

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Miura Global Link Management Inc.	Duration of Evaluation Study
Project Name	The Project for the Improvement of Small-scale Fishery Center ("Le Projet de Construction d'un Centre de Pêches à Lompoul")	March 2010—December 2010

I Project Outline

Country Name	Republic of Senegal	
Project Period	December 2004 (Detailed Design) to March 2006 (Completion of facility construction, installation of equipment and soft component)	
Executing Agency	La Direction des Pêches Maritimes (DPM), Ministère de L'Économie Maritime et des Transports Maritimes Internationaux	
Project Cost	Grant Limit: 652 million yen	Actual Grant Amount: 651 million yen
Main Contractors	Construction: TOA Corporation, Procurement (Facility): Kankyo Corporation, (Ice-maker and refrigerator): Maekawa MFG. Co., Ltd., (Radio equipment): Furuno Electric Co., Ltd.	
Main Consultants	Fisheries Engineering Co. Ltd.	
Basic Design	"Basic Study Report on the Project for the Improvement of Small-scale Fishery Center", August 2004, Fisheries Engineering Co. Ltd.	
Related Projects (if any)	<ol style="list-style-type: none"> 1. Development Study on the Plan to Revitalize Northern Fishing District" (1997) (based on the results of this study, a master plan was established including recommendations for a plan to develop infrastructure in Saint-Louis and Kayar and a plan to build facilities supporting fishermen in northern coastal fishing villages, including Lompoul) 2. Similar grant aid cooperation projects such as "Project for Small-scale Fishery Revitalization (Missirah Fish Processing Center) (1987)", "Project for Building the Dakar Central Wholesale Fish Market (1989)" the "Project for Construction of the Kayar Fish Processing Center (2000)" and the "Project for Building a Central Market in Kaolack (2002)" have been implemented. When the ice machine provided in this project broke down, the ice machine technician from the Kaolack Central Market has provided assistance. 3. Long-term experts, such as advisers on the administration of marine products, has been dispatched since 1987, and two of these experts worked on development studies, technical cooperation projects and follow-up on grant-aid projects, including this project, that were being implemented or had already been implemented, as well as providing support for the formation of new projects (one expert was dispatched for the period from January 2008 to March 2010 and the other will be dispatched from May 2010 to May 2012). 4. In the technical cooperation project "Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages (2009-2013)," the practice of round haul net fishing in Lompoul and other places was considered as one activity, and training of marine product processing workers and fishermen was also planned. 	
Project Background	Since Lompoul does not have docks, marine products were unloaded directly on the sand and traded without regulation. Moreover, vehicles were unable to access the landing area, so that a lengthy period elapsed until the fish catch could be put into cold storage, thus hurting the freshness of the catch. Sanitary conditions were poor since clean water to wash the sand-covered fish catch could not be obtained, so the fish catch was occasionally contaminated. Moreover, the lack of an ice making and cold storage facility meant that the price of fish plummeted when the fish catch was large and the quality of the processed products was damaged because the hygienic environment at the processor was poor and there was no storage warehouse. This impeded the development of the fishing industry.	
Project Objective	To construct fish landing facilities, ice-making and cold storage equipment, facility and equipment for processing, a facility to supply well water, management office, and equipment to monitor safety of fishing boats in order to improve the quality of the fish catch and the processed marine products in Lompoul, Commnunauté Rurale de Kab Gaye, Région de Louga.	
Output[s] (Japanese Side)	<p><Soft components> Assistance in establishing the Management Committee for the Lompoul Marine Production Center ("Comité de pilotage du Centre de Pêches à Lompoul") and management committees for the fish landing facility ("Comité de gestion de l'aire de débarquement"), the processing area "Comité de gestion de l'aire de transformation", and facility for the supply of well water ("Comité de gestion de l'installation d'approvisionnement en eau") (establishment of administrative regulations, setting of usage fees, preparation of record books for facilities and equipment, etc.), training for staff working in operation and management and financial management for the above committees and associations, educational activities for users</p> <p><Construction of facilities> Support facility for marine product processing, support facility for marine product distribution (including fish landing facilities), support facility for fishermen, basic infrastructure (water supply facility, toilets, other)</p> <p><Procurement of equipment> Processing equipment, equipment for hall for disposal of goods, equipment for multi-purpose assembly room and administration, equipment for safety monitoring of fishing boats</p>	

II Result of the Evaluation

Summary of the evaluation

• This project has been highly relevant with the country's development plan and development needs both at the time of planning and ex-post evaluation, as well as Japan's ODA policy at the time of planning, therefore its relevance is high. Both project period and project cost were within the plan, therefore efficiency of the project is high. This project has somewhat achieved its objectives, therefore its effectiveness is fair. Some problems have been observed in the O&M system and financial situation of the executing agency, therefore, sustainability of the project effects is fair. In light of the above, this project is evaluated to be satisfactory.

<Recommendations to the Lompoul Marine Production Center (hereinafter referred to as, "Center") in order to enhance sustainability >

1. The Center should continuously collect unpaid fees for ice and unpaid rental fees for lockers for fishing equipment and fish drying stands and to repay unpaid electricity bills.
2. The Center should fully consider diversifying revenue sources at the administration improvement meeting and the regular monthly meetings of GIEI (mutual association) and carry out feasible ones.

<Recommendations to DPM and JICA>

In order to increase the fish processing amount at the Center, which has been used as an indicator for the direct effect, DPM and JICA should consider the possibility of transferring round haul net fishing techniques to Lompoul fishermen and implement if feasible. This would be one of the activities of the "Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages," which is currently being carried out.

<Lessons Learned>

1. One of this project's goals was to improve the quality of processed goods, but the fishing boats based at the Center did not have the technology for the round haul net fishing that would ensure a sufficient stable catch of the sardines needed as the raw material in processed goods. Thus, in similar projects in the future, the feasibility of incorporating the technology transfer needed to achieve the project objectives into a Technical Cooperation project that could be affiliated should be considered at the planning stage for grant-aid cooperation.
2. This evaluation study was able to quantitatively measure the utilization of equipment by confirming the utilization rate of the ice-making machine (actual ice production divided by ice maker's production capacity), but the gaps between the plan and the actual could not be analyzed since no target was set. In similar projects in the future, a target utilization rate for ice making machines should be set for both the peak fishing season and the off season as operation indicator when the project is planned.

<Constraints of this evaluation study>

• This evaluation study is a simplified version, and the evaluation was based solely on the data obtained in a review of documents, questionnaires given to the implementing organization and interviews with Japanese consultants. Accordingly, the data that could be confirmed through direct observation (such as the use of the donated facilities and equipment) was assessed based on responses to questionnaires. Moreover, the primary data forming the basis for the indicators in the questionnaire responses was not confirmed. A beneficiary study was not conducted in this simplified evaluation.

At the same time, the implementing organization provided appropriate information when they were asked to answer the questionnaire and additional questions. Particularly when evaluating the project's sustainability, the information from the previous and present advisors were used as data sources. Accordingly, we were able to conduct a more rigorous evaluation compared other projects in the same package, whose evaluations were based solely on information from JICA and questionnaires given to the implementing organization.

• Due to the lack of a field survey, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

1 Relevance

(1) Relevance with the Development Plan of Senegal

When the project was planned, the Priority Action Plan (2003-2005) designated the enhancement of the added value of fishery products through the construction of fish landing facilities and the promotion of processing and production. At the time of the ex-post evaluation, the Marine Product Sector Policy Paper (2007) specified five development policies: 1) sustainable management of marine product resources, 2) fulfillment of national marine product demand, 3) adding value to marine product resources, 4) reinforcing capacity of specialists and 5) improving access to funding. This project is consistent with 2) and 3). Thus, this project was consistent with Senegal's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Senegal

Lompoul was located in between Saint-Louis and Kayar. When the project was planned, fishing had been introduced relatively recently and development of the fishing industry lagged behind in Lompoul. Based on the results of the Development Study "Study on Plan to Revitalize Northern Fishing District," in cooperation with JICA, a master plan was established in 1997 including recommendations for a plan to develop infrastructure in Saint-Louis and Kayar and a plan to build support facilities for fishermen in northern coastal fishing villages, including Lompoul. At the time of the ex-post evaluation, according to the executing agency, the recommendations for the northern coastal fishing villages in the aforementioned master plan were effective. For this reason, the project was consistent with Senegal's development needs both when the project was planned and when the ex-post evaluation was conducted.

(3) Relevance with Japan's ODA Policy

In February 1998, the Policy Consultation Mission confirmed that the basic human needs sector (water supply, education, healthcare and medicine), the environment (preventing desertification) and agriculture and fisheries that had been designated as the priority areas for aid to Senegal when the Economic Cooperation Study Mission visited in November 1993 were still the priority areas. Accordingly, this project is consistent with the Japan's aid policies at the time the project was planned.

This project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

2 Efficiency

(1) Project Outputs

The outputs of the Japanese side were mostly as planned.

(2) Project Period (Project Inputs)

The planned project period was 16.5 months whereas the actual period was 16 months. Thus, the project period was almost as planned (97% of the planned).

(3) Project Cost (Project Inputs)

The planned project cost was 652 million yen whereas the actual project cost was 651 million yen. Thus, the project cost was within the plan (99.8% of the planned).

Both project period and project cost were within the plan, therefore efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

Indicator (1) the amount of fresh fish distributed by the Center amounted to 1,486 tons/year in 2008, exceeding the 2008 target of 1,435 tons/year, and distribution continued to increase in 2009. In addition, indicator (2) the ice storage rate for the fish (sardines) distributed by the Center was 50% in both 2008 and 2009, exceeding the 2008 target of more than 10%. Indicator (3) the ice storage rate for types of fish other than sardines also stood at 50% in 2008, meeting the 2008 target of more than 50%.

On the other hand, (4) the Center's fish processing amount fell far short of the 2008 target of 900 tons/year, producing only 137 tons/year; this also significantly undercut the baseline in 2004, which was 716 tons/year. The reasons for this shortfall are as follows: 1) since the goal was to improve the quality of fresh fish by increasing the ice storage rate, sales were boosted with the sale of fresh fish rather than with processed fish products and 2) the catch of fish used in processing (such as sardines) did not increase as much as anticipated. At the time of planning, it was assumed that some sardine round haul netters from Saint-Louis, Kayar and Fass Boye would dock at Lompoul, but this could not be confirmed at the time of the ex-post evaluation. At Lompoul, bottom gill net fishing and driftnet fishing are practiced, with a peak fishing season limited to April-June. If the round haul net fishing are practiced in Lompoul in the peak season for round haul net fishing on Senegal's northern coast, December -March, through the cooperation with Italy's Shalom Foundation or/and through "Project on Capacity Building for Artisanal Fisheries Organizations and Leaders in Fishery Villages" in cooperation with JICA, the processing amount could be increased.

Distribution support facilities (landing and disposal facility, ice-making and storage facility) are utilized. Use of the processing support facility is limited because catches of fish used for processing have not increased as much as expected. Moreover, since not all of the fishermen use lockers for their fishing equipment, only some lockers are used. There are no facilities or equipment that are not utilized or are being used for other purposes. Data on the ice-making machines' utilization rate for the peak season, interim season and off season are not known, but the average utilization rate from March 2006 to April 2010 was about 54%.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The fish market and warehouse located on the planned construction site were demolished and the site was acquired as planned. All of the fishery workers targeted for transfer were given a new stall, and there were no particular problems with the site acquisition process.

The anticipated positive indirect effects were 1) an increase in fishery production, 2) an increase in revenue for fishermen due to the improved freshness of fish products, 3) an increase in the revenue of women employed in processing work due to the improved value of the processed goods and increased distribution resulting from improved storage conditions for process goods, 4) an improvement in the working environment in the processing area and 5) the improved living environment for fishery workers as a result of a supply of clean water and the installation of toilets. According to the executing agency, although there is no quantitative data, all of these effects have materialized, with the exception of 3). As regards 3), the processing amount has fallen significantly, as described above, so the earnings of processing workers have not increased. The number of beneficiaries such as fishermen, women employed in processing, and middlemen have increased compared to the plan. Other indirect effects include 1) the start of fishing activities in surrounding villages (Diogo, Dare Dao, Mbetete, Rony, etc.), with many of these fishermen docking at the Center, and 2) the fact that, although middlemen used to bring ice from Dakar and Saint-Louis prior to the project's completion, after the project was completed these middlemen came from surrounding villages such as Loga, Kebemer and Potou to buy ice from the Center.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

The government entrusted the administration of the Lompoul Marine Production Center to the Kab Gaye Village Committee, and this committee then entrusted the Center's administration to GIEI (mutual association), which had been formed for the purpose of running the Center. In order to run the Center, four members from each of the 18 GIEs (economic interest group, or "Groupement d'intérêt économique") for marine product-related activities in Lompoul participate (72) and make up the administrative committee. Fifteen members of this administrative committee were selected to form the GIEI. When the project was planned, the intention was to set up management associations for each of the facilities (landing place, processing area, well water supply facility) targeted in this project, as well as a management committee (CRG) to serve as the organization managing all of the management associations. As planned, management associations and management committees were set up as planned by the time the project was completed in March 2006 with support from soft components. Subsequently, the GIEI was established in May 2006, and it was decided that CRG should be established underneath the GIEI, which was a change of plan. However, CRG had not been organized up to the present, and the monthly meetings that CRG were to have held have been hosted by GIEI. As described below, in order to improve operation and management problems such as failure to pay electricity costs, an administrative improvement council has been held every month since June 2010 in addition to GIEI's monthly meetings. This shows that the administrative and maintenance system is improving.

(2) Technical Aspects of Operation Maintenance

Two employees to operate and maintain the ice-making and storage equipment were assigned by DPM, one of whom handles minor repairs, including parts replacement. If these employees cannot handle an issue, the ice machine technician at the Kaolack Central Market, which was established in the previous grant-aid project for Kaolack Central Market Construction, is contacted and this technician either diagnoses the problem over the telephone or comes from Kaolack. In addition, an agent of a refrigerating equipment manufacturer and an assembly factory are located in Dakar, and major malfunctions can be fixed by these technicians. Accordingly, it is considered that there are no particular problems.

(3) Financial Aspects of Operation Maintenance

Since the Ministry of Maritime Economy covered electricity costs from the time the Center was established in 2006 until April 2008, the Center posted a profit. However, the Center had a deficit in 2009–2010 because of the high expenditures for electricity and failure by some users to pay rental fees for lockers for fishing equipment and fish drying stands and for ice. According to the report by the marine product administration adviser who is currently dispatched (original data: executing agency), the Center's revenue in July 2010 was about 4.8 million FCFA and its expenditures were 2.7 million FCFA, resulting in a profit of 2.14 million FCFA. The Center also had savings totaling 4.75 million FCFA. However, the balance of unpaid electricity bills at that point was about 26 million FCFA, so the Center would have a deficit if it paid its electricity bills. The Center had revenue from the collection of payments in arrears in July 2010, so total revenues were high, but the balance when excluding this revenue was about 750,000 FCFA.

To eliminate these unpaid electricity bills, the Center attempted to reduce its electricity bills by stopping one of its ice-making machine compressors and raised the price of ice (from 20 FCFA/kg to 30 FCFA/kg) in 2009. In addition, since the administrative improvement meeting met in June 2010, the Center has made progress in collecting arrears on payments for fees for lockers for fishing equipment and fish drying stands and for fees for ice, and this money has been used to pay unpaid electricity bills. According to the report by the marine product administrative adviser, if the Center has the same amount of revenue (excluding revenue from the collection of payments in arrears) as in July 2010 (off season) every month from now on and 30% of this is saved to be used to upgrade the facility in the future, the unpaid electricity bills can be paid in approximately three years.

Meanwhile, at the time the project was planned, the ratio of revenue from the landing place, processing area and well water supply was expected to be 2:3:5. However, as described above, sales from the sale of fresh fish have been higher than for processed fish products, and as of January 2010, approximately 80% of the revenue came from ice sales. According to the report by the previous advisor, the fish catch in periods other than the peak season have dropped precipitously (the monthly catch during the peak season was 400 tons and only 25 tons in the off season in 2007), and ice sales have dropped sharply in tandem. This means that revenue sources must be diversified. As of the ex-post evaluation, water is distributed to 39 taps in homes and 4 public taps from wells supplying water for ice-making machines, and the fee collection rate is 97%, but revenue from water bill payments account for only about 3% of the Center's entire revenue. At the August 2010 monthly GIEI meeting, the establishment of a cafeteria, use of round haul net fishing practices and the re-opening of a gasoline stand were proposed as ways to diversify revenue sources, and these ideas will be considered for actual implementation in the future.

(4) Current Status of Operation Maintenance

The trolleys in the processing facility and distribution facility are rusted, and the chairs in the multi-purpose conference room are dilapidated, but other facilities and equipment are in generally good conditions. There is no plan for maintenance and management, but records of daily checks, regular service records, malfunction and repair records and operating records can be accessed. The frequency of regular service for facilities and equipment depends on the facility and equipment, but is about once a week or once a month.

Some problems have been observed in the O&M system and financial aspects of the Center, therefore, sustainability of the project effects is fair.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Yoko Ogawa Global Link Management, Inc.	Duration of Evaluation Study
Project Name	The Project for Infectious Disease Control Phase II	March 2010 – December 2010

I Project Outline

Country Name	United Republic of Tanzania	
Project Period	June 2004 ~ March 2006	
Implementing Agency	Ministry of Health (MoH)	
Project Cost	Grant Limit: 302 million yen	Actual Grant Amount: 273 million yen
Main Contractors	(Procurement Contract) Toyota Tsusho Corporation	
Main Consultants	Japan International Cooperation System (JICS)	
Basic Design	“Basic design study report on the project for the infectious diseases control phase II in the United Republic of Tanzania”, JICA, April, 2004	
Related Projects (if any)	JICA Experts “Health Sector Advisors (2001~2003),” collaborated with this Project. JICA “Special Medical Equipment (AIDS Blood Tests) (2000, 2001)” was a predecessor of this Project. Project Formulation Survey, “USA-Japan Joint Project Formulation Missions (HIV/AIDS/Infectious Diseases/Population and Health) (January-February, 2001),” served as a planning study for this Project. Grant Aid “Infectious Diseases Control (2002, 2003)” was also a predecessor. Technical Assistance Project “Project for Institutional Capacity Strengthening for HIV Prevention Focusing on Sexual Transmitted Infections (STIs) and Voluntary Counselling and Testing Services (March 2006-July, 2010),” also collaborated with this Project.	
Project Background	<p>Despite Tanzania's efforts in prevention of HIV infection dating back in 1985, the number of HIV positive people has been on increase: In 2002, it was estimated that 1.5 million people were infected with HIV while annual death due to AIDS was 140,000 in Tanzania. The Ministry of Health had formulated and launched the “Health Sector HIV/AIDS Strategy for Tanzania 2003-2006,” which aimed at: (1) ensuring HIV testing of blood transfusion; (2) reinforcing HIV testing and counselling; (3) providing regular HIV tests among pregnant women to prevent mother-to-child transmission; and, (4) reducing the risk of HIV transmission through treatment of STIs. There were growing concerns not only over European Union's announcement on termination of STI drugs supply after 2003, but also over “the 3 by 5 Initiative” which would drastically expand demands for the equipment and supplies as well as training needs for HIV testing and counselling. Meanwhile, Japan had conducted a joint project formulation study in 2001 under the Japan-US common agenda in the health sector, and later supported test kits/STI drugs procurement through the Grant Aid scheme, under the Project for Infectious Diseases Control (2002, 2003). While a demand for testing equipment was expected to further grow in future also with impending enforcement of obligatory re-testing of those wish to receive AIDS treatment, there was no prospect of obtaining the necessary fund at that time. As such, Tanzania has requested assistance from Japan for the effective implementation of HIV/AIDS control, which is one of the urgent and most highly prioritised issues in the country.</p>	
Project Objective	To provide necessary equipment (HIV/STI test kits, laboratory supplies, STI medicines) in order to strengthen blood donor testing, HIV testing and counselling and STI control programme, as well as to increase number of patients receiving proper STI treatments in Tanzania.	
Output[s] (Japanese Side)	1) Procurement of the HIV test kits and laboratory consumables for use by 420 testing and counselling sites and by 86 hospitals providing blood transfusion sites 2) Procurement of syphilis test kits, STI medicines and consumables for use by ante-natal clinics	

II Result of the Evaluation

Summary of the evaluation

- This project has been highly relevant to the country's development plan and development needs, both at the time of planning and at the time of ex-post evaluation. As well, the Project was in line with Japan's ODA policy at the time of planning: Therefore, its relevance is rated high. Efficiency is rated high, as it obtained all the planned Outputs within the planned project cost and period. The Project has reached most of its planned targets, and thus, the effectiveness is also rated high. In terms of sustainability, the management of logistics and HIV/STI control programme has no major institutional or technical problems, and so does financial aspect, provided that foreign assistance for HIV testing kits and STI drugs continue. Short-term stock-outs could be expected in case Tanzania fails to secure continuous funding from its largest donor, the Global Fund, in which case sustainability of the effects could be limited, or rated fair.
- In light of the above, this project can be evaluated to be highly satisfactory so far as the Government can secure foreign assistance for procurement of the equipment; or, be satisfactory should the Government fails to secure such resources. Given historical records and humanitarian nature of the support, and government's experiences gained over the past years in proposal development and grant management, it is however unlikely that an interruption of external funding becomes long-term.

<Recommendations for the Ministry of Health (MoH) and Tanzania Commission for AIDS>

- To secure financial and human resources, as well as continuous improvement in quality of programme interventions for maintaining the benefits of the nation-wide coverage of HIV testing and STI testing/treatment.

<Recommendations for the Medical Stores Department (MSD)>

- To further strengthen logistics management as well as to secure trained human resources in all Zonal MSD warehouses.

<Constraints of this evaluation study>

- 1) The data obtained by direct observation are not included in this study because this study was conducted based on only the document review and the questionnaire to the counterparts and the consultant.
- 2) When indicator data in response to the questionnaire is used, the raw data and types of formula were not confirmed.
- 3) There was no avenue to discuss appropriateness and feasibility of the recommendations with the counterparts.
- 4) The ex-post evaluator did not exercise strict control over who should respond to the questionnaire, nor anonymity of the response.

1 Relevance

(1) Relevance to the Sector Strategy of Tanzania

Based on the "National Multi-sectoral Strategic Framework for HIV/AIDS," MoH formulated the "Health Sector HIV/AIDS Strategy for Tanzania (2003-2006)" in 2003 to address particularly; 1) blood transfusion safety, 2) counselling for those being tested and for the infected, and, 3) treatment of sexually transmitted infections (STIs) in order to reduce HIV infection rate and mother-to-child HIV transmission. At the time of the ex-post evaluation, MoH has formulated and is implementing much similar Strategy document (2008-2012), with unchanged emphasis on the above-mentioned points. Thus, the Project is considered to be (a) highly relevant to Tanzania's HIV/AIDS sector strategy both at the time of planning and at the time of the ex-post evaluation.

(2) Relevance to the Development Needs of Tanzania

At the end of 2002, Tanzania was estimated to have 1.5 million HIV positive people, 140,000 annual deaths due to AIDS, and the HIV prevalence in the population aged 15-49 of 9.6%. At the time of ex-post evaluation, despite the HIV prevalence has decreased from 7.0% in 2003/04 to 5.7% in 2007/08, the country remains unchanged in its status of the generalised epidemic. Furthermore, an introduction of the "3 by 5 initiative" expanded demands for HIV counselling and testing. Thus, the Project is still considered to be responsive to the needs of Tanzania.

(3) Relevance to Japan's ODA Policy

The Japan's ODA policy towards Tanzania (2000) included support for population and health including HIV/AIDS control, along with other four priority areas, namely, 1) promotion of agriculture and small-scale industries, 2) basic education, 3) improvement of living environment in urban areas, 4) forest conservation. Support for the population and health sector was punctuated with Tanzania being one of the key countries of the Global Issues Initiative on Population and AIDS. Therefore, this Project was in line with Japan's ODA Policy at the time of planning. Moreover, 2002 was the year when the European Union announced withdrawal from the procurement support of STI drugs, which added to the urgency of support by Japanese government.

Given above, this project has been highly relevant to the country's sector strategy, development needs, as well as Japan's ODA policy. Therefore, its relevance is rated high.

2 Efficiency

(1) Project Outputs

All the medical equipment/supplies were procured as planned, both in terms of type and quantity specifications. According to the Completion Report, for third country procurement, the goods were last confirmed to have been loaded to the ship at the port of origin, while for in-country procurement, the goods were received by the central Medical Stores Department. According to MoH, goods received by the central MSD have then been delivered to Zonal MSD warehouse, relevant District Health warehouses and hospitals, as per the records of the central MSD. As for the delivery to destined health facilities and testing sites, the evaluator could not obtain proper records/information, despite requests made within the questionnaire. Nevertheless, the actual number of testing conducted the following year indicates that the delivery to destined facilities and utilisation of test-kit supplies did occur. Therefore, the Output is considered to have been achieved as planned.

(2) Project Period (Project Inputs)

The Project was executed within the planned period, with both the actual and planned periods being seventeen (17) months (100%). There was some delay due to issues in quality and quantity of certain goods procured, which was discovered in time prior to the shipment through a routine inspection conducted by the Consultant. However, the delay did not prolong the entire process.

(3) Project Cost (Project Inputs)

The actual Project Cost was 273 million yen (90%), lower than planned 302 million yen. The reason for a ten-percent under-run is considered to be reasonable, as it was a result of competitive bidding, or more specifically, due to participation of new competitors, who pushed down the price.

The Project has achieved its Outputs as planned, assuming that the procured equipment/supplies were delivered to destined health facilities and testing sites. Also, given that Project period and cost were within the plan, the efficiency of the Project is rated high.

3 Effectiveness / Impact

(1) Quantitative Effects

Test kits and STI drugs were all distributed to MSD Zonal warehouses, District Health stores, and hospitals. Assuming these supplies reached destined peripheral health facilities and testing sites, and were used during 2005 until the first half of 2006, there were 684,000 antenatal mothers and 644,000 people who received syphilis testing and HIV testing, respectively. Considering that: 1) these numbers surpass the amount procured by the Project (565,000 and 265,000); and 2) the actual number of STI cases (287,000 cases) exceeded the estimated 250,000 cases by the Project, most of the HIV and syphilis test kits and the STI treatment drugs were likely to have been utilized adequately. During that time, deficiency in test kits and drugs was met through procurement by either other external resources or MoH budget. There was also a report that there had been a few episodes of stock-outs of one or two STI drugs due to delayed disbursement during that time. Actual volume of blood screened against HIV was limited to 31,000 units as opposed to the expected 150,000 units, most likely due to the delay in establishing transfusion services until 2006, and to the failure to incorporate hospital-based data which can account more than 70%. (It is possible to divert unused HIV screening test kits to counselling and testing activities.) Given above, it is highly likely that most of equipment/supplies were properly utilized and contributed to the above- and below-mentioned benefits.

(2) Impacts (Including impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

As indirect effects, 605,000 people, with potential JICA contribution of up to 83%, or 500,000, gained knowledge of their HIV status and also benefited from counselling services on both prevention and treatment. Among which, 42,000 people were able to start AIDS treatment, with potential JICA contribution of up to 83%, or 35,000. Another 42,000 ante-natal women received syphilis treatment based on proper diagnosis, with an estimated JICA contribution of up to 87%, or 37,000.

Furthermore, the number of STI cases reported, decreased by 55% in 2007. (This drastic drop, however, is overrated as the low number is partly a result of poor report submission by districts, due to changes in reporting method during the same period.) HIV infection rates among adolescents (age between 15~19) also dropped from 2.1% in 2003/04 to 1.0% in 2007/08, similar to a decreasing trend in the number of new infections.

Meanwhile, although there are some information on the lack of medical waste treatment facilities and equipment, no negative effects on environment were reported in the questionnaire or documents reviewed by the evaluator.

In light of above, as this project has largely achieved its objectives, and as no negative impacts were observed, its effectiveness is rated high.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

Both at the time of planning and of ex-post evaluation, all the Health Districts and MSD Zonal warehouses were/are reported to have sufficient infrastructure and personnel for proper delivery of medicines and test kits for HIV/AIDS/STI control programme. All the Zonal MSD warehouses since 2005 and 70% of Health District warehouses since 2010 have temperature-controlled storage facilities. Human resources trained in logistics management are assigned in most of these facilities, except for a few Health Districts. There is a report referring to a certain remote areas still lacking in cold chains to preserve the rapid plasma reagin (RPR) test, a type of syphilis test kits procured under this Project. MoH has already addressed this issue by replacing RPR to SD Bioline, which can be stored at room temperatures, and thus cater for the needs of remote facilities with cold chain challenges.

(2) Technical Aspects of Operation Maintenance

MoH is thought to have sufficient technical capacity to carry out proper storage, management and delivery of STI medicines and test kits, based on the following information gathered through questionnaire and published reports: 1) A manual for "Integrated Logistics Management System (ILS)" was produced in 2006 and revised in 2008; 2) 846 people have received ILS training between 2005~2009; 3) Thirteen (13) types of manuals and implementation guidelines were produced between 2005~2009, in order to strengthen HIV/AIDS/STI control programme; 4) 14,274 counsellors were trained in HIV counselling and testing through 570 training sessions; and, 5) 10,446 health workers were trained in STI control through 521 training sessions. Therefore, MoH has sufficient technical capacity to implement and to maintain the HIV/AIDS/STI control programme.

(3) Financial Aspects of Operation Maintenance

According to the questionnaire response and other published reports, MoH is likely to secure fair amount of funds from external support and own resources for another five years, in order to procure, store, manage and deliver equipment/supplies for HIV counselling and testing, as well as to manage and implement HIV/AIDS/STI control programme. This even with drastic increase in demands due to President's HIV testing campaign and expansion of testing sites and resulting increase in access. Tanzania has increased its annual funding for HIV/AIDS quite significantly for the last ten years, from USD 2.8 million in 2001/02 to 30 million in 2005/06; and has recently stabilised around 20 million. It also continues to seek funding from multiple sources, including bilateral and multilateral donors to supplement its own budget, and currently exploring the possibility of establishing a fund to finance the national response to HIV/AIDS: An attempt to decrease dependency on external funding and to increase fund predictability.

On the other hand, Tanzania relied 44% of health budget on external resources in 2006, according to WHO. Tanzania also depends greater proportion of resources on the Global Fund for procurement of supplies. As the Global Fund determines continuation of support based on the quality of proposals and grant performance, it is difficult to predict likelihood of securing new or renewed support from the Fund. As of September 2010, MoH as a principal recipient held grant performance rating at 80% "meets expectations" or "adequate," but 20% "unacceptable." Therefore, financial aspect is considered stable so far as the external funding is delivered.

(4) Current Status of Operation Maintenance

According to some published reports and the questionnaire response, current status of operating logistics management and HIV/AIDS/STI control programme is good on the whole. Areas that still remain as challenges include: 1) stock-outs of HIV test kits and STI medicines at the facility level in some districts due to late or inadequate placement of orders; and, 2) stock-outs due to shortage of equipment/supplies from donor agencies coupled with delays by government procurement process.

In light of above, few major problems have been observed in the operation and maintenance of logistic system and programme management, except for dependency on external resources, therefore sustainability of the project effect is considered high, provided that Tanzania continues to secure sufficient external resources. On the other hand, should there be an interruption of external funding, short-term stock-outs of test kits and medicines are likely to occur, which, in turn, limit effects brought to by this Project. In such case, the sustainability is rated fair.

Given historical records and humanitarian nature of the support, and government's experiences gained over the past years in proposal development and grant management, it is however unlikely that such stock-out lasts in the long-term.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Miura Global Link Management Inc.	Duration of Evaluation Study
Project Name	The Project for the Rehabilitation and Reinforcement of the Capacity of National Center of Forest Seed and Four Regional Forest Seed Departments (Le projet de réhabilitation et renforcement des capacités du Centre National de Semences Forestières (CNSF) et de quatre Antennes Régionales de Semences Forestières (ARSF))	March 2010 – December 2010

I Project Outline

Country Name	Burkina Faso	
Project Period	June 2004 (Detail Design)-December 2005 (Hand-over of the equipment)	
Executing Agency	Ministry of Environment and Livelihoods (MECV) Centre National de Semences Forestières (CNSF), Anennes Régionales de Semences Forestières (ARSF) Bobo-Dioulasso, ARSF Dori, ARSF Fada N'Gourma, ARSF Kaya	
Project Cost	Grant Limit: 321 million yen	Actual Grant Amount: 279 million yen
Main Contractors	Construction: NA Procurement: Sojitz Corporation and Itochu Corporation	
Main Consultants	Asia Air Survey Co., Ltd.	
Basic Design	"Basic Design Report for the Project for the Rehabilitation and Reinforcement of the Capacity of National Center of Forest Seed and Four Regional Forest Seed Departments," Asia Air Survey Co., Ltd., August 2008	
Related Projects (if any)	<ol style="list-style-type: none"> 1. 1999, Grant Aid Project for the Improvement of Seedling Production in Rural Area (Kaya ARSF and Dori ARSF, which are the target areas of this project, are included in the grant project. The executing agency for the grant project is Environmental Preservation Agency (Direction Generale de la Preservation de l'Environnement, DGPE.) 2. 2007, training course "New Technology Introduction and Technology Administrator Reinforcement Program for CNSF" (training on genetic diversity using the equipment provided by this project) 3. 2010-2013, Technical Cooperation Project of Support for Seedling Production Sector. The implementing agency is the Department of Forest, DGPE 4. 1997-2008, Dispatch of three Advisors for Environment and Afforestation/Reforestation to the Department of Forest, DGPE 5. 2010, Follow-up cooperation to this project (Some of the equipment for offices and for training/dissemination was damaged in the September 2009 flood. Follow-up cooperation was implemented by JICA to recover some of the damaged equipment.) 	
Project Background	In Burkina Faso, CNSD and ARSF have carried out the production and distribution of seeds/seedlings and research and dissemination of the seed/seedling production. However, due to the deterioration of equipment, their activities and research were limited. Therefore, the Government of Burkina Faso requested the provision of new equipment to promote their activities in order to contribute to the production of seeds/seedlings, which contributes to the plantation project.	
Project Objective	To provide equipment for research/testing and for seed/seedling production in CNSF and four ARSF in order to contribute to the research of good quality seeds and seedlings, the seed/seedling production and the supply of seedling for the afforestation project.	
Output[s] (Japanese Side)	<Equipment> Research and testing equipment, seed production equipment, seedling production equipment, water supply equipment, training and dissemination equipment, equipment for operations	<Soft component> Bio statistics and follow-up for equipment maintenance

II Result of the Evaluation

Summary of the evaluation

• This project has been highly relevant with the country's development plan and development needs both at the time of planning and the ex-post evaluation, as well as Japan's ODA policy at the time of planning; therefore, its relevance is high. Although the project cost was within the plan, the project period was longer than planned, therefore, the efficiency is fair. Although two out of three indicators did not reach eighty percent of the targets for the target year, the reasons for non-achievement were external factors. Furthermore, all the indicators had largely achieved their targets at the time of ex-post evaluation, and this project contributed to the afforestation/reforestation as one of its indirect effects; therefore, its effectiveness is high. Some problems have been observed in the system and techniques of the executing agency, so the sustainability of the project effect is fair. In light of the above, this project is evaluated to be satisfactory.

<Recommendations to CNSF>

1. It is recommended that CNSF inform the supplier of the malfunctioning research/experiment equipment such as the photosynthesis indicator and request that the supplier diagnose the cause of the failure and take action if necessary.
2. 1) As soon as the CNSF staff receiving training on how to operate the research/experiment equipment as a part of the soft component of this project returns from the training, he should provide other laboratory staff with guidance on how to operate the growth chamber, C/N coder, and photosynthesis indicator. 2) If the above staff does not have sufficient skill to provide other staff with guidance, it is recommended that re-training be organized at the expense of Burkina Faso.
3. It is recommended that CNSF discuss with MECV the possibility of increasing the number of ARSF seedling experts and technicians and of providing additional subsidies required for the increase of the staff.

<Recommendation to JICA>

• It is recommended that JICA provide CNSF with technical support in the event that CNSF faces difficulties in implementing Recommendation 1 and Item 2 of the Recommendation 2.

<Lessons Learned>

1. 1) When targets for effect indicators are decided in similar environmental projects in the future, targets should be set with several target years, not a single target year. 2) When we evaluate effectiveness at the time of the ex-post evaluation, it is recommended that a specific year be selected when there is no serious impact by external factors, such as the natural environment, out of several target years, and then to measure the achievement of the indicators in the specific year, or to check the secular change of the established target years.
2. In this project, the installation of the equipment was delayed due to delays in the ground leveling and civil engineering work which are the responsibilities of CNSF. In similar projects in the future, the work for which the executing agency is responsible should be conducted without delay.

<Constraints of this evaluation study>

• This evaluation study is a simplified version, and the evaluation was based solely on the data obtained in a review of documents, questionnaires given to the executing agency and interviews with Japanese consultants. Accordingly, the data that could be confirmed through direct observation (such as the use of the donated facilities and equipment) was assessed based on responses to questionnaires. Moreover, the primary data forming the basis for the indicators in the questionnaire responses was not confirmed. Due to the lack of a field-survey, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

1 Relevance

(1) Relevance with the Development Plan of Burkina Faso

In 1998, the Government of Burkina Faso formulated the following policies and plans to combat desertification: 1) National Forest Policy (PNF) consisting of the national afforestation/ reforestation plan (PNAF), national village forest plan (PNFV), plan for community forest for charcoal/firewood (PBE), 2) Green Belt Plan, which is a project for afforesting/reforesting an area 2km in width and 630km in length, and 3) Five-Year Plan for afforestation/ reforestation for desertification (1998-2002). In 2007, the government formulated the National Response and Action Plan for Climate Change, and it is promoting forest conservation and reforestation with the aim of both alleviating and responding to climate change. Furthermore, in 2007, the government formulated the National Strategy for Seedling Production in order to promote activities for afforestation/ reforestation. Thus, this project was consistent with Burkina Faso's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Burkina Faso

At the time of planning, in order to provide good quality seeds and seedlings to afforestation/reforestation projects such as Green Belt Plan, CNSF and ARSFs have been involved in the production and sales of seeds and seedlings as well as the research and dissemination of seeds and seedling production. However, the equipment became obsolete, which started to negatively affect those activities and research. Up to the time of the ex-post evaluation, seedling production in the public seedling nursery had been expanded through the Grant Aid Project for the Improvement of Seedling Production in Rural Area (1999), as well as this project. At the same time, seedling production in the private sector has been encouraged recently. As a result, seedling production in Burkina Faso has picked up. However, there are still challenges, such as 1) the institutionalization of private seedling producers, 2) quality improvement of seedlings and development of a distribution system, and 3) formulation and monitoring of an efficient seedling production plan. Thus, development needs for seedling production remain high at the time of ex-post evaluation.

(3) Relevance with Japan's ODA Policy

According to the ODA Country Cooperation Data Book 2004, the support for Burkina Faso was to be given in the priority areas: basic human needs and prevention of desertification. Therefore, it can be said that this project was consistent with Japan's aid policies for Burkina Faso when the project was planned.

This project has been highly relevant with the country's development plan and development needs, as well as Japan's ODA policy; therefore, its relevance is high.

2 Efficiency

(1) Project Outputs

The outputs on the Japanese side were mostly as planned, although there were minor changes such as a change in equipment specifications.

(2) Project Period (Project Inputs)

The planned project period was 15 months, whereas the actual project lasted 19 months. Thus, the project period was longer than planned (126% of the planned duration). The reasons were as follows: 1) The basic civil engineering work to be conducted by CNSF/ARSF such as ground leveling for greenhouses and pipe-house, construction for roof of pumps, and civil engineering work for power supply was delayed. Accordingly, the installation of the equipment was delayed in spite of the arrival of the equipment. 2) Although all the high-purity nitrogen gas was to be locally procured at the time of planning, a sufficient quantity of the gas was not available in the country. Thus, it took time to make up for the shortage with a supply from a neighboring country.

(3) Project Cost (Project Inputs)

The planned project cost was 321 million yen, whereas the actual project cost was 279 million yen. Thus, the project cost was lower than planned (87% of the planned cost). The reason for the decrease was that the actual price of contractors for procurement was lower than planned.

Although the project cost was within the plan, the project period was longer than planned, therefore the efficiency of the project was fair.

3 Effectiveness / Impact

(1) Quantitative Effects

None of the three indicators -- 1) seeds production volume, 2) seeds distribution volume, and 3) seedling production volume -- achieved their targets for the target year 2006, but all the indicators largely achieved their 2006 targets in 2009.

1) Whereas the actual total seed production of CNSF and ARSF in 2006 was as low as 4,228kg (68% of the planned), the planned target for 2006 was 6,200kg. The total seed production was increased to 5,802kg (94% of the planned) in 2009.

2) Whereas the actual total seed distribution volume for domestic, overseas and research use in 2006 was as low as 2,565kg (51% of the planned), the planned target for 2006 was 5,000kg. The total seed distribution was increased to 4,798kg (96% of the planned) in 2009. Total actual seed production for domestic and overseas use did not achieve the targets in the target year, but the actual product for research use achieved its target in the target year.

3) Whereas the actual total seedling production volume of CNSF and ARSF in 2006 was 298,904 (85% of the planned), the planned target for 2006 was 350,000. The total seedling production volume was increased to 370,300 (108% of the planned) in 2009.

One of the reasons for non-achievement of Indicators 1 and 3 for the target year 2006 is that some species did not bear fruit due to less rainfall than usual. Furthermore, according to the information by CNSF and JICA, the seedling production volume varies from year to year and by region (ARSF), depending on the volume of the afforestation/reforestation campaign by the MECV and the volume of orders from donor-funding projects, NGOs and individuals. One of the reasons that seeds distribution within the country did not achieve its target in 2006 is that the stakeholders had lost their incentives due to the late rainy season in 2006. The reason why seed distribution to the overseas buyers did not achieve its target is unknown.

Photosynthesis indicator for the growth chamber, one kind of research and experiment equipment, has not been functioning due to inappropriate operation. The C/N coder has not been utilized because the staff in the laboratory who had received operational training as part of the soft component of this project is outside CNSF for training and other laboratory staff who have not received training do not know how to operate the equipment. However, other equipment has been fully utilized. In the joint research with University of Ouagadougou, the National Science & Technology Research Center (CNRST), these universities and institutes utilize the research and experiment equipment provided by this project to analyze materials. According to CNSF, incubators for seedlings, photosynthesis indicators, and refrigerators for seeds are useful for selecting and providing seeds which match with the region and climate. Furthermore, the research and experiment equipment has been utilized to improve the seeds' quality in the Operation Acacia Project carried out by the CNSF/Food and Agriculture Organization (FAO). None of the equipment is used for other purposes.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The implementation of this project did not have a negative impact on the natural environment. According to CNSF, this project has contributed to environmental protection through the seedling and seeds supplies to the government, donors, and NGOs which are implementing afforestation/reforestation projects such as PICOFA Project, Ile de Paix Project, and others. Quantitative effects such as the afforested/reforested area which was increased by this project are unknown.

There were no particular problems in the land acquisition process, and no residents were relocated.

Although two out of three indicators did not reach 80% of the targets for the target year, the reasons for non-achievement were external factors. Furthermore, all of the indicators had largely achieved their targets at the time of ex-post evaluation, and this project contributed to the afforestation/reforestation as one of the indirect effects; therefore, its effectiveness is high.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

As planned, CNSF is responsible for overall management and guidance of all the facilities and equipment including those of ARSFs. One staff has been in charge of O&M of the overall facilities and equipment. Specifically, the users of the equipment in CNSF and ARSFs submit reports to the O&M staff when there are any equipment malfunctions. The staff checks the status of the malfunctioning equipment based on the reports, and then reports to the Director General through the Department of Administration and Finance (DAF) and receives his instructions on how to make the repairs. There were seven research and technology staff, whereas the planned number was four. Meanwhile, the number of staff, including experts on seedlings and technicians, was decreased by one or two in each ARSF compared with the number at the time of planning, so it is necessary to bring the number back to three or four staff in each ARSF.

(2) Technical Aspects of Operation Maintenance

It was reported that both CNSF and ARSFs utilize operation manuals, and they have sufficient regular O&M skills. CNSF has also sufficient skills in making repairs. However, the laboratory staff in CNSF require training in research and experiment equipment for a certain period of time because this was the first time that the laboratory staff had used the photosynthesis indicator and C/N coder. In addition, although one laboratory staff received training on how to operate this particular piece of equipment as part of the soft component of this project and the training in Japan in 2007, this staff is currently outside CNSF for training, and other staff have not received training on how to operate this particular equipment. When this equipment malfunctioned, the staff checked the manuals, but they have not contacted suppliers. According to the Japanese consultant, if training on operating the research and experiment equipment is required, the required time for training is three to four days each for growth chamber, leaf-area indicator, and photosynthesis indicator and one week for the C/N coder and other equipment.

(3) Financial Aspects of Operation Maintenance

While revenue from sales of seeds and seedlings exceeded the estimates at the time of planning, fuel costs for the equipment slightly exceeded the estimate. The approved amount of the government subsidy has been gradually decreasing since 2006 and accordingly the annual budget of CNSF has been gradually decreasing. However, the annual budget of CNSF between 2007 and 2009 was as high as 150% of that of 2001. Given these factors, it is considered that the minimum financial resources required for O&M have been secured. There has been some revenue from the analysis service in the joint research with universities since 2008, although it has been very limited.

(4) Current Status of Operation Maintenance

In general, the O&M status of the equipment of CNSF/ARSFs is good except for some equipment. The photosynthesis indicator in the growth chamber requires failure diagnosis. Some parts of the equipment for office and for training/ dissemination were damaged by the flood in September 2009. Follow-up cooperation has been implemented by JICA to recover some of the damaged equipment.

Some problems have been observed in the system and techniques of the executing agency; therefore, sustainability of the project effects is fair.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Miura Global Link Management Inc.	Duration of Evaluation Study
Project Name	The Project of the Improvement of Fishery Port in Cotonou	March 2010 – December 2010

I Project Outline

Country Name	Republic of Benin			
Project Period	September 2003 (Detail Design)-November 2005 (Completion of facility construction and installation of equipment)			
Executing agency	Ministère de l'Agriculture, de l'Élevage et de la Pêche (MAEP), Direction des Pêches (Department of Fisheries)			
Project Cost	Grant Limit: 1049 million yen	Actual Grant Amount: 1047 million yen		
Main Contractors	DAIHO CORPORATION			
Main Consultants	ECOH CORPORATION/KYOKUYO CO., Ltd (JV)			
Basic Design	"Basic Design Report for the Project for the Improvement of Fishery Port in Cotonou," ECOH CORPORATION/KYOKUYO CO., Ltd (JV), August 2003			
Related Projects (if any)	<ol style="list-style-type: none"> 1. 2004 ~ present: A total of three fishery experts were dispatched to the Department of Fisheries. Following the assignment of a fishery technical adviser in 2004, a fishery administrative advisor was assigned in 2008 to assist in managing and maintaining this project. 2. 2005: One technician was dispatched to receive training in freezer maintenance in Japan. In addition to the ordinal training, the technician had the opportunity to learn how to install/maintain the actual freezer with a dispatch to Benin to observe its installation/dismantling. This was made possible thanks to the coordination between the fishery adviser and the manufacturer. 3. A fishery coordinator was dispatched to JICA Senegal office. 4. 2008-present: Four Japan Overseas Cooperation Volunteer (JOCV) were dispatched to indirectly assist in the management of Cotonou Port (specifically assisting the already established women's fishery cooperative in micro-credit management [rural development], promoting the sales of processed products [home economics], establishing and managing a daycare center [youth activity], and obtaining fishery statistics [statistics]). 5. 1988: The first grant aid for fishery equipment was given to the Department of Fisheries. 6. 1994: The second grant aid for fishery equipment to the Department of Fisheries. 			
Project Background	<p>Marine products are the important sources of animal protein (30-50%) for the Beninese. However, they consume about only 8kg of fishes annually. To meet the national demand, the Republic of Benin imports about 20,000MT of frozen fish, which aggravates the country's foreign currency balance. Cotonou Port is a hub for coastal fisheries, and unloads about 1/5 of its catch. Furthermore, Cotonou Port is a center of small-scale fishery in which 36% of national small fish boats concentrate. On the other hand, Cotonou Port faces various issues: the increase in the number of commercial ships affects the safety and navigation of fish boats; the operational capacity remains low due to the lack of infrastructure such as landing and unloading facilities; and fish prices fall because the shortage of ice reduces the fish's freshness.</p>			
Project Objective	To construct unloading facilities and equip distribution facilities such as ice production capacity in order to enhance the efficiency of small-scale fisheries, and to improve the freshness of marine products and to stabilize the supply of fish for the inland population.			
Output[s] (Japanese Side)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p><Facility> Unloading pier of pirogues, pirogue storage site, bank protection, block for disposal of goods, block for multipurpose common usage, block for office, ice-making plant and freezer, block for electricity facility</p> </td> <td style="width: 50%; border: none;"> <p><Equipment> Ice-making plant and storage, equipment for disposal of goods, freezer</p> </td> </tr> </table>		<p><Facility> Unloading pier of pirogues, pirogue storage site, bank protection, block for disposal of goods, block for multipurpose common usage, block for office, ice-making plant and freezer, block for electricity facility</p>	<p><Equipment> Ice-making plant and storage, equipment for disposal of goods, freezer</p>
<p><Facility> Unloading pier of pirogues, pirogue storage site, bank protection, block for disposal of goods, block for multipurpose common usage, block for office, ice-making plant and freezer, block for electricity facility</p>	<p><Equipment> Ice-making plant and storage, equipment for disposal of goods, freezer</p>			

II Result of the Evaluation

Summary of the evaluation

• This project has been highly relevant with the country's development plan and development needs both at the time of planning and ex-post evaluation, as well as Japan's ODA policy at the time of planning; therefore, its relevance is high. This project has generally achieved its objectives and has generated various positive indirect effects; therefore, its effectiveness is high. Both the project period and project costs were within the plan; therefore, the efficiency of the project is high. Furthermore, the project does not have any specific structural, technical, and financial problems nor does the executing agency have any O&M problems. Therefore, the sustainability of the project effect is high. The joint efforts with experts and JOCV also particularly helped to enhance the sustainability of this project. In light of the above, this project is assessed as highly satisfactory.

<Recommendations to the Department of Fisheries>

- 1) In order to enhance financial sustainability, it is recommended that a plan for operation and maintenance (hereinafter referred to as, "O&M") and its expenditures be devised.
- 2) In order to enhance the financial sustainability, it is recommended that a corporate accounting system be introduced as planned, with the assistance of the fishery administrative advisor.
- 3) In order to strengthen the technical sustainability, it is recommended that a freezer technician be trained to ensure that a substitute is available.
- 4) In order to improve the operational efficiency at the block for multipurpose common usage, it is recommended that a mechanism for coordinating activities be considered.

<Recommendations to JICA>

- 1) It is expected that JICA will contribute to the introduction of the corporate accounting system by supporting the fishery administrative advisor.
- 2) If the Cotonou small-scale fishery port (Port de Pêche Artisanale de Cotonou, hereinafter referred to as, "POPAC") requests that the manufacturer provide training to train a freezer technician, it is recommended that JICA assist in coordinating with POPAC and the manufacturer by providing information.

<Constraints of this evaluation study>

• This evaluation study is a simplified version, and the evaluation was based solely on the data obtained in a review of documents, questionnaires given to the executing agency and to the fishery administrative adviser, as well as questionnaires given to the Japanese consultants. Accordingly, the data that could be confirmed through direct observation (such as the use of the donated facilities and equipment) was assessed based on responses to questionnaires by the executing agency and data/photos provided by the fishery administrative advisor. Moreover, the primary data forming the basis for the indicators in the questionnaire responses was not confirmed. Due to the lack of a field survey, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

• At the same time, the reports of the advisor in the past were used as information sources in a review of documents. When there was a discrepancy between the data submitted by the executing agency and the fishery adviser now on site, we verified the information by sending additional questionnaires. Furthermore, regarding the extent to which an impact had been generated, we used the data/information based on the beneficiary surveys (about 25 fishermen and about 100 middlemen) conducted by the same fishery advisor. Accordingly, we were able to conduct a more detailed evaluation compared to other grant aid projects in the same package, whose evaluations were based solely on JICA's internal documents at the time of the project completion, on questionnaires given to the executing agency and on the questionnaire given to the Japanese consultants.

1 Relevance

(1) Relevance with the Development Plan of Benin

When the project was planned, Benin's National Economic and Social Development Plan (2000) prioritized the following issues in the area of agriculture, livestock and fishery: (1) contribution toward the acquisition of foreign currency, (2) contribution toward domestic food self-sufficiency, (3) the creation of employment opportunities, and (4) sustainable use of natural resources. Accordingly, the Department of Agriculture, Livestock and Fisheries initiated an operational policy which includes the development of small-scale fisheries and better use of marine products. A five-year plan (1998-2002) prepared by the Department of Fisheries included measures to promote the effective use of fish resources; the operational plan of the Department of Fisheries established in 2004 includes the improvement of small-scale fisheries. Moreover, the national policy of fishery/cultivation (2010) prioritized the plan and the implementation of management/maintenance of fishery ground. Thus, this project was consistent with Benin's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Benin

Marine products are an important source of animal protein (30-50%) for the Beninese. However, the republic of Benin imports about 20,000MT of frozen fish. At the time the project was planned, Cotonou Port was a hub for coastal fisheries and a center of small-scale fishery. On the other hand, the Cotonou Port faced various issues: congestion due to the increase in the number of commercial ships; low operational capacity due to the lack of infrastructure such as landing and unloading facilities; and falling fish prices because the shortage of ice reduces freshness. At the time of the ex-post evaluation, the improvement of ice making capacity was still one of the country's development needs. For this reason, the project was consistent with Benin's development needs both when the project was planned and when the ex-post evaluation was conducted.

(3) Relevance with Japan's ODA Policy

According to the ODA Country Cooperation Data Book 2002, the Government of Japan planned to implement the grant aid cooperation mainly in the sector of agriculture and basic human needs, to accept trainees from fishery and forestry sectors, and to implement technical cooperation such as Development Study. Therefore, it can be said that this project was consistent with Japan's aid policies for Benin when the project was planned.

This project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy; therefore, its relevance is high.

2 Efficiency

(1) Project Outputs

The outputs of the Japanese side were as planned.

(2) Project Period (Project Inputs)

The planned project period was 26 months, whereas the actual period was 27 months when including the first and last months of the project. Thus, the project period was shorter than planned (98 % of the planned).

(3) Project Cost (Project Inputs)

The planned project cost was 1049 million yen, whereas the actual cost was 1047 million yen. Thus, the project cost was lower than planned (99.8% of the planned amount).

Both the project period and project costs were within the plan; therefore, the efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

Regarding "time required for unloading, disposal of goods and distribution (at the time of high fishing season)," the Department of Fisheries reported that, in 2006-2009, the indicator (1) time for transport, met the 2010 target of 10 minutes, and that all other indicators exceeded their respective targets: indicator (2) unloading time (target of 54 minutes vs. actual 45 minutes), indicator (3) time for disposal of goods (target of 50 minutes vs. actual 40 minutes), indicator (4) distribution time (target of 50 minutes vs. 30 minutes), and indicator (5) total time (target of 164 minutes vs. actual 125 minutes).

All facilities and equipments are sufficiently utilized. Particularly, the ice making machine can be judged as being fully utilized because, according to the former fishery technical advisor, it was reported that 3MT of ice was sold on average daily in 2007, and according to the beneficiary survey conducted by the present advisor, at the ex-post evaluation the demand for ice exceeded the supply capacity of ice making machine in the high fishery season. Furthermore, the utilization rate of Cotonou Port by small-scale fishery boats is higher than the rate at the time of planning (not set as outcome indicator). The Department of Fisheries reported that an average of 36% of small-scale fishery boats annually were using the Cotonou Port at the time of planning (no respective data available for low/high fishery season), while this rate increased to about 45% during the low fishing season and to about 70% during the high fishing season at the time of the ex-post evaluation. Even though we could not obtain data showing a change in the number of users of Cotonou Port who are the direct beneficiaries of this project, the executing agency and the fishery administrative advisor reported that the number of users of Cotonou Port increased dramatically compared to before. On the other hand, the block for multipurpose common usage is very crowded, and thus the operational efficiency is low (see attached photos). Because of the increase in the number of users and POPAC center was constructed on the sand beach where fishermen used to repair their fish nets, they began to fix their nets inside.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The number of people in Cotonou who are indirect beneficiaries increased from 75,000 at the time of planning to 120,000 at the time of the ex-post evaluation. Moreover, as regards the expected positive impacts, the executing agency reported that, thanks to the project, the availability of ice had the following effects: higher sales of fresh fish, and 90% decrease in the loss of marine products in the last four years, which in turn increased the income of relevant people, although there is no statistical data for this. Furthermore, according to the beneficiary survey targeting fishermen and middlemen which was conducted by the fishery administrative advisor to assist this ex-post evaluation, the implementation of hygiene training and the establishment of a cleaning day by the users of Cotonou Port and of a weekly hygiene day enhanced awareness on quality control for fish and on maintenance of a hygienic environment in working areas, which contributes to a decrease in damage to health caused by spoiled fish. However, no quantitative data was obtained regarding the decrease in the health damage caused by spoiled fish. In addition, as a positive indirect effect which was not anticipated, the country of Benin was approved to export marine products to the EU in 2009, and now Cotonou Port is exporting mainly shrimp to the EU. Later on, POPAC became a model for the unloading site which was constructed at Lake Amenu with Belgian assistance.

As for the environmental impact, the Benin conducted an environmental assessment and found no negative impact. Furthermore, there were no particular problems in the land acquisition process and no residents were relocated.

This project has largely achieved its objectives; therefore, its effectiveness is high.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

While the fishery cooperative managed the operation of the existing facility, the management office established by the Department of Fisheries managed the port facility newly established by the project (POPAC). The main management staff from the management office were dispatched by the Department of Fisheries, and the workers were newly employed. The number of staff at the management office has been increased compared to the number at the time of planning. Initially, it was planned to establish a public corporation in the future by consolidating the management office and the fishery cooperative to operate the entire Cotonou Port. However, it was judged that the public corporation would not be able to provide a quick response to the needs in the field. Instead, at the time of the ex-post evaluation, a participatory operational management system had been put in place in the form of a consultative committee consisting of the Department of Fisheries, the management office, the head of Cotonou Port, the fishery cooperative and middlemen cooperative. At the time of planning, management and training for the beneficiaries (fishery and middlemen, among others) by the management office was pointed out as the important assumptions. However, the consultative committee is playing its role. Moreover, the previous and current fishery experts are continuously assisting in improving its management. Thus, no particular problems are found in the structural aspects of operational maintenance.

(2) Technical Aspects of Operation Maintenance

Outside of the project, one freezer technician was given training in "freezer maintenance" in Japan. Thanks to the coordination between the fishery technical advisor at the time and the freezer manufacturer, the freezer technician was able to learn about installation and maintenance for the freezer equipment that would actually be used. Furthermore, the same technician participated in training in freezer maintenance in a third country (Senegal); thus, it is judged that this person obtained a sufficient level of technique. A technician from the Japanese manufacturer was invited to Africa to overhaul the Japanese machines (freezer for ice and the freezer for storage), through mediation by the fishery technical advisor (inquiries concerning when the Japanese manufacturer's technicians would visit Africa and requests for such visits). On the other hand, the current fishery administrative advisor reported that, out of two freezer technicians, the level of one technical assistant (contract worker) is not sufficient, and it is necessary to train the technical assistant in order to establish a substitute system so that repairs can be made at any time.

(3) Financial Aspects of Operation Maintenance

POPAC, the target of this project, has had a surplus since the opening of the facility, without receiving any financial assistance from the government.

With the assistance of the past fishery technical advisor, POPAC has been saving 10% of its sales as the depreciation cost (O&M reserves). The cost of the overhaul for the Japanese machines (the freezer for ice and the freezer for storage) and for spare parts are covered using these depreciation cost. After deducting the cost of the above spare parts (8 million FCFA), the amount of the remaining depreciation is 9 million FCFA at the time of the ex-post evaluation, which is judged to be sufficient at this moment. If 10% of the sales is set aside continuously, it is highly possible to secure a sufficient level of savings to cover the cost for the maintenance of facilities and their renewal. However, plans for O&M and its expenditures have not been prepared.

In September 2008, after deducting the depreciation costs, the profit was distributed among the fishery cooperative, the Department of Fisheries, the Cotonou autonomous port and the Cotonou small-scale fishery port (POPAC: the target of the project). The distribution ratio was 45%, 30%, 15% and 10%. The dividends are used to build a store in which to sell fishing nets, personnel cost and facilities (emergency generators in the event of power cuts), for example. On the other hand, balance sheets are not prepared and bank statements are not disclosed. Thus, in order to ensure that the balance, including the surplus, is appropriate and transparent, and to improve the sustainable management of the port, corporate accounting is currently being introduced with the assistance of the fishery administrative advisor.

(4) Current Status of Operation Maintenance

As explained above, the Department of Fisheries reported that the O&M of facilities and equipments are in very good or good condition, although there is a problem of space in the multipurpose common usage room, which became overcrowded. Moreover, according to the Department of Fisheries, recommendations made at the time of planning, such as "keep track of fishery statistics, ascertain usage of facility, manage safety of landing pier and unloading pier, carry out regular maintenance checks of facilities, and carry out O&M activity of facility," and other recommendations made at the time of inspection, such as "maintain and dredge, maintain and check ditch and sewage disposal facility, set up emergency generator for power cuts," are all being implemented.

No major problems have been observed in the operation and maintenance system; therefore, the sustainability of the project effect is high.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Yukiko Sueyoshi Global Link Management, Inc.	Duration of Evaluation Study
Project Name	The Project for Improvement of Domasi College of Education	March 2010—December 2010

I Project Outline

Country Name	Republic of Malawi	
Project Period	July 2004 (Detail Study)-January 2006 (Completion date/ Handover date)	
Implementing Agency	Ministry of Education, Science and Technology (MoEST), Division of education planning	
Project Cost	Grant Limit: 568 million yen	Actual Grant Amount: 567 million yen
Main Contractors	Shimizu Corporation	
Main Consultants	Kume Sekkei Co., Ltd	
Basic Design	“Basic design study report on the project for secondary school teacher training facility improvement at Domasi College of Education in the Republic of Malawi“, Kume Sekkei Co., Ltd., 2003	
Related Projects (if any)	JICA, Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET (In-Service Training) Malawi (2004-2007) JICA, Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET Malawi Phase II (2008-1012)	
Project Background	<p>Since the government of Malawi had been emphasized higher education since the independence, the dissemination of primary and secondary education was lagged behind. In 1993, the Education for all (EFA) strategy was introduced, together with the introduction of free primary education in order to improve such situation. As a result, the number of students enrolled in secondary education was rapidly increased. In response to the sharply increasing demand for secondary education, MoEST has redeployed primary school teachers with two years training to secondary schools teachers. Under this circumstance, because of a high proportion of low-qualified secondary school teachers with a training background involving only primary education teaching method, many secondary schools found it almost impossible to organize lessons based on the official curriculum of secondary education. Therefore, a qualitative improvement of secondary education and training of qualified teachers which were capable of teaching the contents of the new curriculum in a competent manner was urged.</p>	
Project Objective	To construct new educational facilities and provide necessary equipment in order to improve the quality of secondary education in Domasi College of Education.	
Output[s] (Japanese Side)	<ul style="list-style-type: none"> -construction of demonstration school for secondary education and teachers hostel, and provision of relevant equipment -construction of female hostel and provision of relevant equipment -construction of computer laboratory and provision of relevant equipment -construction of gymnasium and provision of relevant equipment 	

II Result of the Evaluation

Summary of the evaluation
<p>This project has been highly relevant with the country's development policy and development needs, as well as Japan's ODA policy; therefore, its relevance is high. The planned objectives of the project have been almost achieved, and positive impacts were reported so far, therefore its effectiveness is also high. Although the project period was slightly longer than planned, the reason of delay was unavoidable because of delay in custom procedures for some materials; therefore the efficiency of the project is high. No major problems have been observed in the operation and maintenance structure, technical and finance aspects. Furthermore, after the project completion, JICA has been providing continual technical cooperation projects in order to improve the quality of secondary education in Malawi, and the Domasi College of Education has been played a role as a national training center, so sustainability of the project's effect is also high. In light of the above, this project is evaluated as highly satisfactory.</p>
<Recommendations>
<ul style="list-style-type: none"> • The craft room and relevant materials were not utilized as originally planned at the time of ex-post evaluation because a craft teacher has not been allocated in the demonstration school for secondary education. It is recommended that the Domasi College of Education prioritize to recruit a craft teacher in the future.
<Constraints of this evaluation study>
<p>This evaluation is a simplified version without a field survey; therefore, the evaluation was performed under some constraints as follows.</p> <ol style="list-style-type: none"> 1) It does not include data that could be confirmed by direct observation, since the evaluation was based solely on data obtained through document review, questionnaires given to the implementing agency and Japanese consultant. 2) When using data on indicators in the questionnaire responses, we requested the raw data as evidence, but were not able to obtain it. 3) Due to the lack of a field survey, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

1 Relevance

(1) Relevance with the Development Plan of Malawi

At the time of planning, the Policy Investment Framework (2002) identified the priority areas in the education sector such as construction of secondary schools, expansion of educational facilities, improve of curriculum, and training for un-qualified teachers. At the time of ex-post evaluation, the National Education Sector Plan (2008-2017) also affirmed increase in the educational facilities and qualified teachers as one of top priority issue in order to improve the access to the secondary education. Therefore, this project was relevant with the development plan of Malawi from the planning to the end of the project.

(2) Relevance with the Development Needs of Malawi

At the time of planning, there were development needs in improvement of educational system in terms of facility, material and teacher because the number of children enrolled in primary education had sharply increased in Malawi. At the same time, the secondary education in Domasi College of Education which is responsible for training secondary school teachers in Malawi had faced lack of teachers and basic educational facilities and materials.

At the time of ex-post evaluation, the same issue has been remained in the educational sector in Malawi. Thus, this project is consistent with Malawi's development needs both when it was planned and the ex-post evaluation was conducted.

(3) Relevance with Japan's ODA Policy

In February 1997, both governments agreed following two priority areas for Japan's ODA policy for Malawi which were 1) rural development through improvement of productivity in the agricultural sector and 2) basic human needs to reduce poverty reduction (increase in food production, education, environmental conservation, and health and medical service). This project was implemented under the second priority areas, therefore, it was relevant with the Japan's ODA policy.

This project has been highly relevant with the country's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

2 Efficiency

(1) Project Outputs

Japanese outputs were generally achieved as the planned. Under the Project, educational facilities (demonstration school for secondary education, teachers' hostels, female hostel, computer laboratory, and gymnasium) were constructed and relevant educational equipment (science, biology, home economic and craft) were provided to improve the quality of the secondary education in Domasi College of Education.

(2) Project Period (Project Inputs)

The planned project period was 17.5 months, and actual period was 19 months which was slightly longer than planned (118% of the planned period). The reason for this delay—import clearance procedures from the South African company that required much more time than expected—was unavoidable.

(3) Project Cost (Project Inputs)

The Japanese grant ceiling amount was 568 million yen, and disbursement was 567 million yen (99.8% of the planned cost); therefore, the project cost was almost as planned.

Although the project period was slightly longer than planned, this was due to a delay in the customs procedure for some materials, and project costs were within the plan. Therefore, the efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

At the time of planning, the following indicators were set in order to verify the project effectiveness. 'Indicator 1: Number of qualified teachers of secondary education who can conduct classes based on the new curriculum' was 452 person /year in 2007 (94% of the planned target) which was slightly below the target set for 2007 (480 person/year), however, it climbed to 487 person/ year in 2009. 'Indicator 2: Number of qualified female teachers of secondary education who can conduct classes based on the new curriculum' was 270 person/ year in 2007 (112% of the planned target) which exceeded the target set for 2007 (240 person /year). In regard gender disparity, the percentage of female teachers was increased from 41% in 2003 to 55% in 2009 which shows discrepancy in teachers has been improving. 'Indicator 3: Number of qualified teachers of secondary education who can conduct computer classes' was 220 person /year in 2007 (146% of the planned target) and it was the same in number in 2009 which exceeded the target set for 2007 (150 person/year). 'Indicator 4: Number of qualified teachers of secondary education who can conduct gymnastics classes' was 47 person/year in 2007 (156% of the planned target) and it was the same in number in 2009 which exceeded the target set for 2007 (30 person/year). Therefore, it is confirmed that these indicators set by the ex-ante evaluation are almost achieved at the time of ex-post evaluation.

According to the Domasi College of Education regarding utilization of facilities and equipment provided by the project, almost all facilities and equipment are fully utilized by them. The absorption rate of the female dormitory and the teachers hostel are almost 100% at the time of ex-post evaluation.

At the time of planning, it was pointed out as an external factor that the allocation of sufficient number of teachers was essential factor to secure the project's effectiveness. Accordingly, it is confirmed at the ex-post evaluation that since a craft teacher has not been allocated in the demonstration school for secondary education, the craft room and relevant materials were not utilized in demonstration school as originally planned, the materials are currently utilized in the Domasi College of Education. According to the JICA Malawi office, the Malawi side has been planning to allocate one craft teacher to the demonstration school from another school which has more than one craft teachers within the same education area.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

According to the Domasi College of Education, the cluster-related activities (information sharing among secondary education schools), which was assumed to be an indirect effect of the project, have been enhanced since the educational facilities in the college were expanded by the project. It is also reported that there are unintended positive impacts from the project such as enhancement of internal training in the school, information sharing among teachers within the school, community-based education, Parents and Teachers Association (PTA) and increase of the revenue of the college due to increase of number of students. Accordingly, the number of student has been sharply increased from 492 person in 2002 before the project to 718 person in 2008 and 999 in 2009 after the project completion. The implementation of this project did not have a negative impact on the natural environment, and no problems arose in the land acquisition process.

After the project completion, JICA has been providing technical cooperation with aim to improve the quality of secondary education in Malawi, and the Domasi College of Education has been played an important role as a national training center under these cooperations. This may be one of promoting factor to enhance the project effectiveness.

This project has largely achieved its objectives, therefore its effectiveness is high.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

Both the time of planning and the ex-post evaluation, the provided facilities and equipment have been operated and maintained by the Domasi College of Education with total of 3 staff in charge of maintenance in electricity, facility and cleaning. Thus, no major problems have been identified in the operation and maintenance system. For the school management, although the number of teachers was increased from 41 person at the time of planning to 54 person at the time of ex-post evaluation, there are 80 vacant posts in the college. Allocation of sufficient number of teachers is an issue to be tackled by the Domasi College of Education. According to the questionnaire survey to the Domasi College of Education, the post of craft teacher has been vacant in the demonstration school for secondary education since the project completion. Accordingly, it was reported from JICA that the Malawi side has been planning to allocate one craft teacher to the demonstration school from another school within the same education area.

(2) Technical Aspects of Operation Maintenance

Since 2004, the Domasi College of Education has been responsible for the national training center and the teachers played an important role in the in-service teacher's training under the JICA's technical cooperation 'Strengthening of Mathematics and Science in Secondary Education (SMASSE) INSET' with aim to improve quality of secondary education through establishment of INSET policy in Malawi. Since the facilities and equipment provided under the project were designed in accordance with the existing specifications, a proper operation and maintenance is available by the excising staff to this date. This indicate that the technical sustainability is high both the school management and the operation maintenance aspects.

(3) Financial Aspects of Operation Maintenance

The scope of this project was expansion of the existing facilities and provision of equipment, thus the operation and maintenance cost is able to cover within the current budget frames. The Domasi College of Education has received funding for its current budget from the MoEST as one of the training college under the jurisdiction of the MoEST. Thus, it can be assumed that there are no financial problems which bring serious effects on the school management as long as this financial system will continue.

(4) Current Status of Operation Maintenance

According to the questionnaire survey to the Domasi College of Education, although repaint on a scratched-wall is required in the some facilities, almost all facilities and equipment are well functioned and maintained.

No major problems have been observed in the operation and maintenance system, therefore sustainability of the project effect is high.

