide the training program and to establish a continuous supporting mechanism for water purification plant.
- The municipalities are suggested to treat the O&M problems with sense of professionalism and serious commitment to high quality O&M.



- The municipalities are suggested to schedule an installation of quality systems and environmental management in the short term (3-5 years).
- Continuous training in O&M after the project is as important as retaining staffs who are trained by the project for the transferred knowledge to be put into practice.

## Internal Ex-Post Evaluation for Grant-Aid Project

conducted by Honduras Office: October, 2011

Country	“El Proyecto del Mejoramiento del Puente Agua Caliente” and “El Proyecto de Reconstrucción del Puente Las Hormigas”
Honduras	

### I. Project Outline

Project Cost	E/N Grant Limit : 788 million yen 1 <sup>st</sup> Phase (Puente de Las Hormigas) : 499 million yen 2 <sup>nd</sup> Phase (Puente de Agua Caliente) :289 million yen	Contract Amount : 779 million yen 1 <sup>st</sup> Phase (Puente de Las Hormigas) :497 million yen 2 <sup>nd</sup> Phase (Puente de Agua Caliente) :282 million yen
E/N Date	1 <sup>st</sup> Phase : August 2005, 2 <sup>nd</sup> Phase: June 2006	
Completion Date	1 <sup>st</sup> Phase : February 2007, 2 <sup>nd</sup> Phase: December, 2007	
Implementing Agency	Ministry of Public Works, Transport and Housing (Secretaria de Obras Publicas, Transporte y Vivienda (SOPTRAVI) )	
Related Studies	Basic Design Study: January - August 2005	
Contracted Agencies	Consultant(s)	Katahira & Engineers International
	Contractor(s)	Hazama Corporation
	Suppliers(s)	N/A
Related Projects (if any)	<p>Japanese cooperations: Grant-Aid Project:El Proyecto para la Reconstrucción de los Puentes en la Zona de Tegucigalpa(1999-2002), El Proyecto para la Construcción de los Puentes Ilama y Democracia(1999-2003), El Proyecto para la Construcción de los Puentes de la Carretera de Libramiento de Choluteca(1999-2002), El Proyecto de Reconstrucción del Puente Guasaule(1999-2002)</p> <p>Other donors' cooperations: After the devastations by the Hurricane Mitch in 1998, World Bank, IDB, AusAID, Government of Sweden and Government of Spain provided assistance to the rehabilitation of roads and bridges.</p>	
Background	<p>With the support of foreign donors, Honduras has almost recovered from the devastations by the Hurricane Mitch. In terms of road transportation, there are still more work to be done at the time of ex-ante evaluation. The traffic regulations and load restriction in some of main trunk roads had still been put in force because some bridges are still impromptu facilities. It was said that only 65.6% out of the entire length of 3,200 km had been renovated as of at the end of 2004. On the other hand, there was a pressing need to put distribution in place to cope with the increasing volume of the international cargos. This was attributable to the accelerated demands of international distribution of agricultural products among Central-American countries under the Sistema de Integracion Centroamericana (SICA). Under such circumstances, it has become imperative for the Government of Honduras to rehabilitate two bridges located along the Logistic Corridor.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To strengthen the main trunk roads and to secure the safe and sustainable transportation of goods and population by rehabilitation and replacement of two bridges along the Logistic Corridor</p>	
	<p><b>Outputs</b></p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- 1<sup>st</sup> Phase : Puente de Las Hormigas</li> <li>- (45.0m, Removal of whole set of existing bridge. Construction of new bridge for replacement)</li> <li>- 2<sup>nd</sup> Phase : Puente de Agua Caliente</li> <li>- (46.3m, Removal of upper part of existing bridge and bridge pier. Construction of new upper part of bridge and bridge pier for replacement)</li> </ul> <p>Honduras Side</p> <ul style="list-style-type: none"> <li>- To secure the land for construction, temporary office, storage space for construction materials</li> <li>- To relocate the electric power lines, communication lines and water pipes</li> <li>- To construce the Bailey Bridge to be used for the roundabout way (Puente Las Hormigas)</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>Government of Honduras has put much effort to the road maintenance and improvement. However, there are still more work to be done to upgrade the road condition. It is said that only 65.6% out of main trunk roads with entire length of 3,200km, have been renovated as of at the end of 2004. On the other hand, there is a pressing need to gain the broad distribution to cope with the increasing volume of the international cargos. This is attributable to the accelerated demands of international distribution of agricultural products among Central-American countries under the SICA. Under such circumstances, it has become imperative for the Government of Honduras to rehabilitate two bridges located along the Logistic Corridor.</p> <p>This project has largely achieved its objectives; strengthening the main trunk roads and securing the safe and sustainable transportation of goods and population by rehabilitation and replacement of two bridges along the Logistic Corridor. The velocity for transit and weight limit of passing vehicle have been achieved their target values. As for sustainability, sufficient number of staff has been allocated to maintain the roads condition and no problems have been observed in institutional, technical, financial as well as operation &amp; maintenance aspects. For relevance, the project has been highly relevant with Honduras'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, as well, both the project cost and project period were within the plan. In the light of above, this project is evaluated to be highly satisfactory.</p>

**1 Relevance**

This project is highly relevant with Honduras development plan (ex. Poverty Reduction Strategic Paper), development needs in improvement of road condition and maintenance in order to stimulate the economy domestically and internationally, as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

**2 Efficiency**

Both project period and project cost was within the plan (ratio against the plan 98% and 94% respectively).Therefore, efficiency of this project is high.

**3 Effectiveness/ Impact**

This project has largely contributed to decrease the vehicles' transit time over the bridge and to improve the traffic flow. And the increase of the weight limit for passing vehicle has facilitated the sustainable and increasing transportation of goods and population. Interviews with those in charge at the implementing agency, it was confirmed that the project has also contributed to increasing the international transportation of goods. And main trunk roads have been strengthened and the safe and sustainable transportation of goods and population has been secured. Furthermore, it was observed that the embankment stabilization for Puente de Las Hormigas has led the mitigation of flood damage and the resolution of dust dispersion by roads. Therefore, its effectiveness/impacts is high.



Puente de Las Hormigas



Puente de Agua Caliente

**Quantitative Effects**

Indicators	Name of the bridge	Baseline value (2004:Basic Design year)	Target value (2007/2008:After completion)	Actual value (2008:Target year)	Actual value (2011:Ex-post evaluation year)
(1) Increase of velocity for transit	Puente de Las Hormigas	Below 10km/h	2007 (Designed)80km/h	80km/h	80km/h
	Puente de Agua Caliente	Below 30km/h	2008 (Designed)80km/h	80k /h	80km/h
(2) Weight limit of passing vehicle	Puente de Las Hormigas	32.7 ton	2007 40.9 ton	40.9 ton	40.9 ton
	Puente de Agua Caliente	32.7 ton	2008 40.9 ton	40.9 ton	40.9 ton

(Data source : SOPTRAVI)

**4 Sustainability**

With the sufficient number of staff allocated with specific terms of reference, the current operational and maintenance including the cleaning is properly conducted through whenever necessary. In case of maintenance and repair, the experienced private contractors selected under the bidding system is in charge with technical expertise under the supervision of Department of Maintenance and Repair (Fondo Vial) As for the financial aspect, it is likely that implementing agency can secure and complement the additional budget if the repair is urgently needed. It has been observed by site visits that two bridges have maintained the favorable condition. There are no problems in institutional, technical, financial and operation and maintenance aspects. Therefore, sustainability of the project is high.



Puente Las Hormigas



Puente Agua Caliente

**III. Recommendations & Lessons Learned**

**Recommendations for Implementing agency:**

Considering the possible effects by the climatic change such as hurricane in Honduras, it is recommended that the regular check-up on maintenance should be conducted in order to protect the bridge from such disasters by early detection of any damage. Such regular check-up system will eventually lead to the extension of expected lifetime of bridges.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Honduras Office: October 2011

Country	The strengthening of the fire-fighting capacity project
Honduras	

## I. Project Outline

Project Cost	E/N Grant Limit: 814 million yen	Contract Amount: 663 million yen
E/N Date	June, 2006	
Completion Date	September, 2007	
Implementing Agency	Ministry of Justice and Interior, Fire Defense Agency (CBH)	
Related Studies	Basic Design Study: June - December 2005	
Contracted Agencies	Consultant(s)	Incorporated Foundation Fire Equipment and Safety Center of Japan
	Contractor(s)	N/A
	Supplier(s)	Sojitz Corporation
Related Projects (if any)	<p>Japanese cooperations:</p> <p>Technical Cooperation</p> <ul style="list-style-type: none"> <li>- Provision of training in Japan (JICA Group Training)</li> </ul> <p>Grant Aid</p> <ul style="list-style-type: none"> <li>- The project for preparation of fire-fighting equipment (1989)</li> </ul> <p>Other donors' cooperations:</p> <ul style="list-style-type: none"> <li>- Korea (Fire-engine, man transit vehicle), Spain (Fire-engine), Spain (Fire-engine, Rescue truck, others)</li> </ul>	
Background	<p>In Honduras, the fire-station facilities, equipment and related human resource were focused to set up reliable fire-fighting system according to "Action plan for the strengthening of the fire-fighting capacity of CBH" in order to tackle increasing number of disaster. However, 30% of fire-engines was more than 20 years old. Thus, it was difficult for the fire-fighting capacity at that time to cope with the increasing number of disaster in urban area, caused by heavy population concentration as well as increasing large-scale/ multistory facilities.</p>	
Project Objectives	<p>Outcome</p> <p>To strengthen the fire-fighting capacity in targeted major cities (20 municipalities including Tegucigalpa, San Pedro Sula, La Ceiba, Puerto Cortes, etc.) by procurement of fire-fighting related equipment.</p>	
	<p>Outputs</p> <p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Equipment: Procurement of 30 of Fire-engines (11 of leading fire-engine, 16 of cars, 2 of air working vehicle, a O&amp;M guidance vehicle) and carried equipment, spare parts, 4 sets of wireless to targeted municipalities</li> <li>- Soft Component: O&amp;M Training on Fire-engine and Fire-fighting equipment</li> </ul> <p>Honduran Side</p> <ul style="list-style-type: none"> <li>- Construction of garage for fire-engines together with guarantee of land, Construction of Fire Station, Guarantee of warehouse for spare parts, Arrangement of Infrastructure (Electricity, Water supply, and sewage, etc. for the procured equipment), Domestic transportation of vehicles</li> </ul>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>The government of Honduras was trying to set up reliable fire-fighting system to deal with the increasing number of disaster due to heavy population concentration as well as increasing large-scale/ multistory facilities in urban area. However, it was difficult for the fire-fighting capacity at that time to cope with above mentioned-situation because of very old fire-engine/equipment.</p> <p>The project has largely achieved strengthening of the fire-fighting capacity in targeted 20 municipalities by procurement of fire-fighting related equipment. The ratio, to appropriate disposition, of Fire-engines ready to be dispatched in all 47 nationwide Fire-stations including new ones achieved to 100%. In addition, Operating ratio of wireless at Fire-stations nationwide is almost 100%. Therefore, this project has been contributing to not only targeted fire stations but also to strengthening of fire-fighting capacity of Honduras as a whole. As for sustainability, there was no problem observed in the project due to the fire-engine situation of being ready to be dispatched through daily practice of inspection in proper manner. For relevance, the project has been highly relevant with Honduran development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency as well, both the project cost and project period were almost within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>
1 Relevance
<p>This project has been highly relevant with the Honduran development plan (Action plan for the strengthening of the fire-fighting capacity of CBH), development needs (national as well as targeted areas' needs of the strengthening of the fire-fighting capacity), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period were within the plan (ratio against plan: 81%, 100%). Therefore, efficiency of this project is high.</p>

### 3 Effectiveness/Impact

The project has largely achieved its objective, strengthening of the fire-fighting capacity in targeted 20 municipalities by procurement of fire-fighting related equipment. The ratio, to appropriate disposition, of Fire-engines ready to be dispatched in all 47 nationwide Fire-stations including new ones increased from 70% at the time of ex-ante evaluation to 100% at the time of both target year and ex-post evaluation (actual achievement of targeted value). Also, the operating ratio of wireless at Fire-stations nationwide achieved 100% at target year as well as at the time of ex-post evaluation. During the site visit, it was confirmed that two wireless procured by this project were replaced to new ones by the implementing agency due to the unavailability of spare parts in domestic market. And the targeted number of prepared fire-fighting vehicles that are ready to be dispatched was achieved at the time of ex-post evaluation. Based on the interview with the implementing agency, timely arrivals to the fire scene have been realized after completion of the project because of its contribution to high operational rate of fire-engine. Consequently, the project has been contributing to improvement in the safety for the habitants as well as visitors from abroad in the targeted 20 municipalities. Therefore, its effectiveness/impact is high.

#### 【Operational Indicators】

	2005(Year of BD)	Target Year(2007)	Target Year (2007 Actual Value)	Ex-post evaluation (2011)
Ratio, to appropriate disposition, of Fire-engines ready to be dispatched in all 47 nationwide Fire-stations including new ones.	63 Vehicles/90 (70%)	90Vehicles / 90(100%)	90Vehicles /90 (100%)	90Vehicles / 90(100%)
Operating ratio of wireless at Fire-stations nationwide	43Sta. /46Sta. (93%)	47Sta. /47Sta.(100%)	47Sta. / 47Sta.(100%)	47 Sta./47Sta.(100%)
Number of prepared fire-fighting vehicles that are ready to be dispatched		30 Vehicles / 30		30 Vehicles /30

(Source : CBH, Answer to the questionnaire and interview to Fire-stations in each related municipality )



Ready to be dispatched for 24 hours due to Well maintenance



The exterior of the building of Tegucigalpa Central Fire Station

### 4 Sustainability

The structure of implementing agency is sustained in the similar manner of the implementation period, and it is considered enough for continuity of project effectiveness. The staff allocation has been improving because total number of allocated staffs in all stations has been increased and set optimum in each station (increase or decrease according to the each fire station's situation). As for technology for O&M, all of those who received the O&M technical training (soft-component of this project) remain as responsible persons for the equipment O&M of fire-stations. They regularly provide the trainings to persons in charge of O&M in neighboring areas. Thus, implementing agency has no problem in the technical aspect. In addition, all procured fire-engines are actually ready to be dispatched through practice of daily inspection in proper manner. Therefore, sustainability of the outcome by this project is high. As for the financial aspect in this project, expenses for personnel, fuel and O&M have been budgeted since CBH together with each municipality is expected to bear the fire-fighting cost. It was confirmed that such budget has been executed although some documented data of some targeted fire-stations could not be obtained.

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



A fireman in fire-fighting suit and fire-engine that is ready to be dispatched

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

To assure deliberately the budget for future fire-engine procurement because procurement of new vehicles is definitely necessary as existing vehicles' deterioration go forward over time although O&M mechanism for the procured fire-engine and equipment have been well functioning.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Vietnam Office: October, 2011

Country	The Project for Improvement of Safety Laboratory for National Institute of Hygiene and Epidemiology
Viet Nam	

### I. Project Outline

Project Cost	E/N Grant Limit: 891 million yen	Contract Amount: 874 million yen
EN Date	September, 2006	
Completion Date	January, 2008	
Implementing Agency	National Institute of Hygiene and Epidemiology (NIHE)	
Related Studies	Basic Design Study: January - June 2006	
Contracted Agencies	Consultant(s)	Nihon Sekkei - Fujita Planning (JV)
	Contractor(s)	Toda Corporation
	Supplier(s)	Mitsubishi Corporation
Related Projects (if any)	Japanese cooperations: Capacity Development for National Institute of Hygiene and Epidemiology to Control Emerging and Re-emerging Infectious Diseases (2006-2010) (JICA Technical Cooperation) and a number of joint collaboration researches and projects between NIHE and bilateral donors, UN agencies and NGOs	
Background	SARS outbreak occurred in Vietnam in 2003. In 2005, 65 cases of human avian influenza were reported. The country had the largest infections and fatalities caused by H5N1 avian influenza from the end of 2003 to 2005, and further spreading of the infection was being feared. The high-risk pathogens including avian influenza virus, SARS, HIV were mainly handled at NIHE. In 2005, NIHE received 2,346 clinical specimens of avian influenza. Those specimens were tested at the existing BSL-2+ laboratories for diagnosis. However, in accordance with WHO regulation, high risk pathogens must be handled at BSL-3 laboratories, but at that time, there was no BSL-3 laboratory in Vietnam.	
Project Objectives	<b>Outcome</b> To enhance capabilities of the National Institute of Hygiene and Epidemiology (NIHE) in testing and conducting research on dangerous pathogens such as avian influenza virus by construction of laboratories and procuring related equipment.	
	<b>Outputs</b> <b>Japanese Side</b> <ul style="list-style-type: none"> <li>- Construction of four (4) Biosafety level (BSL)-3 laboratories and supporting facilities (BSL-2 laboratories and chemical laboratory rooms) on the 3rd and 4th floors of High Tech Center (HTC) of NIHE</li> <li>- Procurement of laboratory equipment</li> <li>- Software component (technical transfer on new facilities)</li> </ul> <b>Vietnam Side</b> <ul style="list-style-type: none"> <li>- Construction of HTC building</li> <li>- Interior work on 3rd and 4th floors</li> <li>- Removal of old facilities</li> <li>- Utilities</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>The establishment of BSL-3 laboratories which enables safe and appropriate examination of high-risk pathogens was the most priority in the infectious disease control in Vietnam. However, NIHE, the Vietnam's leading research institution in this field, did not have the one.</p> <p>The project has largely achieved its objectives set in the basic design: i) BSL-3 and its associated facilities were established and ii) these facilities have been operated in a proper way to test and conduct researches on dangerous pathogens as well as to train other institutions. As for sustainability, there was no problem observed in the project due to NIHE's good commitment in ensuring necessary manpower as well as necessary expense for its operation and maintenance.</p> <p>For relevance, the project has been highly relevant with Vietnam country development policy, development needs as well as Japan's ODA policy at the time of ex-ante and ex-post evaluation. For efficiency, it is evaluated as fair because project implementation period slightly exceeded the plan.</p> <p>In the light of the above, this project is evaluated to be highly satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with the Vietnam's development plan (national development plans and programs for emerging and re-emerging infectious diseases; five-year plan of the health sector 2011-2015), development needs (continuous threat against hazardous pathogens and important role of BSL-3 laboratories), as well as Japan's ODA policy (Country Assistance Program for Vietnam), at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>



## 2 Efficiency

The project cost was within the plan (ratio against plan: 98%). However, project implementation period was slightly longer than planned (ratio against plan: 124%) due to the delay of the construction of HTC building and the interior work on 3rd and 4th floor by Vietnamese side because of prolonged administrative procedures. Therefore, efficiency of the project is fair. Nevertheless, the extension of the period was somehow inevitable due to some technical adjustments in the context that BSL-3 laboratories are the first ones in Vietnam, which required complicated operation regulations.

## 3 Effectiveness/Impact

BSL-3 laboratories have been certified in accordance with WHO's standard by Directorate for Standards, Metrology and Quantity (STAMEQ), and become a model for other institutions nationwide. The decrease in the number of tests for dangerous pathogens in 2010, after sharp increase in 2009 due to the receipt of pathogens including H5N1, H1N1 and H1N3 from all institutions of the country, can be explained by that (i) other institutes, particularly the HCMC Pasteur started receiving suspected pathogens for testing, (ii) the number of suspected pathogens decreased in 2010, and (iii) NIHE has been sustained a leading role in the national epidemiological network, conducting a number of training courses and collaborating with domestic and foreign institutions in development of biosafety regulations and joint researches, and thus the indicator/target set at the ex-ante evaluation (i.e. increased number of tests at NIHE) cannot fully capture outcomes of this project. In that way, despite the non-achievement of the target of the quantitative indicator in 2010, this project has largely achieved its objective of enhancing capabilities of NIHE in testing and conducting research on dangerous pathogens and brought a good impact to the whole network of epidemiological institutions in Vietnam. Therefore, its effectiveness/impact is high.

### Quantitative Effects

Indicator(unit)	2005 (BD year)	2007 and thereafter (Target year)	Actual results		
			2008 (Target year)	2009	2010
Number of tests for dangerous pathogens (such as avian influenza virus)	2,346 (avian influenza)	increase	1,663	8,196	235

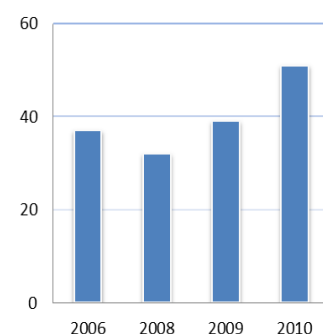
Source: NIHE



NIHE building



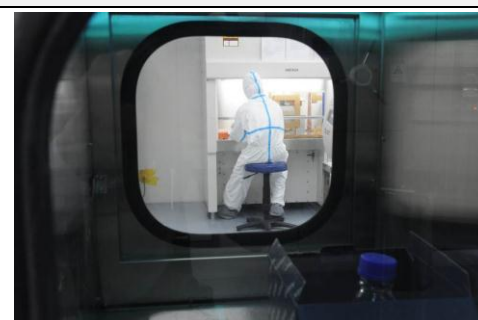
Entrance to the BSL-3 laboratory



No. of joint-researches with national and international institutions

## 4 Sustainability

Since the establishment of BSL-3 in 2008, NIHE has shown a good commitment in ensuring necessary manpower as well as necessary expense for its operation and maintenance. In addition, within a framework of the JICA technical cooperation project, short term experts on BSL-3 operation were assigned to provide technical advices, which has contributed to the high technical level of the staffs. The deficiencies of some equipment that were found during an evaluation of that technical cooperation project have been fixed by the time of this ex-post evaluation. By this time, this project has no problem in structural, technical, financial and current operation and maintenance aspects of the implementing agency, and it is deemed that there is no specific concern for continuity of project effectiveness for future perspective. Therefore, the sustainability is evaluated as high.



Researcher working in a BSL-3 laboratory

## III. Recommendations & Lessons Learned

### Recommendations for Implementing agency:

A continuous effort in ensuring manpower for operation and maintenance and necessary expense is needed to maintain the proper operation of BSL-3.

### Lessons learned for JICA:

This project was to bring highly advanced facilities and equipment that had never been in the country before, but attained high sustainability, possibly due to the combination of several factors as follows: (i) urgent and exclusive needs for the subject matter (in case of this project, handling of highly dangerous pathogens that had not been practiced by other entities in the country), (ii) collaboration between hardware development (this grant aid project) and software (capacity) development (software component and the technical cooperation project), and (iii) good capacity of the implementing agency to absorb the new techniques. Future projects involving advanced technology are advised to suffice these conditions as much as possible.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Zambia office: October, 2011

Country	The Project for the Improvement of Expanded Programme on Immunization (Phase II)
Zambia	

## I. Project Outline

Project Cost	E/N Grant Limit: 283 million yen	Contract Amount: 283 million yen																							
E/N Date	August, 2006																								
Completion Date	September, 2007																								
Implementing Agency	Ministry of Health (MOH)																								
Related Studies	Basic Design Study: March 2006																								
Contracted Agencies	Consultant(s)	Japan International Cooperation System																							
	Contractor(s)	Toyota Tsusho																							
	Supplier(s)	N/A																							
Related Projects (if any)	Japanese cooperation: The Project for the Improvement of Expanded Programme on Immunization (Phase I) (2001) (JICA Grant Aid)																								
Background	The immunization programme in Zambia has been recognized for its sustained high coverage levels, contributing to reduction in childhood morbidity and mortality rates. However, sustaining high coverage had been difficult due to shortage of human resource, and insufficient cold chain equipment (due to outdated cold chain equipment and increased population and number of newly constructed health facilities), among other issues. The Phase I project replaced more than 10-year old cold chain equipment, but the ones that were not replaced at that time have become old and obsolete. The government did not have enough financial resources to replace the old equipment; thus, the government requested Grant Aid from Japan.																								
Project Objectives	<b>Outcome</b> To improve the vaccine management by provision of cold chain equipment to health facilities nationwide.																								
	<b>Outputs</b> Japanese Side Procurement of cold chain equipment nationwide. <table border="1" data-bbox="327 1012 1098 1281"> <thead> <tr> <th></th> <th>Planned</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>Electric refrigerator</td> <td>194</td> <td>194</td> </tr> <tr> <td>Kerosene/ electric refrigerator</td> <td>155</td> <td>154</td> </tr> <tr> <td>Gas/ electric refrigerator</td> <td>51</td> <td>49</td> </tr> <tr> <td>Solar refrigerator system<sup>(*)</sup></td> <td>185</td> <td>181</td> </tr> <tr> <td>Electric refrigerator/ freezer</td> <td>18</td> <td>18</td> </tr> <tr> <td>Voltage regulator</td> <td>126</td> <td>320</td> </tr> <tr> <td>Equipment for provincial health offices</td> <td>9</td> <td>9</td> </tr> </tbody> </table> *Operational training for cold chain officers was provided.			Planned	Actual	Electric refrigerator	194	194	Kerosene/ electric refrigerator	155	154	Gas/ electric refrigerator	51	49	Solar refrigerator system <sup>(*)</sup>	185	181	Electric refrigerator/ freezer	18	18	Voltage regulator	126	320	Equipment for provincial health offices	9
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Electric refrigerator	194	194																							
Kerosene/ electric refrigerator	155	154																							
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Solar refrigerator system <sup>(*)</sup>	185	181																							
Electric refrigerator/ freezer	18	18																							
Voltage regulator	126	320																							
Equipment for provincial health offices	9	9																							
	Zambia Side Installation of equipment (including monitoring and reporting to JICA)																								

## II. Result of the Evaluation

Summary of the Evaluation
<p>The immunization programme in Zambia has been recognized for its sustained high coverage levels, contributing to reduction in childhood morbidity and mortality rates. However, sustaining high coverage had been difficult due to shortage of human resource, and insufficient cold chain equipment which resulted from increased population, number of newly constructed health facilities, and outdated cold chain equipment).</p> <p>This project, following the Phase I project, has largely achieved the improvement of vaccine management due to increased storage capacity and improved cold chain maintenance capacity, and contributed to the increase in immunization rate. As for sustainability, some problems have been observed in terms of structural and financial aspects due to budget limitation for staff training and allocation and consequent shortage of technicians to operate/repair the cold chain system and equipment. However, the cold chain equipment has been appropriately maintained.</p> <p>For relevance, the project has been highly relevant with Zambia's development policy and, 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.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

I Relevance
<p>The project has been highly relevant with Zambia's development plan (strengthening of the Expanded Program for Immunisation (EPI) in all districts as set in various national health development plans/strategies such as National Health Strategic Plan 2006-2010), development needs (proper management of vaccines), as well as Japan's ODA policy (Country Assistance Policy for Zambia in 2002), at the time of planning and ex-post evaluation. Therefore, its relevance is high.</p>

## 2 Efficiency

Project cost was as planned. However, project period was longer than planned (ratio against the plan: 127%) due to the delay of the training sessions conducted by the manufactures (they could not arrange the sessions as planned because MOH did not timely secure the necessary budget of day allowances and travel expenses for the Zambian trainees). Therefore, efficiency of the project was fair.

## 3 Effectiveness/Impact

The Project has largely achieved its objectives of the improvement of vaccine management.

The percentage of health facilities with functional cold chain equipment and immunization coverage have remarkably increased by the time of ex-post evaluation, though the level of achievement is slightly below the national target due to identified needs for replacement of equipment at some facilities whose equipment was not replaced by this project and newly constructed facilities. Some of the old but functional cold chain equipment (not from this project), have been maintained by cold chain officers trained by the project and using project tool kits, but they needed replacement at the time of ex-post evaluation.

Based on WHO studies and; interviews with officials of MOH Child Health Unit, District Medical Offices (DMOs) and, health facilities, management of vaccines and immunization is considered to have been improved after the project.

Therefore, effectiveness/impact of this project is high.

### Quantitative Effects

Indicator(unit)	baseline value	target value	actual value (2010/2011)
Disposal rate of vaccines (%)	n.a	n.a	Average: n.a.
% of Health facilities with functional cold chain equipment *	45% as of 2005	100% by 2008***	85% as of 2011 (due to replacement needs and newly constructed facilities).
Immunization coverage based on UNICEF and WHO criteria):** <ul style="list-style-type: none"> <li>• Measles:</li> <li>• DPT3:</li> </ul>	As of 2008:  Measles: 89% DPT3: 95%	90% by 2015***	Measles as of July 2010: 97%  DPT3 as of July 2010: 84%.

Sources: \* Child Health Unit (CHU), MOH

Notes: \* Not mentioned in the ex-ante evaluation, but used as an alternative indicator to disposal rate of vaccines; ; \*\* ditto; \*\*\* national target, not the one specifically set for this project.



Gas/electric refrigerator (at a missionary hospital in Chongwe)



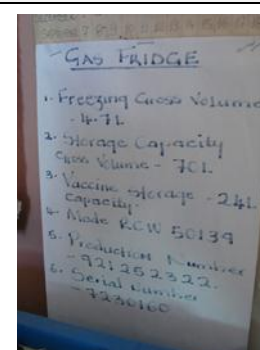
Well-organized and maintained solar refrigerator (at a health center in Chongwe)



Solar panel for solar refrigerator

## 4 Sustainability

The project has some problems in structural and financial aspects due to limitation of budget to recruit and train technicians to maintain (operate/repair) the cold chain system in place of those who left, and consequent shortage of technicians in some provinces/districts. However, no problem has been observed in technical aspect in terms of the high technical level of the remaining technicians. Also, operation and maintenance aspect of the implementing agency does not have serious problem either: maintenance of cold chain system is being prioritized at all levels to ensure its sustainability, and for provinces/districts where technicians are not currently assigned, provincial and central-level technicians respond when need arises. Therefore, sustainability of the project is fair.



Instruction for gas/electric refrigerator

## III. Recommendations & Lessons Learned

### Recommendations for the Implementing agency:

There is need to support new supply of cold chain equipment to new facilities and replacement of old ones in old facilities; there is need to sustain refresher courses on management of cold chain equipment in view of advancement of new technology and high staff turnover in the ministry especially at health centre/post level.

## Internal Ex-Post Evaluation for Grant Aid Project

conducted by Guatemala Office: October 2011

Country	The Project for the Improvement of Major National Hospitals in Metropolitan Area
Guatemala	

### I. Project Outline

Project Cost	E/N Grant Limit: 899 million yen	Contract Amount: 890 million yen
E/N Date	August, 2006	
Completion Date	March, 2008	
Implementing Agency	Ministry of Public Health and Social Assistance (MoPHSA)	
Related Studies	Basic Design Study: December, 2005 - July, 2006	
Contracted Agencies	Consultant(s)	System Science Consultants
	Contractor(s)	Hazama Corporation
	Supplier(s)	Itochu Corporation
Related Projects (if any)	Other donors' cooperations: EU, CIDA, IADB, UNFPA, The Damien Fountain	
Background	In Guatemala, Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) among population in poverty is high. After Peace Agreement, heavy migration from rural area to urban area is considerable (Population in Metropolitan area: 1.8 million in 1994, 2.5 million in 2002). Consequently, the situation of health service provision in Metropolitan area has been deteriorated. The Anti-tuberculosis Sanatorium San Vicente (specialized in anti-infectious disease including tuberculosis), Hospital General San Juan de Dios and Hospital Roosevelt (General Hospitals with specialty in Maternal and Child Health (MCH)) have been tackling the above-mentioned issues through referral system of health facilities, but they are not adequately prepared / equipped.	
Project Objectives	<b>Outcome</b> To provide the quality medical services in MCH and Infectious Diseases to Metropolitan area by improvement of buildings / facilities and procurement of medical equipment to the Anti-tuberculosis Sanatorium San Vicente , Hospital General San Juan de Dios, and Hospital Roosevelt	
	<b>Outputs</b> <b>Japanese Side</b> <ul style="list-style-type: none"> <li>- Reconstruction of Outpatient consultation ward, Laboratory, Isolation ward, and other incidental facilities.</li> <li>- Procurement of medical equipment related to anti-tuberculosis, pediatrics, obstetrics and gynecology.</li> </ul> <b>Guatemalan Side</b> <ul style="list-style-type: none"> <li>- Procurement of the necessary equipment (furniture, etc.) after the removal of the old one.</li> </ul>	

### II. Result of the Evaluation

Summary of the Evaluation
<p>The 3 hospitals (Anti-tuberculosis Sanatorium San Vicente, Hospital General San Juan de Dios, Hospital Roosevelt) were not adequately prepared / equipped in order to tackle the deteriorated situation of health service provision in Metropolitan area at the time of ex-ante evaluation (2006).</p> <p>This Project has achieved its objectives of providing the quality medical services in MCH and Infectious Diseases to Metropolitan area by improvement of buildings/facilities and procurement medical equipment to the Anti-Tuberculosis Sanatorium San Vicente, Hospital General San Juan De Dios and Hospital Roosevelt with specialty in MCH, due to the fact that the target indicators have been exceeded by the actual value (e.g. number of inpatients in isolation ward (Anti-tuberculosis Sanatorium San Vicente): 36 beds/day in 2005, 148beds/day in 2008, 254beds/day in 2010). As for sustainability, some problems have been observed in terms of technical, financial, current status of operation and maintenance aspects due to the recent trends of equipment maintenance (bid as a big package), high cost of imported spare parts, etc. For relevance, the project has been highly relevant with Guatemalan development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, project period slightly exceeded the plan. In the light of above, this project is evaluated to be satisfactory.</p>

### 1 Relevance

This project has been highly relevant with the Guatemalan development plan (the government policy “Hope Plan”, Goal of Millennium and National Health Plan of 2008-2012, and Health Policy), development needs of low health indices and deteriorated situation of health service provision in Metropolitan area, as well as Japan’s ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.

### 2 Efficiency

Project cost was within the plan (99%). However, project period was slightly longer than planned (108% against plan). Therefore, efficiency of the project is fair.

### 3 Effectiveness/Impact

This project has largely achieved its objectives of providing the quality medical services in MCH and Infectious Diseases to Metropolitan area by improvement of buildings / facilities and procurement of medical equipment to the Anti-tuberculosis Sanatorium San Vicente (specialized in anti-infectious disease including tuberculosis) , Hospital General San Juan de Dios and Hospital Roosevelt (General Hospitals with specialty in MCH). The number of outpatients and inpatients in isolation ward (Anti-tuberculosis Sanatorium San Vicente), and waiting days after reservation for consultation/treatment (Hospital Roosevelt) expected were achieved at both target year and the time of ex-post evaluation due to improvement of efficiency of medical services. In particular, San Vicente Hospital explained that the rapid increase in outpatients at the Anti-tuberculosis Sanatorium and inpatients in the isolation ward is due to the role of the hospital now being considered as a referral hospital of respiratory diseases, and the increasing demand for specialized care of respiratory diseases. Also the survival rate of premature baby (Hospital Roosevelt, Hospital General San Juan de Dios) expected was increased at both target year and the time of ex-post evaluation. Moreover, based on the questionnaire to the hospitals and interview to the personnel in each hospital (director, administrative staffs, nurses, personnel in charge of the satisfaction office and some patients),it was found that Quality of Life (QOL) during consultation / treatment at Anti-tuberculosis Sanatorium San Vicente has been improved through better attention to patients, effectively conditioned rooms, etc., and that the hospitals have started functioning as education hospitals thanks to the facility development by this project. Also, based on the statistical data from the targeted three hospitals, the expected better hospital environment to prevent infection cases to staff and in hospitals at Anti-tuberculosis Sanatorium San Vicente, as well as the expected more treatment opportunities for serious patients in perinatal period, are deemed to be appearing.



Procured equipment at Hospital San Vicente

As for environmental issues, efforts in wastewater treatment including liquid waste from laboratories have been made by the assisted hospitals although planned environmental actions have not been completed perfectly yet (e.g., the sewage treatment plant of the Hospital San Juan de Dios not in full operation; some old pumps at the Hospital Roosevelt). And no immediate negative impacts on natural environments have been reported.

Therefore, effectiveness/impact of this project is high.

#### Quantitative Effects

Indicator(unit)	Baseline value (year 2005)	Target value (year 2008)	Actual value (year 2008)	Actual value (2010)
Number of outpatients (Anti-tuberculosis Sanatorium San Vicente)	12,000 (48/day)	12,750 (51/day)	14,003 (56/day)	25,000 (100/day)
Number of inpatients in isolation ward (Anti-tuberculosis Sanatorium San Vicente)	36 beds/day	42 beds/day	148 beds/day	254 beds/day
Mortality rate of serious patients of ICU disease (Anti-tuberculosis Sanatorium San Vicente)	15%	12%	6.9%	13.%
Number of exams conducted in the constructed laboratory (Anti-tuberculosis Sanatorium San Vicente)	N/A	N/A	58,092	61,250 (Year 2010) 44,200 (Year 2011)
Number of waiting days after reservat on for consultation/treatment (Hospital Roosevelt)	10-14 days	7 day	14	7
Survival rate of premature baby (Hospital Roosevelt) (Hospital General San Juan de Dios)	N.A.	Increase	Increased	Increased

(Source: Result of Interview and questionnaire to the Hospitals )

#### 4 Sustainability

The responsibilities for operation and maintenance (O&M) of medical equipment are given to 3 hospitals. Although no problem was found in the structure of the three hospitals except no inventory and a systematic plan, there are some problems in the technical aspect due to no allocation of specialized staffs in maintenance at the 2 hospitals (Hospital Roosevelt, San Vicente). Also, MoPHSA and the hospitals have some problems in the financial aspect due to the considerably high prices to import the spare parts. Currently, MoPHSA and the hospitals are handling this financial issue by giving priorities for equipment maintenance. In the aspect of operation and maintenance status, while most of the procured equipment is still in operation, the O&M agencies have some problems of unavailability of some spare parts due to the absence of a branch/representative of the company that deals the procured equipment in Guatemala, besides minor problems in the sewage treatment of Roosevelt and San Juan de Dios Hospitals as mentioned above. Therefore, sustainability of the project is fair.



Full utilization of equipment at Hospital Roosevelt

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- It is necessary to carry out actions for the sewage treatment for the Roosevelt and San Juan de Dios Hospitals,.
- It is necessary to guarantee the continuous sufficient budget allocation for the maintenance of equipment.
- It is necessary to have an inventory and a systematic plan of maintenance of hospital equipment.
- It is desirable to start negotiations on the extension and/or remodeling of the hospital buildings towards the more convenient environment for the patients.

Lessons learned for JICA:

- It is important to monitor and to record the operation result of the equipment utilization to clearly see the effectiveness of the procured equipment.



# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Zambia office: October, 2011

Country	The Project for Malaria Control
Zambia	

## I. Project Outline

Project Cost	E/N Grant Limit: 308 million yen	Contract Amount: 256 million yen
E/N Date	November, 2006	
Completion Date	January, 2008	
Implementing Agency	Ministry of Health (MOH)	
Related Studies	Basic Design Study: August, 2006	
Contracted Agencies	Consultant(s)	Japan International Cooperation System
	Contractor(s)	Toyota Tsusho
	Supplier(s)	N/A
Related Projects (if any)	Other donors' cooperations: The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), World Bank, USAID, DFID, KfW, UNICEF, WHO and others for insecticide treated nets (ITNs) mass distribution campaign, indoor residual spraying, intermittent preventive treatment of pregnant women, prompt diagnosis and treatment of malaria with effective drugs, etc.	
Background	High malaria prevalence in Zambia has hindered socio-economic development. Under-five children and pregnant women are most vulnerable groups to malaria. The Government of Zambia has implemented the National Malaria Control Strategy (2006-2011) with the target, "more than 80% of people in the designated districts sleep in insecticide treated net by 2008". To achieve this objective, the government was in need for procurement of mosquito nets; hence the government of Zambia requested Grant Aid from Japan.	
Project Objectives	Outcome To increase the use of mosquito net among children under five years old and pregnant women by procurement and distribution of long lasting insecticidal mosquito net (LLIN)	
	Outputs(s) Japanese Side Procurement of LLIN x 360,000 pieces (handover at SFH (Society for Health) depository in Lusaka) Zambia Side periodic distribution of LLIN to health centers in Mwinilunga, Kaputa, Chingola, Senanga, Chibombo, Samfya, Isoka, Chongwe, Chipata and Kalomo, ten Malaria Sentinel Districts.	

## II. Result of the Evaluation

Summary of the Evaluation
<p>The government of Zambia has made various malaria control efforts including distribution of mosquito nets, indoor residual spraying and preventive care to pregnant women. This project was implemented to prevent malaria in the ten districts with high malaria transmission rates by distributing mosquito net.</p> <p>The data about the use of the insecticide treated nets (ITNs), of which LLIN procured by this project was one type, in the target districts was not available at the time of the ex-post evaluation. However, based on the nationwide data and some qualitative information, it is considered that this project has partially achieved the use of ITNs among under-five children and pregnant women due to the fact that some of the end users failed to replace them when they became old (after three years). Hence the utilization rate has not reached the national goal (80%). As for sustainability some problems have been observed in the structural aspect due to lack of monitoring of use of ITNs in target districts, and in the financial aspect due to recent withholding of donor funding to the MOH following the 2009 Corruption scandal, which has resulted in unsustainable availability of ITNs for replacing old ones for end users.</p> <p>For relevance, the project has been highly relevant with Zambia'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 as well, both the project cost and project period were within the plan.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>The project has been highly relevant with Zambia's development plan (malaria control continuing to be one of the priorities in national development plans), development needs (reduction of malaria morbidity), as well as Japan's ODA policy (Country Assistance Policy for Zambia in 2002), at the time of planning and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period were within the plan (ratio against the plan: 83%, 100%). Therefore, efficiency of this project is high. The distribution of LLIN from the central depository to health centers was carried out by Zambia-side funding.</p>

### 3 Effectiveness/Impact

Currently, district-specific data on effectiveness/impact of malaria prevention activities are not available. The ITN policy that initially targeted young children and pregnant women has been extended to covering sleeping spaces in all households using mass distribution and antenatal clinic distribution schemes, according to Zambia National Malaria Control Program Performance Review 2010 (MPR-Zambia 2010) and National Malaria Indicator Survey (MIS) 2010; and MIS does not routinely monitor ITN utilization by end users. Therefore, it is difficult to assess effectiveness of this specific project separately from the effects of other interventions. Under such circumstances, effectiveness of this project was inferred based on national data and some qualitative information.

The project somewhat achieved its objectives of the increased use of ITNs by pregnant women and under-five children to prevent malaria according to national data, but the utilization rate did not reach the national target, which is also the target of this project, due to recent reduction in donor funding (since 2009), which resulted in reduced availability of prevention commodities, (for replacing old ones). Also, some end users failed to replace their ITNs when they became old (after three years).

Nevertheless, national incidence of malaria dropped from 412 cases per 1,000 population in 2006 to 252 cases per 1,000 population in 2008 and to 246 per 1,000 in 2009. Chongwe district reported increased use of mosquito nets including ITNs and reduction in malaria incidence which was attributed to increased use of nets. Also, MIS revealed that women acquired better knowledge of use of mosquito net to prevent malaria. The LLIN distributed by this project accounted for 4.5% of ITNs required (35.4% of ITNs actually distributed) in whole Zambia as of 2010.

From above, effectiveness/impact of this project is considered to be fair.

#### Quantitative Effects

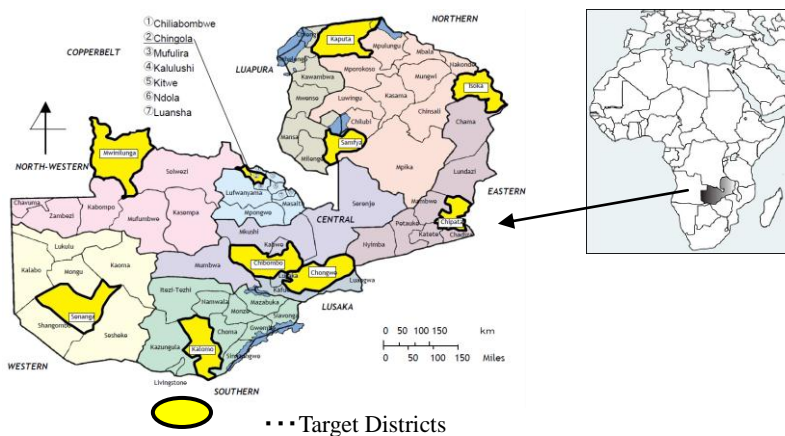
Indicator(unit)	baseline value (year)	target value (2008)	actual value (2008):	actual value (2010):
% of under-five children and pregnant women in 10 districts who sleep under mosquito net/ITNs	N.A.	More than 80%	<b>Target district: Not available</b> <b>National data(*)</b> <ul style="list-style-type: none"> <li>Under-five children: 47.5% under mosquito nets / 41.1% under ITNs</li> <li>Pregnant women: 50.3% under mosquito nets / 43.2% under ITNs</li> </ul>	<b>Target district: Not available</b> <b>National data (*)</b> <ul style="list-style-type: none"> <li>Under-five children: 55.3% under mosquito nets / 49.9% under ITNs</li> <li>Pregnant women: 52% under mosquito nets / 45.9% under ITNs</li> </ul>

Data source: Malaria Indicator Surveys (MIS) 2008 and 2010

Note: \* National level indicator is not an original effect indicator mentioned in Basic Design Study but a reference indicator as district-wise data were not available.



Long Lasting Insecticidal Mosquito Net (LLIN)



### 4 Sustainability

This project has some problems in structural aspects for continuity of project effectiveness in that end user utilization could not be monitored in targeted districts as planned at ex-ante evaluation. This was due to the fact that existing health management information system (HMIS) have not captured health indicators from the community (beyond the health centers), despite that no problem was found in the institutional framework for distribution of ITNs/LLIN. Also, a problem has been observed in the financial aspect due to recent withholding of donor funding to the MOH following the 2009 Corruption scandal, which has resulted in unsustainable availability of ITNs for replacing old ones for end users. Therefore, sustainability of the project is fair.

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

There is need to ensure collection and monitoring of data on targeted project indicators for effectiveness.

Lessons learned for JICA:

Establishing project indicators that the executing agency can routinely monitor even after the completion of the project so that effects of the project can be monitored and evaluated.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Mozambique office: October, 2011

Country	The Project for Malaria Control
Mozambique	

## I. Project Outline

Project Cost	E/N Grant Limit: 449 million yen	Contract Amount: 353 million yen
E/N Date	January, 2007	
Completion Date	January, 2008	
Implementing Agency	National Malaria Control Program (NWCP), Ministry of Health	
Related Studies	Basic Design Study: October, 2006	
Contracted Agencies	Consultant(s)	Japan International Cooperation System
	Contractor(s)	N/A
	Supplier(s)	Toyota Tsusho Corporation
Related Projects (if any)	Other donors' cooperations: Distribution of mosquito nets to pregnant women through Malaria Consortium (NGO) (Provinces of Inhambane, Nampula, Cabo Delgado) (Grant by DfID, 2005-2010), etc.	
Background	The Human Development Index of Mozambique is low among Sub-Saharan countries, particularly represented by such indicators as under-five child mortality rate at 138 per 1,000 live births and maternal mortality rate at 520 per 100,000 live births in 2008. Among major diseases in Mozambique, malaria is the leading cause of disease and death, and thus considered as a big obstacle in the country's economic development giving serious effects on people's health. To tackle this problem, the government of Mozambique prepared the National Malaria Strategic Plan 2006-09 in which it set a target to raise the dissemination rate of mosquito nets to 95% by 2009, and requested the government of Japan for grant aid to cover the shortage of nets to achieve the target.	
Project Objectives	Outcome	To decrease morbidity by malaria among pregnant women in the five target provinces (Inhambane, Sofala, Manica, Nampula and Cabo Delgado) by provision of Long Lasting Insecticidal Mosquito Nets (LLINs) to pregnant women for free.
	Outputs	<p>Japanese Side</p> <ul style="list-style-type: none"> <li>- Procurement of 605,000 pieces of LLINs to be distributed to pregnant women in the target five provinces (Inhambane, Sofala, Manica, Nampula and Cabo Delgado)</li> </ul> <p>Mozambique Side</p> <ul style="list-style-type: none"> <li>- Procurement of storage of LLINs, transportation of LLINs to district health bureaus in the target provinces, and distribution of LLINs from district health bureaus to the final destination</li> </ul>

## II. Result of the Evaluation

Summary of the Evaluation
<p>In Mozambique, the National Malaria Strategic Plan set a target to improve dissemination rate of mosquito nets to pregnant women and under five children. However, distribution of nets had never been carried out in some provinces, and some other provinces lacked sufficient quantity of nets. The five target provinces of this project were selected from provinces that had such characteristics.</p> <p>The project has partially achieved its objective of decreasing malaria morbidity among pregnant women by providing them with free LLINs. Although data availability was limited, in one target province where some data was available, the project achieved the objective because malaria morbidity among pregnant women decreased in the target year. Also, the number of malaria infections among under-five children significantly decreased in the same province. However, in terms of ownership rate of mosquito nets among pregnant women, the achievement level of the objective had some limitations due to insufficient number of mosquito nets that the Mozambique side continuously distributed to pregnant women who had antenatal check-up (ANC). As for sustainability, although the system of handling mosquito nets was generally good, some problems have been observed in terms of the structural aspect of distribution of nets including stock control and securing vehicles to transport nets from provinces to districts.</p> <p>For relevance, the project has been highly relevant with Mozambique'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 as well, both the project cost and project period were within the plan while the outputs of the Mozambique side were partly modified.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance
<p>This project has been highly relevant with Mozambique's development policy (National Five-year Development Plan, National Malaria Strategic Plan, etc.), development needs (development needs for malaria control for pregnant women in the five target provinces), as well as Japan's ODA policy (health sector being positioned as of the priority development issues) at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Both project cost and project period were within the plan (ratio against plan: 79%, 80%). Therefore, efficiency of this project is high.</p>

### 3 Effectiveness/Impact

Among the indicators for quantitative effects of this project, only limited verification was possible about decrease in malaria morbidity among pregnant women in the target districts because data was not available. Nevertheless, in Nampula Province where the data collected showed a decrease in the target year (2010), this indicator is considered to have achieved the expectation. On the other hand, the ownership rate of mosquito nets was below the planned level because the Mozambique side could not prepare sufficient number of nets to be continuously distributed to women taking ANC, following the increase in the number of eligible women beyond the projected level<sup>(Note)</sup>. For assessment of direct effects of this project, the net ownership rate as of year 2008, when the project distributed nets, should have been verified rather than 2009 or 2010. However, it was not possible because consistent data on the number of eligible women (denominator of this indicator) was not available for that year. Meanwhile, with the data of 2008 collected from some provinces, it is inferred that the ownership rate might have been considerably high right after the distribution of nets by the project.

The number of infections with malaria among under-five children, another indicator, has decreased in two provinces where data was available. In Manica Province, where nets had not been distributed to pregnant women before this project, the number of infections significantly decreased by 19.2% per year between 2008 and 2010. Also, based on interviewing with Malaria Consortium, this project is considered to have contributed to raising people's awareness of malaria prevention.

As shown above, this project has somewhat achieved its objective; therefore its effectiveness/impact is fair.

#### Quantitative Effects

[Effect on all target districts] No. of LLINs distributed to final destinations: 610,000 planned; 580,000 distributed in 2008

	2006 (Basic Design year)	2009 (Actual value)	2010 (Target year)	
(Indicator 1) Ownership rate of LLINs among pregnant women in the five provinces (No. of eligible women projected: 557,268)	N.A.	76.2%	(Plan) 95%	(Actual) 67.6%
(Indicator 2) Malaria morbidity among pregnant women in the five districts	N.A.	N.A.	N.A.	N.A.

Sources: NMCP and Manica Provincial Health Department (the target value assumed the continuing distribution of nets by the government of Mozambique).

[Effects on Manica Province] No. of LLINs distributed to final destinations: 80,000 planned; 90,000 distributed

	2006 (Basic Design year)	2009 (Actual value)	2010 (Target year)	
(Indicator 1) Ownership rate of LLINs among pregnant women in Manica Province (eligible women projected: 68,392)	N.A.	(Actual) 102.2%	(Plan) 95%	(Actual) 77.9%

Source: Report from Manica Province Health Department

[Effects on Nampula Province] No. of LLINs distributed to final destinations: 270,000 planned; 240,000 distributed

	2006 (Basic Design year)	2007 (Actual)	2008 (Actual)	2009 (Actual)	2010 (Target year)	
(Indicator 1) Ownership rate of LLINs among pregnant women in Nampula Province (eligible women projected: 243,621)	N.A.	44.5%	93.5%	40.2%	(Plan) 95%	(Actual) 56.5%
(Indicator 2) Malaria morbidity among pregnant women in Nampula Province	N.A.	N.A.	N.A.	1.1%	N.A.	0.5%

Source: Report from Nampula Province Health Department

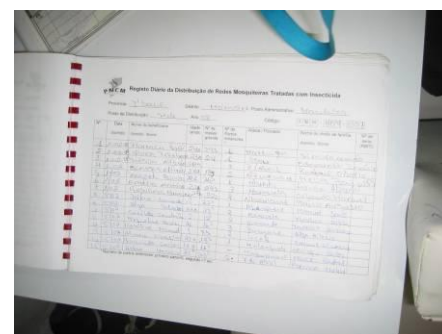
(Note) According to a report by NMCP, the total number of LLINs distributed to pregnant women in the five target districts was 481,553, and the number of women who took ANC was 712,521.



LLIN distributed in this project (middle) and a pregnant woman receiving an explanation on how to use it (left)



A nurse at a health center explaining on LLIN distributed in this project



Distribution record kept at a health center (Inhambane Province)

### 4 Sustainability

Although the implementing agency's system of handling mosquito nets was generally good with appropriate allocation of staffs, some problems have been observed in terms of the structural aspect of distribution of nets including stock control and securing vehicles to transport nets from provinces to districts. Therefore, sustainability of the project is fair.

### III. Recommendations & Lessons Learned

#### Recommendations for Implementing agency:

In order for the distribution of mosquito nets not to be only a temporary event, it is recommended that the implementing agency ensure budget for continuing distribution, and strengthen the monitoring system including management of data such as the number of pregnant women eligible for receiving nets.

Lessons learned for JICA:

The scope of this project for the Japanese side was up to procurement of mosquito nets to Mozambique, and it was the counterpart side that was responsible for distribution of them. However, it was difficult to measure effects of the procurement by the Japanese side in the situation where the monitoring and evaluation system for distribution on the Mozambique side has not been fully established or practiced. Therefore, future projects in the similar kind could better measure their impacts if they accompany capacity building in monitoring and evaluation of distribution of nets such as field training in data collection, management and analysis for officers in charge at provincial- and district health departments.

Also, in order for the distribution of mosquito nets not to be only a temporary event in future projects, JICA should strongly encourage the counterpart agencies to secure budget for continuous distribution of nets.

# Internal Ex-Post Evaluation for Grant Aid Project

conducted by Bolivia Office: October 2011

Country	The Project of Equipment for Expansion of Local Roads
Bolivia	

## I. Project Outline

Project Cost	E/N Grant Limit: 900 million yen	Contract Amount: 794 million yen
E/N Date	January, 2007	
Completion Date	February, 2008	
Implementing Agency	Prefectural road office in La Paz, Santa Cruz, Potosí (Supervision: Office of Vice - Minister of Transportation, Ministry of Public Works)	
Related Studies	Basic Design Study: January 2006 - November 2006	
Contract Agencies	Consultant(s)	Construction Project Consultants, Inc.
	Contractor(s)	N/A
	Supplier(s)	Mitsubishi Corporation, Sojitz Corporation
Related Projects (if any)	Japanese cooperations: Grant Aid <ul style="list-style-type: none"> <li>- Project for Preparation of Road Department Workshop (1989)</li> <li>- Project for Preparation of farm road in Potosí (1989)</li> <li>- Project for Preparation of farm road in La Paz (1990)</li> <li>- Project for Preparation of farm road in Santa Cruz (1990)</li> </ul>	
Background	<p>Delay in development of local roads was one of the factors that hinder the development of rural area in Bolivia. It was difficult for poor population in rural area to have more opportunities for income and to access to social services such as schools, health facilities without sufficient infrastructure including local road network. However, road improvement in rural areas was difficult due to mountainous landscape and frequent natural disasters. To improve above-described situation on local road network, "Plan for local road preparation" set the target of total 2,018 km of local roads to be constructed / up-graded in prefectures of La Paz, Santa Cruz, and Potosí.</p>	
Project Objectives	<p><b>Outcome</b></p> <p>To prepare the roads (total 2,018km) in the targeted 3 prefectures (La Paz, Santa Cruz, Potosí) by procurement of road construction equipment.</p>	
	<p><b>Outputs</b></p> <p>Japanese Side  <ul style="list-style-type: none"> <li>- Equipment for road preparation in 3 prefectures (La Paz, Santa Cruz, Potosí): Bulldozer (3), Wheel Loader (10), Motor Grader (15), Excavator (4), Vibratory Roller (3), Dump Truck (19), Sprinkler Truck (3), Tips Ladder (2), Tire Roller (1)</li> </ul>                     Bolivia Side  <ul style="list-style-type: none"> <li>- Custom related cost (Customs clearance fee, storage charge, etc.), Domestic transportation cost</li> </ul> </p>	

## II. Result of the Evaluation

Summary of the Evaluation
<p>Road improvement in rural areas was important for rural poor, but difficult due to mountainous landscape and frequent natural disasters in Bolivia. Under such circumstances, road development in the three prefectures of La Paz, Santa Cruz and Potosi was an urgent issue.</p> <p>This project has largely achieved the preparation of roads due to the proper use of the equipment prepared. As for sustainability, some problems have been observed in terms of technical aspects due to the lack of experienced staff in the O&amp;M of the equipment. 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 as well, both the project cost and project period were almost within the plan.</p> <p>In the light of above, this project is evaluated to be highly satisfactory.</p>
1 Relevance
<p>This project has been highly relevant with the Bolivian development plan ("Productive Bolivia", etc.), development needs ("Transportation infrastructure improvement for economic activities"), as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. Therefore, its relevance is high.</p>
2 Efficiency
<p>Project cost was within the plan (88 % against plan) and project period was as planned (100% against plan). Therefore, efficiency of the project is high.</p>



### 3 Effectiveness/Impact

This project has largely achieved its objective of expanding local roads in the targeted three prefectures (La Paz, Santa Cruz, Potosí) by procurement of road construction equipment. The target values on the lengths of roads prepared were achieved by both Potosí (937.7km as against the planned 740km) and Santa Cruz (2,912.12km as against the planned 678km) in the year 2010, though it is difficult to show the segregated data on the length of roads constructed only by the procured equipment. Also, data from La Paz were not available at the time of the ex-post evaluation due to the lack of availability of time from SEDCAM La Paz personnel for interviews and lack of readily available information. However, based on the interviews with- or reports of SEDCAMs (Departmental Service of Roads: current names of the implementing agency) of the three prefectures, it was found that all of their road construction equipment, including the equipment procured by this project, is fully utilized for realization of the mentioned lengths of road preparation.

Based on the interview result with the implementing agencies as well as local residents, the expansion of the roads has allowed better access to social and economic services (e.g. positive impacts were observed on local tourism in Potosí and distribution of agricultural products to wider areas), therefore improving the way of life of the local residents).

Therefore, considering the good utilization status of all the construction machineries and positive findings on better accessibility due to the expanded roads, it can be concluded that effectiveness/impact of this project is high

Although the procured equipment have been sufficiently used, “closed cabin” equipment, rather than the “open cabin” equipment provided by the project, would have provided more comfort and security to the operators hence they could have worked more hours and improved the overall performance of the equipment in severe cold weather.

#### Quantitative Effects

Indicator	baseline value (2006 )	target value (2011)	actual (2011)	value	actual value (2010)
Length of roads prepared by Prefecture					
La Paz		600 km	N.A.		N.A.
Santa Cruz		678 km	N.A.		2,912.12 km
Potosí		740 km	N.A.		937.70 km

(Sources: Interviews results to the directors of SEDCAM Potosí and Santa Cruz and related staff. Reports presented by SEDCAM La Paz and Potosí.)

### 4 Sustainability

The responsibility of equipment prepared by this project belongs to prefectural road office in three districts: same as implementing agencies; Information from La Paz was not available at the time of the ex-post evaluation so analysis was made based on the information collected during field survey,

In terms of structure of the implementing agencies, it was partly changed in name from SEPCAM (Prefectural Service of Roads) to SEDCAM (Departmental Service of Roads) from the implementation period while the number of staffs is more than implementing period. This is considered enough for continuity of project effectiveness. One of the implementing agencies (SEDCAM Potosí) has some problems in the technical aspect due to lack of qualified staff. The staffs of Potosí are neither qualified nor provided the training for the maintenance of modern machineries although they have skills that have been accumulated over their long working experience.

The implementing agencies have no problem in the financial aspect because it has the necessary budget for the O&M of the equipment. And they have no problem in the status of operation and maintenance because they follow the established procedures for the operation, maintenance and management of the equipment, except the slow procurement of spare parts in Potosí where there is no supplier, though this problem is beyond the control of the implementing agency.

Therefore, sustainability of the project is fair.



Dump trucks procured to SEDCAM Potosí

### III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- Prefectural Road office of Potosí is suggested to allocate appropriately qualified personnel including the new mechanics with necessary knowledge/experience as well as to provide necessary trainings in order to conduct proper O&M activities.
- In order to prevent road operations from hampering and to keep smooth parts repair, the procurement process of important spare parts should be checked previously by C/P Agencies

Lessons learned for JICA:

- It would be advisable to check the (weather/temperature) conditions of the place where the equipment is used so that the type of equipment suitable for the given weather conditions could be procured and thus operators of the equipment could maximize their performance.