

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Yukiko Sueyoshi Global Link Management, Inc.	Duration of Evaluation Study
Project Name	Project for Reconstruction of the Xai-Xai Primary Teacher Training Center in the Republic of Mozambique	March 2010 – December 2010

I Project Outline

Country Name	Republic of Mozambique	
Project Period	September 2004 (detail design)-March 2006 (hand-over date)	
Implementing Agency	Ministry of Education	
Project Cost	Grant Limit: 709 million yen	Actual Grant Amount: 708 million yen
Main Contractors	Dai Nippon Construction	
Main Consultants	Yamashita Sekkei Inc.	
Basic Design	“Basic design study report on the project for the reconstruction of the Xai-Xai Primary Teacher Training Center in the Republic of Mozambique,” Yamashita Sekkei Inc.; Mohri, Architect & Associates, Inc., 2003	
Related Projects (if any)	JICA, Strengthening of Primary Education in Gaza Province in Mozambique (2006-2009, technical assistance to enhance in-service training system in Gaza province) JICA, Japan Overseas Cooperation Volunteers (dispatch teachers to the Xai-Xai Primary Teacher Training Center and other junior high schools in Gaza province)	
Project Background	In Mozambique, the primary education system consists of five years of first level education (EP1) and two years of second level education (EP2). Net enrollment for primary school was low at 62.6% in 2002, and only 46.2% of enrolled schoolchildren moved up to the final grade of EP1 (first to fifth grades) between 1998 and 1999. Thus, many problems have to be solved so that all children may have the opportunity to get a primary education. It should be noted that the country's annual population growth rate was 2.2% in 2000. In view of the increase in enrollment at primary schools (average for the period from 1998 to 2002), with nearly 190,000 children reaching school age every year, 3,800 primary teachers must be added every year. In actuality, however, the annual number of graduates from teacher training institutions was less than 1,800. Therefore, it is urgently necessary to enhance the country's primary education system in terms of both quantity and quality.	
Project Objective	To construct new educational facilities and provide necessary equipment in order to improve quality of teacher training at the Xai-Xai Primary Teacher Training Center.	
Output[s] (Japanese Side)	Administration building, classrooms, laboratory, workshops, library, kitchen, canteen, laundry, hall, female accommodations, male accommodations, teacher accommodations, room for teacher support and resource center, educational equipment, etc	

II Result of the Evaluation

Summary of the evaluation

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 achieved, and therefore its effectiveness is also high. Although the project period was slightly longer than planned, the reasons were delays in custom procedures for some materials. Project costs were within the plan, and therefore the efficiency of the project is high. Some problems have been observed in terms of structural and financial aspects of operation and maintenance, so sustainability of the project's effect is fair. In light of the above, this project is evaluated as highly satisfactory.

<Recommendations >

- In order to improve operation and maintenance management, it is recommended that Xai-Xai Primary Teacher Training Center issue a report on problems and failures of facilities and equipment, and to submit it to the Gaza Directorate of Education. In addition, it is desirable to secure more technicians necessary for the proper operation and maintenance of the facilities.
- It is recommended that the Gaza Directorate of Education take countermeasures based on the report from the center (requesting further support from Ministry of Education, if necessary), and to continuously monitor the operation and maintenance of facilities and equipment.
- It is recommended that JICA address this issue when the Ministry requests follow-up support for the repair of facilities of the center.

<Constraints of this evaluation study>

This evaluation is a simplified version without a field survey; therefore, the evaluation was performed under some constraints as follows.

- 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 a 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 Mozambique

At the time of planning, the Education Sector Strategic Program 1999-2003 identified expansion of access and improvement of quality as one of the priority areas in the education sector. Particularly in teacher training issues, it set targets to construct more teacher training centers in the country and to train about 2,200 teachers per year. At the time of the ex-post evaluation, the Education Sector Strategic Program 2006-2010 also affirmed the need to improve the ratio of students per qualified teacher through a teacher training program. Therefore, this project was relevant with the development plan of Mozambique from the planning to the end of the project.

(2) Relevance with the Development Needs of Mozambique

At the time of planning, the number of primary school pupils per teacher was 59.2 (2002) in Gaza province, while the target ratio set by the Ministry of Education is 50. Moreover, the percentage of unqualified primary teachers in the province was also high at 52.2% (2002). This meant a serious shortage of teachers and a low quality of education. At the time of the ex-post evaluation, the percentage of unqualified primary teachers in the province was high at 44.1% (2009). Especially in Gaza province, the percentage climbed to 57.1% (2009), which was well beyond the national average. Therefore, the relevance of the project is high, considering the development needs of Mozambique and Gaza province.

(3) Relevance with Japan's ODA Policy

In 1994, both governments agreed that the three priority areas for Japan's ODA policy for Mozambique were agriculture, the social sector and human resource development. This project was implemented with social sector assistance, and therefore it was relevant with the Japan's ODA policy.

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

Some Japanese outputs were changed due to lack of project funding resulting from sharp exchange rate fluctuations and rising steel prices. Those changes were as follows: 1) the construction of ceilings for the administration building and the teachers building was canceled, 2) the steel supplier was changed from a Mozambique company to a Japanese company to reduce material costs, 3) all floors of existing and new construction buildings were changed from tiling to cement plastering.

(2) Project Period (Project Inputs)

The planned project period was 17 months (5 months for designing and 12 months for construction), whereas the actual project period was 20 months (7 months for designing and 13 months for construction). The project period was slightly longer than planned (118% of the planned period). The reason for this delay—import clearance procedures that required much more time than expected—was unavoidable.

(3) Project Cost (Project Inputs)

The Japanese grant ceiling amount was 709 million yen, and disbursement was 708 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 four indicators were selected in order to verify the project effectiveness. "Indicator 1: Number of qualified teachers graduated from CFPP¹ and IMAP² in Gaza province" was 203 persons/year in 2008 (101% of the planned target) and 515 persons/year in 2009, which exceeded the target set for 2008 (200 person/year). "Indicator 2: Number of qualified teachers graduated from IMAP in Gaza province" in 2008 was unknown, but it climbed to 519 person/year in 2009, which exceeded the target set for 2008 (200 person/year). "Indicator 3: Number of students per qualified teacher in Gaza province" was 94 persons in 2008 (91% of the target) and 87 persons in 2009, which almost met the target set for 2008 (85.5 persons). Moreover, "Indicator 4: Unqualified teacher ratio in Gaza province" improved 41.6% in 2008 (to 80% of the target) and 39% in 2009, which almost achieved the target set for 2008 (33.4%).

At the time of planning, it was pointed out that there were two external factors which might inhibit the project implementation. The first factor, "transition process from CFPP to IMAP should be implemented in accordance with the Japanese construction period," was addressed by having the Xai-Xai Primary Teacher Training Center apply the new teachers training policy at the time of project completion. The second factor, "sufficient number of qualified teachers in IMAP should be allocated for proper operation," was overcome since it was confirmed the enough qualified teachers were secured after the project completion.

According to Xai-Xai Primary Teacher Training Center, all the equipment and facilities provided under the project have been fully utilized under the planned objectives.

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

The intended impact at the time of planning, such as a decrease in the repetition rate and drop-out rate and utilization as an evacuation

¹ Centro de Formacao de Professores de Primarios: First level (first to fifth grade) teacher training center

² Instituto de Magisterio Primarios: Secondary level (first to seventh grade) teacher training center

center by the community, could not be confirmed. On the other hand, according to Xai-Xai Primary Teacher Training Center, after the improvements made to the facility in this project, the center was utilized as a community meeting facility by the local government and community. The center also reported an increase in revenue as one of the unintended positive impact from the project. No negative impact has been reported so far.

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

4 Sustainability

(1) Structural Aspects of Operation Maintenance

The operation and maintenance system has not been changed since the project was implemented, and thus the new facilities constructed under the project have been operated and maintained by the Xai-Xai Primary Teacher Training Center. Although two technicians in charge of electricity and plumbing were allocated upon project completion, there was only one plumbing technician at the time of the ex-post evaluation because the contract with the electrical technician was canceled in 2007. According to Xai-Xai Primary Teacher Training Center, it is sometime difficult to take quick action to make repairs when electrical appliances malfunction because they have to outsource to a local company. This means that it is necessary to hire an additional support person to improve operations and maintenance. For the school management, upon the transmission to IMAP, the number of personnel necessary for education activities was increased by 45 for teachers (20 at the time of planning) and 38 for staff (22 at the time of planning), which exceeded the planned 30 for each.

(2) Technical Aspects of Operation Maintenance

For the technical support for the operation and maintenance of facilities and equipment, an engineer from the Gaza Directorate of Education has been conducting monitoring and providing technical guidance as required from the center. For the teachers and staff, seminar, supplementary class, and technical guidance from the educational university have been provided in order to enhance educational knowledge and skill. Accordingly, it is judged that the technical sustainability is also high.

(3) Financial Aspects of Operation Maintenance

The annual revenue of Xai-Xai Primary Teacher Training Center is composed of the ordinary budget from the Gaza Directorate of Education and the tuition from students. Compared to the revenue at the time of planning and the time of ex-post evaluation, revenue has been doubled because of an increase in tuition resulting from an increase in the number of students since the project completion; on the other hand, expenses have also increased four-fold due to the expansion of facilities and operation and maintenance costs. Although there have been deficits since the project was completed, it turned a profit in 2009. According to the Xai-Xai Primary Teacher Training Center, the ordinary budget from the province has been continuing; however, the amount is not sufficient for regular maintenance and prompt repair.

(4) Current Status of Operation Maintenance

According to the Xai-Xai Primary Teacher Training Center and JICA Mozambique office, although almost all facilities and equipment have been fully utilized, there are some facilities in need of repair. The following problems have been reported so far: 1) leaking of rain mist in the facilities through gable openings, 2) defect of chairs in the class room due to missing crews to fix the seat surface, and 3) soil erosion due to un-surfaced road because of lack of bricks.

Some problems have been observed in terms of structural and financial aspects of operation and maintenance; therefore, sustainability of the project effect 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 equipment of IFEER (Le projet de remise a niveau de l'Institut de Formation aux Engins et à l'Entretien Routier)"	March 2010 – December 2010

I Project Outline

Country Name	Kingdom of Morocco	
Project Period	February 2005 (confirmation of the plan, review of the specification, preparation of bidding documents and approval)-February 2006 (Hand-over of equipment)	
Executing Agency	La Direction des Routes et de la Circulation Routière, Ministre de l'Équipement e du Transport (DRCR)	
Project Cost	Grant Limit: 382 million yen	Actual Grant Amount: 364 million yen
Main Contractors	Construction: None, Procurement: Itochu Corporation	
Main Consultants	Construction Project Consultants Inc.	
Basic Design	"Basic Study Report for the Project for the Improvement of Institut de Formation aux Engins et à l'Entretien Routier (IFEER) in Morocco", December 2004, Construction Project Consultants Inc.	
Related Projects (if any)	<ol style="list-style-type: none"> 1. 1991-1992, Grant Aid Assistance "The project for construction of IFEER" (Construction of IFEER and procurement of equipment) 2. 1992-1997, Technical Cooperation Project for IFEER 3. 1999-2003, Group Training Course on Road Maintenance and Construction Equipment (Phase I) 4. 2005-2010, Technical Cooperation/ Group Training Course on Road Maintenance and Construction Equipment in IFEER Phase II (Four trainees learned how to operate the new model equipment in the training in Japan as a part of the technical cooperation project before receiving the new equipment) 5. 2009-2011, Group Training Course on Road Maintenance and Construction Equipment Phase III (An expert provided in-depth training of the new model equipment.) 6. 2010, Follow-up cooperation (Spare-parts for the equipment for road construction was provided.) 	
Project Background	Since 1991, the Government of Japan has provided assistance through grant aid project, technical cooperation and group training courses in order to contribute to the human resource development in road construction and maintenance of Morocco and Francophone Africa. However, as more than ten years passed, the equipment and training content is becoming obsolete.	
Project Objective	To provide training equipment for IFEER in order to improve the training contents.	
Output[s] (Japanese Side)	Road construction equipment, equipment for maintenance/garage, and equipment for civil work laboratory	

II Result of the Evaluation

Summary of the evaluation
<p>• This project has been highly relevant with the development plan and development needs of Morocco as well as Japan's ODA policy, therefore its relevance is high. Both project period and project cost were within the plan, therefore efficiency of the project is high. Given that the number of trainees and number of new curriculum achieved those targets, this project has largely achieved its objective, namely improvement of training content, therefore its effectiveness is high. No major problems have been observed in the operation and maintenance system, therefore sustainability of the project effects is high. In light of the above, this project is evaluated to be highly satisfactory.</p>
<p><Recommendations></p> <p>• It is recommended for IFEER to continuously develop new curriculum and update the curriculum and to continuously recruit trainers from both public and private sectors in order to respond to the changing needs of road construction and maintenance.</p>
<p><Constraints of this evaluation study></p> <ol style="list-style-type: none"> 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, O&M agency and the Japanese consultants so it does not include data that could be confirmed through direct observation, i.e. the maintenance conditions; 2. When using indicator data in questionnaire responses, the raw data was not confirmed;

1 Relevance

(1) Relevance with the Development Plan of Morocco

The DRCCR's basic strategy for road construction and maintenance targeted the followings: 1) preservation of road assets by strengthening road repair and operation and maintenance, 2) road improvement for securing economic and safe transportation responding to the increase in traffic volume, and 3) expansion of rural road network based on the Programme National de Routes Rurales (PNRR). Thus, this project was consistent with Morocco's development policy both at the time of planning and the ex-post evaluation.

(2) Relevance with the Development Needs of Morocco

At the time of planning, there were the following challenges in human resource development in order to implement the above basic strategy, and those remain challenges still at the time of ex-post evaluation. 1) training of staff with high technical skills for road network maintenance, 2) securing personnel for PNRR, 3) re-training for both junior and senior staff in order to response to the new model road construction equipment with automatic controlling device (hereinafter referred to as "new model equipment"), which has been recently used by DRCCR and private sector, 4) assistance to the private road construction companies for technical improvement. Thus, this project is consistent with Morocco'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 policy consultation between the Government of Morocco and that of Japan in July 1997 were 1) development of agriculture and marine industry; 2) water resource development; 3) improvement of infrastructure; 4) rural development for the reduction of geographical disparities and for poverty reduction; 5) environment; and 6) social development. This project supports the improvement of infrastructure. Therefore, it can be said that this project was consistent with Japan's aid policy for Morocco 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 except educational equipment.

(2) Project Period (Project Inputs)

Both planned and actual project period was 13 months. Thus, the project period was as planned (100% of the planned).

(3) Project Cost (Project Inputs)

The planned project cost was 382 million yen whereas the actual project cost was 364 million yen. Thus, the project cost was lower than planned (95% of the planned). The difference between the plan and actual is due to the cancelation of the educational equipment.

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

3 Effectiveness / Impact

(1) Quantitative Effects

The actual number of the trainees who completed the courses was 395 persons per year in 2007, achieving the 2007 target of 360 persons per year (110% of the target). In 2010, it reached 540 persons per year (150% of the target). The number of the trainees respectively from DRCCR, private sector and Third Country (Francophone Africa) also achieved the target. The actual number of newly developed curriculum was six in 2007, achieving the 2007 target of five. It is eight in 2010. Examples of the new curriculum using equipment provided by this project, which were not planned at the time of project planning, are the ones for equipment management and repairing plan. As there is a problem with cooling device for bulldozer engines, bulldozers are used carefully. None of the equipment was unused or 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, and no problems arose in the land acquisition process. No residents were relocated.

The following intended indirect effects were observed. 1) Most DRCCR engineers and technicians (210 persons per year) completed training by IFEER, and the number of staff who is capable of operating and maintaining the new equipment was increased. This shows the improvement of skills of DRCCR staff. 2) After the new curriculum was introduced, the required time for repairing new model equipment was shortened, as a result, new model equipment became available for use anytime. 3) A number of ex-trainees have been involved in various projects for the annual road construction plan such as road repairing, snow and sand clearing, connection of road network to remote villages. As a result of the training, the required time for clearing snow and sand was shortened. This shows that the improvement of technical skills through the training contribute to the efficient implementation of the annual road construction plan. There was also unintended indirect effect by this project. Ex-trainees of IFEER, particularly the ones who completed the new curriculum, could obtain positions in civil work companies as operators of heavy equipment, whose demand is very high in the job market.

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

4 Sustainability

(1) Structural Aspects of Operation and Maintenance

As planned, the trainers of IFEER conduct operation and maintenance (O&M) of the equipment provided by the project while providing trainees with guidance for O&M. Whereas the number of trainers was 21 at the time of planning, it increased to 26 (4 section chiefs, trainers increased from 13 to 16, training assistants increased from 4 to 6) in 2009. This increase made IFEER being capable of the O&M of the new equipment. All the new trainers were recruited from both public and private sectors as the new curriculum were introduced.

(2) Technical Aspects of Operation and Maintenance

Following the recommendations at the time of planning, four trainers learned how to judge malfunctioning and how to repair before receiving the new equipment in the training in Japan as a part of the Technical Cooperation Project for Road Maintenance and Construction Equipment Phase II. They also received basic training from makers when they received the equipment as a part of this project. Furthermore, they received in-depth training from a Japanese expert as a part of the Group Training Course on Road Maintenance and Construction Equipment Phase III. According to IFEER, the training in Japan and the dispatch of a trainer enabled the trainers and trainees to be capable of basic repairs of the new model equipment. Thus, it can be judged that the IFEER trainers have sufficient skills for O&M of the new model equipment.

(3) Financial Aspects of Operation and Maintenance

IFEER has an independent settlement system, and expenses are covered using revenue solely from training fees. The past few years have posted profit. The increase of fuel cost by the newly provided equipment has been covered by the increase in the revenue from training fees. Whereas the planned increased number of trainees is 60 persons per year, the actual number was 95 persons per year.

(4) Current Status of Operation and Maintenance

In January 2010, spare-parts for road construction equipment (bulldozers, hydraulic shovels, wheel loaders, etc) were provided with the follow-up cooperation of this project. According to IFEER, the O&M status of the equipment is good in general. As there is a problem with cooling device for the engines of bulldozers, bulldozers are used carefully. There is no equipment which requires major repair and which are under repair. Regarding the equipment for road maintenance/garage, trainees conduct daily inspection based on the daily inspection check list under the supervision of trainers as a part of training. They record operating hours, fuel consumption quantity and malfunctioning of the equipment. They also conduct regular maintenance along with the daily inspection record as a part of training.

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

Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Improvement of Vocational Training in Ecuador	January 2010 – December 2010

I Project Outline

Country Name	Republic of Ecuador
Project Period	July 2002-June 2007
Executing Agency	Servicio Ecuatoriano de Capacitación Profesional [Ecuadorian Professional Training Service] (SECAP)
Cooperation Agency in Japan	Ministry of Health, Labor and Welfare Employment and Human Resource Development Organization of Japan
Total Cost	815 million yen
Related Projects (if any)	JICA, "The Project for Improvement of Vocational Training in Ecuador (Grant Aid Project)"
Overall Goal	The Project aims to establish vocational training system which provides skilled workers with required level of professional ability by the industrial sector and to contribute to improvement of the employment opportunity in Ecuador.
Project Objective	The project aims to improve the operation and administration system in SECAP and its main vocational training centers in order to produce a large number of workers having technical skills (i.e. electricity, electronics, industrial mechanics, welding and sheet metal processing) that meet the needs of the industrial sector using CERFIN as a pivotal center.
Output[s]	<p>Stage 1</p> <p>(1) The training needs in industry (in major cities) will be assessed by each target field through the reinforcement of the relationship with the industrial sector and the current status of major regional vocational training centers will be examined.</p> <p>(2) Based on the assessment in (1) above, skill up-grading courses will be modified, developed, and implemented.</p> <p>(3) Based on the assessment in (1) above, an implementation plan for the specialized training courses for technique and technology within CERFIN will be drawn up.</p> <p>(4) Based on the analysis in (1) above, an implementation plan for instructors retraining course will be drawn up.</p> <p>Stage 2</p> <p>(5) A system will be set up in order to perform regular monitoring of the above-mentioned training needs and to reflect the results in the training program.</p> <p>(6) A training system for employed workers will be set up in CERFIN, and monitoring of these workers' performance in industry will be implemented.</p> <p>(7) Specialized training courses for technique and technology will be implemented at CERFIN and a job placement support system will be set up for trainees.</p> <p>(8) Retraining of instructors working at the major regional vocational training centers will be implemented at CERFIN.</p> <p>(9) Training course curriculums and teaching materials developed at CERFIN will be spread to other regional vocational training centers.</p>

Inputs (Japanese Side)		Inputs (Ecuadorian Side)	
Experts	7 for long term, 21 for short term and 12 from the third country	Staff allocated	26 counterpart personnel
Equipments	298 million yen	Equipments	N. A.
Local Cost	31 million yen	Local Cost	N. A.
Trainees Received	18 trainees	Land etc provided	Office space for the Japanese experts, space for installation of provided machinery and equipment
Others	19 million yen (equipment brought with the experts' dispatch)	Others	Assistant to the Japanese experts, driver, and secretary

II Result of the Evaluation

Summary of the evaluation

As a result of this Project, a system for operating and managing training courses has been established at the 4 target training centers* (including the Industrial Training Center of the North Region (CERFIN)), including training needs assessment, curriculum development, instructors retraining, etc. The number of implemented courses has increased at these centers. After participating in the courses, the trainees have performed well and built good reputations. Thus, the Project achieved its objectives and its effects continue. Also, it should be noted that this Project has generated synergetic effects with the Grant Aid Project which was implemented at the same timing.

The training courses have been actually increasing, but the fact is that demand for training has also increased. In order to establish new courses, further needs assessment is necessary, and also more instructors will be necessary.

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

<Recommendations for the Ecuadorian Professional Training Service (SECAP)>

1. To satisfy demand of the increasing applicants, it is recommended to increase the number of courses and instructors.
2. For the new courses to be established, instructors need to be retrained to provide practical training courses.
3. The experience of CERFIN and also of the other 3 training centers* should be shared with the other SECAP training centers, by facilitating communication among instructors of different centers.

Note: The major activities of the Project were firstly implemented at CERFIN, such as training needs assessment, curriculum development, and retraining of the instructors. Then, these outputs were extended to the other 3 training centers: the Industrial Training Center of Cuenca (CEFIC), the Industrial Training Center of Ambato (CEFIA), and the Industrial Training Center of the Coastal Region (CERFIL).

1 Relevance

(1) Relevance to the Development Plan of Ecuador

In the "National Development Plan (2002-2003)" vocational training and human resource development were listed as priority issues, and the successive plan for 2005-2007 likewise aimed to improve the productivity of the domestic industries and to develop vocational capacities. In the "National Development Plan (2007-2010)," these issues continue to be priorities, identifying the modernization of SECAP and vocational training of the vulnerable, including women, as the national strategies.

(2) Relevance to the Development Needs of Ecuador

In Ecuador, the petroleum and industry sectors account for 12% of GDP. These are easily affected by changes in international oil price, so it was urgent to develop alternative industries and human resources. However, SECAP, which was the only vocational training center in the industrial sector, needed to upgrade instructors, equipment, and machinery to satisfy the demand from industry.

(3) Relevance to Japan's ODA Policy

In the policy consultations held in 1999 and 2005, "poverty reduction," "environmental conservation" and "disaster prevention" were discussed as priority areas for assistance. Among these areas, "poverty reduction" includes the development of key industries (industrial human resource development, vocational training for the vulnerable).

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 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective

As a pivotal center, CERFIN conducted training needs assessment almost every year and revised the training curriculum and teaching materials, and these results were shared with other training centers. Also, 36 instructors in the area of "Electricity and Electronics" and "Metal and Mechanics" were retrained as planned. Based on these outputs, it can be judged that the operation and administration system has been established for providing training courses. During the Project period, for up-grading training in "Metal and Mechanics" and "Electricity and Electronics," respectively 116 and 184 courses were implemented, in which 1,379 and 2,238 workers participated. Also, for specialized training for "tecnico/tecnologo" (high school graduates), respectively 28 and 32 courses were implemented, and 467 and 481 trainees participated. Although the training opportunities have increased as such, there were more applicants which couldn't be accepted. At CERFIN, a job placement support system was established, but the majority got jobs at the enterprises where they received OJT training. Only 6 trainees from 60 of the "tecnico" courses found employment through this system in 2005.

At the 3 training centers other than CERFIN, the up-grading training courses expanded; the number of the trainees increased from 80 (2006) to 279 (2007).

(2) Achievement of Overall Goal, Intended and Unintended Impacts

First, cases of new technologies being applied were reported, a process was automated at the factory level, and the quality of the products has improved at the enterprises which the trainees belong to. Also, these organizations and the Chamber of Commerce express their satisfaction with the training contents. Second, as many as 90% of the training graduates gained employment after the course at all the target centers, satisfying the demand from the industry sector. Other impacts include that the retrained instructors of different centers started communication to improve the curriculum/material and the operation and maintenance of the equipment, and that they have come to help other regional training centers besides the Project's target centers to improve the training facility and

curriculum/material.

(3) Synergetic Effects with the Grant Aid Project

The instructors retrained by this Project repeated retraining also to the instructors of the target centers of the Grant Aid Project, and monitored their performance. Also, the curriculum and material developed by this Project have been utilized at other centers. The Japanese experts of this Project gave advice so that useful equipment was selected for the Grant Aid Project.

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

3 Efficiency

(1) Outputs

As mentioned above, the Project achieved results as planned.

(2) Elements of Inputs

The inputs were mentioned in the "Project Outline." Some of the equipment was delayed due to the delay of the freight process and disparity of the specification, but this didn't affect the Project outputs. Other inputs were appropriate in terms of quality, quantity and timing.

(3) Project Cost, Period of Cooperation

The Project planned inputs of 234 million yen for Stage 1, and the actual cost was 815 million yen for Stage 1 and 2. The actual duration of the Project was 60 months, as planned.

The inputs are appropriate for producing outputs and achieving the project objective; therefore efficiency of the project is high.

4 Sustainability

(1) Related Policy towards the Project

In the "National Development Plan (2007-2010)," vocational training and human resource development continue to be priorities, identifying the modernization of SECAP and vocational training of the vulnerable including women, as the national strategies.

(2) Institutional/Operational and Technical Aspects of the Executive Agency

At each center, staff are assigned for management of the training courses, such as training needs assessment, follow-up of the graduates, revision of the curriculum/materials, support for job placement, etc. Instructors have been retrained at each center in all areas except industrial sewing. However, teaching staff isn't sufficient in terms of quantity and skills in some areas, as sufficient instructors haven't been newly hired, while training courses in the new area have been increasing. Out of 26 instructors who were working for the Project, 24 remain at CERFIN. For the revision of the curriculum/materials and its sharing among the centers, the procedure and the person in charge is clearly defined. The major equipment procured by the Project, with one exception, is functioning with regular inspections.

(3) Financial Aspects of the Executive Agency

The budget of SECAP has been increasing even since the Project ended in 2007. There was a slight deficit in 2008, but in other years the financial status was sound.

(4) Continuity of Effectiveness and Impact

Since the Project was completed, the number of some courses for up-grading and specialized training has been decreasing. This is because the duration of some courses was extended, and also two courses were integrated into one course. The number of graduates in all courses has been increasing, except one course at CERFIN. 90% of the graduates can find jobs after the training every year.

Some problems have been observed in the technical aspects of the executing agency; therefore, sustainability of the project effects is fair.

Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Strengthening Institutional Capacity of Mining Environmental Management	January 2010 – December 2010

I Project Outline

Country Name	Republic of Chile			
Project Period	July 2002-June 2007			
Executing Agency	National Service for Geology and Mining (SERNAGEOMIN)			
Cooperation Agency in Japan	Ministry of Economy, Trade and Industry			
Total Cost	698 million yen			
Related Projects (if any)	JICA, "The Project on the Mine Safety and Environmental Training Center (1994-1999)" (Project-Type Technical Cooperation)"			
Overall Goal	<ol style="list-style-type: none"> 1. The Chilean Government prevents mining pollution caused by closed and abandoned mines. 2. SERNAGEOMIN gives technical guidance concerning the measures to closing mines. 3. SERNAGEOMIN compiles a database on Chilean mines. 			
Project Objective	<ol style="list-style-type: none"> 1. SERNAGEOMIN grasps the situation surrounding operating, closed, and abandoned mines. SERNAGEOMIN compiles a database for closed and abandoned mines, including information on potential environmental impact. 2. SERNAGEOMIN has the capacity to evaluate the plan for minimizing and monitoring environmental damage caused by mining, including mine closure. 			
Output[s]	<ol style="list-style-type: none"> 1. Various initial input is completed. 2. Basic knowledge regarding prevention for Mining pollution is disseminated among inspectors in SERNAGEOMIN. 3. Necessary investigation skills for closed and abandoned mines are strengthened in SERNAGEOMIN. 4. SERNAGEOMIN has an improved data base system for investigation results. 5. SERNAGEOMIN develops the capacity to evaluate technical measures for closing mines. 6. SERNAGEOMIN strengthens its skills for examining pollution from model mines. 7. SERNAGEOMIN develops the capacity to evaluate pollution protection plans for model operating, closed and abandoned mines. 8. SERNAGEOMIN strengthens its capacity for assessing environmental impact. 9. SERNAGEOMIN improves its chemical analysis and its skills in management of the equipment. 10. SERNAGEOMIN obtains data analysis technology and results evaluation technology for chemical analysis results. 			
	Inputs (Japanese Side)		Inputs (Chilean Side)	
Experts	9 for long term, 8 for short term		Staff allocated	36 counterpart personnel
Equipments	152 million yen		Equipments	N. A.
Local Cost	94 million yen		Local Cost	1,211 million peso
Trainees Received	19 trainees		Land etc provided	Office space for the Japanese experts
Others	N. A.		Others	N. A.

II Result of the Evaluation

Summary of the evaluation

This Project aimed to strengthen the capacities of the National Service for Geology and Mining (SERNAGEOMIN) to evaluate and monitor the plans for mine closure, by upgrading its knowledge and skills in investigating mines, compiling databases, planning and evaluating pollution protection plans, etc. Through practical training, SERNAGEOMIN gained the above knowledge and skills, and thus it can be judged that the objective was achieved to some extent. At the time of the ex-post evaluation, some activities have changed their format but their function itself has continued. SERNAGEOMIN says that the budget is not sufficient to cover all the functions, but the project effects have been continuing.

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

<Recommendations JICA>

In order to verify the effects of the project, it is necessary to establish quantitative indicators for the Project Purpose and Outputs. If it is not possible, it is indispensable to clearly set criteria for judgment to verify the achievement even in a qualitative way. Also, it is necessary to design the project plan logically. The Project Purpose should be achieved by appropriate Outputs being produced; A Project Purpose which only paraphrases the Outputs produced should be avoided.

<Constraints of this evaluation study>

1. Regarding this Project, the Project Purpose overlaps some of the Outputs and the same goes for the indicators. Also, some indicators are not verifiable or do not include quantitative targets. Therefore, the achievement couldn't be compared with the targeted objectives or indicators. For objectives without a quantitative target, if there was a positive change, even small, it was just described as "there was improvement to some extent."
2. Some Outputs are duplicated. For example, Output 1 is just the result of the Inputs. Output 2 is the overlap of Outputs 3, 4, 5, 6, 7, 8, 9 and 10. Outputs 9 and 10 can be one output. In this evaluation study, the Outputs and the Project Purpose were reorganized and then analyzed.

1 Relevance

(1) Relevance to the Development Plan of Chile

President Lagos, who was inaugurated in 2000, valued environmental issues and tried to promote environmentally-sound economic development. This was followed by the "National Development Plan (2007-2010)," and in this plan "the improvement of the quality of life" was described as one of the strategic pillars for development, which includes environmental programs. A relevant collaborative action for prevention of pollution caused by mining was the "Clean Production Framework Agreement—Large Scale" signed by the mining industry and the Government in 2000, and one of the documents organized from this agreement was the "Methodological Guidelines on Mining and Drainage" published in November 2002.

(2) Relevance to the Development Needs of Chile

Chile is the biggest copper-producing country in the world, but there were no laws and regulations to obligate the restoration of closed and abandoned mines, and therefore many closed and abandoned mines were left uncontrolled and very little information was available on them. The concern was great for the adverse effects on the environment and the people nearby. Recently, mine pollution has been decreasing, but there seems to be a need for the mine investigation including the security as measures for mine closures.

(3) Relevance to Japan's ODA Policy

Based on the survey of the ODA Task Force in Chile and the political discussions with the Chilean government in 2005, "environmental protection and health improvement" has been set as one of the four priorities in Japan's assistance. Regarding this priority area, JICA has elaborated the program for enhancement of environment administration capacities. Also, Japan supports Chile's south-south cooperation and expects to extend the Project's effects to other countries which have similar environmental problems.

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

2 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective

The Project generated the following results to enhance the administrative capacities of SERNAGEOMIN.

- (i) The format of the investigation of the closed and abandoned mines (E-400) was revised. 213 mining facilities were investigated and the results were stored in the revised database.
- (ii) With the newly developed format (E-500), 19 operating mines were investigated.
- (iii) A total of 96 SERNAGEOMIN staff gained new knowledge on the evaluation of technical measures for closing mines.
- (iv) SERNAGEOMIN staff acquired skills to prepare pollution protection plans with cost estimation based on actual cases (as case studies during the seminar).
- (v) The draft of the EIA guideline was prepared, and was finalized.
- (vi) 13 standardized documents for chemical analysis were developed, and more samples were analyzed within 30 days than before.

The above 6 elements are indispensable to evaluate and monitor the technical measures for closing mines. Actually, as a result, SERNAGEOMIN evaluated and monitored 50 plans for closing mines based on the revised Mining Safety Regulations. Therefore, it can be judged that the Project Purpose was achieved to some extent, as results of the project outputs.

(2) Achievement of Overall Goal, Intended and Unintended Impacts

No quantitative data was available, but according to SERNAGEOMIN, the following pollutants have been mitigated: particulate matter from the mines and tailings dumps, collapse of the tailings dumps, mine drainage, and mining noises and vibration. Besides, SERNAGEOMIN has continued monitoring mines and conducted seminars on safety, and due to these extension activities, requests for consultation with SERNAGEOMIN increased on EIA and evaluation of mine closures.

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

3 Efficiency

(1) Outputs

As mentioned above, the Project achieved results as planned.

(2) Elements of Inputs

The inputs were mentioned in the "Project Outline." Some activities were delayed due to the delayed dispatch of an expert and delayed customs clearing of some equipment, but the Outputs were generated as planned. Besides this point, the terminal evaluation study analyzed that the quality, quantity and timing of the inputs were appropriate.

(3) Project Cost, Period of Cooperation

The Project planned the inputs of 530 million yen. The actual cost was 698 million yen, slightly higher than planned, but no problem was pointed out in the terminal evaluation study, as the actual cost wasn't compared with the planned cost.

The actual period of the Project was 60 months as planned.

Some of the inputs (project cost) are not appropriate for producing outputs, therefore efficiency of the project is fair.

4 Sustainability

(1) Related Policy towards the Project

The Message of the present President Piñera (Social Projections for Chile to 2014) describes, among others, the importance of environmental conservation, environmentally-sound market development, and development of the mining industry. In addition, the present Director of SERNAGEOMIN expresses the new guidelines including the online posting of mining information and safety of the mining activities, so as to strengthen prevention of accidents and pollution and training of the supervisors. Also, the Bill Mine Closure received an approval for parliamentary discussions in March 2010 and it is expected to legally promote the evaluation of the mining plans.

(2) Institutional/Operational and Technical Aspects of the Executive Agency

For conducting necessary related activities for preventing mining pollution (e.g., investigation of the closed and abandoned mines, database management, evaluation of mining pollution, evaluation of pollution protection plans, EIA, and chemical analysis), staff are allocated almost in the same way as they were during the project period. Out of the 36 staff who were counterpart personnel during the project, 30 remain at SERNAGEOMIN. For the newly employed staff, lectures and OJT are delivered. However, according to the self evaluation of SERNAGEOMIN, personnel are not sufficient in some areas (investigation and supervision of the operating mines, and chemical analysis) and need to have capacity strengthened in some areas (investigation of the operating mines and planning of the pollution protection plans). However, except for this point, no major concerns were identified. The manuals and documents developed by the Project are still all accessible by the staff. The major procured equipment are regularly inspected and functioning, though some had repair records.

(3) Financial Aspects of the Executive Agency

In 2010, 12,232 million pesos are allocated to SERNAGEOMIN. The budget for operation has been increasing since 2007 (7,226 million pesos, when the Project was completed), but SERNAGEOMIN says it is not sufficient to complete its functions for the protection of mining pollution and mines investigation. The main budget has been allocated to areas such as volcanic hazards and mining safety.

(4) Continuity of Effectiveness and Impact

As of May 2010, SERNAGEOMIN has evaluated 231 plans for mine closure. Considering that only 50 were evaluated during the Project, it can be said that the Project's effects have continued. Among the 6 functions of SERNAGEOMIN mentioned in the column of "Effectiveness/Impact", all have been implemented in the same way as they were during the Project, except the investigation of operating mines, and SERNAGEOMIN evaluates itself sufficiently capable. The investigation for operating mines itself has been conducted, although its format was modified.

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

Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project on Conservation of the Environment and Rural Development with Farmers' Participation for the Mediterranean Dryland Zone of Chile in the Republic of Chile	January 2010 – December 2010

I Project Outline

Country Name	Republic of Chile			
Project Period	March 2003-February 2005 (extension period: March 2002-February 2007)			
Executing Agency	National Institute for Agricultural Research (INIA), Studies and Agrarian Policies Bureau (ODEPA), Regional Secretariat of Agriculture (SEREMI), Institute of Agricultural Development (INDAP), National Commission of Irrigation (CNR)			
Cooperation Agency in Japan	Ministry of Agriculture, Forestry and Fisheries of Japan, Forestry and Forest Products Research Institute			
Total Cost	798 million yen			
Related Projects (if any)	None			
Overall Goal	Sustainable agriculture and poverty alleviation will be promoted through a soil and water conservation program at small-scale watershed areas in an inland dry region.			
Project Objective	Integrated soil and water conservation technology for sustainable agriculture development will be verified at small-scale watershed in Ninhue County, Region VIII.			
Outputs	<ol style="list-style-type: none"> 1. Elaborating the appropriate agricultural development plan at small-scale watershed level 2. Improving techniques for soil/water conservation 3. Verifying the practical integrated technology for soil/water conservation 			
	Inputs (Japanese Side)		Inputs (Ecuadorian Side)	
Experts	11 for long term, 27 for short term		Staff allocated	13 counterpart personnel
Equipments	152 million yen		Equipments	N. A.
Local Cost	35,288,375 pesos (extension period: 10 million yen)		Local Cost	817,115,394 pesos
Trainees Received	27 trainees		Land etc provided	Office space, land for experimental farms, storage space for equipments
Others	N. A.		Others	Installation, transport and customs clearing of the procured equipment

II Result of the Evaluation

Summary of the evaluation

This Project aimed to promote sustainable agriculture and poverty reduction, by developing techniques on soil and water management in the model area in the target county (Ninhue) and extending these techniques to other target areas. This is in line with government development plans and the needs of the rain-fed cultivation area in the Region VIII, where many poor people live. The Project was implemented in a participatory manner. It formulated a model development plan with farmer participation, and developed techniques not only by verifying them on an experimental farm but also by checking how the farmers applied them in the model area. The original objectives were achieved within the 5-year period, but some issues (water resources and non-plowing cultivation) remained and so the Project was extended by 2 years to work on these issues.

After the Project, in 5 counties including Ninhue an agricultural development plan was prepared to promote the techniques developed by the Project, and these were applied by farmers. As a result, farmers increased some crop production and improved techniques for cultivation and farming.

The National Institute for Agricultural Research (INIA) has a budget to operate the experimental farm was constrained but maintained other systems for extension of the techniques verified by the Project.

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

<Recommendations to INIA>

The experimental farm is quite appropriate as the farmers learn necessary techniques in a participatory way. Therefore it is necessary to provide an adequate funds to operate the experimental fields, to continue the demonstrations to farmers, and when required, to verify the soil and management techniques.

<Recommendations to JICA>

This Project achieved the two target indicators for the Project Purpose within the original period and the effectiveness was evaluated comparatively high in the terminal evaluation study. However, some technical issues remained and so the period was extended. It is not easy to establish minimum indicators ensuring directness and accurateness, but it is desirable to manage projects with such indicators which also have technical aspects. It is necessary to thoroughly discuss this before the project begins and establish the necessary indicators. Even after the project starts, it is necessary to modify or add indicators as necessary.

1 Relevance

(1) Relevance with the Development Plan of Chile

The "National Policy for Chilean Agriculture: 2000-2010" which has been in effect since the project commencement, describes the importance of (i) strengthening of international competitiveness of the agricultural and livestock industry, (ii) improving the livelihood of the small scale farmers, and (iii) developing agriculture and livestock using of natural resources. This Project aimed to verify and extend the techniques of soil/water conservation for sustainable agricultural development in a mediterranean dryland zone and this is in line with the national agricultural policy of Chile.

(2) Relevance with the Development Needs of Chile

According to the above mentioned policy paper, in Region VII (Project's target), the agriculture and living level in the mediterranean dryland zone is lower than other zones; the policy aims to increase this level.

(3) Relevance with Japan's ODA Policy

Based on the ODA Task Force survey in Chile and political discussions with the Chilean government in 2005, "environmental protection and health improvement" has been set as one of the four priorities in Japan's assistance.

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 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective

By the end of the Project, the following outputs were generated: (i) agricultural development plans were prepared in 2 model micro-scale watersheds. The following outputs were generated: (ii) 6 techniques were developed or improved for soil and water conservation (water management for drip-irrigation system, non-plowing cultivation of wheat and bean, use of native trees, etc.); (iii) 4 manuals were prepared (study/planning/evaluation, irrigation/water resources, soil management, and farming/cultivation); and (iv) bulletins for farmers were prepared on 11 topics (small-scale irrigation, usage of the tractors, etc.). As a result of these outputs, the target farmers in San Jose began to use the soil conservation technology verified by the Project—68 farmers using non-plowing cultivation, 93 using drainage canales for prevention of rill erosion, 15 using small-scale tree planning, and 6 using dikes for prevention of gully erosion. Likewise, the small-scale irrigation technology was used by some farmers—10 farmers using a new irrigation facility, and 9 farmers using drip-irrigation. All these achievements exceed the targeted indicators. However, as mentioned bellow, the Project was extended to deal with some remaining tasks relating to water resources, and non-plowing cultivation.

(2) Achievement of Overall Goal, Intended and Unintended Impacts

The techniques developed or improved by the Project have been recommended in the agricultural development plan in 5 counties including the Project target. In these counties, the wheat production doubled compared to before the Project (35 quintals/ha in 2009) and the farmers now use newly cultivated beans. To avoid the environmental burdens, 80% of the farmers reduced the idling and burning of fields and now apply more appropriate fertilizers, according to the terminal evaluation study.

There are also some spillover effects. Even since the Project was implemented, many farmers, research institutions, agricultural consulting companies have visited the experimental Project farm and learned to apply the non-plowing techniques in each farm. The farmers' association organized by the Project still provides rental service to the farmers in other areas. INIA has presented the Project's results in 11 national and international seminars and also introduces the Project's outline on its website. Besides, the County of Yumbel, by agreement with INIA, has disseminated the techniques developed by the Project.

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

3 Efficiency

(1) Outputs

As mentioned above, the Project generated the outputs as planned: agricultural development plans elaborated, techniques improved for soil/water conservation, and related manuals developed.

(2) Elements of Inputs

There was a delay in the dispatch of a long-term expert but short-term experts made up for some work, and therefore the delay didn't affect the activities implementation (Terminal Evaluation Study). Besides this, the necessary resources for the outputs were inputted, as planned.

(3) Project Cost, Period of Cooperation

The actual cost for the inputs was 798 million yen. The information regarding the planned cost was not available.

The planned period of cooperation was 60 months and the actual duration was 84 months, longer than planned (140%). One of the reasons for the extension is that the Project needed a survey for assuring the water resource. Due to the Project's efforts, the irrigation expanded and so the demand for water increased. However, the shallow well had unforeseen coliform contamination, and this is why the Project had to be extended for some period in order to search for alternative water resources.

The project period was longer than planned; therefore efficiency of the project is fair.

4 Sustainability

(1) Related Policy towards the Project

President Piñera in his Inaugural Message in March 2010 affirmed that one of the Chilean visions is a society full of opportunities, and regarding this, he made clear the necessity of increasing food production, export expansion, sustainable agriculture, job opportunities through agriculture, etc.

(2) Institutional/Operational Aspects of the Executive Agency

Even after the Project terminated, the staff was assigned to the management of irrigation and water resources, soil management, farming, the creation of public relations materials, and coordination with other outer organizations. And, INIA organizes regular meetings with other organizations and municipalities related to agricultural extension, maintaining the similar system to the Project.

(3) Technical Aspects of the Executive Agency

All 13 counterpart personnel of the Project still remain at INIA, and try to disseminate more appropriate watershed management techniques based on the survey results on water resources which was conducted in the extension period. All the important equipment provided by the Project are regularly inspected and functioning with one exception.

(4) Financial Aspects of the Executive Agency

The INIA budget increased in the year following the Project completion, but since then it has been decreasing. The budget for 2010 is 407 million US dollars, smaller than that of the last year of the Project. The special budget for disseminating the Project's effects had been allocated till 2009, but in 2010 that budget is not earmarked.

(5) Continuity of Effectiveness and Impact

Among 4 techniques developed or improved by the Project, 10 farmers newly apply the techniques on non-plowing cultivation every year. INIA disseminates the Project's effects via seminars and internet. Therefore it can be said that most of the Project effects, though not all, are continuing. INIA intends to use the experimental farm, but in 2010 due to the budget constraints, it is using the farm for other purposes such as on soil crack and erosion verification.

Some problems have been observed in the financial aspects of the executing agency; therefore, sustainability of the project effects is fair.

Simplified Ex-Post Evaluation for Technical Cooperation Project

Evaluator, Affiliation	Nobuko Fujita Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Promotion of Sustainable Marine Fisheries Resource Utilisation in the Republic of Trinidad and Tobago	January 2010 – December 2010

I Project Outline

Country Name	The Republic of Trinidad and Tobago
Project Period	September 2001-September 2006
Executing Agency	Fisheries Division, Ministry of Agriculture, Land and Marine Resources(MALMR) Caribbean Fisheries Training and Development Institute(CFTDI) The Department of Marine Resources and Fisheries(DMRF), The Tobago House of Assembly(THA)
Cooperation Agency in Japan	N.A.
Total Cost	716 million yen
Related Projects (if any)	1. JICA, Project-type Technical Cooperation "The Regional Fisheries Training Project in Trinidad and Tobago"(Phase 1) (April 1996-March 2001) 2. JICA, Development Study "Master Plan Survey on Development and Management of Fisheries Industry in Caribbean Countries"(March 2008-March 2011)
Overall Goal	Sustainable utilisation of fisheries resources in the Republic of Trinidad and Tobago is facilitated.
Project Objective	Fisheries extension and training activities for sustainable utilisation of fisheries resources are to be practiced by the mutual cooperation among the Fisheries Division, the CFTDI and the DMRF, THA.
Output[s]	(1) Resources management capabilities of Fisheries Division and DMRF, THA are enhanced. (2) Technical capabilities of CFTDI in capture fishery technology and fishing gear development, seafood technology, marketing, and marine engineering are enhanced. (3) Fisheries extension capabilities within the Fisheries Division and DMRF, THA are enhanced.

Inputs (Japanese Side)		Inputs (Trinidad and Tobago Side)	
Experts	6 for long term, 4 for short term	Staff allocated	23 counterpart personnel
Equipments	94.8 million yen	Equipments	2.96 million TTD (Trinidad Tobago \$)
Local Cost	181 million yen	Local Cost	3.849 million TTD (disbursement by CFTDI up to September 2004, including above costs for equipment. Other costs are unknown.)
Trainees Received	13 trainees	Land etc provided	Facilities and training sites
Others	N.A.	Others	N.A.

II Result of the Evaluation

Summary of the evaluation

This project was a continuation of "The Regional Fisheries Training Project in Trinidad and Tobago" (Phase 1) to improve the training capacity of the Caribbean Fisheries Training Development Institute (CFTDI) that was established by Trinidad and Tobago to develop human resources in the fisheries sector in Caribbean countries. The Project was implemented to enhance fisheries extension and training activities for sustainable utilisation of the fisheries resources of the Fisheries Division, Ministry of Agriculture, Land and Marine Resources (MALMR) and CFTDI. After the first Joint Coordination Committee (June 2002), the Department of Marine Resources and Fisheries, The Tobago House of Assembly (DMRF, THA) was included as a beneficiary.

By the end of the project period the Project's outputs (as stated above), had been achieved except for some extension capabilities. The linkage between the project purpose and the overall goal, however, was weakened because the Fisheries Division did not approve extension activities in Trinidad. In addition, currently Tobago officers and fisher folks are not included in CFTDI training activities for fisheries officers and fisher folks in Trinidad. As for extension activities, although the Fisheries Division and DMRF, THA are in charge of extension services on Trinidad and Tobago island respectively, utilisation of methods and techniques introduced by the Project for sustainable utilisation of fisheries resources including; fishing methods, fishing gears, processing techniques for marine products, and capture fishery technology is limited. On the other hand, in Tobago island, fisher folks have been using one of the newly introduced fishing methods. In addition, fishermen's association organized during the project period is still active and several new organizations have been established after the Project in Tobago island.

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

Parallel to this project, the Regional Technical Cooperation Promotion Programme "RTCPP," started in Phase I by JICA was continued with long-term experts of this project. RTCPP was a human resource development project targeting 13 Caribbean countries for sustainable utilisation of marine resources based at CFTDI. In this evaluation, RTCPP was treated as an impact of this project. Similar activities at CFTDI are no longer conducted, however some Caribbean countries send their trainees to CFTDI on their own

budget.

Note: Due to high-level decisions, financial information for the Fisheries Division and the DMRF, THA were not provided.

1 Relevance

(1) Relevance to the Development Plan of Trinidad and Tobago

The "Sector Policy of Food Production and Marine Resources of Trinidad and Tobago," stresses the importance of sustainable management of natural resources.

(2) Relevance to the Development Needs of Trinidad and Tobago

The necessity to ensure the sustainability of natural resources by coordinating both public and private sector stakeholders was pointed out in regards to the fisheries sector of Trinidad and Tobago. A number of factors including, the waning seine fisheries, international law disputes with Barbados over catch quota of flying fish, and the downsizing of catch, raised concern in regards to the sustainable utilisation of resources and contributed to the active participation on the part of fisher folks. Such active participation further indicates that the local need for the Project was high.

(3) Relevance to Japan's ODA Policy

ODA Data book states that development of sustainable marine resources in Trinidad and Tobago is important in terms of sustainable development. Also, "the New Framework of Cooperation of Japan and CARICOM in the 21st Century" formulated in 2000, suggests greater focus on tourism, fisheries and agriculture industries and calls for closer cooperation in the infrastructure development, equipment provision, human resource development and technical assistance for further development of fishing industry.

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

2 Effectiveness / Impact

(1) Achievement of Project Outputs and Project Objective

As for Output 1 (Resources management capabilities of Fisheries Division and DMRF, THA), all the goals in terms of biological data collection, developing textbooks, etc., were achieved by the end of the Project. Regarding Output 2 (technical capabilities of CFTDI in capture fishery technology and fishing gear development, seafood technology, marketing, and marine engineering), counterparts were able to conduct training by themselves and pre-set goals were achieved. As for Output 3 (fisheries extension capabilities within the Fisheries Division and DMRF, THA), because of the policies of the Fisheries Division, the output was limited to Tobago island.

As for the project purpose, except for the target related to extension works in Trinidad, the pre-set goals were achieved by the end of the Project. "Recommendation for the proper fisheries management" was drawn up, and Fisheries Extension Work Group was established in Tobago in 2003. Training sessions organized by counterparts were conducted by the end of the Project.

(2) Achievement of Overall Goal, Intended and Unintended Impacts

Limited achievement was obtained in regards to the stated overall goal to facilitate the sustainable utilisation of fisheries resources in the Republic of Trinidad and Tobago. Among fishing methods introduced during the Project, FADs (fish aggregating devices) are still used in Tobago, however, other methods including set net fishing, diamondback squid drift with vertical/horizontal longline fishing, and appropriate mesh size net fishing are not used today. The reason why FADs are not used in Trinidad is that FADs, which are suitable for deep water with floating fish passing through, are not suitable to Trinidad since its coast is shallow. As for set net fishing, the testing of the fishing technology was not fully conducted during the project period and as for appropriate mesh size net fishing, the activities were suspended during the Project both due to the policies of the Fisheries Division. As for diamondback squid drift, fishing grounds for squid were too far for this method to be used conveniently.

Since the end of the Project, no new fishing methods have been introduced. (The stated target for introducing new methods was that more than three kind of new fishing methods would be introduced by 2011.) In regards to marine products processing techniques, sanitary treatment of catch, and how to make Satsuma-age fish cake, CFTDI did organize training courses; however, neither local processing companies nor fisher folk are currently producing Satsuma-age. (The stated target was that more than three kind of processed products would be commercially produced by 2011). Other processed products such as bottled flying fish roe, Hanpen fish cake, and fish sauce were also not produced after the Project. When fisher folks were asked if they currently use sustainable fishing methods, respondents gave the following wide-variety of answers: The Fisheries Division answered 0%, CFTDI answered 25%, and DMRF, THA answered 30%. Considering the above situation, at least Tobago fisher folks are highly likely to achieve the stated goal of 20% by 2011.

By RTCPP, output of this project has spread to Caribbean countries, and FADs are utilized in Dominica and Saint Lucia. In addition, although diamondback squid drift fishing has not been used in Trinidad and Tobago since the end of the Project, it is being used in Saint Christopher and Nevis. There is no negative impact on natural environment.

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

3 Efficiency

(1) Outputs

As mentioned above, in regards to Output 3 (Fisheries extension capabilities within the Fisheries Division and DMRF, THA are enhanced), a Fisheries Work Group was established, and a fishermen's association was organized but it was limited to Tobago island. Other outputs were achieved as planned.

(2) Elements of Inputs

Input from the Japanese side, in terms of experts and equipment, was appropriate. Some of the counterparts were assigned part-time for this project and therefore did not have enough time to participate in the Project, according to the terminal evaluation among others.

(3) Project Cost, Period of Cooperation

The actual duration of the Project was 60 months as planned. The actual cost was 716 million yen while planned input was 740 million yen.

The inputs are appropriate for producing outputs and achieving the project objective; therefore project efficiency is rated high.

4 Sustainability

(1) Related Policy towards the Project

In Trinidad and Tobago, overexploitation of marine products is still a serious issue and sustainable marine resource management remains an important issue. A draft of the New Fisheries Act, which was submitted during the Project to realize sustainable management, was not adopted, and as mentioned earlier, the "Recommendations for Appropriate Fisheries Management Policies" were not implemented. The Tobago Five-year Development Plan of Fisheries Villages drafted in 2005 during the Project was also not realized.

(2) Institutional/Operational Aspects of the Executive Agency

At the time of the ex-post evaluation, it was reported that coordination among the Fisheries Division, DMRF, THA, and CFTDI remains at an informal level. As for trainings, CFTDI offers training courses for fisheries officers in Trinidad (twice a year) and fishermen (6 times a year). Training is provided in (among others) the field of fishing methods, processing, proper handling of catches, marine engineering and navigation techniques. However, the target training groups do not include either Tobago fisheries officers or fisher folks and no training has been conducted in Tobago since the end of the Project.

As for extension works, although Tobago Fisheries Work Group stopped their activities in 2009, the Fishermen's Association that was established with the support of the Project, still continues activities such as fish gear production. Three new fishermen's associations, modeled after the Tobago fishermen's association, were also established.

(3) Technical Aspects of the Executive Agency

Nine out of ten counterparts of the Project at CFTDI, and ten out of eleven at the Fisheries Division keep working. Although only one out of four remains at Tobago Fisheries Division, new staffs are trained using some of the textbooks developed during the Project.

(4) Financial Aspects of the Executive Agency

In regards to financial aspects, no problems are evident. Budgeting problems did not exist during the Project and CFTDI's budget increased every year from 2005 to 2009 for a total increase of 186%. (Detailed financial information was not provided by the Fisheries Division and DMRF of THA).

(5) Continuity of Effectiveness and Impact

Part of the project effectiveness remains. On Tobago, some of the fishing methods introduced or developed by the Project such as FADs are still in use, and proper handling of the catch and marine engineering are utilized in CFTDI training.

Some equipment is reported to be unused. (For example, a four stroke engine at DMRF, THA, and a profile projector at the Fisheries Division). Other equipments are fairly well utilized and in good condition.

Sustainability of the project effects is considered fair because some problems have been observed in related policy and institutional aspects of some of the executing agencies.

