

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 Rural Water Supply (Phase II)	March 2010 – December 2010

I Project Outline

Country Name	Republic of Uganda	
Project Period	December 2003 (Detail Design)-March 2006 (Completion of soft component)	
Executing Agency	Ministry of Water, Land and Environment (MWLE), Directorate of Water Development (DWD)	
Project Cost	Grant Limit: 599 million yen	Actual Grant Amount: 585 million yen
Main Contractors	Both Construction and Procurement: Nissaku Co.Ltd.	
Main Consultants	Pacific Consultants International Co. Ltd. and Mitsubishi Materials Natural Resources Development Corp.	
Basic Design	“Basic Design Study on the Project for Rural Water Supply in Central Uganda”, Pacific Consultants International Co. Ltd. and Mitsubishi Materials Natural Resources Development Corp., August 2003	
Related Projects (if any)	<p>1. Grant Aid Project “Rural Water Supply in the Republic of Uganda” from 1997 to 2001. The target areas include three districts: Mpigi, Mubende and Kiboga, which are next to the target areas of this Project.</p> <p>2. In Mukono district, NGOs assisted excavation of boreholes at four locations. NGOs also assisted all the target areas in establishing water sanitation committees in cooperation with local governments.</p>	
Project Background	<p>Since 1990s, rural water supply projects were carried out in large scale with the assistance by DANIDA, UNICEF. The Government of Japan started a grant aid project in 1997. The number of wells excavated by donors including Japan between 1991 and 2000 reached 9,354, which drastically improved water supply situation in the rural area. Although the national average of rural water supply rate was 54.9% in 2002, the rural water supply rate in each district ranged from 23.7% to 79.9%, which showed gaps between districts.</p>	
Project Objective	To construct wells with hand-pumps and to provide equipment for ground water investigation and for educational campaign in Masaka, Mukono and Kayunga District in order to provide clean and stable water.	
Output[s] (Japanese Side)	<p><Facility> Tube well with hand-pumps</p> <p><Equipment> Equipment for ground water investigation and for educational campaign</p>	<p><Soft component> Educational activities for sustainable operation and maintenance of the water facilities by local communities (workshops for communities/ water sanitation committees, workshops for Community Development Assistants and Health Assistants, training for Hand-Pump Mechanics, etc)</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. Decline in the cases of water-borne diseases, which was assumed to be an indirect effect of the project, could not be measured quantitatively. But, this project has largely achieved its objectives, namely the improvement in rural water supply rate, served population in rural area and water quality parameters, therefore its effectiveness is high. Some problems have been observed in O&M status of wells, therefore sustainability of the project effects is fair. In light of the above, this project is evaluated to be highly satisfactory.

<Recommendations>

• It is recommended for the Directorate of Water Development (DWD) to identify the condition of wells that are not functioning, determine whether the problem is due to the technical skills of the water supply officers and/or hand-pump mechanics (HPMs) or another problem, and then to take appropriate action.

• It is recommended for JICA to provide follow-up cooperation, including re-training of the HPMs, depending on the status of the aforementioned situation.

<Constraints of this evaluation study>

1. The evaluation was conducted based solely on the data that could be obtained from a review of the materials and questionnaires given to the implementing organization, so it does not include data that could be confirmed through direct observation, i.e. the maintenance conditions;
2. when using data in questionnaire responses, the raw data was not confirmed;
3. statistical data on the decline in the rate of outbreaks of water-borne diseases, which was assumed to be an indirect effect of the project, could not be obtained, so we were unable to confirm this quantitatively;
4. residents' perception on the water tariff were not known because a survey on their willingness to pay (WTP) was not conducted; and
5. when confirming the actual monthly charge per household, the selection of one village per district was not a random sample, but left up to the implementing organization.
6. Due to the lack of a field study, there was no opportunity to hold discussions with the executing agency regarding the recommendations.

1 Relevance

(1) Relevance with the Development Plan of Uganda

When the project was planned, the Poverty Eradication Action Plan (PEAP; 1997) designated roads, agriculture, healthcare, education and sanitation as the five priority areas. Moreover, the Rural Water Supply Operational Plan 2002-2007 (OP5) targeted the construction of 4,000 water supply facilities places per year (water supplied population of 1 million). The current Rural Water and Sanitation Strategic Investment Plan 2000-2015 (SIP15; 2002) aims to achieve a rural water supply rate of 100%. In addition, the Rural Water Supply Operational Plan 2008-2013 (OP6) continues to target the construction of 4,000 water supply facilities per year. Thus, this project was consistent with Uganda's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Uganda

When the project was planned, in Masaka district, Mukono district and Kayunga district, the water access rates were 34.5%, 59.1% and 48.6%, respectively, which was quite low. This made the construction of water supply facilities in rural areas with large impoverished populations an urgent issue. Moreover, as a result of decentralization, authority over the implementation of water supply and sanitation projects was being ceded from the Ministry of Water and Environment's Directorate of Water Development (DWD) to the District Water Offices (DWOs), making it essential that the project implementation capacities of DWOs be strengthened. At the time of the ex-post evaluation in 2009, the national average rural water supply rate stood at 65%, higher than that of 2002 (54.9%) when the project was planned. Although this represents an increase, the rate is still low. Moreover, due to the high population growth in the target areas, the number of wells remains insufficient, with the number of users per well at 688 in the Masaka district (about double the target), 1,895 in Mukono (about six times higher) and 893 in Kayunga (about three times higher), compared to the target of 300 users per well. Accordingly, the need for the construction of rural water supply facilities in the targeted districts remained high even when the ex-post evaluation was conducted. Reinforcing the project implementation capacities of the district water offices also remains an issue. Thus, this project is consistent with Uganda's development needs both when it was planned and when the ex-post evaluation was conducted.

(3) Relevance with Japan's ODA Policy

The priority areas agreed on in the Economic Cooperation Policy Discussions (1997) and the Project Assessment Study (1999) were (1) human resource development, (2) basic human needs support, (3) agricultural development and (4) basic economic infrastructure development. Therefore, it can be said that this project was consistent with Japan's aid policy for Uganda 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 mostly as planned. The planned total length of dug wells was 11,970 meters whereas the actual length was 12,131 meters (101% of the planned). The planned number of successful wells was 120 whereas the actual number was 116 (97% of the planned). The procurement of the equipment and soft component were carried out as planned.

(2) Project Period (Project Inputs)

The planned project period was 29 months whereas the actual project period was 28 months. Thus, the project period was shorter than planned (97% of the planned).

(3) Project Cost (Project Inputs)

The planned project cost was 599 million yen whereas the actual project cost was 585 million yen. Thus, the project cost was lower than planned (98% 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

Whereas the targets for the rural water supply rate in the Masaka district, Mukono district and Kayunga district for 2006 were 36.3%, 60.8% and 50.9%, respectively, the actual rate were 68%, 61%, and 52% in 2006. Thus, those met their targets. Whereas the targets for the rural water supply population for 2006 (304,944, 356,495 and 247,610), the actual population was 315,263 people (103% of the target), 393,004 people (110%) and 265,896 people (107%) in Mukono and Kayunga, respectively, in 2006. Therefore, those also met their targets. Since there were no reports of wells dug with aid from other donors and NGOs in the Masaka district and Kayunga district, it is considered that the increase in the rural water supply rate and rural water supply population was due to the effect of this project alone. Meanwhile, in the Mukono district, domestic and international NGOs provided support in excavating wells at four locations, so we can assume that the increase in the rural water penetration rate and rural water supply population was due to the effect of this project and the assistance by NGOs.

Whereas some of the water quality parameters in the target villages exceeded national standards at the time of the project planning, all of the target villages satisfied all the water quality parameters at the time of the ex-post evaluation. The number of Water and Sanitation Committees (WSCs) continuing to collect water supply charges in the target villages met the targets for 2006 in Masaka, Mukono and Kayunga (49, 33, and 38 for a total of 120) with 50, 56 and 52 (total of 158) WSCs. However, these figures include not only WSCs established by this project, but also WSCs established with the cooperation of NGOs and local governments. The number of WSC established by the project was 31, 41 and 44 (total of 116), which is the same as the number of wells built in each village. The number of these WSCs that continue to collect water supply charges is not known.

The equipment provided to DWD is fully utilized. See below "4. Sustainability" for the operation status of the wells. The manuals for the water quality inspection kits provided to the districts were in Japanese, so they were only partially used. None of the equipment was used for other purposes.

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

Statistical data on the decline in the cases of water-borne diseases, which was assumed to be an indirect effect of the project, could not be obtained, so we were unable to confirm this quantitatively. However, according to DWOs, there have not been any large-scale outbreaks of water-borne illnesses since this project was completed. The implementation of this project did not have a negative impact on the natural environment, and no problems arose in the land acquisition process. No residents were relocated.

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

4 Sustainability

(1) Structural Aspects of Operation and Maintenance

As planned, the water supply facilities built in this project are maintained by the WSCs established for each water supply facility as part of the implementation of soft components. The Ministry of Water, Land and the Environment (MWLE), the Ministry of Gender, Labor and Social Development (MGLSD) and the Ministry of Health have provided support at the district level, county level and sub-county level. MWLE has Water Supply Officers at the District Water Offices (DWOs) and the county level, and private-sector Hand-Pump Mechanics (HPMs) at the sub-county level to help the residents maintain their water supply facilities. MGLSD has community development officials at the district level and village development assistants at the sub-county level to provide support. The Ministry of Health appoints health officers at the district level and health assistants at the sub-county level to provide support.

WSC is responsible for daily inspection and cleaning of the wells and regular replacement of the pumps' consumables, including those costs. In principle, HPMs repair sudden malfunctions of the pump. DWD/DWO make the repairs in the event that HPM are not able to.

According to the implementing organization, the recommendations made in the Basic Design Report—(1) strengthen the capacity of DWOs in implementing water supply and sanitation projects, (2) cooperation between MWLE and MGLSD in order to efficiently carry out public awareness and educational programs, and (3) secure human resources to set up a sustainable hand pump repair and inspection system—have all been carried out.

(2) Technical Aspects of Operation and Maintenance

Through the soft component, community workshops, training for HPMs and OJT for Water Supply Officers have all been held. Moreover, HPMs in the target villages in the Masaka district (that were targeted in the first phase of this project) received refresh-training through the soft component. According to the defect inspection report in the second phase (2007), these villages did not experience the kind of pump malfunctions caused by the HPMs' repair mistakes in villages in the Mukono district and Kayunga district that were targeted in the second phase. This indicates that the HPMs' technical skill was adequate as of 2007 at least. In the defect inspection report, it was recommended that refresh training should be conducted for all HPMs after the project was completed.

since the HPMS in the Mukono and Kayunga districts were not able receive refresh-training through the soft component. However, as of the ex-post evaluation, only six HPMS in Mukono and five in Kayunga had attended a second round of training due to financial constraint. As noted in the "effectiveness" section above, approximately 23% of the successful wells targeted in this project are not currently functioning. This could indicate that the technique of the HPMS or DWO water supply officers is insufficient, although the cause is not clear.

(3) Financial Aspects of Operation and Maintenance

The budgets both for DWD and three districts have decreased since 2007. However, according to DWD, it continues to secure the budget necessary for operation and maintenance, including the employment of staff involved in rural water supply and sanitation projects. This factor had been listed as an external risk in the ex-ante evaluation summary.

The actual monthly cost per household in three villages in the target districts was higher than estimated when the project was planned. Whereas the estimate was 403 UGS assuming 50 households per well, the actual costs are 500 UGS in Kasokoso Village in Mukono district, which has 200 households; 2000 UGS in the Wabuyinja Village in Kayunga district, which has 70 households; and 1000 UGS per household for Kiteredde Village in Masaka district, which has 35 households. A survey on willingness to pay (WTP) was not conducted so the residents' perception on water supply charges is not known.

(4) Current Status of Operation and Maintenance

27 wells (10 in Masaka, 7 in Mukono and 10 in Kayunga) of 116 wells (23% of the successful wells targeted in this project) are not functioning and cannot be used. The reasons for mal-function are not clear. Spare parts for the resistivity measurement equipment and electrical well logging equipment donated to DWD cannot be obtained in Uganda, thus it is being ordered and the equipment will be repaired as soon as the parts are obtained.

Some problems have been observed in terms of O&M status, 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 for the Improvement of Small-scale Fishery Center	March 2010 – December 2010

I Project Outline

Country Name	Republic of Cameroon	
Project Period	March 2005 (Detail Design)-March 2006(Hand-over of the equipment)	
Executing Agency	Ministère de l'Élevage, des Pêches, et des Industries Animales (MINEPIA), Direction des Pêches (Department of Fishery)	
Project Cost	Grant Limit: 400 million yen	Actual Grant Amount: 400 million yen
Main Contractors	Construction and Procurement: Shimizu Construction Co. Ltd.	
Main Consultants	Overseas Agro-fisheries Consultants. Co. Ltd.	
Basic Design	"Basic Design Report for the Project for the Improvement of Small-scale Fishery Center", Overseas Agro-fisheries Consultants. Co. Ltd., February, 2005	
Related Projects (if any)	<ol style="list-style-type: none"> 1. October 2006-October 2008, a Japan Overseas Cooperation Volunteer (JOCV) specialized in fisheries cooperative was dispatched to the Small Center Fishery Community Center of Kribi (CECOPAK) to support its operation and management. 2. July 2007-January 2008, Technical Adviser for Marine Product Development and Operations and Management was dispatched for providing technical guidance to MINEPIA and CECOPAK and for studying the feasibility of the Development Study "Sustainable development of fishery resources, aquaculture development". 3. 2008- Present, a JOCV specialized in rural development was dispatched to CECOPAK. 	
Project Background	The feasibility study report regarding the marine financial support project prepared by the Cameroon government and FAO (1997) recommended the vitalization of the comprehensive small-scale fishery in Ocean County, where the biggest marine resources are estimated among the five coastal counties and where the fish catch is estimated to increase in the future. Mboa-Manga fishing port, the planned project site, is the biggest fishing port in Ocean County, thus it has high potential capacity in development of fishery resources. However, the lack of ice-making and preserving plant and sanitary hall for disposal of goods/whole sale, negatively had affected the fishery activities before this project.	
Project Objective	To construct a small-scale fishing center in Mboa-Manga fishing port in Kribi City in Ocean County, Southern Province and to provide equipment for unpacking and repairing, in order to improve the freshness of marine products, to provide ice production capacity and to improve the utilization rate of pirog boats.	
Output[s] (Japanese Side)	<Facility> Bank protection, open channel, hall for disposal of goods/whole sale, ice-making plant, equipment lockers, canteen, water supply and drainage facility	<Equipment> Equipment for disposal of goods fishing (refrigerated fish boxes and scales), outboard engine

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 financial aspects and O&M situation of the executing agency, but the agency has received subsidies from the government in the past and the above problems are not seriously affecting the outcome indicators. Therefore, sustainability of the project effects is fair. In light of the above, this project is evaluated to be satisfactory.

<Recommendations>

• It is recommended that the Ministry of Livestock, Fisheries and Animal Industries (Ministere De L'Elevage, Des Peches Et Des Industries Animales, MINEPIA), Kribi City, and the Small Center Fishery Community Center of Kribi (CECOPAK) further reinforce the response to the problem of the illegal dumping of fishing nets. We also recommend that CECOPAK and MINEPIA set aside the money needed to upgrade the ice making machines and ice storage refrigeration units as planned in 2011 to ensure that this process proceeds smoothly.

<Lessons Learned>

- 1) In this project, advisers on fish processing development and management technology and Japan Overseas Cooperation Volunteers provided support with operations, maintenance and management some time after the Center was established. However, when the Center was initially established, the setting of appropriate loan fees, management of loan contracts and accounting using computers, and thorough management of water supply and electricity fees were inadequate, which resulted in continuing deficits. In similar projects in the future, there is a need at the planning stage to consider assistance measures for establishing an operations and management system at an early stage such as dispatching advisers or including a soft component of the grant-aid cooperation.
- 2) In this evaluation survey, when measuring the extent to which indicators such as the degree of improvement in freshness of fish, the ice production volume, and the number of pirog boats registered, it took time and effort to go back to the baseline period and confirm the impact of fluctuations in the annual fish catch, which was an external factor. In similar projects in the future, when the project is planned, the implementing organization should monitor the indicators together with the annual fish catch from the baseline to the target year.
- 3) Since the indicator items and measuring methods were not discussed with the implementing organization when the project was planned, some items were not monitored. When planning similar projects in the future, it is important to come to an agreement regarding indicators with the implementing organization after thorough discussion and develop a monitoring system when the center is established. In particular, since the ice production volume is closely related to the fish catch and ice sales revenue and all of these fluctuate throughout the year, establishing a system to monitor these items on a monthly basis and manage the data in an integrated manner is important in forecasting income and expenditures.
- 4) Since the utilization rate for the ice making machine ("ice production volume" divided by "ice making machine's production capacity") was not set as an operations indicator in this project, it was not possible to quantitatively measure the utilization of the machines. In similar projects in the future, the utilization rates for the ice making machines should be forecasted for both the peak fishing season and the off season when the project is planned and the actual results compared to the forecasts.

<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. However, the evaluator did ask the executing agency additional questions to confirm any data that we determined to be inconsistent with the data from the Technical Adviser for Marine Product Development and Operations and Management and by the Japan Overseas Cooperation Volunteers (JOCV). This simplified evaluation does not include data obtained in a beneficiary study.

• 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 implementing organization provided appropriate information on the four occasions they were asked to answer additional questions in a questionnaire, and materials such as reports including pictures concerning the illegal dumping of fishing nets were submitted. The information from the advisor and JOCV who provided CECOPAK with operational and management support and a report by a private-sector ODA monitor who observed the facilities targeted in this project and JOCV activities in 2007 were used as information sources when evaluating the project's effectiveness and sustainability. Accordingly, we were able to conduct a more rigorous evaluation compared other projects in the same package, whose evaluations were based solely on the information from JICA and questionnaires given to the implementing organization.

1 Relevance

(1) Relevance with the Development Plan of Cameroon

When the project was planned, "economic diversification to strengthen growth" was listed as one of the seven pillars of Cameroon's Poverty Eradication Strategy (2003), with the goal being to improve productivity and revenue in farming and fishing villages and support the producers to ensure the country's food supply. Furthermore, the Livestock Raising, Fishery Industry and Animal Production Development Strategy (2002), which was announced before the project planning and is still valid at the time of ex-post evaluation, stated that the modernization of the marine products production system, improvements to the organizational framework, improvements to incentives, and the sustainable development of fishery resources were priority issues. Thus, this project was consistent with Cameroon's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Cameroon

When the project was planned, the fishery industry played an important role in Cameroon as a source of inexpensive animal protein and a source of revenue for farmers and fishermen. The annual haul of marine products was about 110,000 tons, of which over 90% came from small-scale fisheries. Coastal fishing accounted for about 45% of overall small-scale fishery production, even though the fishing area was limited. At the same time, domestic production alone could not meet the demand for fish consumption, so in 2003 imports amounted to 100,000 tons in 2003 and about 140,000 tons in 2007. Therefore, at the time of the ex-post evaluation, it can be said that improving the fish catch and increasing aquaculture production are important issues. For this reason, the project was consistent with Cameroon'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 2004, the basic policy for Cameroon was to focus support on grant-aid cooperation and technical cooperation. In addition, support was to be given in the priority areas: basic human needs such as education, water, health and medicine and the fishing industry (small-scale fishery promotion plan) and infrastructure development. Therefore, it can be said that this project was consistent with Japan's aid policies for Cameroon 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 mostly as planned.

(2) Project Period (Project Inputs)

Both the planned and actual project period was 12 months. Thus, the project period was as planned (100 of the planned).

(3) Project Cost (Project Inputs)

Both the planned and actual project cost was 400 million yen. Thus, the project cost was as planned (100% 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

1) The rate of improvement in the freshness of the drumfish, which is a priority species, at landing (percentage of fresh drumfish as a percentage of the overall daily fish catch) was 5.1% in 2007, undercutting the 2007 target of 10%. This can primarily be attributed to the decline in the drumfish catch, which was specified as an external risk factor when the project was planned. Whereas the drumfish catch is declining, the fish catch of other kinds is increasing. The data on the annual overall fish catch, including drumfish, for 2004, 2006, 2008 and 2009, shows that the catch is stable at about 400 tons.

2) The ice production volume undercut the 2007 target of 600 tons/year at 243 tons per year (41% of the target) in 2007 and 235 ton/year (39% of the target) in 2008. The production volume had increased to 420 tons per year when the ex-post evaluation was conducted (2009), but this was only equivalent to the baseline level for 2004 (400-500 tons per year). This was because there was more demand for the ice blocks produced by local self-employed workers than for the ice cubes produced by the project's facility in general. According to CECOPAK, the following specific situations can be considered respectively in 2007, 2008 and 2009: The fish catch was poor in 2007 (quantitative data is not available). In 2008, in order to save electricity cost, CECOPAK sold ice cubes without preserving them in cold house, which caused poor quality of ice cubes. As a result, consumers started to purchase ice from other shops. In contrast, the ice production volume increased in 2009 compared with 2007 and 2008 for the following three reasons: 1) the overall annual fish catch was as usual; 2) CECOPAK recovered the quality of ice cubes by using the cold house; and 3) a French operator started to operate seven pirog boats hiring twenty-five young local fishermen and to purchase ice cubes from CECOPAK.

3) The sales price for ice reached the target of 35 FCFA/kg in 2007, and it could be offered for about half of the 2004 baseline of 65 FCFA/kg. In 2009, the sales price was raised to 40 FCFA/kg in light of higher water and electricity charges.

4) We were not able to compare the target and actual number of registered motorized pirog boats in the planned site (Mboamanga) because we were not able to obtain the results for 2007 (target year) from the Transportation Department.

5) The average number of operating motorized pirog boats per day reached 50 in the target year of 2007, meeting the target of 50.

6) We were not able to compare the target and actual utilization rate because we were not able to obtain the actual results from 4). The 2004 baseline for "the average number of motorized pirog boats used per day", which formed the basis for the 2007 target, was the actual measured value of the number of boats landing in one week during the peak season for fishing with bottom gill nets (September) divided by 2 ($87 \div 2 = 43.5$) (because most of the boats land twice a week). When a study was conducted to measure the number of landings over a one-week period in September 2010 with the same conditions as in September 2004 with cooperation from the implementing organization and based on the measurement method stipulated in the project's ex-ante evaluation summary, it was found that the number of pirog boats landing in a one-week period totaled 91 in 2010, compared to 87 in 2004. This was slightly above the target.

We confirmed that the use of equipment and materials for repairing outboard motors provided in this project contributed to the increase in the utilization rate of motorized pirog boats. All equipment and materials were utilized, and none was used for other purposes.

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

No residents were relocated, and there were no particular problems in the land acquisition process. The implementation of this project did not have a negative impact on the natural environment, but the dumping of old nylon fishing nets by fishermen became a problem. Over the past two years, CECOPAK has carried out awareness campaigns, but the problem remains. CECOPAK is currently working together with the Kribi city government to find a way of resolving the problem. Awareness campaigns to address the dumping of kitchen scraps by canteen are also ongoing, but it remains a problem, compounded by littering by tourists. These awareness campaigns should be continued with the cooperation of the JCOV currently dispatched.

The positive indirect effects that were anticipated were as follows. According to statistics from the Development Authority for Small Craft Sea Fishing (Mission de Développement de la Pêche au Cameroun, MIDEPECAM) in Kribi (2003-2005) and CECOPAK (2007-2009), the earnings of fishermen increased from 50,000 FCFA in 2004 to 80,000 FCFA in 2009. One reason for this increase in revenue was the higher wholesale price for fish resulting from the improvement in freshness of fish due to the implementation of this project (1,000 FCFA in the peak season and 1,500 FCFA in the off season in 2006, compared to 1,200 FCFA in the peak season and 2,500 FCFA in the off season in 2010). Nevertheless, we were only able to obtain reliable statistics on earnings from CECOPAK from 2007, and we were not able to make a simple comparison of data from different information sources. Moreover, a variety of factors are involved in the increase in earnings for fishermen, so we cannot conclude that it was due solely to the project's impact.

When the project was initially planned, it was expected that delivery of fresh fish to more distant markets due to ice making and cold storage would be a positive indirect effect. However, no such case has been observed. About 60% of the fish catch is bought by wholesalers and sold in a large market in Yaoundé city. The remainder is either sold at the Center or consumed in cafeterias both within and outside of the Center.

There were three unanticipated positive indirect effects. 1) Although the region targeted in this project does not compile statistics on the number of tourists, this area is becoming a tourist attraction. 2) According to the implementing organization, the cafeteria within the Center and the eating places on the neighboring beach modeled after the Center's cafeteria all serve fresh seafood, which has led to an increase in the earnings of the self-employed workers. 3) The revitalization described above has resulted in an increase in the number of beneficiaries, such as middlemen and wholesalers outside of CECOPAK, those involved in transport, and cafeteria managers and workers.

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

(1) Structural Aspects of Operation Maintenance

The plan had stipulated that in the first five years, MINEPIA's Department of Fishery, MIDEPECAM, and Kribe City would jointly administer and manage CECOPAK, after which the Mboamanga Dock Development Committee (Comité de développement du débarcadère de Mboamanga, CDDM) would manage it on its own. However, MIDEPECAM and Kribe City did not participate in managing CECOPAK due to their financial situations, and CDDM did not participate because of organizational problems. As a result, under the supervision of the Department of Fishery (MINEPIA), CECOPAK (whose director also served as MIDEPECAM's Kribe branch director) was responsible for administration and management. In 2008, a union (GIC) was set up at CECOPAK's urging. When this project was completed, CECOPAK had six employees, but this has now increased to 10 (8 regular employees and 2 contract employees). CECOPAK held a regular weekly meeting from 2008 to discuss income/expenditure reports, reports on people not making their payments, and facility management. As of the ex-post evaluation, no problems with the administration and management system had been reported.

(2) Technical Aspects of Operation Maintenance

The two technicians in charge of the ice making machine have sufficient technology to maintain and manage the ice making machines and cool boxes. Moreover, ice sales records are accurately recorded, and the electricity and water meters have been regularly checked since 2008.

(3) Financial Aspects of Operation Maintenance

CECOPAK has an independent settlement system, and in principle expenses are covered using revenue from sales of ice and rent (cafeteria, facility for baggage stowage and wholesale selling, fishing equipment lockers, refrigerated fish boxes, etc.).

According to CECOPAK, the revenue was approximately 17.2 million FCFA, the expense (electricity and water charges, personnel, gasoline, etc.) was 19 million FCFA, and thus there was deficit of 1.8 million FCFA in 2007. Major reasons for the deficit were the followings: 1) high cost of electricity charges; 2) it was not possible to establish appropriate rental charges for canteen due to the objection by canteen lessees; 3) canteen lessees delayed their payment of rental charges due to the lack of rental agreement between them and CECOPAK.

Regarding the high cost of electricity charges, the report by the Technical Adviser for Marine Product Development and Operations and Management pointed out that the production capacity of the ice making machines (2 tons per day) was too large for the demand for ice, so electricity costs ran up. In 2007 ice production volume was below approximately 30 tons per month (1 ton per day) even in November, when sales were highest, and over one ton was needed for market days (Wednesdays and Saturdays), but this could be supplied even with a one-ton capacity machine by making it the day before and stockpiling it.

In order to cancel the deficit, in 2008 those on the Cameroon side compiled and implemented a proposal for management improvements with the cooperation of the above-mentioned Adviser. Whereas the revenue remained at about 17 million FCFA (it is unknown whether this includes the subsidy of 2.5 million FCFA from the government), the expense (electricity and water charges, personnel, gasoline, etc.) decreased to 15.4 million FCFA. Thus, 2008 posted a profit of 1.6 million FCFA. The management improvement proposal called for 1) an increase in rents (an increase in canteen rental charge from 3,600 FCFA to 5,000 FCFA), 2) the conclusion of rental agreements between CECOPAK and the lessees, 3) a prohibition on extending credit for ice and rent payments, 4) the exclusion of those who do not pay rent, 5) the selling of ice in burlap bags to encourage and manage ice sales, and 6) the use of computers to thoroughly manage data on accounting and contracts (with assistance from advisers and JOCV). When raising usage fees for cafeteria stalls, appropriate rents were set by surveying the number of customers to the cafeteria, their orders, and sales for a certain period.

In 2009, the revenue was approximately 22 million FCFA, the expense was 22 million FCFA, and thus those were balanced. Major reasons for the increase in revenue are as follows: 1) canteen rental charges were raised; 2) the ice sales price was raised from 35 FCFA to 40 FCFA; 3) ice production volume was increased as mentioned earlier.

However, in the beginning of 2010, due to the difficulty in payment of the water charges of 0.8 million FCFA, CECOPAK received a 2 million FCFA subsidy from MINEPIA, which helped to maintain the cash balance. Since the ice making machines and ice storage equipment are planned to be updated in 2011 (the update was planned to be conducted every five years at the time of project planning), MINEPIA will need to cover any shortages if CECOPAK's funds are insufficient.

(4) Current Status of Operation Maintenance

According to CECOPAK, the facility for baggage stowage and wholesale selling, ice-making facility, fishing equipment storage and repair facility, and management facility were all well maintained, and the pipe blockage in the cafeteria that had been identified in an inspection for defects was resolved. It was pointed out in the defect inspection that there were no operating records for the ice-making machine, but such records were being kept as of the ex-post evaluation and no particular problems have been reported. It was reported that out of the 128 refrigerated fish boxes, 18 had been lost due to accidents at sea and torrential rain, so only 110 were used. Each refrigerated fish box is numbered to prevent loss, and the borrower and the box's number are recorded. The borrower is told to clean it before returning it, but in the case of particularly severe dirtiness, the manager cleans the box. The suspended scale has been cleaned after each use, as recommended in the defect inspection, and has even been painted, but 14 of the 15 sets provided by the project have been broken and there is no prospect for recovery. Thus, CECOPAK bought two more for 50-kilo loads with its own funds, but more will need to be bought so it requested supported from MINEPIA. According to the implementing organization, just after CECOPAK was established, the JOCV dispatched for two-year periods contributed to the organization of CECOPAK as intermediaries between CECOPAK employees on the one hand and the boat owners and fishermen on the other. They also contributed to the improvement of the sanitary conditions of the baggage stowage and wholesale selling site. As such, the effect of this project on administration and management can be recognized.

Some problems have been observed in the financial aspects and O&M situation of CECOPAK, but CECOPAK has received subsidies from the government in the past and the above problems are not seriously affecting the outcome indicators. 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 Living Environment Improvement Project for Unplanned Urban Settlements in Lusaka	March 2010—December 2010

I Project Outline

Country Name	Republic of Zambia					
Project Period	From June 2004 (E/N) to February 2006 (Completion of the TA Component)					
Implementing Agency	Lusaka City Council (LCC) [Supervised by the Ministry of Local Government and Housing: MLGH]					
Project Cost	Grant Limit: 461 million yen	Actual Grant Amount: 449 million yen				
Main Contractors	SHIMIZU CORPORATION					
Main Consultants	NIPPON KOEI CO., LTD.					
Basic Design	“Basic design study report on living environmental improvement project for unplanned urban settlements in Lusaka in the Republic of Zambia,” Nippon Koei Co., Ltd., August, 2003					
Related Projects (if any)	Grant Aid “Water Supply Project in Satellite Area of Lusaka (1993~2000),” was a prototype intervention that constructed water-supply facilities for six (6) unplanned settlements in Lusaka in the area adjacent to this Project. Community Empowerment Program “Community Empowerment Program “Community Empowerment for Water Development (2002)” was a prototype intervention on 1) training managers, or “tap leaders,” of public taps installed by the above-mentioned Grant Aid, 2) promoting community ownership over the water facility, and 3) providing hygiene education to residents. Development Study, “Lusaka Unplanned Urban Settlements Living Environment Improvement Plan (1999~2001),” formulated an area action plan for strengthening social services in eight (8) unplanned settlements in Lusaka including Project’s target areas. Technical Assistance, “The Lusaka District Primary Healthcare Project Phase 2 (2003~2007),” collaborated with and provided technical support for this Project.					
Project Background	In Lusaka city, an increasing influx population from local areas accelerated the expansion of unplanned urban settlements (UUSs), commonly referred to as ‘Compounds.’ In 2000, an estimated one million or more people lived under poverty in these compounds where social services such as public transport, utilities, and garbage treatment are sporadically provided. The Government of Zambia asked the Government of Japan for technical cooperation to prepare a social service improvement plan in the UUSs. “The Study on Environmental Improvement of Unplanned Urban Settlements in Lusaka,” which was conducted from March 1999 to July 2001 in eight UUSs, produced an action area plan. Based on the action area plan, Zambia submitted a request for a Japan’s Grant Aid Scheme in August 2001 for the purpose of developing a water supply system for safe and healthy drinking water, and health and hygiene education in three UUSs for four UUSs including Ng’ombe, Freedom, Kalikiliki and Chibolya (Chibolya was later dropped as it was to receive assistance from other agency).					
Project Objective	The Project aims to improve environmental hygiene and to provide stable water-supply services in terms of water supply volume and water quality, through the construction of water-supply facilities and provision of health and hygiene education in three UUSs located in peripheries of Lusaka City.					
Output[s] (Japanese Side)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">1) Construction of the water supply systems, of which communities carry out operation, maintenance, and levy collection in three UUSs (Ng’ombe, Freedom, and Kalikiliki).</td> <td style="width: 50%; border: none;">3) Promotion of health and hygiene behaviours in the three UUSs.</td> </tr> <tr> <td style="border: none;">2) Construction of the community centres in three UUSs where a committee for managing water-supply management will be housed.</td> <td style="border: none;">4) Capacity building to develop community-based operation and management systems for water supply services in the three UUSs.</td> </tr> </table>		1) Construction of the water supply systems, of which communities carry out operation, maintenance, and levy collection in three UUSs (Ng’ombe, Freedom, and Kalikiliki).	3) Promotion of health and hygiene behaviours in the three UUSs.	2) Construction of the community centres in three UUSs where a committee for managing water-supply management will be housed.	4) Capacity building to develop community-based operation and management systems for water supply services in the three UUSs.
1) Construction of the water supply systems, of which communities carry out operation, maintenance, and levy collection in three UUSs (Ng’ombe, Freedom, and Kalikiliki).	3) Promotion of health and hygiene behaviours in the three UUSs.					
2) Construction of the community centres in three UUSs where a committee for managing water-supply management will be housed.	4) Capacity building to develop community-based operation and management systems for water supply services in the three UUSs.					

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. There was a slight delay in completion (105% of the planned value), which was due to the late approval of the land clearance by the LCC. Despite the issue, the delay in the project completion was contained within 20 days. Considering that the Project attained all the Outputs within the planned budget with less than twenty-day delay, the efficiency is rated high. The Project has reached most of its planned targets, except for one essential indicator, water production volume, which hampered part of the effects. Thus, the effectiveness is rated fair. Positive impacts are observed, including: 1) decreased time for fetching water; 2) increased access to safe water source, both in terms of numbers of people and areas; and, 3) increased capacity of community-based organization in maintaining levy collection system. There was a comment in the questionnaire response from MLGH on increased disposal of grey water on streets in the area. One of the intended indirect effects, a decrease in water-borne diseases, could not be confirmed because the data could not be obtained. In terms of the management and maintenance of the facilities, it is expected that the water-supply scheme can be sustained, at least in two compounds, although they do have some minor institutional and technical issues. In the other compound, however, financial sustainability seems to be at issue. Given these conditions, the sustainability of effects brought to by his Project is rated fair.
- In light of the above, this project is evaluated to be satisfactory.

<Recommendations to MLGH, LCC and LWSC>

- To secure funding for comprehensive projects including not only water-supply facilities but also with sewage and waste-water treatment (MLGH).
- To render conciliatory support for both the Ward Development Committees (WDCs) and the Water Trust (former Water Supply Management Committees: WTs) to improve their relationship, and also technical support for improvement of financial management capacity among WTs.
- To continue provision of technical support and advisory for WTs (Lusaka Water and Sewage Company, or LWSC).

<Recommendations to JICA>

To consider further support for the area of water-supply and waste-water management based on Zambia's new "National Urban Water Supply and Sanitation Programme (draft 2009)", given the continuing population increase in UUSs.

<Constraints of this evaluation study>

- 1) This study was conducted based on the document review and the questionnaire survey to the counterparts and the consultant, and did not include data such as those obtained by direct observation or through interviews by the evaluator.
- 2) When indicator data in response to the questionnaire was 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.
- 5) There were numerous similar interventions to improve living conditions and health status of residents in urban unplanned settlements both prior to and during the Project, and either by JICA or by other development assistance organisations, which inferably contributed to effective Project design and success in developing capacity of the executing agency and the community. However, this evaluation did not conduct a causality assessment between such interventions and Project's achievement.

1 Relevance

(1) Relevance with the Development Plan of Zambia

MLGH's "Peri-Urban Water Supply and Sanitation Strategy (2001)" ultimately aims at reduction of water-borne diseases, and enlisted 1) improvement of structure and institutional arrangement, 2) appropriate selection of the area, and 3) promotion of community participation for improvement of water-supply and environmental hygiene-related services, as means of achievement of the aim. Thus, the contents of this Project are in line with the sector policy of the time. Furthermore, Zambia's "Vision 2030 (2006)" as well as its commitment to the Millennium Development Goals identifies the improvement of water-supply and environmental hygiene services as main target objectives. At the same time, as MLGH has renewed its commitment to achieve the said aim by preparing "National Urban water Supply and Sanitation Programme (draft 2009)," the successor to its 2001 policy, the Project is considered to be highly relevant to Zambia's development plan both at the time of planning and at the time of ex-post evaluation.

(2) Relevance to the Development Needs of Zambia

At the time of planning, very few households had access to safe water sources; and diarrhoea has a share of 23~29% among all diseases in the target areas. Thus, the Project is considered to be responsive to the needs of beneficiaries. Although the population with access to safe water sources increased in the area at the time of ex-post evaluation, this particular development needs still persist as the demand for water supply also expanded due to continued influx of migratory population in the areas.

(3) Relevance with Japan's ODA Policy

The Japan's ODA policy towards Zambia had included support for "cost-effective public health and medical services" as one of five priority areas, which punctuated construction of water-supply facilities in improving public health of poor households to control communicable diseases, as well as promotion of community participation for improved capacity for maintenance and management of such facilities: Therefore, this Project is in line with Japan's ODA Policy at the time of planning. In addition, Zambia positively appraised the comparative advantage of this Project as being 1) a grant, instead of loan, for infrastructure development in the peri-urban areas with the most vulnerable population; and 2) equipment of high quality with an expected long life span.

Based on the above, this project has been highly relevant with the Zambia's development policy/strategy, development needs, as well as Japan's ODA policy. Therefore, its relevance is rated high.

2 Efficiency

(1) Project Outputs

The Outputs of the Japanese side were mostly as planned. Changes made to the Basic Design in the number of water supply facilities and equipment were considered adequate, as they were based on the estimates of water yield volume by test-drilling a well. Construction of one water facility and a community centre had to be put off for some weeks in order to secure proper legal requirements through a local government, but the Project had resolved the issue by the change in construction site.

(2) Project Period (Project Inputs)

Actual Project took twenty-one months (20 months and 20 days), as opposed to the plan (20 months), slightly longer than planned (105%). According to the JICA Zambia Office, the reason for the delay was due to the unavailability of clean title on the land initially allotted for construction of community centre by the Zambian side. Considering the land issue was cleared swiftly and the delay was contained within just twenty days, the project period is considered as in reasonable line with the plan.

(3) Project Cost (Project Inputs)

The actual Project Cost was 449 million yen (97.4%), lower than the planned 461 million yen. Thus, the project cost was as planned (100% of the planned).

Given the above factors, since the project has largely achieved its planned Outputs within the planned cost and with the period consistent with the plan, the overall efficiency of the project is rated high.

3 Effectiveness / Impact

(1) Quantitative Effects

While prior to the Project, no more than 0.6% of households in the area had access to safe water (piped water), the situation improved significantly after the Project. Approximately 80% of residents (about 72,000 people; 11,380 households) are now able to access the public water taps within five to ten minutes. Using the actual water production volume and the unit water consumption in 2008, the number of beneficiaries is estimated at 92,400 people each day, exceeding the target population of 86,000. Time required for fetching water, including waiting time and return trip, also achieved the expected value, improving from 35~60 minutes in 2003 to less than 25 minutes in 2008, <35 minutes in 2009 and <40 minutes in 2010. Nevertheless, due to poor aquifer especially in one compound, average daily water supply volume came short, with 19%~73% of the expected value. Hence, actual unit water consumption stagnated at around 8.4~9.6 litres per capita per day (lpcd) between 2008~2010, far short of the expected value of 30 lpcd.

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

All water-supply facilities and equipment as well as community centres are fully utilized. Community-based management of water supply scheme is adequate, with all compounds securing 78%~89% of revenue ratios between 2008~2010. While access to sanitary toilets increased five-fold to 41% of households, water disposal facilities within residences are very rare. The questionnaire response from MLGH mentioned an increase in grey water disposed on streets. However, whether these sanitary conditions in the area have any bearings with project's interventions is not examined due to the lack of information. Regarding the land acquisition process, no negative impacts on residents were reported. (Data on the incidence level of water-borne diseases in the Project area could not be obtained through the questionnaire or web-based research. Thus, impact in this regard is not examined here.)

Therefore, given both that the Project enabled access to safe water for greater size of population than the expected, and that actual amount of water was less than expected, this project is considered to have somewhat achieved its objectives. Therefore, its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

After the Resident Development Committees (RDCs) were abolished, management responsibility of the community centres has shifted to the Ward Development Committees (WDCs), or bodies with mandates in areas beyond single compound. However, due to the lack of WDC budget, resources required for repairs, utility and security personnel are paid by the water schemes. While organisational arrangement for the maintenance of water-supply facilities and equipment provided by the Project, including 1) human resource allocation, 2) clarity in duties and responsibilities, and 3) emergency response plan, are rated excellent by the executing agency(ies), that for the maintenance of community centres was rated 'partly satisfactory', due to such issues as WDC's demanding rent from the Water Trusts.

(2) Technical Aspects of Operation Maintenance

According to LWSC, technical capacity, including 1) general management of the water supply functions; 2) management of water quality of the Water Trusts, are 'satisfactory', and so is the use of manuals in operation and maintenance developed by the Project. It also observes that WTs have yet to secure capable technical staff due to their poor remuneration. As a result, LWSC often has to provide technical staff in doing borehole pump uplifting/repairs and electrical repairs. This leaves WTs' technical sustainability as partly unsatisfactory. It is worthy of note, however, that LWSC responds to and renders support for these community organizations as they require, including advising on network extension, constructions, and prospects for increasing water supply production.

(3) Financial Aspects of Operation Maintenance

According to LCC, WTs not only utilize the Manual in financial management (formulated by the Project), but their transparency and accountability in financial management is 'satisfactory.' Looking at the revenues and expenditures of each WT, two of three compounds have the expenditure in excess of the revenue (8% and 50% more of the expenditure), requiring improvements in financial aspects. Whether WTs receive subsidies from the government that makes the organisation financially viable could not be confirmed.

(4) Current Status of Operation Maintenance

At the time of ex-post evaluation, the facilities and equipment provided by the Project are mostly reported to be in "good" condition, with the exception of a chlorinator, which is currently under repair. In addition, WTs conduct sensitisation of community on dangers of using unsafe water from shallow wells, as well as on keeping the water points clean, by utilising proceeds from the water supply.

Considering that: 1) some problems have been observed in terms of structural and technical aspects, 2) for one compound, a major problem is observed in terms of financial aspects; and, 3) for two other compounds, financial issues do not appear to hamper the continuation of water supply schemes. On the whole, the sustainability of effects brought to by the Project 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	Republic of Zambia	
Project Period	December 2004 ~ January 2006	
Implementing Agency	Ministry of Health (MoH)	
Project Cost	Grant Limit: 415 million yen	Actual Grant Amount: 255 million yen
Main Contractors	(Procurement Contract) Toyota Tsusho Corporation	
Main Consultants	Japan International Cooperation System (JICS)	
Basic Design	"The Republic of Zambia, the project for infectious disease control phase II : basic design study report : basic equipment study", JICA, September 2004	
Related Projects (if any)	Technical Assistance "AIDS and Tuberculosis Control (March 2001~March 2006)" had contributed to technically strengthening the Tuberculosis Control Programme. Grant Aid "Infectious Diseases Control (2003)" was a predecessor of this Project.	
Project Background	Zambia has a high disease burden of tuberculosis (TB) with 507 TB patients per 100,000 population in 2002 that compares with WHO-designated "high burden countries of TB" in Africa such as Kenya (540), Tanzania (128), and South Africa (558). In addition, Zambia has its pressing needs to contain further expansion of TB infections due to its severe HIV/AIDS epidemic. In order to improve its TB detection rate, and treatment success rate, it was necessary to secure steady provision of laboratory supplies and reagents as well as anti-TB drugs. Concurrently, there also was a pressing need to address common infectious diseases such as malaria, pneumonia, diarrhoea, dysentery, typhus and opportunistic infections due to HIV and Aids.	
Project Objective	<ol style="list-style-type: none"> 1) To procure TB laboratory test reagents and supplies in order to equip TB laboratories for Lusaka, Copperbelt and Southern provinces, where they bear 70% of disease burden. 2) To procure the Health Centre Kits containing medicines and basic medical consumables in order to equip one-third of health centres in Zambia. 	
Output[s] (Japanese Side)	<ol style="list-style-type: none"> 1) Procurement of the TB laboratory test reagents and supplies for Lusaka, Copperbelt and Southern provinces. 2) Procurement of the Health Centre Kits to be used by the country's primary health facilities, which contain non-TB common infectious diseases such as malaria, pneumonia, diarrhoea, dysentery and typhus. 	

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 several circumstantial evidences point to very high likelihood of donated equipment/supplies having been delivered to the destined facilities and utilised for intended purposes. The Project was also completed within the planned period and costs. Regarding the effectiveness, the TB reagent component part of the Project has reached most of its planned targets, and thus, the effectiveness is also rated high. For the Health Centre Kits component, it is likely that the Project also benefited the clients who visited health facilities, provided that the Kits were distributed to the destined health facilities and utilised properly. In terms of sustainability, it is rated either fair, or low. In the former scenario, while some minor problems have been observed in terms of institutional and technical aspects, provided that foreign assistance for the procurement and supplies for the TB control programme and the Health Centre Kits continue, the sustainability is rated fair. In the latter scenario, should the lift of the Global Fund becomes prolonged, it is highly likely that stock-outs of supplies occur in health facilities, and thus the sustainability of the effects will be interrupted.
- In light of the above, this project on the whole can be evaluated to be either highly satisfactory, or satisfactory, depending on the government's ability to secure external resources for the procurement of supplies.

<Recommendations for the Ministry of Health (MoH)>

- To make efforts to secure resources for procurement of logistics for the TB Control and for the Health Centre Kits.
- To further invest on proper infrastructure and human resource development on logistics management to overcome stock-outs and overstocking of drugs and medical supplies at the peripheral facilities, as well as delays in procurement at the central level.
- To improve provincial reporting on the TB control and other related data.

<Constraints of this evaluation study>

- 1) This study was conducted based on the document review and the questionnaire survey to the counterparts and the consultant, and did not include data such as those obtained by direct observation or through interviews by the evaluator.
- 2) MoH's response to the questionnaire did not contain sufficient data in order to assess the effectiveness and sustainability. As such, most of the data used to rate the effectiveness and the sustainability was of secondary nature, i.e. the published documents from

other donor agencies and observations and facts provided by the JICA country office. Therefore, the overall rating and that of effectiveness are performed with limited data.

- 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 Zambia

In the National Health Strategic Plan (NHSP: 2001~05) as well as in the renewed NHSP (2006~2010), both strategic plans equally enlisted TB control as one of the "Public Health Priority Interventions," along with the integrated child health, HIV/AIDS/STI control and malaria. By the same token, essential drugs and medical supplies are also classified as the "Clinical Care and Diagnostic Services Priority Interventions." Thus, the Project is considered to be highly relevant to Zambia's health sector strategy both at the time of planning and at the time of the ex-post evaluation.

(2) Relevance to the Development Needs of Zambia

At the planning stage of this Project, TB disease burden was high, similar to other high burden countries in Africa, at 507 TB patients per 100,000 people (2002). The TB control programme at that time focused on expanding and strengthening the DOTS programme. Thereafter, Zambia achieved nation-wide coverage of the DOTS programme in 2003, and the global standard target of 85% in treatment success rate in 2006. Most recently, the emphasis of the TB control programme has shifted to addressing TB/HIV co-infection and improving upon the low DOTS case detection rate, along with continuation of DOTS strategy nation-wide. Thus, provision of laboratory supplies and reagents are consistent with the needs of the country both at the planning stage and at the time of ex-post evaluation.

By the same token, other infectious diseases such as malaria, acute respiratory infections, opportunistic infections due to HIV and AIDS, diarrhoea, dysentery and typhoid continued having high shares of patient's visits. Thus, procurement of the Health Centre Kits, which address these communicable diseases and support rural health services, was and is consistent with the needs of Zambia.

(3) Relevance to Japan's ODA Policy

At the planning stage, the Japan's ODA policy towards Zambia (2002) had included "improvement of cost-effective health services" as one of its five (5) priority areas of support, which also emphasised cooperation in the communicable diseases control. Therefore, the Project was relevant to the Japan's ODA policy at the time of planning this Project.

Given the 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

According to the Project Completion Report, all the medical equipment/supplies were procured as planned, both in terms of type and quantity specifications, and their receipt was confirmed at the Medical Stores, Ltd. (MDL) by the consultant in January 2006. While the delivery to destined health facilities from MSL could not be confirmed through a questionnaire to MoH/MSL, it is highly likely that the goods were distributed to destined facilities when considering the following factors: 1) The assessment done by the Global Fund in 2005, a major funding body of TB drugs in Zambia, states "the distribution and supply chain management of health products in Zambia have not been the cause of significant delays or issues"; 2) WHO's TB Country Profile states there had not been stock-outs of laboratory supplies either at central or peripheral levels in 2006 (but some units experienced stock-outs at peripheral in 2007); and, 3) the number of notification cases do not show any significant drop. As for the Health Centre Kits, it is also likely that the supplies were distributed to destined health facilities, considering the fact that "Health Centre stocks, on average, improved from 73% in 2002 to 76% in 2004 (NHSP (2006~2010))."

(2) Project Period (Project Inputs)

The Project was executed with slight delay, of actual 14 months as opposed to the planned 13 month-period (108%). The delay was due to the extra time required for the consultant to confirm and ensure that materials used in one of containers of the reagents can endure harsh environment of overseas shipment.

(3) Project Cost (Project Inputs)

The actual Project Cost was 255 million yen (61%), much lower than the planned 415 million yen. The reason for this under-run is: 1) the estimate at the time of the planning was conducted assuming participation of contractors already-qualified and with excellent track-record; and, 2) a result of competitive bidding, or more specifically, due to participation of new Holland-based competitor(s), who pushed down the price.

In light of the above, the Project had slightly longer period than planned, with significantly lower cost than planned to achieve its planned Outputs, assuming that the procured equipment/supplies were delivered to destined health facilities. Considering that the slight delay is of reasonable cause, the efficiency of the Project is rated high.

3 Effectiveness / Impact

(1) Quantitative Effects

As an effect and operational indicators, TB case detection rate (new smear positive cases) remained steady at 58% from 2005 to 2006, while notification cases, including new and relapse, were 49,576 (14,857 new; 34,719 relapse) in 2005 and 47,790 (14,025 new; 33,765 relapse) in 2006 in the whole country. Assuming the 70% disease burden of three target provinces combined, roughly estimated 33,500 cases were notified there during 2006, mostly reaching its target of 35,000 cases, 96% of the amount of reagents supplied under this Project. (Actual breakdown of notification cases at provincial levels could not be obtained through questionnaire survey.)

As for the effects of the Health Centre Kits, it is not possible to determine whether they reached the planned number of beneficiaries (the supplied volume) due to unavailability of statistical data such as the total number of health centre visits. (The questionnaire response did not provide such data.) Given that distribution of the Health Centre Kits have been relatively steady, it is highly likely that a certain number of visitors to health centres did benefit from the Kits supplied through the Project. Thus, the rating on effectiveness does not reflect the results of this component.

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

The Project has benefited roughly 33,500 people in discovering/confirming their TB infection (70% of 47,790 nation-wide). That in turn lead to successful treatment outcome of 11,324 patients (70% of 16,177 patients nation-wide), given the treatment success rate of 85% and 81% for new and re-treatment cases, respectively, in 2006. Indirect effects of the Health Centre Kits may include decreasing trend in out-of-pocket health expenditures, or improvement in perceived quality of care or clients' satisfaction rating. However, this evaluation study neither conducted beneficiary survey nor was able to obtain such data through questionnaire or from other sources.

In light of the above, one can assume that the Project has largely achieved its objective, provided that TB laboratory reagents were distributed and utilised properly. No negative impacts were reported. Therefore, effectiveness of the TB laboratory component is rated high. On the other hand, procurement of the Health Centre Kits can be considered to have had some effects, provided that the Kits have been properly distributed to and utilised by destined health facilities.

4 Sustainability

(1) Institutional Aspects of Operation and Maintenance

Medical Stores, Ltd. has received management and technical assistance from the Crown Agents since 2004. The Crown Agents reported there has been improvement in staff compensation package, storing, inventory, ordering and distribution system, while MoH sees room for improvement in the logistics system especially in storage capacity and trained human resources at central and regional MSL stores as well as at district stores.

In terms of institutional sustainability of the TB control programme, the JICA Zambia Office reported there have been many improvements since 2004. In the annual review of the TB control programme, MoH announced that it plans to allocate budget in supervision and monitoring, appointment of a national-level TB-HIV focal point, provincial-level TB/HIV focal points and microscopists by 2012.

(2) Technical Aspects of Operation and Maintenance

In terms of technical aspects of operation and maintenance of logistics functions, MoH maintains that MSL and district health stores have sufficient technical capacity to carry out proper storage, management and delivery of necessary drugs and medical supplies to peripheral health facilities, in response to the questionnaire prepared for this evaluation. At the same time, since the response also states that stock-outs and over-stocking still occur due to insufficient storage infrastructure and the lack of staff training, there is room for improvement in the technical aspects of logistics management. MoH continues to strengthen their technical capacity through MSL staff training (85% trained as of 2006), improving the essential drugs list, development of the Pharmaceutical Logistics Management Information System, formulation of a three-year procurement plan (2005 ~ 2007), and so forth. For the management, storage and distribution of the Health Centre Kits that benefited from continuous support by the Netherlands since 1990s, there appear to be few problems: Its supply and distribution is reported to have been steady in 2004.

In terms of the technical sustainability of the operation and maintenance of the TB control programme, many positive factors were observed: 1) Zambia successfully scaled up DOTS operations in 2003; and, 2) Zambia has been receiving support from Japan, the United States and the Global Fund for technical staff training and technical improvement of TB laboratory testing. JICA has contributed to the improvement of laboratory functions in the University Teaching Hospital of Zambia since 1995. At the time of ex-post evaluation, the TB control programme continues its effort in technical advancement, especially in addressing the TB-HIV co-infection, i.e. in provision of HIV testing and counselling services for TB patients, provision of anti-retroviral and introduction of CPT (cotrimoxazole preventive therapy), and so forth.

All in all, MoH appears to have sufficient technical capacity to implement and to maintain its logistics functions as well as the TB control programme, with some room for improvement.

(3) Financial Aspects of Operation and Maintenance

While Zambia relied on external resources for 40.5% of its health budget in 2005 and 38.1% in 2006 (WHO), the Basic Design Study conducted in 2004 maintains that sufficient resources for storage and distribution of drugs and medical supplies was safely secured from the recurrent budget. According to the JICA Zambia Office, MSL continues to distribute drugs and medical supplies without interruption despite major limitation in 2010 health sector budget. The government however commits to increase the health sector budget allocation over the next five years, from ZMK802.4 billion (2011), ZMK1,287.5 billion (2012), ZMK1,471.7 billion (2013), ZMK1,755.0 billion (2014) to ZMK1,847.8 billion (2015), a four-year steady increase. Although Zambia's own resources may be far below covering the price of drugs and medical supplies, the above-mentioned conditions indicate government's commitment in this area. Having stated so, the recent freeze on aid by the Netherlands and by the Global Fund¹ in 2009, which stemmed from the mismanagement of the funds by MoH officials, insinuated potential interruption of external aid inflow to Zambia, which would make

¹ However, funds originally meant for the Ministry of Health has been disbursed through the United Nations Development Program (UNDP) to ensure that there is no disruption of lifesaving services (Press Releases, 16 June 2010)

the maintenance of service provision difficult. (Details in health budget/expenditures could not be obtained through the questionnaire survey.)

(4) Current Status of Operation and Maintenance

Current status of procurement, supply and distribution of drugs and medical supplies may have some room for improvement. A report by the Global Fund lists in its Grand Score Card (2005) the delay in procurement due to the insufficient communication between the Zambia Tender Board and the Procurement unit of MoH as the bottleneck to achieving higher detection and successful treatment, while the ex-post evaluation summary (2008) on the predecessor project "Infectious Disease Control (E/N 2003)" cites proper supply and distribution of TB reagents and the Health Centre Kits to provinces in accordance with population and demand estimates. In addition, in the annual review meeting of the TB control programme, MoH reported that there were no stock-outs of TB drugs in the target 3 provinces. As for the monitoring and evaluation aspect, TB related data collection may require strengthening, judging from the poor response rate of the questionnaire and the report by the Global Fund.

In terms of the overall performance of the TB control programme, new smear positive case detection rate remained at 58%, while treatment success rate was 85% in 2007 (latest data). The case detection rate falls short of the WHO-defined target of 70%, requiring further improvement in finding TB patients.

In light of the above, some minor problems persist in institutional and technical aspects, while overall capacity and commitment to operate and maintain the logistics management and the TB control programme appears fairly consistent. Thus, so far as external resources are available for procurement of necessary supplies, sustainability of the project effect is considered fair. On the other hand, should the suspension of external funding prolong, a short-term interruption of supplies is highly likely, which, in turn, would limit the effects of this Project. In such case, the sustainability is rated low.