Part 2

Project-level Evaluation

* For the Terminal Evaluation of Technical Cooperation, the evaluation results for 8 of major examples selected based on areas, sectors, and rating results, are published in this report. For the Ex-post Evaluations of Japanese ODA Loan projects, the evaluation results for all 40 projects are published

The Results of the External Evaluation and Rating

JICA is promoting external evaluations in order to improve the transparency and objectivity of evaluation results. Based on the project evaluation results, JICA is conducting the rating* based on the rating methods for ODA loan projects and technical cooperation.

The Results of Ex-post Evaluation Rating for ODA Loan Projects

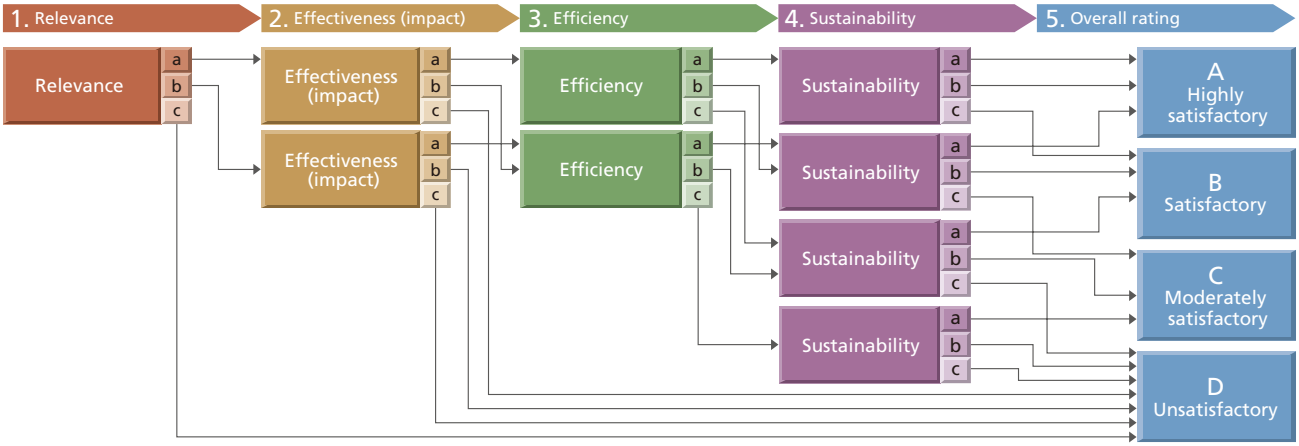
The results of ex-post evaluation of ODA loan projects are rated using four grades - A (highly satisfactory), B (satisfactory), C (moderately satisfactory), and D (unsatisfactory). The rating started with the individual ex-post evaluation results published in FY2004. In assigning ratings, projects are first evaluated individually on: (1) relevance, (2) effectiveness (impact), (3) efficiency, and (4) sustainability. The result is inserted into the Rating Flowchart, and an overall rating is assigned.

Ratings are not only to show evaluation results in an easy to understand way, they are also useful for investigating measures to improve the development of projects based on those results.

However, because ratings do not reflect everything there is to know about a project, their importance should not be overemphasized. The rating should be considered as one indicator.

Out of 40 projects for which results were released in FY2008, 20 (50%) achieved a rating of A, 14 (35%) were rated B, 4 (10%) were rated C, and 2 (5%) were rated D (see next page). For outlines of the ex-post evaluations for the 40 projects, refer to pages 49-93.

Rating Flowchart



Rating Method

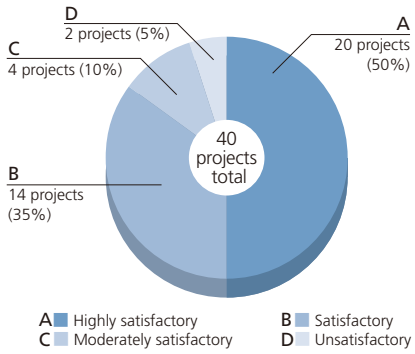
Item	Points	Criteria		Notes
1. Relevance	Evaluate the relevance to development needs at the time of the appraisal and at the time of the ex-post evaluation and evaluate the project's consistency with development policies.	Consistent with needs and policies	a	
		Some problems in consistency	b	
		Serious problems in consistency	c	
2. Effectiveness (impact)	Compare planned and actual figures to measure effectiveness.	80% or more of target	a	·Multiple operation and effect indicators are analyzed on the basis of major indicators.
		50% - 79% of target	b	
		Below 50% of target	c	
3. Efficiency	Compare the planned content and the actual content, in terms of project outputs, project period, and cost. Based on the results of each comparison, rate the overall efficiency of the project.	**1. Outputs** Not reflected in the ratings, but is taken into consideration when rating the items below.	(Outputs)	·In cases where additions or changes have been made to the project outputs, these are considered in evaluating the project period and costs.
		2. Project period	(Input)	
		100% or less of target	a 3 points	·Overall efficiency is assessed by ranking the project period and project costs into three categories (a, b and c).
		Between 100% and 150% of target	b 2 points	
		Exceeding 150% of target	c 1 point	
		3. Project costs (total project costs in foreign currency)	(Input)	
		100% or less of target	a 3 points	
		Between 100% and 150% of target	b 2 points	Different rules may be applied for extreme cases.
		Exceeding 150% of target	c 1 point	
		4. The points for the two items above are tallied together (a = 3 points, b = 2 points, c = 1 point)		
		[aa] → Efficiency is a (a+a = 6 points)	a	
		[ab, ba, ac, ca, bb] → Efficiency is b (4 - 5 points)	b	
		[bc, cb, cc] → Efficiency is c (2 - 3 points)	c	
4. Sustainability	Evaluate sustainability based on the financial situation, and by considering technical capacity, operational system and the status of facilities.	Highly sustainable	a	·Grade "c" is assigned in cases of excessive debt, chronic deficits, or marked budget shortfalls.
		Some concerns but no major problems	b	
		Major concern at the time of ex-post evaluation	c	
5. Overall rating	Perform an overall rating.	See the flowchart above.		

* Evaluation results will be shown in a more easy to understand way in the future by developing a consistent rating system for each aid scheme. Refer to page 28 for details.

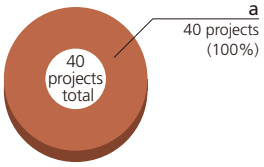
Rating

Country	No.	Project name	Relevance	Effectiveness	Efficiency	Sustainability	Overall rating
India	1	Calcutta Transport Infrastructure Development Project	a	a	c	a	B
	2	Eastern Karnataka Afforestation Project	a	a	a	b	A
	3	Tamil Nadu Afforestation Project	a	a	a	a	A
Indonesia	4	Kupang and Bitung Port Development Project	a	a	b	a	A
	5	Bili-Bili Irrigation Project	a	a	b	b	B
	6	Rural Areas Infrastructure Development Project (3)	a	a	a	b	A
Sri Lanka	7	Kukule Ganga Hydroelectric Power Project	a	a	b	a	A
	8	Small and Micro Industries Leader and Entrepreneur Promotion Project (1) (2)	a	a	a	a	A
Thailand	9	MRTA Initial System Project (Blue Line) (1) – (5)	a	a	b	b	B
	10	Traffic Planning and Management Sector Loan	a	a	b	b	B
	11	Regional Development Program (2)	a	b	b	b	C
China	12	Jiangxi Jiujiang Thermal Power Plant Project (1) (2)	a	a	b	a	A
	13	Hunan Yuanshui River Basin Hydropower Development Project	a	a	b	a	A
	14	Liangping-Changshou Highway Construction Project	a	b	a	a	A
	15	Hainan East Expressway Expansion Project	a	a	b	a	A
		Hainan Development Project (Highway) (1) (2)					
	16	Harbin Electric Network Construction Project	a	a	b	a	A
Pakistan	17	Rural Roads Construction Project	a	a	b	b	B
Bangladesh	18	Paksey Bridge Construction Project (1) (2)	a	b	b	a	B
Philippines	19	Agno and Allied Rivers Urgent Rehabilitation Project	a	a	b	b	B
	20	Local Government Units Support Credit Program	a	a	b	a	A
	21	Pinatubo Hazard Urgent Mitigation Project	a	a	b	b	B
	22	Metro Manila Interchange Construction Project (4)	a	a	b	b	B
	23	Industrial and Support Services Expansion Program (2)	a	a	a	a	A
	24	Environmental Infrastructure Support Credit Program (2)	a	a	a	a	A
	25	Special Economic Zones Environment Management Project	a	c	c	a	D
Vietnam	26	Phu My Thermal Power Plant Project (1) - (4)	a	a	b	a	A
	27	Pha Lai Thermal Power Plant Project (1) - (4)	a	a	b	a	A
	28	National Highway No.1 Bridge Rehabilitation Project (I) (II)	a	a	a	b	A
	29	National Highway No.5 Improvement Project (1) - (3)	a	a	b	b	B
	30	Hanoi-Ho Chi Minh City Railway Bridge Rehabilitation Project (1) - (3)	a	a	a	b	A
	31	Third, Forth and Fifth Poverty Reduction Support Credit	a	a	a	b	A
Malaysia	32	Hospital Universiti Kebangsaan Malaysia (HUKM)	a	a	b	a	A
Tunisia	33	Irrigation Perimeters Improvement Project in Oasis in South Tunisia	a	b	b	b	C
	34	Treated Sewage Irrigation Project	a	c	b	a	D
Morocco	35	Expressway Construction Project	a	b	b	a	B
		Casablanca South Ring Road Construction Project					
Jordan	36	Second Human Resources Development Sector Investment Project	a	b	b	b	C
Brazil	37	Jaiba Irrigation Project II	a	a	c	a	B
Peru	38	Rural Highway Rehabilitation and Improvement Project (2)	a	a	c	a	B
Fiji	39	Nadi-Lautoka Regional Water Supply Project	a	a	b	b	B
Albania	40	Power Transmission and Distribution Project	a	b	c	a	C

Overall rating

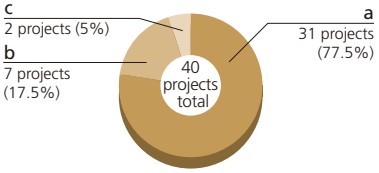


Relevance



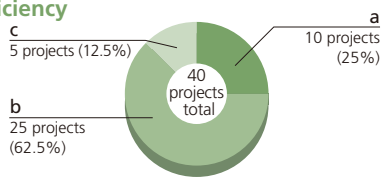
Consistent with needs and policies ····· a
Some problems in consistency ····· b
Serious problems in consistency ····· c

Effectiveness (impact)



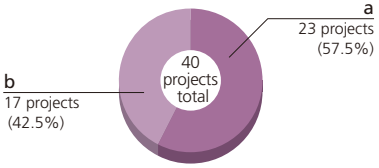
80% or more of target ····· a
50% - 79% of target ····· b
Below 50% of target ····· c

Efficiency



Overall efficiency [aa] (6 points) ····· a
Overall efficiency [ab, ba, ac, ca, bb] (4 - 5 points) ··· b
Overall efficiency [bc, cb, cc] (2 - 3 points) ····· c
(a = 3 points, b = 2 points, c = 1 point)

Sustainability



Highly sustainable ····· a
Some concerns but no major problems ····· b
Major concern at the time of ex-post evaluation ··· c

The Results of the External Evaluation and Rating

The Results of the Secondary Evaluation for the Terminal Evaluation of Technical Cooperation Projects

The Advisory Committee on Evaluation*1 / the Secondary Evaluation Working Group

In order to increase the transparency and objectivity of evaluation, JICA has been conducting secondary evaluations since FY2003, in which the Advisory Committee on Evaluation checks the results of terminal evaluations for technical cooperation projects (primary evaluation) performed by JICA. In the secondary evaluation in FY2008, 50 projects' terminal evaluations conducted by JICA in FY2005 (10 projects), FY2006 (27 projects) and FY2007 (13 projects) were examined in terms of the "quality of terminal evaluations" and the "quality of projects based on terminal evaluation reports."

For the secondary evaluations, a working group was set up under the Advisory Committee on Evaluation in cooperation with the Japan Evaluation Society (JES). The working group was comprised of 10 JES experts in evaluation as evaluators. The following method was employed to conduct the secondary evaluations. Each terminal evaluation reports was appropriately allocated to four out of ten evaluators who then read the reports. One evaluator read all the reports and two evaluators read half the reports each. Other evaluators read 19-20 reports each. In order to eliminate the evaluators' judgment variations, the judgment standard of the evaluator who read all the reports was used as the standard for the entire team and the values were calculated accordingly, so that all the evaluators' judgment standards could be calibrated. The values calculated by this method means that each report was evaluated by virtually 10 evaluators.

The working group also re-evaluated some of the projects for which secondary evaluations were conducted in the previous fiscal year so that the values from the previous fiscal year can be converted in accordance with the judgment standard used in FY2008. The values were then used to look at the year-to-year changes in the "quality of terminal evaluations" and the "quality of projects based on the terminal evaluation reports."

Quality of Terminal Evaluations

The quality of terminal evaluations was examined from various standpoints. As a result, the scores for all the evaluation items averaged 3.0 (the "medium" level) or higher on a five-point scale. Therefore, the quality of terminal evaluations is reaching the "medium" level.

The year-to-year changes show that the quality of the terminal evaluations has improved for the projects in FY2004-2007 when compared to the projects in FY2003. The overall quality for FY2007 was particularly high although the difference in values was not statistically significant. On the other hand, relatively low scores were assigned for "evaluation framework" in FY2006 and FY2007 because it was not clear to what extent the evaluators from the partner countries participated in some terminal evaluations.

It is recommended that terminal evaluation reports should state the extent to which the partner country's evaluators were involved in the terminal evaluation, in order to improve the quality of the primary evaluation.

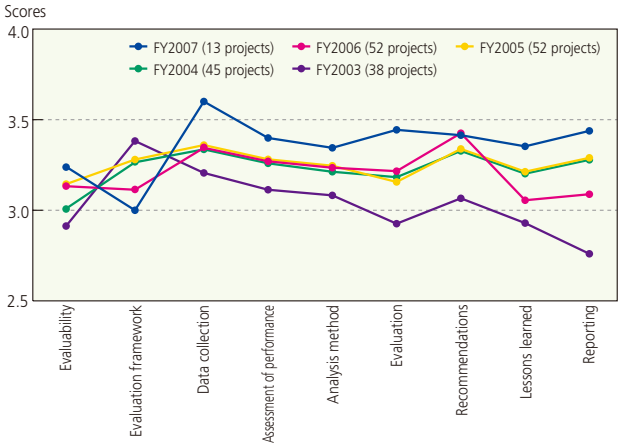
Quality of Projects Based on the Reports

The "medium" level (3.0) or above was achieved for all the five DAC evaluation criteria, namely, relevance, effectiveness, efficiency, impact and sustainability. "Relevance" achieved the highest mark while "efficiency" and "impact" were given relatively low marks. The scores for FY2004-2007 were higher than FY2003 in all the evaluated items.

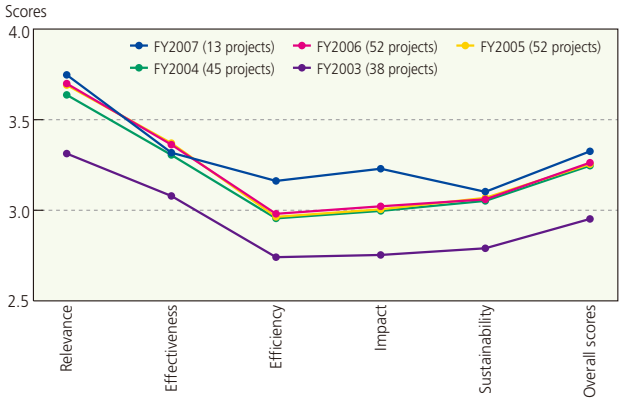
Four-grade ratings were also conducted based on the overall scores*2 which were calculated from the scores for the five evaluation criteria. The year-to-year changes showed that the number of projects with a grade D has decreased while the number of projects with a grade A has increased. A large difference in the scores between projects rated high and projects rated low was seen in the "achievement levels for the project purpose" in terms of their "effectiveness".

Therefore, it is recommended that appropriate approaches for project implementation should be selected at the planning stage in order to improve the quality of projects.

Year-to-Year Changes in the Quality of Terminal Evaluations (Average Scores)



Year-to-Year Changes in the Quality of Projects Based on Reports (Average Scores)



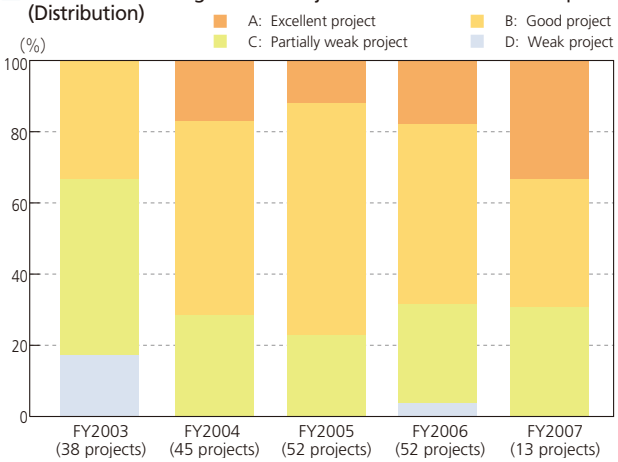
*1. Before the inauguration of the new JICA (in October 2008), the former JICA Advisory Committee on Evaluation decided on the evaluation framework and launched the evaluation work of the secondary evaluation for FY2008. Therefore, the Committee continued to conduct the evaluation after the inauguration.

*2. The overall scores were calculated by averaging the scores for the five evaluation criteria. The secondary evaluation in the previous fiscal year employed weighted scores based on the opinions of a small number of experts. However, weighting methods can be changed when the time and experts involved change. In addition, there was no substantial difference between the results of weighted scores and the results of simple averages due to the close correlation between the scores of the five items for the same project. Therefore, in this fiscal year, simple averages, which are stable in terms of the results, were used instead of using variable weighted scores.

Overall Evaluations of Projects by Secondary Evaluators Based on Terminal Evaluation Reports

Rank	Country	Project name	FY	Overall score
1	Ecuador	Project on the Improvement of Vocational Training	2006	3.97
2	Vietnam	Strengthening of the Food Industries Research Institute	2007	3.87
3	Afghanistan	Strengthening of Non-Formal Education	2006	3.71
4	Thailand	Project on Assistance for Public Health Insurance Information System Development 2005	2005	3.66
5	Laos	Project for Strengthening Medical Logistics	2007	3.63
6	Timor-Leste	Project on Capacity Building for Periodic Road Maintenance	2007	3.62
7	Afghanistan	Strengthening of the Teacher Education Program	2007	3.57
8	Senegal	Project for the Development of Human Resources in Health	2006	3.57
9	Laos	Capacity Development for Water Supply Systems	2006	3.55
10	Cambodia	Project on Capacity Building for Water Supply Systems	2006	3.55
11	Pakistan	Punjab Literacy Promotion Project	2006	3.54
12	Tanzania	Kilimanjaro Agricultural Training Centre (Phase 2)	2006	3.54
13	Kenya	Research and Control of Infectious Diseases Project	2005	3.45
14	Kenya	Strengthening of Wildlife Conservation Education	2007	3.39
15	Mexico	International Course on the Prevention of Uterine Cervical Cancer	2007	3.37
16	Nepal	Community Tuberculosis and Lung Health Project	2005	3.32
17	Chile	Project on the Institutionalization of Mine Pollution Control	2006	3.31
18	Egypt	Improvement of Science and Mathematics Education in Primary Schools	2005	3.30
19	Cambodia	Capacity and Institution Building in the Electric Sector	2006	3.30
20	Argentina	Natural Environment Conservation Project in Iguazu Region	2006	3.29
21	Philippines	Strengthening of Flood Forecasting and Warning Administration	2005	3.27
22	Panama	Water Quality Monitoring Techniques	2006	3.26
23	Ghana	Project for the Promotion of Farmers' Participation in Irrigation Management	2006	3.24
24	China	The Dairy Farming and Industry Development Project in Heilongjiang Province	2005	3.23
25	Indonesia	The Project on Enhancement of Civilian Police Activities	2006	3.23
26	Cambodia	Battambang Agricultural Productivity Enhancement Project	2005	3.22
27	Indonesia	Human Resources Development for Local Governance (Phase2)	2006	3.22
28	Armenia	Technical Educational Assistance in the System of Obstetrical Services	2006	3.19
29	Philippines	Improvement of Earthquake and Volcano Monitoring System	2005	3.18
30	Thailand	HIV/AIDS Center for Collaboration among GMS countries	2007	3.13
31	Indonesia	Development of Appropriate Technology for Multi-storey Residential Buildings and their Environmental Infrastructure for Low Income People II	2007	3.12
32	Malawi	Strengthening Mathematics and Science in Secondary Education through In-service Training	2007	3.10
33	Uzbekistan	Uzbekistan-Japan Center for Human Development	2005	3.08
34	Indonesia	Training of Agricultural Extension Officers on the Improvement of Farm Management	2006	3.06
35	Ecuador	Project for the Enhancement of Volcano Monitoring Capacity	2006	3.05
36	Serbia and Montenegro	Small and Medium-sized Enterprises Supporting-Agency Reinforcement Project	2006	3.02
37	Vietnam	Project for the Improvement of In-Service Training	2007	2.98
38	Kyrgyzstan	IT Human Resources Development (National IT Center)	2007	2.96
39	Mexico	Coastal Wetland Conservation in the Yucatan Peninsula	2007	2.94
40	Kenya	International Parasite Control Project	2005	2.93
41	Bulgaria	Project on the Development of a Business Management Skills Training Center for Small and Medium-sized Enterprises Managers	2006	2.92
42	Palau	Palau International Coral Reef Center Strengthening Project	2006	2.85
43	Cambodia	Legal and Judicial Cooperation Project (Phase 2)	2006	2.85
44	Bolivia	Mining Environmental Research Center Project	2006	2.78
45	Vietnam	Reinforcement of the SME Technical Assistance Center	2007	2.77
46	Pakistan	Improvement of Public Administration for Local Government in the Punjab	2006	2.70
47	Nicaragua	Rural Community Development Project for Vulnerability Reduction against Natural Disasters in the Municipality of Villa Nueva	2006	2.65
48	Laos	Project on Riverbank Protection Works	2006	2.65
49	Saudi Arabia	Technical Education Development and Training Center	2006	2.52
50	Myanmar	Strengthening the Capacity of the Central Statistical Organization	2006	2.42

Year-to-Year Changes in the Project Evaluations based on Reports (Distribution)



Reviewing Past Secondary Evaluations

Secondary evaluations are aimed at increasing the transparency and objectivity of internal evaluations through the involvement of external evaluators who are different from the primary evaluators. Based on the results of each secondary evaluation for the past five years, the Committee extracted issues that should be improved and showed good examples of high-quality terminal evaluation reports, in order to improve the quality of projects and terminal evaluations. In this way, secondary evaluations contributed to improving the quality of projects and their primary evaluations. JICA is expected to further improve its transparency and the objectivity of evaluations through reflection of the results and experiences of secondary evaluations in conducting ex-post evaluations of technical cooperation projects as external evaluations.

The Results of the External Evaluation and Rating

Third-Party Opinions about Ex-Post Evaluations of ODA Loan Projects

In order to ensure the objectivity of the evaluation, JICA asks experts in developing countries to review the ex-post evaluation report for all individual ex-post evaluations, then publishes their views for the report as a third-party opinion. Their opinions for each country are shown on the JICA website. A third-party opinion on five ex-post evaluations of ODA loan projects in China is shown below as an example (see pages 60-64 for details of the ex-post evaluations).

Third-party Opinions about the Ex-post Evaluations of ODA Loan Projects in China

Projects which were evaluated in ex-post evaluations

The Hunan Yuanshui River Basin Hydropower Development Project, the Jiangxi Jiujiang Thermal Power Plant Project (I) (II), the Harbin Electric Network Construction Project, the Liangping-Changshou Highway Construction Project and the Hainan East Expressway Expansion Project

● Developing country's expert (China)
Mr. Lin Jiabin
Deputy Head of the Social Development Research Department
Development Research Center of State Council, the People's Republic of China

The five projects which were subject to the ex-post evaluations were infrastructure development projects which have essentially been completed during the Chinese Tenth Five-year Plan period (2001-2005). The five projects include: two projects for constructing power plants [the Hunan Yuanshui River Basin Hydropower Development Project and the Jiangxi Jiujiang Thermal Power Plant Project (I) (II)]; one project for electric network construction (the Harbin Electric Network Construction Project); and two projects for highway construction (the Liangping-Changshou Highway Construction Project and the Hainan East Expressway Expansion Project). They can be categorized into electric power projects and highway projects.

When looking at these projects from a macro-standpoint, they greatly contributed to the economic development of China in recent years. China entered into a new growth period from 2001 which was the first year of the Tenth Five-year Plan, and some bottlenecks emerged regarding coal, electric power, oil and transport from around the end of 2002. The elimination of these bottlenecks became an important macro-control issue. The five projects mentioned above were completed and put into use in the period of the Tenth Five-year Plan and therefore they greatly contributed to the elimination of bottlenecks.

When looking at these projects from a local development standpoint, these projects are highly consistent with China's regional development strategies. Historically, the country has introduced its regional development strategies in stages including: the Coastal Development Strategy in the 1980s; the Great Western Development Strategy at the end of the 1990s; as well as two strategies which were introduced in the 21st century, namely the Northeastern Development Strategy and the Central Region Development Strategy. The following table shows the locations of the above-mentioned five projects, and the relationship between the projects and the regional development strategies.

Relationship between the Projects and the Regional Development Strategies

Project name	Location	Importance of the location in the regional development strategy	Role of the project
Hainan East Expressway Expansion Project	Hainan Province	The area was the largest special economic zone in China in 1988. It is now a province which is famous for its tourism and ecology.	The project is an important part of tourism and agricultural development in the areas along the route.
Liangping-Changshou Highway Construction Project	Chongqing City	It was an important area for the Great Western Development Strategy.	The project contributes to improvements in the structure of industry and the quality of residents' lives by improving mobility.
Harbin Electric Network Construction Project	Harbin City, the Heilongjiang Province	It is an important area for the Northeastern Development Strategy.	The project contributes to improvements in the efficiency of industry and the quality of residents' lives by improving the dependability and efficiency of the electricity network.
Hunan Yuanshui River Basin Hydropower Development Project	Hunan Province	The province is subject to the Central Region Development Strategy.	The project contributes to the development of the regional economy by improving electricity supply and demand.
Jiangxi Jiujiang Thermal Power Plant Project	Jiujiang City, the Jiangxi Province	The province is subject to and an important part of the Central Region Development Project.	The project contributes to the development of the regional economy by improving electricity supply and demand.

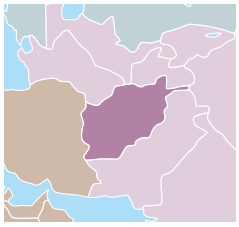
As shown in the above table, the locations of the five projects are highly relevant to China's regional development strategies. The facilities subject to the five projects are extremely important social infrastructure facilities for the areas. Therefore, the projects play an important role in regional development and in turn greatly contribute to the implementation of China's regional development strategies.

It is particularly noteworthy that the Liangping-Changshou highway played an important role in earthquake relief operations for the 2008 Sichuan earthquake (May 12, 2008) because the road was located in the affected area. The Sichuan earthquake hit the Liangping District particularly hard in the area around Chongqing City. In Liangping District, a school collapsed in a government designated cultural village, and 40 pupils were buried alive and 4 pupils died. The Chongqing-Changshou and Liangping-Changshou highways were hardly affected by the earthquake. They exhibited their social importance as emergency transport roads for urgent relief supplies and proved to be very useful in the government's response to the emergency. Therefore, the Liangping-Changshou highway was highly praised by the local government and the public.

The five projects were designed, constructed and run after taking into account environmental considerations and one of the projects was given an award by the local government (the Liangping-Changshou Highway Construction Project which received the "Best Green Award" by Chongqing City). ODA loan projects established good examples of construction project processes which sustain environmental conservation in China where environmental problems are becoming severer and environmental measures are increasingly being focused on.

At the time of writing this article, it is the 30th anniversary for the Chinese reforms. It will also soon be the 30th anniversary of the launch of ODA loans to China. ODA loan projects have been conducted side-by-side with the high economic growth in China since the Chinese reforms. Their focus has shifted from infrastructure development to agricultural development, and to environmental conservation. ODA loan projects should be highly praised since they have provided what China needed at each stage in time (and sometimes anticipated future needs) and they have contributed to Chinese national development over the past 30 years.

Asia Afghanistan



Strengthening of the Teacher Education Program

Contributing to the improvement of lessons in elementary education using teacher's guides

Rating

Secondary evaluation	Overall rating
	A

Project Objectives and Cooperation Framework

《 Objectives 》

The project aims to improve lessons in primary education by developing "teacher's guides" and conducting in-service training. The "teacher's guides" will include an explanation about the content of the text books, how to proceed with lessons and points to remember when conducting lessons.

《 Cooperation Framework 》

Overall goal:
- The skills and abilities of Afghan in-service teachers are upgraded.

Project purpose:
- To disseminate knowledge and skills to improve teaching and learning in the classroom with by-subject, grade-specific teacher's guides for grade 1-3 teachers in the targeted areas.

Outputs:
- To develop an INSET Training Package (teacher's guides and training manuals), which is in accordance with the new curriculum for grades 1 to 3.
- To implement short-term INSET training for teachers assigned to grades 1 to 3 in the targeted areas.
- To make policy suggestions for the improvement of PRESET and long-term INSET.

Outline of the Project

- Total cost (Japanese side): 480 million yen
- Period of cooperation: June 2005 to August 2007
- Partner country's implementing agency: Teacher Education Department (TED) and Compilation and Translation Department (CTD), Ministry of Education (MOE), Afghanistan.
- The number of experts dispatched: 12 experts (short-term)
- The number of technical training participants taught in Japan: 5 participants
- Main equipment provided: audio-visual equipment, equipment for keeping animals.

Developing teacher's guides with local personnel

Effects of Project Implementation (Effectiveness, Impact)

Project purpose (effectiveness): Development of new teacher's guides which correspond to the new curriculum is expected to be completed by the end of the project. Training was also conducted for 10,000 teachers, equal to half of the number of teachers who teach 1st to 3rd grade primary school children in the project areas. Therefore, the method for improving lessons using the teacher's guides is now used widely in the project areas. Based on the above-mentioned facts, it was determined that the project is likely to achieve its project purpose.

Forecast for the achievement of the overall goal (impact): Improvements to classes were observed through the in-service training and the utilization of the teacher's guides. Therefore, it was determined that the project is getting closer to achieving the overall goal. There were also spillover effects such as that NGOs which conduct similar activities to the project in other areas utilized the teacher's guides and the training manuals, and that other donors that work in these areas are planning to utilize the teacher's guides in their activities.

Relevance

Teacher education and curriculum development are priority issues in the National Education Strategic Plan for Afghanistan. The Japanese government's "Basic Education for Growth Initiative (BEGIN)" also stipulates teacher education as one of the priority issues. Therefore, the project purpose is consistent with the policies of the two countries.

Efficiency

All the inputs provided by both Japan and Afghanistan have been used effectively and are contributing to the delivery of the project's effects. Meetings and school visits were often suspended or postponed due to the deteriorating security situation, but both countries' efforts enabled the project to proceed as planned. Local personnel were effectively utilized as members of the development team of the teacher's guides.

Sustainability

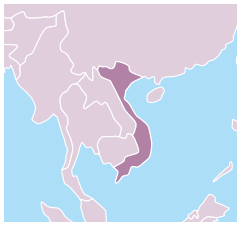
Lessons were improved by introducing the teacher's guides for lesson improvement, and the project activities are supported by the teachers. Therefore, it is expected that the guides will be utilized and the improvements to lessons will be seen on a wider scale. In order to continue the utilization of the project's outputs and to create further spillover effects, it is necessary for the Afghan government to closely coordinate and cooperate with other donors, NGOs, etc.

Conclusion, Lessons Learned, Recommendations

Through the efforts of Japan and Afghanistan, the expected outputs were achieved including the development of new teacher's guides and training manuals, the implementation of in-service training, etc. Regarding the impact of the project, improvements to lessons were also observed. The teachers themselves also feel that their teaching skills have improved.

* One city and five provinces (Kabul City, Kabul Province, Nangarhar Province, Balkh Province, Kandahar Province and Herat Province)

Asia **Vietnam**



Strengthening of the Food Industries Research Institute

Contributing to the strengthening of research and development (R&D) capacities for the creation of higher value-added products in the food processing industry

Rating

Secondary evaluation	Overall rating A

Project Objectives and Cooperation Framework

《 Objectives 》

The project was to strengthen the capabilities of the Food Industries Research Institute (FIRI) which provides technical assistance to the food processing industry, which has problems with quality management and preservation technologies. The project thereby aimed to improve the technical capacities of small and medium-sized food processing enterprises in Vietnam.

《 Cooperation Framework 》

Overall goal:

- Food processing technologies are improved in Vietnamese small and medium-sized food processing enterprises.

Project purpose:

- The FIRI's ability to develop food processing technologies is strengthened. The FIRI's function to provide the necessary information for certification is strengthened.

Outputs:

- The characteristics of major processed food products distributed in Vietnam are clarified.
- FIRI researchers' ability to utilize microorganisms and enzymes is improved.
- FIRI researchers' ability to test and analyze the components and quality of food products needed for domestic certification is improved.
- FIRI researchers' technical guidance ability is improved regarding guidance on quality management and food processing for small and medium-sized food processing enterprises

Outline of the Project

- Total cost (Japanese side): 560 million yen
- Period of cooperation: September 2002 to September 2007
- Partner country's implementing agency: the Food Industries Research Institute (FIRI)
- The number of experts dispatched: 8 experts (long-term), 21 experts (short-term)
- The number of technical training participants taught in Japan: 36 participants
- Main equipment provided: biochemical analysis instruments, etc.

Simple testing of products at a food processing site (boiled cucumber)

Effects of Project Implementation (Effectiveness, Impact)

Project purpose (effectiveness): R&D capabilities have been improved as can be seen in the fact that 40 research papers were published in the related subject area and six utility solutions were obtained regarding food processing. 26 technical guidance sessions were conducted for small and medium-sized food processing enterprises. Considering that the project was focusing on technical guidance activities when the evaluation was conducted, it is expected that 35 technical guidance sessions (the set target) will be achieved by the end of the project period. Therefore, the project is expected to achieve its project purpose.

Forecast for the achievement of the overall goal (impact): Improvements were observed in the processing technologies at three food processing enterprises which had received FIRI's technical guidance. It is expected that the overall goal will be achieved if technical guidance continues to be provided. FIRI staff are aware of the importance of the activities and they are highly motivated, and therefore it is likely that the technical guidance activities will continue.

Relevance

In Vietnam, one of the priority policy issues is the development of rural areas which are home to 70% of the country's population. The government is implementing various measures to develop small and medium-sized enterprises including food processing enterprises, in addition to the development of the rural infrastructure and the diversification of agricultural products. In Japan's Country Assistance Program for Vietnam, agricultural and rural development is one of the assistance priorities. Therefore, the project is consistent with both countries' policies.

Efficiency

All the inputs provided by Japan and Vietnam have been used effectively and are contributing to the delivery of the project's effects. In the initial stage of the project, clear indicators and targets were not set in the plan. This delayed the delivery of the project's effects. However, the mid-term evaluation helped to set detailed indicators and the project activities accelerated from then on, therefore the efficiency of the project has been ensured.

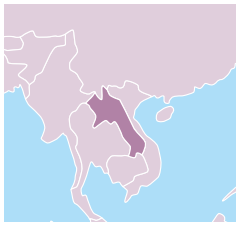
Sustainability

At the time of the evaluation, it was determined that the activities were highly sustainable in terms of political, organizational, financial and technical sustainability. However, considering that the FIRI will become an independent administrative corporation in 2009, it is necessary for the FIRI to increase their independent finance sources.

Conclusion, Lessons Learned, Recommendations

In general the project is highly appreciated. Through the project, the FIRI became recognized as an organization which played an important role in the improvement of technologies used by Vietnamese small- and medium-sized food processing enterprises. It is expected that the FIRI will continue to improve their capacity to conduct research and to provide technical assistance for enterprises, through their own efforts. Lessons learned through this project regarding the operation of a project are that clear indicators and targets should be set from the initial planning stage, and that the Project Design Matrix should be reviewed and amended where necessary as the project proceeds.

Asia Laos



Project for Strengthening Medical Logistics

Contributing to the appropriate management of medicines and other medical supplies

Rating

Secondary evaluation	Overall rating
	A

Project Objectives and Cooperation Framework

《 Objectives 》

The project will educate technicians on the maintenance of medical equipment so that they can maintain and repair medical equipment, and improve the capabilities of medical supply managers, as well as improving medical supply storage conditions. Through these activities, the project aims to realize the appropriate management of medical equipment and medical supplies.

《 Cooperation Framework 》

Overall goal:
- Medicines, medical products and equipment come to be managed and utilized efficiently and properly.

Project purpose:
- The mechanism is established at the central and provincial levels for managing and utilizing medicines, medical products and equipments efficiently and properly.

Outputs:
- The system is established for supporting central and provincial levels through MES and Logistics Center.*
- The capacity of management, maintenance, and repair for technical staff is improved at MES, central and provincial hospitals.
- The management capacity for central and provincial hospital managers is improved.
- The capacity of storage, handling, and inventory control for staff in charge of inventory control of medicines and medical products is enhanced at the Logistics Center and warehouses in 4 target provinces.

Outline of the Project

- Total cost (Japanese side): 246 million yen
- Period of cooperation: May 2005 to April 2008
- Partner country's implementing agency: the Medical Product Supply Center (MPSC), the Ministry of Health (MOH)
- The number of experts dispatched: 1 expert (long-term), 18 experts (short-term)
- The number of technical training participants taught in Japan: 8 participants
- Development of facilities: construction of the Logistics Center
- Main equipment provided: forklifts, hydro-thermometers with data loggers, electric stacker lifts, etc.

* It was previously the Central Warehouse. The Logistics Center will aim to serve as the central warehouse which stores medicines, medical products in Laos.

Effects of Project Implementation (Effectiveness, Impact)

Project purpose (effectiveness): Through improvements in the technical abilities of technicians who maintain medical equipment in hospitals and the implementation of daily maintenance checks by users, the medical equipment maintenance was improved. Systems for managing medical products and medical equipment efficiently and appropriately were also established through the development of the Logistic Center. For example, the average storage period for medicines was halved from 12 months to six months. Therefore, it was determined that the project will be able to achieve its project purpose.

Forecast for the achievement of the overall goal (impact): The annual average operation rates for medical equipment in central and provincial hospitals are generally increasing. A 0% annual dead stock rate for medicines was achieved at the Logistics Center and at warehouses in three provinces which are the project target areas. If the daily operations (which were implemented in the project) continue to be implemented after the project ends and the operation rate for apparatus is further improved, it will be possible to realize the efficient management and utilization of medical apparatus. Therefore, it was determined that it will be possible to achieve the overall goal.

Relevance

In the Health Strategy to 2020 created by the Laos Ministry of Health, there are four priority programs which are related to the project's subject area. Therefore, the objectives of the project are consistent with the priority issues of the Laos Ministry of Health. "Improvement in health care services" is also one of the priorities stipulated in Japan's Country Assistance Program for Laos PDR. Therefore, the project is also consistent with Japan's ODA policy.

Efficiency

Through the development of the Logistics Center which serves as the central warehouse that stores medicines and medical products, the project was able to show provincial warehouses a model logistic (storage and transport) system for medical products. Therefore, the project succeeded in facilitating the establishment of appropriate logistic systems at provincial warehouses.

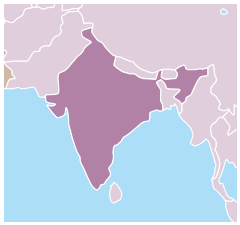
Sustainability

It is expected that the activities will continue to be conducted because the maintenance checks for medical equipment and the management of medicines. are becoming part of their daily routine. Therefore, the activities are highly sustainable in terms of political and organizational sustainability. However, there is a need to secure appropriate personnel and financial sources for maintenance and management, in order to perform further improvements.

Conclusion, Lessons Learned, Recommendations

The management of medical equipment has been improved. For example, maintenance checks are now conducted at each hospital on a daily basis, and the operational status of the medical equipment can now be monitored more easily. With regard to the management of medicines, the Logistics Center started serving as a hub for the national logistics system and this enabled the appropriate storage of medicines. Therefore, the project is considered to have brought highly successful results. As the next steps, it is recommended that the MOH should develop guidelines for logistics systems and establish a budgetary system which will provide a sufficient budget for the continuation of the project's activities and the utilization of the project's outputs.

Asia India



Calcutta Transport Infrastructure Development Project

Contributing to reducing traffic congestion and a better environment by improving and grade-separating intersections in this large city

【External evaluator】
Koichi Ishii, Pegasus Engineering Corporation

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	c	
Sustainability	a	

Project Objectives

To improve road surfaces for smoother traffic by building ten major intersections in the central part of the city, and thereby contribute to economic development, better public transport services, and a more favorable urban environment.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 10,679 million yen / 10,531 million yen
- Loan agreement: February 1997
- Terms and conditions: 2.1% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: December 2005
- Executing agency: Transport Department, State Government of West Bengal
- Website URL: http://www.wbgov.com

Addtional work area

Changes in traffic volume at peak times (No. of cars/hour)*

Intersection	Direction	Before the project	At the time of ex-post evaluation Feb. 2008	Percentage increase
AJC BOSE	West→East	400	1,840	360
	East→West	274	2,054	650
GARIAHAT	North→South	950	2,314	144
	South→North	1,090	2,872	163
PARK	South→North	1,976	4,437	125
	North→South	1,746	3,226	85
LOCK GATE	South→North	475	930	96
	North→South	234	1,046	347

* The peak times are defined as 09:00 - 11:00 and 16:00 - 18:00.
Source: Transport Department, State Government of West Bengal

Effects of Project Implementation (Effectiveness, Impact)

This project has resulted in gradual increases in traffic volume in the city of Kolkata, formally known as Calcutta, judging from the fact that the traffic volume at most of the grade-separated intersections constructed under this project increased more than 100% (see the table below). The project has also made some contribution to smoother traffic flows in the city. It is evident from the fact that the average traveling speed along seven routes in the city increased from 12.9 km/h in 1992 to 19.6 km/h at the time of the ex-post evaluation, and from the beneficiary survey showing that 77% of the road users who responded noted reduced traffic congestion and a shorter commuting time, and that some 73% reported better driving comfort. Finally, the project has made some contribution to a better urban environment as well. Such air pollutants as SO_2 and NO_2 as well as noise levels have been on the decline, although levels of suspended particle matter (SPM) and noise have yet to meet national standards. This project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with India's national policies and development needs at the times of both appraisal and ex-post evaluation. Kolkata has far much lower ratio of roads than that of other major cities, making road traffic more concentrated in the city center. The need to increase the road capacity, especially by grade-separating or otherwise improving intersections, was well recognized in the city in the project planning phase. At the time of the ex-post evaluation, more emphasis was placed on how to cope both with the increased transport demand as a result of recent economic growth and with health hazards associated with air and noise pollution.

Efficiency

The project period was much longer than planned and the project costs slightly exceeded the plan (182% and 104% of planned respectively); therefore the evaluation for efficiency is low. The major causes of the delay were associated with land acquisition and the need for relocating underground installations such as water mains. The additional cost was chiefly due to the relative increase in the value of the domestic currency and by additional work to make up for the cancelled work for grade-separated intersections.

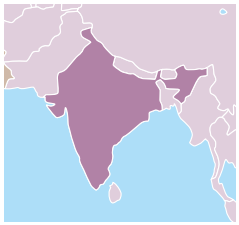
Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system; therefore sustainability of this project is high. The Hooghly River Bridge Commissioners (HRBC), which is responsible for the O&M of the project, provides its staff with regular training. It also received adequate budget allocations for the project O&M.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. There remains a considerable need to construct the planned but cancelled intersections with grade separation. It is advisable to study technical alternatives soon, including the construction of bridge piers with a smaller cross section that will not require the relocation of underground installations. A major lesson learned is the importance of establishing a system that ensures smooth coordination with the residents and organizations concerned to provide prompt solutions to problems associated with land acquisition and the relocation of underground installations.

Asia India



Eastern Karnataka Afforestation Project

Contributing to the prevention of degradation and the regeneration of degraded forests, and livelihood improvements through participatory afforestation

【External evaluator】
Koichi Ishii, Pegasus Engineering Corporation

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	b	

Project Objectives

To prevent the degradation of forests, regenerate already degraded ones, conserve biodiversity, and increase forest productivity by implementing sustainable, community-participatory afforestation (tree-planting, extension activities, etc.) in Karnataka State, thereby contributing to a better environment and poverty reduction in the region.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 15,968 million yen / 14,831 million yen
- Loan agreement: February 1997
- Terms and conditions: 2.1% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: May 2005
- Executing agency: Karnataka Forest Department, Government of Karnataka
- Website URL: http://karnatakaforest.gov.in

Annual production volume and value of the forest products

Forest products	Annual production volume (tons)		Annual value (million rupees)*	
	Plan at the time of the appraisal	Actual volume for FY2007	Plan at the time of the appraisal	Actual volume for FY2007
Fuel wood	284,000	340,000	196	235
Bamboo	12,310,000 (numbers)	112,500,000 (numbers)	19	169
Fodder (grass / leaves)	5,842	15,900	1	3
Fruits	10,224	46,700	102	467

* The figures have been rounded off to the nearest millions of rupees.
Source: Karnataka Forest Department, Government of Karnataka

Effects of Project Implementation (Effectiveness, Impact)

Under this project, some 340 million trees were planted in a total area of 557,870 ha in 2007 which outperformed the initial target of 470,500 ha. The project also made some contribution to improved forest productivity. For example, the annual production of fuel wood increased some 20 percent from 196 million rupees at the time of the appraisal to 235 million rupees, as shown in the table below.

As for the impact of this project, a number of effects have been noted, including a better local environment through water source conservation and increases in soil water content, and poverty reduction through the reduced amount of labor required for collecting fuel wood and fodder (lower branches and leaves).

Through this project, Joint Forest Management (JFM), a participatory forest management was implemented. JFM initiatives included the afforestation planning that accommodates community needs through the village forest committees (VFCs) set up by local residents for the consultation with the state forestry department, the executing agency, and other operation and maintenance of the forest area managed by VFC. Intensified training for forest department officials and collaboration with NGOs both resulted in better coordination between the VFCs and the forest department under JFM.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with India's national policies and development needs at the times of both appraisal and ex-post evaluation. The importance of afforestation was well recognized in Karnataka State at the time of project planning. This recognition remains relevant at the time of the ex-post evaluation (date of 2005) and special emphasis is placed on the need for regenerating degraded forests as the state forest coverage still stands at 21%; below the national average of 23%.

Efficiency

The project period was much longer than planned (167% of the planned period). However, the total area afforested surpassed the planned area by 19% with project costs lower than planned (93% of planned costs); therefore the efficiency of the project is high. The period extension was due to the additional afforestation.

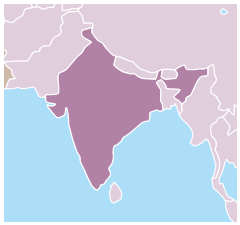
Sustainability

Some problems have been observed in its financial sustainability which is unclear partly because the scale of the forest development fund (an important financial source for the reforestation, operation and maintenance) fluctuates depending on the yields of forest products as well as on seasonal factors. However, no major problems have been observed with the organizational and technical aspects of the project; therefore sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. A major lesson learned is that support for livelihood improvement activities right after afforestation activities has proved effective as a temporary measure until the forests produce adequate benefits. A major recommendation is that the sustainability of the forest development fund should be studied from a financial perspective.

Asia India



Tamil Nadu Afforestation Project

Contributing to environmental and livelihood improvements for local communities with participatory afforestation

【External evaluator】
Koichi Ishii, Pegasus Engineering Corporation

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	a	

Project Objectives

To prevent the degradation of forests, regenerate already degraded ones, conserve biodiversity, and increase forest productivity by implementing a sustainable afforestation (tree-planting, extension activities, etc.) with community participatory efforts in Tamil Nadu State, thereby contributing to a better environment and poverty reduction in the region.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 13,324 million yen / 13,286 million yen
- Loan agreement: February 1997
- Terms and conditions: 2.1% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: May 2005
- Executing agency: Tamil Nadu Forest Department, Government of Tamil Nadu
- Website URL: http://www.forests.tn.nic.in

Effects of Project Implementation (Effectiveness, Impact)

Under this project, some 160 million trees were planted in a total area of 457,454 ha which outperformed the initial target of 470,500 ha. This afforested area accounts for 19.8% of the total forest area of the state standing at 2,304,400 ha in 2005, making some contribution to increasing the state's forest coverage.

Through this project, Joint Forest Management (JFM), a participatory forest management, was implemented. JFM initiatives included the afforestation planning that accommodates community needs through the village forest committees (VFCs) set up by local residents for the consultation with the state forestry department, the executing agency, and other operation and maintenance of the forest area managed by VFC. It is observed that this project had the effect of improving the environment by reducing pressures on the forests from illegal logging or grazing. In addition, it is estimated that the project also made some contribution to poverty reduction, as some 170,000 people or about 40% of the total VFC membership (some 460,000) started businesses under the livelihood improvement activities, including microfinance via the VFCs (see the table below).

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Cumulative number of new businesses participants under the livelihood improvement activities by VFC (as of 2005) (unit: person)

Type of business	Men	Women	Total
Incense	257	1,771	2,028
Bamboo baskets	544	1,599	2,143
Coconut cord	445	574	1,019
Dairying	20,625	24,459	45,084
Bee-keeping	426	249	675
Poultry	1,568	1,090	2,658
Animal husbandry	4,186	3,726	7,912
Woven palm	1,055	2,071	3,126
Tailoring	1,082	5,611	6,693
Utensil and furniture rental	161	179	340
Others	55,338	48,914	104,252
Total	85,687	90,243	175,930

Source: Tamil Nadu Forest Department, Government of Tamil Nadu

Relevance

This project has been highly relevant with India's national policies and development needs at the times of both appraisal and ex-post evaluation. In Tamil Nadu State, the regeneration of degraded forests was given the highest priority in the planning stage. This recognition remains relevant at the time of the ex-post evaluation, and special emphasis is placed on sustainable forest management through JFM and the diversification of income sources for forest-dependent people.

Efficiency

The project period was much longer than planned (161% of the planned period), and the project cost slightly exceeded the plan (110% of the planned cost). However, a major reason for those was the additional undertakings associated with changes in the project scope. Therefore the efficiency of the project is high.

Sustainability

The sustainability of the livelihood improvement activities is unclear. However, the training for forest department officials, VFC members and NGOs has remained in place in Phase II of this project, and no major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; therefore sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. A major in its success was the temporary financial support at the early stages of the project, when the yields of forest products were small and funds for livelihood improvement activities were in short supply.

Asia Indonesia

Kupang and Bitung Port Development Project

Modernizing hub ports for promoting international trade and the regional development of Eastern Indonesia

【External evaluator】
Masami Sugimoto, SHINKO Overseas Management Consulting, Inc.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To strengthen port capacity by developing the port facilities of Kupang Port in East Nusa Tenggara Province and Bitung Port in North Sulawesi Province, thereby contributing to the regional development of Eastern Indonesia through enhanced maritime transport.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 5,250 million yen / 4,997 million yen
- Loan agreement: December 1996
- Terms and conditions: 2.7% interest rate (consulting services: 2.3%); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: December 2005
- Executing agency: Directorate General of Sea Transportation, Ministry of Transportation
- Website URL: http://www.dephub.go.id/hubla/ (in Indonesian)

Effects of Project Implementation (Effectiveness, Impact)

The number of ship calls at Kupang Port and their total gross tonnage increased 56% and 26%, respectively, from 2000, before the construction work started. For the same period, the number of ship calls at Bitung Port and their total gross tonnage rose 13% and 10%, respectively. The volume of cargo handled also grew, up 11% for Kupang Port and up 20% for Bitung Port. The growth rate for container cargo was remarkable, 163% for Kupang Port and 51% for Bitung Port. The average waiting time for ships dropped by over 70 hours for Kupang Port and 10 hours for Bitung Port from 2001. According to a beneficiary survey to which a total of 40 companies responded, 77% of the users of Kupang Port and 100% of the users of Bitung Port said that port safety had improved after the project. The percentage of those who replied that port services had improved was 96% for Kupang Port and 81% for Bitung Port.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Indonesia's national policies and development needs at the times of both appraisal and ex-post evaluation. The Indonesian government remained committed to developing both ports as two of its strategic ports at these two points in time. It has already started the self-financed construction of additional berths at Bitung Port to meet the ever increasing demand for cargo handling.

Efficiency

This project cost less but took much longer than planned (153% of the planned period); therefore, the evaluation for efficiency is moderate. The implementation delay was caused by a number of factors, including changes in the project scope that had been made in the detailed design phase, the change of the equipment for the ports, which resulted in an extension of the procurement period, and the postponed commencement of the civil works to allow for a more careful environmental survey.

Sustainability

No major problems have been observed in the capacity, finance or operation and maintenance (O&M) system of PELINDO III and IV, which are responsible for the O&M of Kupang Port and Bitung Port, respectively; therefore, sustainability of this project is high. These two authorities are committed to training their staff in charge and contract out to subcontractors any major repairs that are too difficult for them to handle technically.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. A major lesson learned is that the project cost has not been well managed by the executing agency. It is necessary to arrange a rational project accounting system and clarify responsibility for record keeping when establishing a structure for project implementation and management.

The volume of containers handled (Unit: TEU*)

Year	Kupang Port	cense
2000	7,333	66,737
2001	7,840	80,386
2002	8,865	83,861
2003	12,320	92,898
2004	15,684	102,648
2005	18,988	103,265
2006	19,254	100,933

* TEU: Twenty-foot equivalent unit
Source: PELINDO III and IV

Asia Indonesia

Bili-Bili Irrigation Project

Utilizing the water resources of the multi-purpose Bili-Bili Dam for improving agricultural productivity in the region

【External evaluator】
Masami Sugimoto, SHINKO Overseas Management Consulting, Inc.

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To increase rice production by constructing and rehabilitating weirs, primary and secondary canals and drainage, as well as procuring operation and maintenance equipment, in South Sulawesi Province, thereby contributing to higher incomes for local farmers.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 5,472 million yen / 5,403 million yen
- Loan agreement: December 1996
- Terms and conditions: 2.7% interest rate (consulting services: 2.3%); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: December 2005
- Executing agency: Directorate General of Water Resources, Ministry of Public Works
- Website URL: http://www.pu.go.id/satminkal/dijen_sda/ (in Indonesian)

Changes in the irrigated and cultivated areas and the unit yield of rice

Indicator		Unit	Planned value (set in 1996)	Actual (2005)
Irrigated area		ha	24,600	23,786
Cultivated area (wet season)		ha	20,700	23,040
Unit yield of rice	Wet season	t/ha	4.6	4.8
	Dry season	t/ha	4.6	N/A

Sources: The Project Completion Report (PCR); the Consultant's Service Completion Report; and Agricultural Census of the Central Bureau of Statistics

Effects of Project Implementation (Effectiveness, Impact)

The total irrigation area stood at 23,786 ha in 2005 as against the project target of 24,600 ha. The area under rice cultivation totaled 23,040 ha in the same period, compared with the planned value of 20,700 ha. The average unit yield of rice in 2005 in the two districts covered by the project was 4.8 tons/ha, surpassing the target yield of 4.6 tons/ha, according to the Agricultural Census of the Central Bureau of Statistics. In a beneficiary survey conducted in Kampili, Bili-Bili, and Bissua, 94% of the 203 farmers who responded said that their living standards improved after the completion of the project. Some 80% of the respondents noted improvements in their children's education and family's health status.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Indonesia's national policies and development needs at the times of both appraisal and ex-post evaluation. At these two points in time, the Indonesian government continued to focus on the development of irrigation facilities for agricultural development and the regional development of Eastern Indonesia in formulating different agricultural programs.

Efficiency

This project cost less but took longer than planned (146% of the planned period); therefore the evaluation of efficiency is moderate. The implementation delay was caused by a number of factors, including the economic turmoil triggered by the Asian currency crisis of 1997, and the resultant reorganization of the administrative agencies and the regulatory framework, which led to delays in project implementation procedures.

Sustainability

Some problems have been observed in terms of the institutional framework for the operation and maintenance (O&M) of the irrigation facilities, which has not been practically functioning; therefore, sustainability of this project is fair. The field survey for this evaluation suggests that the weirs and main canals are largely well maintained, although there is room for improvement in the functioning of the water users' associations.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. A major lesson learned is that the responsibility for end canal development has not been clearly defined. An irrigation project should be designed to cover end canals as well to maximize its effectiveness and impact. Recommendations include strengthening the monitoring system for measuring project effects and impact; defining the division of responsibilities for the development and O&M of the irrigation facilities; and encouraging the proper fulfillment of these responsibilities through collective discussion devices.

Asia Indonesia

Rural Areas Infrastructure Development Project (3)

Contributing to higher living standards for local residents by developing the basic infrastructure in 8,000 villages in 14 provinces covering islands other than Java and Bali

【External evaluator】
Masami Sugimoto, SHINKO Overseas Management Consulting, Inc.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	b	

Project Objectives

To promote the sustainable development of the regional economy and enhancement of self-reliant capacity of communities by developing their basic infrastructure, including access facilities, small-scale irrigation facilities, small water-supply systems, and sanitation facilities in villages in 14 provinces covering islands other than Java and Bali, thereby contributing to the poverty alleviation in Indonesia.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 20,039 million yen / 19,906 million yen
- Loan agreement: July 2001
- Terms and conditions: 1.8% interest rate; 30-year repayment period (including a 10-year grace period); general untied (consulting services: 0.75%, 40-year repayment period [10 year grace period]; bilateral tied)
- Final disbursement date: October 2005
- Executing Agencies: Deputy for Regional Development and Local Autonomy, National Development Planning Agency (BAPPENAS); Ministry of Finance; D.G. of Human Settlement, Ministry of Public Works; D.G. of Regional Development and D.G. of Community Empowerment, Ministry of Home Affairs
- Website URL:
  http://www.bappenas.go.id/ (BAPPENAS);
  http://www.depkeu.go.id/Ind/ (Ministry of Finance);
  http://ciptakarya.pu.go.id/
  (D.G. of Human Settlement, Ministry of Public Works);
  http://www.depdagri.go.id/ (Ministry of Home Affairs)
  (All in Indonesian)

Savings in access time to essential facilities (via roads, bridges, etc.)

Facilities \ Change	Access time (min.)		Average saving (%)
	Before the project	After the project	
Asphalt Road	22	10	55%
Shopping market	44	24	45%
Terminal*	29	14	52%
Clinic	22	14	36%
Village office	23	15	35%
Kecamatan office	46	31	33%
School	14	10	29%

* Terminal for means of local public transportation such as the ojek (motorbike) and mini bus
Source: Beneficiary survey

Effects of Project Implementation (Effectiveness, Impact)

According to a survey of the beneficiaries of the project, to which 61 people from four provinces responded, the project resulted in a saving of 30% to 55% in the access time to such essential facilities as markets, schools and clinics. From 80% to 100% of the respondents said their income increased as a result. The development of small-scale irrigation facilities reduced the proportion of beneficiary farmers who complained about water shortages during the dry season from 86% to 14%. As a result, the unit yield of rice rose 20% to 30%. Some 70% of the farmers reported gains in income. With a small water-supply system, almost 100% of the respondents switched their source of domestic water from rivers or other natural waters to tap water. The installment of sanitation facilities gradually changed the local residents' awareness of hygiene. The proportion of those with a household toilet increased from 0% to 10-20% after the project. An improvement was also observed in the health status of residents in areas that gained access to tap water and sanitation under the project. Almost 100% of the respondents said that their family members became less likely to get ill.

Therefore, project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Indonesia's national policies and development needs at the times of both appraisal and ex-post evaluation. At these two points in time, the Indonesian government was implementing the Integrated Area Development Program aimed directly at the poor. Basic infrastructure development in rural villages constituted an essential element of the program.

Efficiency

Both project period and costs were almost as planned; therefore, efficiency of the project is high.

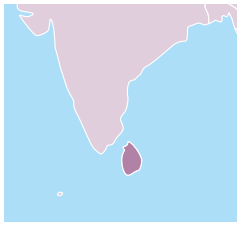
Sustainability

Although local residents are required to operate and maintain almost all the facilities developed under the project themselves, the O&M activities are not systematically conducted in a fixed institutional framework. On the other hand, many of such facilities are kept in good condition supported by their traditional spirit of mutual help; therefore, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. A lesson learned is that to manage a small-scale, multi-site project like this one, it is essential to develop and operate an integrated management system that covers the central to the field levels. Another lesson is that an approach that accommodates local culture should be taken to maximize the project effects. Recommendations include reviving the monitoring system based on data from the Central Bureau of Statistics, reviewing the O&M system that has been applied across the board with a view to enhancing the sustainability of this project, and taking additional steps to build the capacity of district government officials.

Asia Sri Lanka



Kukule Ganga Hydroelectric Power Project

Contributing to industrial development and a higher electrification rate by building a hydroelectric power plant

【External evaluator】
Hajime Sonoda, Global Group 21 Japan, Inc.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To provide stable supply of electricity in Sri Lanka by constructing a run-of-river type hydroelectric power plant (35 MW × 2 units) equipped with a regulation pond in the Kukule Ganga (River) – a tributary of the Kalu Ganga (River) – which is a large rainfall zone, thereby contributing to the alleviation of the tight supply-demand situation for electricity and to the socio-economic development of Sri Lanka.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 21,227 million yen / 19,415 million yen
- Loan agreement: July 1994
- Terms and conditions: 2.6% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: June 2005
- Executing agency: Ceylon Electricity Board (CEB)
- Website URL: http://www.ceb.lk/

Effects of Project Implementation (Effectiveness, Impact)

The average power generation of this plant between 2004 and 2007 reached 306 GWh (97% of the planned value). In 2006, the plant accounted for about 4.0% of the peak power supply and about 3.4% of the annual power supply, suggesting that the project made a limited and indirect contribution to industrial development and a higher electrification rate.

It should be noted that the project had a favorable impact on the lives of local residents when the construction of access roads in the vicinity of the plant provided easy access to the otherwise isolated areas. Meanwhile, delays were observed in compensation to some affected people.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Sri Lanka's national policies and development needs at the times of both appraisal and ex-post evaluation. In addition, there is great demand for the capacity of low-cost hydroelectric generation since a demand for power is increasing continuously and the cost of the thermal power generation is rising.

Efficiency

This project constructed a plant with a planned generation capacity within the planned cost. However, the project period was much longer than planned (44 months behind schedule) due to delays in procurement and revisions. Therefore, the evaluation for efficiency is moderate.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system; therefore, sustainability of this project is high. With an adequate O&M budget, the plant is largely operated and maintained in an appropriate manner.

Conclusion, Lessons Learned, Recommendations

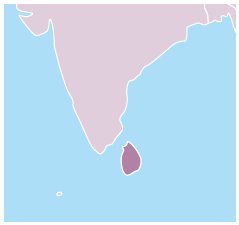
In light of the above, this project is evaluated to be highly satisfactory. Three major lessons have been learned from the project. First, it is important to exert every effort to make sure the progress of a power generating project designed to deal with the looming gap in the demand and supply of power. Second, access roads may bring socioeconomic benefits to communities in the vicinity of the power plant. Third, both the executing agency and donors need to monitor the process and progress of compensation carefully and the content of compensation needs to be examined to accommodate the socio-economic conditions of the people to be compensated. The CEB should take the initiative in starting a constructive dialogue so that an agreement on the outstanding compensation issue can be reached with all the people concerned. This evaluator recommends providing advanced training for engineers engaged in this project as well as provides training on the design and operation of the SCADA system.

Operational performance of the Kukule Ganga Hydroelectric Power Plant

	2003 Oct.-Dec.	2004	2005	2006	2007
Maximum output (MW)	80	80	80	75	75
Annual power generation (GWh)	79	318	317	319	270
Annual operating hours (2 units total: hours)	2,098	8,865	8,797	9,003	7,665
Unplanned outage hours (2 units total: hours)	125	141	513	435	70

Note: The planned annual power generation was 317 GWh at the time of appraisal.
Source: Questionnaire results from CEB

Asia Sri Lanka



Small and Micro Industries Leader and Entrepreneur Promotion Project (1) (2)

Contributing to job creation and export increase by providing "two-step" loans to small and medium-sized enterprises (SMEs) and micro enterprises

【External evaluator】
Hajime Sonoda, Global Group 21 Japan, Inc.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	a	

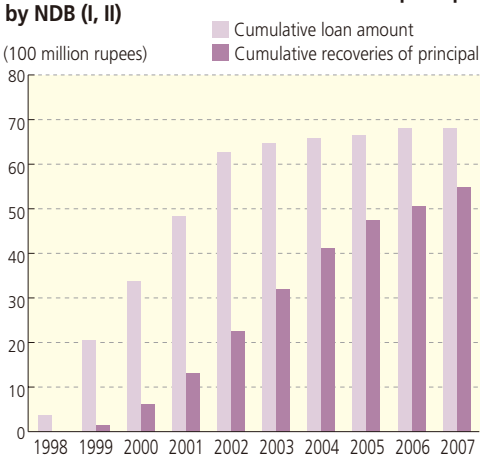
Project Objectives

To improve the productivity, profitability and technical capabilities of SMEs and micro enterprises in Sri Lanka by providing them with financial assistance for business operation and technical transfer at low interest rates, thereby promoting job creation and contributing to balanced economic growth and poverty alleviation.

Outline of the Loan Agreement

- Loan amount / disbursed amount: (I): 5,432 million yen / 4,838 million yen; (II) 5,410 million yen / 4,492 million yen
- Loan agreement: (I) August 1997; (II) January 2001
- Terms and conditions: Interest rate: (I) 2.3% / (II) 2.2%; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: (I) October 2001; (II) March 2006
- Executing agency: National Development Bank (NDB)
- Website URL: http://www.ndbbank.com/

Cumulative loan amount / recoveries of principal by NDB (I, II)



Source: Questionnaire results from NDB

Effects of Project Implementation (Effectiveness, Impact)

The 9,300 small and SMEs and micro enterprises or some 30% of the total number of such enterprises in Sri Lanka received loans under this project. It was estimated that one-third of them increased their productivity and profitability while a half of them saw their technical capabilities improved. Almost 70% of the enterprises made some sort of reinvestment. In sum, about 90% of the sub-loans were considered successful.

It was estimated that sub-loans under this project resulted in the creation of about 40,000 jobs and export increases of some four billion rupees per year (0.7% of total exports nationwide).

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Sri Lanka's national policies and development needs at the times of both appraisal and ex-post evaluation. There has been a high demand for funds among SMEs and micro enterprises.

Efficiency

The total amount of loans reached 94% of the planned figure, although the demand for sub-loans for technology transfers was low. Both project period and costs were almost as planned; therefore, efficiency of the project is high.

Sustainability

Although the commencement of the revolving funds* was delayed, no major problems have been observed in the financial sustainability of participating financial institutions, the status of repayments from them to the NDB, or the sustainability of the beneficiary enterprises. Therefore, sustainability of this project is high.

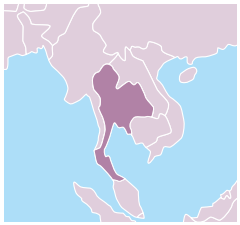
Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. One lesson learned is that periodic review and adjustment of the interest rate for end-users linked to the market rate will result in smooth loan operations. Another lesson is that in order to promote the use of sub-loans for training and technical services, low procedural cost, information dissemination, promotion and publicity activities for clients and coordination with providers of training and technical services are important. It is advisable to promptly start operation of revolving funds which has yet to be started.

The case of a beneficiary enterprise, a biscuit factory

* Surplus funds generated by the gap between the repayment period for a sub-loan and that for an ODA loan. A new loan will be offered by taking advantage of such a surplus.

Asia Thailand



MRTA Initial System Project (Blue Line) (1) - (5)

Contributing to addressing transportation problems in central Bangkok and improving the air quality and other environmental standards

【External evaluator】
Hiroyasu Ohtsu, Graduate School of Kyoto University

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To mitigate the continually worsening traffic congestion in Bangkok by constructing a subway in central Bangkok as part of the development of a mass transit railway network in accordance with the 7th and 8th National Economic and Social Development Plans, thereby contributing to the smooth and efficient movement of people and improvements in environmental problems such as air pollution.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 222,426 million yen / 216,456 million yen (total)
- Loan agreement: September 1996 (I)
- Terms and conditions: (I, II) 2.7% interest rate, 25-year repayment period (including a 7-year grace period); (III, IV, V, and the portions already financed by the local currency) 0.75 interest rate, 40-year repayment period (10-year grace period); general untied (consulting services: partially untied)
- Final disbursement date: March 2006 (V)
- Executing agency: Mass Rapid Transit Authority of Thailand (MRTA)
- Website URL: http://www.mrta.co.th/eng/index.htm

Special note

As the executing agency, the MRTA has taken the initiative to develop guidelines on accessibility for all and make arrangements for disabled persons, some of which are not required by the Thai law. These arrangements are highly evaluated as an example of good practice in the field of "the introduction of a universal design (or consideration for disabled or elderly persons)" in the ODA loan program.

Effects of Project Implementation (Effectiveness, Impact)

The Blue Line is providing services as planned in terms of both the number and frequency of the trains. Yet the number of passengers is below the initial projection of 240,000 - 430,000 passengers per day. The average number of passengers per day between July and November 2007 was 171,200. The main reason for this may be the fact that another mass transit project and the project to extend the Blue Line are behind schedule. On a positive note, the number of users has been on the rise. This growth is expected to continue. A beneficiary survey showed high levels of satisfaction among the users. Almost 100% of the users who responded to the survey said they were satisfied or very satisfied with the Blue Line. The commencement of this line in 2003 has resulted in less congestion along major roads in central Bangkok in terms of both the average traveling speed and the traffic volume of automobiles. It has also had a favorable impact on the air quality along the line. Reductions in air pollutants have been observed.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

The project has been highly relevant with Thailand's national policies and development needs both at the times of the appraisal and the ex-post evaluation. At these two points in time, traffic congestion mitigation and air quality improvement remained important issues for the Bangkok Metropolitan Area, underlining the significance of this project.

Efficiency

Project costs were lower than planned (94% of the planned cost) but the project period was longer than planned (126% of the planned period); therefore the evaluation for efficiency is moderate. The implementation delay was mainly caused by the postponed decision by the Cabinet on the approval of the concession contract.

Sustainability

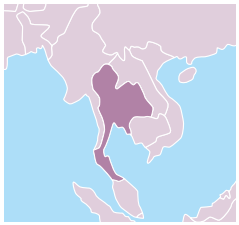
The sustainability of this project is fair. No major problems have been observed with the technical and structural aspects of the operation and maintenance by the MRTA, the executing agency, in relation to the operation and management of the line. With regard to the financial aspect, however, there is room for improvement in the profitability of Bangkok Metro Public Company Limited, the concessionaire.*

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. Lessons learned include the need to improve the bidding system for concession contracts and the need to consider the relevance of the concession contract option for a railroad development project. To enhance the sustainability of this project, the Thai government is advised to take measures to develop mass transit transport systems in a timely manner.

* The holder of a patent or a concession.

Asia **Thailand**



OCMLT Traffic Planning and Management Sector Loan

Improving the convenience and safety of the transport sector and thus contributing to less congestion and a better traffic environment

【External evaluator】
Hiroyasu Ohtsu, Graduate School of Kyoto University

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To meet three objectives of (i) improving the efficiency of road use, (ii) securing traffic safety, and (iii) enhancing the convenience of public transportation by developing road networks and implementing programs for better traffic safety, thereby contributing to less traffic congestion and a better traffic environment.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 4,148 million yen / 3,205 million yen
- Loan agreement: September 1998
- Terms and conditions: 2.2% interest rate, 25-year repayment period (including a 7-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); bilateral tied]
- Final disbursement date: January 2006
- Executing agency: Office of the Commission for the Management of Land Traffic (OCMLT)

Traffic signals installed in the city of Chiang Mai

An overpass constructed

Effects of Project Implementation (Effectiveness, Impact)

Under this project, a feeder transport system has been developed as a spin-off from the revision of the bus routes and schedules by the Bangkok Mass Transit Authority (BMTA). The program for transfer facilities for intermodal transportation in the Bangkok Metropolitan Area is expected to help reduce traffic jams in and around the metropolitan area. The master plan for mass transit railway lines in urban areas, which has been approved by the Cabinet, provides a future course of action for the construction of mass transit services.

The sub-project designed to install traffic signals in Chiang Mai as part of efforts to improve traffic safety has received favorable responses in a beneficiary survey. Many of the pedestrians who responded said the installment of pedestrian signals in the city had increased their safety on the streets.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

The project has been highly relevant with Thailand's national policies and development needs at the times of both appraisal and ex-post evaluation in light of the strategy for improving the traffic environment in the traffic sector.

Efficiency

Project cost was lower than planned (35% of the planned cost), but the project period was much longer than planned (194% of the planned period); therefore the evaluation for efficiency is moderate. The cost savings were made by such factors as the cancellation of the construction of grade-separated intersections, and the introduction of bidding. The implementation delay was caused by a protracted procurement process and the time required negotiating with local residents over landscape issues.

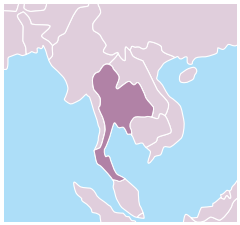
Sustainability

The sustainability of this project is fair. Although some pedestrian signals are in a bad state of repair in the city of Chiang Mai, no major problems have been observed with the technical, structural and financial aspects of the operation and maintenance by the executing agency.

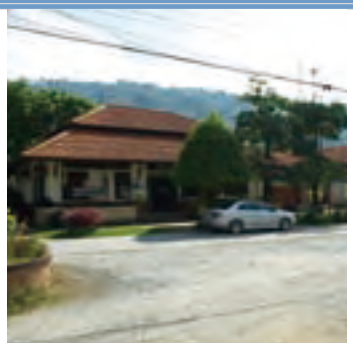
Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. A major lesson learned is the need for substantial briefings to be given to local residents and public hearings in advance; the project implementation was delayed primarily due to protests from the local residents. Improvements to some bus routes have yet to be made due to conflicting interests over which consultations are being held. It is advisable to make these improvements since they will help reduce traffic congestion, especially when another mass transit system is put in place.

Asia Thailand



Regional Development Program (2)



Contributing to the sustainability of tourism development by supporting the improvement of the quality of tourism

【External evaluator】
Satoshi Ohira, Keio University

Rating

Effectiveness, Impact	b	Overall rating C
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To enhance the quality of tourism – an important part of the Thai economy – by developing the basic infrastructure, conserving the environmental, cultural and historical resources of tourist spots, and constructing centers for developing human resources for environmental conservation, thereby contributing to the sustainability of tourism development.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 3,602 million yen / 2,454 million yen
- Loan agreement: September 1998
- Terms and conditions: Interest rates: 0.75% (for the sub-projects for the nature research centers and consulting services), 1.7% (for the sub-projects for constructing waste and sewage treatment plants), and 2.2% (for other sub-projects); repayment period: 40 years including a 10-year grace period (for the sub-projects for nature research centers and consulting services), 25 years including a 10-year grace period (for constructing waste and sewage treatment plants and other sub-projects); general untied (consulting services: bilateral tied)
- Final disbursement date: January 2006
- Executing agency: Tourism Authority of Thailand (TAT)
- Website URL: http://www.tourismthailand.org/

Special note
The industrial village sub-projects under the tourism facilities package deserve special attention. This sub-project is unique both in that it is built on the craftsmanship of local residents for sustainable tourism development and in that it takes advantage of Japanese experience in "roadside stations" (michinoeki).

Effects of Project Implementation (Effectiveness, Impact)

The average length of stay for domestic tourists slightly increased from 2.31 days in 1997 to 2.65 days in 2006. The number of foreign tourists visiting Thailand plunged after the currency crisis of 1997. It bounced back to the pre-crisis level in 2006, when this program was completed. It is unclear whether the program contributed to this recovery. The program outcomes may not be explicitly observed across the country.

The increase in the average spending by both domestic and foreign tourists has resulted in a steady growth in tourism revenues. It is easy to imagine that the depreciation of the baht following the currency crisis has allowed foreign tourists to now spend more and stay longer. It is difficult to determine whether the increase in tourism revenues is due in part to this program or other efforts to upgrade the quality of tourism in Thailand.

On a positive note, this program has produced some of the planned effects. A case in point is the industrial village sub-projects. Although it accounts for only a tiny portion of the total program costs, the sub-projects are becoming a successful example of participatory projects that involve the transfer of Japanese experience.

Therefore, this project has produced certain effects, and its effectiveness is moderate.

Relevance

The program has been highly relevant with Thailand's national policies and development needs at the times of both appraisal and ex-post evaluation. The tourism sector assumed an important position in the national economic and social development plan at the time of the appraisal. The new national economic and social development plan that was in place at the time of the ex-post evaluation had a major goal of achieving environmentally-sound development that embraces biodiversity and local resources based on the idea of a "sufficient economy" advocated by H. M. King Bhumibol. In this sense, the significance of this program is higher now.

Efficiency

The project period was much longer than planned (169% of the planned period) partly because a few sub-projects were not completed by the final disbursement. On the other hand, the program costs were lower than planned (68% of the planned cost). Therefore, the evaluation for efficiency is fair.

Sustainability

The sustainability of this program is moderate as no single agency has general oversight of all these sub-projects.

Conclusion, Lessons Learned, Recommendations

In light of the above, this program is evaluated to be fairly satisfactory. It is advisable that the Thai government secure budget allocations for transferring the equipment that is not in operation due to inadequate funds to another place where it can be put to good use.

Asia China

Jiangxi Jiujiang Thermal Power Plant Project (1) (2)

Contributing to a stable power supply in the Jiangxi Province

【External evaluator】
Shinji Kaneko and Masaru Ichihashi, Hiroshima University
Ryo Fujikura, Hosei University

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To meet the increasing demand for electric power for household, industrial and agricultural use with the construction of a 600 MW-grade thermal power plant (300 MW-grade × 2 lines) using Chinese coal as its fuel as Part III of the Jiujiang Thermal Power Plant, located about five kilometers northeast of the city of Jiujiang in northern Jiangxi Province, thereby contributing to the development of the regional economy.

Outline of the Loan Agreement

- Loan amount / disbursed amount: (I) 12,030 million yen / 11,390 million yen: (II) 17,570 million yen / 14,279 million yen
- Loan agreement: (I) January 1995; (II) November 1995
- Terms and conditions: Interest rate: (I) 2.6%, (II) 2.3%; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: (I) February 2002; (II) December 2005
- Executing agency: China Guodian Corporation
- Website URL: http://www.cgdc.com.cn/web/guest/home

Operation and output performance of the Jiujiang Thermal Power Plant Part III

Indicators		(Unit)	Target figures at the time of completion (Generators No. 5 and 6)	2003		2004		2005		2006	
				Generator No. 5	Generator No. 6	Generator No. 5	Generator No. 6	Generator No. 5	Generator No. 6	Generator No. 5	Generator No. 6
Maximum output		(MW)	300-350 MW x 2 lines	350	350	350	350	350	350	350	350
Net electric energy production		(GWh/year)	4,550	2,260		3,913		3,571		3,889	
Plant load factor		(%)	74.2	45.9	29.4	66.5	69.1	59.6	64.2	63.7	70.6
Availability factor		(%)	74.2	62.8	37.2	91.0	92.0	80.8	83.0	84.2	87.9
Auxiliary power ratio		(%)	6.5	5.7		5.9		5.6		5.5	
Gross thermal efficiency		(%)	41.1	45.8		49.0		46.8		46.7	
Outage hours by cause	Human error	(hrs./year)	N/A	0	0	0	0	0	0	0	0
	Mechanical malfunction	(hrs./year)	N/A	2,102	1,216	13	3	164	3	0	0
	Planned outage	(hrs./year)	N/A	378	427	0	322	725	589	327	0
Outage times by cause	Human error	(hrs./year)	N/A	0	0	0	0	0	0	0	0
	Mechanical malfunction	(hrs./year)	N/A	11	8	2	1	1	3	0	0
	Planned outage	(hrs./year)	N/A	1	1	0	1	1	1	1	0

Source: Jiujiang Thermal Power Plant
Notes: Plant load factor = Volume of annual electric energy production / (rated output × number of hours a year) × 100
Ava lability factor = (Hours of operation a year / number of hours a year) × 100
Auxiliary power ratio = (Volume of electric power consumption within a plant per year / annual electric energy production) × 100
Gross thermal efficiency = (Annual electric energy production × 860) / (annual fuel consumption volume × fuel calorific value) × 100

Effects of Project Implementation (Effectiveness, Impact)

The performance indicators of the plant for 2006 produced mixed results. The actual output was 3,889 GWh against the planned value of 4,550 GWh. The plant load factor stood at 63.7% for Generator No. 1 and 70.6% for Generator No. 2, slightly below the planned value of 74.2%. This was due to the fact that the outage hours for equipment inspection and repairs lasted longer than planned. The plant performed better than the planned values in terms of the auxiliary power ratio (5.5% as against 6.5%) and the gross thermal efficiency (46.7% as against 41.1%).

Between 1999 and 2006, the total power demand and power supply in the Jiangxi Province increased 12.6% and 14.8%, respectively, per year on average. At the time of the ex-post evaluation, the Jiujiang Thermal Power Plant accounted for about 17.5% of the total power supply in the province. Part III of the plant, which was developed under this project, represented 10.0% in 2006 of the total supply, suggesting that the project has made a certain contribution to improving the power supply-demand situation.

Sulfur dioxide emissions from the plant are below China's emission standards thanks to flue gas desulfurization equipment. No adverse effects on the natural environment have been observed.

Therefore, project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with China's national policies and development plan at the times of both appraisal and ex-post evaluation. At these points in time, power demand exceeded power supply in the Jiangxi Province. This situation is expected to continue as Part IV facility will be constructed at the Jiujiang Thermal Power Plant.

Efficiency

This project cost slightly more than planned (115% of the planned cost). The project also took longer (140% of the planned period), mainly because it took much time to prepare and carry out the bidding due to exchange rate fluctuations and the complicated procedures. Therefore, the evaluation for efficiency is moderate.

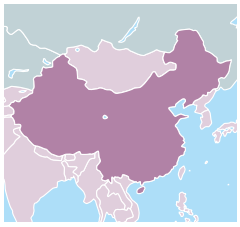
Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system; therefore, sustainability of this project is high. The agency has adequate technical capabilities to operate and maintain the plant. It has appropriate inspection manuals, as well as systems and facilities for training, research, and technical qualifications.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. A major lesson learned is that any project for constructing a coal fired power plant should be designed to include flue gas desulfurization equipment. It is advisable to change the design of the boiler and coal transportation facilities in a timely manner in order to allow for the use of low-priced, high-sulfur coal, in light of the declining profitability of the Guodian Jiujiang Generating Co., Ltd., which is responsible for the operation and maintenance of the plant under this project.

Asia China



Hunan Yuanshui River Basin Hydropower Development Project

Contributing to relieving the tight situation of power supply and demand by constructing hydropower plants in the Hunan Yuanshui River basin, which is rich in potential hydropower resources

【External evaluator】
Shinji Kaneko and Masaru Ichihashi, Hiroshima University
Ryo Fujikura, Hosei University

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To enhance the balance of electric power demand and supply in the mid-western province of Hunan, which serves as a node between the coastal and inland regions of China and is thus strategically important for national economic development, by constructing two hydroelectric power plants with an installed capacity of 225 MW and 240 MW, respectively, with concrete gravity dams in the Yuanshui River basin, thereby contributing to the economic development of the province and the wider mid-western part of China.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 17,664 million yen / 8,857 million yen
- Loan agreement: December 1998
- Terms and conditions: 0.75% interest rate; 40-year repayment period (including a 10-year grace period); partially untied (or bilateral tied in parts)
- Final disbursement date: July 2006
- Executing agency: China Guodian Corporation
- Website URL: http://www.cgdc.com.cn/web/guest/home

Operation and output performance of the Jiujiang Thermal Power Plant Part III

Indicat		(Unit)	Target figures at the time of completion	2004		2005		2006		2007	
				Hongjiang	Wanmipo	Hongjiang	Wanmipo	Hongjiang	Wanmipo	Hongjiang	Wanmipo
Maximum output		(MW)	Hongjiang: 225.0 Wanmipo: 240.0	225.0	240.0	270.0	240.0	270.0	240.0	270.0	240.0
Net electric energy production		(GWh/ year)	Hongjiang: 970.0 Wanmipo: 792.0	795.4	548.3	669.4	558.8	720.7	414.2	852.7	721.8
Capacity factor		(%)	Hongjiang: 49.2 Wanmipo: 37.7	40.7	40.0	31.6	26.8	30.9	19.9	41.1	37.7
Hydro ut lization factor		(%)	Hongjiang: 80.0 Wanmipo: 85.3	96.0	97.8	92.0	95.2	98.1	97.3	99.2	99.4
Annual total inflows		(100 mi llion m³/ year)	Hongjiang: 222.0 Wanmipo: 94.3	212.2	98.3	148.1	73.2	137.5	54.3	162.1	105.5
Planned outage hours		(hrs./ year)	N/A	2,187	258	2,333	1,337	4,254	843	4,357	957
Unplanned outage hours	Mechanical malfunctions	(hrs./ year)	N/A	72	28	4	0	0	0	0	0
	Human error	(hrs./ year)	N/A	0	0	0	0	0	0	0	0
	Floods, etc.	(hrs./ year)	N/A	0	0	0	0	0	0	0	0

Source: Hunan Wuling Hydropower Development Co., Ltd.
Notes: Capacity factor = (Net electric energy production) / (maximum output × number of hours a year) × 100
Hydro utilization factor = (Net electric energy production) / (annual generating capacity in the year in question) × 100
Annual total inflows = Annual total amount of the river inflow into the dam reservoir

Effects of Project Implementation (Effectiveness, Impact)

The Hongjiang and Wanmipo plants are operated highly efficiently. The hydro utilization factor reached 99.2% (against the planned value of 80.0%) for Hongjiang and 99.4% (85.3%) for Wanmipo. However, most of the other indicators were slightly below the planned values. The output amounted to 852.7 GWh (970 GWh) for Hongjiang and 721.8 GWh (792 GWh) for Wanmipo. The capacity factor stood at 41.1% (49.2%) for Hongjiang and 37.7% (37.7%) for Wanmipo. Annual inflows totaled 16,210 million m³ (22,200 million m³) for Hongjiang and 10,550 million m³ (9,430 million m³) for Wanmipo.

The two plants have contributed to job creation and economic development. Local communities in their vicinity have benefited from the dam reservoirs by using them for aquaculture and tourism.

Yet employment opportunities created by the Wanmipo plant were inadequate. Some of the residents who have been resettled in connection with the dam construction have no other choice but to work far away from their home.

Therefore, project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with China's national policies and development needs at the times of both appraisal and ex-post evaluation. At these points in time, power demand exceeded power supply in Hunan Province. Hydroelectric power generation in the Yuanshui River basin accounts for about 50% of the total power output in the province. There is therefore a considerable need for constructing hydropower plants that capitalize on the abundant potential hydropower resources in the basin.

Efficiency

This project cost less than planned (67% of the planned cost) but took slightly longer (106% of the planned period); therefore, the evaluation for efficiency is moderate. The implementation was delayed chiefly because the bidding procedures took much time.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system of the executing agency; therefore, sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. The resettlement of residents in connection with the construction of hydropower plants deserves special attention. When no major industries have been established in the candidate areas for resettlement, a viable option may be to provide the residents to be resettled with vocational training and offer a destination that is more industrialized whenever possible. This option should be considered in developing and appraising any resettlement plan. Since the socioeconomic conditions for the resettled residents change over the long term, the project evaluation should preferably have a longer-term scope.

Asia China

Liangping-Changshou Highway Construction Project

Contributing to the economic development of the corridor and surrounding areas

【External evaluator】
Kiyohide Higuchi, Waseda University

Rating

Effectiveness, Impact	b	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	a	

Project Objectives

To improve the efficiency of transportation among Chongqing Municipality and neighboring cities by constructing an expressway between Changshou and Liangping in Chongqing Municipality (about 110 km), thereby contributing to the economic development of the regions along the expressway route.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 24 billion yen / 19,293 million yen
- Loan agreement: March 2000
- Terms and conditions: 2.2% interest rate, 30-year repayment period (including a 10-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); bilateral tied]
- Final disbursement date: October 2005
- Executing agency: Ministry of Communications, People's Republic of China
- Website URL: http://www.moc.gov.cn/ (in Chinese)

Outputs of this project

Item	Planned	Actual
Expressway (Liangping-Changshou)	110 km	114 km
No. of lanes	4 for the entire length	As planned
No. of bridges	About 60	56
No. of interchanges	6	As planned
No. of service stations	1	As planned
No. of sets of maintenance vehicles and equipment	1	As planned
Input of consulting services	80 M/M	As planned

Sources: Reference materials used for the appraisal and the Project Completion Report (PCR)

Effects of Project Implementation (Effectiveness, Impact)

According to a fixed-point survey that the evaluator conducted in October 2007, the average daily traffic volume was 8,320 vehicles (or an equivalent of 11,648 passenger vehicles), falling short of the planned value. This is largely attributable to the fact that the connecting highway is incomplete. Meanwhile, travel times have been reduced by more than half from the pre-project levels, and a beneficiary survey has confirmed that the project has significantly contributed to easier access to business information, more opportunities for commerce, better access to information for livelihood improvement, and shortened times for travel to and from public facilities such as schools and hospitals.

This project has produced certain effects and its effectiveness is moderate.

Relevance

This project has been highly relevant with China's national policies and development needs at the times of both appraisal and ex-post evaluation.

It is part of one of the priority highways in the plan to construct an expressway network of "five north-south and seven east-west highways" for the purpose of promoting the economic development of inland China under China's Ninth Five-Year Plan for 1994-1999. The Tenth Five-Year Plan for 2000-2005 defined Chongqing Municipality as the economic center of the upper reaches of the Yangtze River and China's southwestern region. Accordingly, it aimed to develop these regions as a new industrial region with Chongqing being the origin.

Efficiency

Both the project period and cost of the project were almost as planned; therefore efficiency of the project is high.

This project was aimed at constructing a 110-km highway between Liangping and Changshou within the Chongqing Municipality. The work was completed largely as planned. The project used for the first time in China, such innovative and simplified construction methods as the SMA paving method, which makes the road surface more resistant to wear and gives it a longer life. Introduction of such simplified construction methods allowed the construction period to be shortened to 83% of the planned period. These methods also made it possible to procure materials domestically or from neighboring countries, thus shortening the project period and helping to reduce the project cost to 82% of the planned value. The fact that land acquisition and resettlement was needed at a smaller scale helped to reduce the project cost as well.

Sustainability

No major problems have been observed in the capacity of the executing agency nor in the operation and maintenance (O&M) system; therefore, sustainability of this project is high. Chongqing Yudong Expressway Co., Ltd., a company under the umbrella of the Chongqing Municipal Traffic Department (wholly owned by the Chongqing Municipal Government), is responsible for project management, and for road maintenance, the same company set up a highway patrol division to allow for seven to eight members to patrol the highway on a continual basis, a first system of its kind in China.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. There are no major lessons learned or recommendations to note.

Asia China

Hainan East Expressway Expansion Project; Hainan Development Project (Highway) (1) (2)

Constructing and expanding an expressway on Hainan Island, contributing to the island's economic development

【External evaluator】
Masaaki Shiraishi, Waseda Research Institute Corp.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To address increasing traffic and traffic safety concerns by constructing and expanding a 253-km highway on Hainan Island that links Haikou, the main city in the east, with Sanya in the north, thereby contributing to the economic development of the island.

Outline of the Loan Agreement

- Loan amount / disbursed amount:
- (I) 7,100 million yen / 7,064 million yen
  (II) 5,855 million yen / 5,814 million yen
  (Expansion) 5,274 million yen / 4,103 million yen
- Loan agreement: (I) January 1991; (II) October 1991; (Expansion) March 2000
- Terms and conditions: (I) 2.5% interest rate; 30-year repayment period (including a 10-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); general tied]
  (II) 2.6% interest rate; 30-year repayment period (including a 10-year grace period); general untied
  (Expansion) 2.6% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: (I) February 1996; (II) November 1997; (Expansion) July 2005
- Executing agency: Hainan Expressway Co., Ltd.
- Website URL: www.hi-expressway.com (in Chinese)

Effects of Project Implementation (Effectiveness, Impact)

Under these projects, the expressway between Haikou and Sanya was constructed and expanded. The average traffic volume between Haikou and Qionghai (located between Haikou and Sanya) was greater than the planned value, while the average traffic volume between Qionghai and Sanya was less. This is partly due to the fact that industrial production is concentrated in the northeastern part of Hainan Island. At any rate, the traffic volume in all the sections is on the rise and travel times have been reduced by half in all the sections. A questionnaire survey of residents in the eastern part of the island showed that they largely appreciated the projects, citing such effects as reduced transport costs and the contribution to regional economic development.

Therefore, these projects have largely achieved their objectives and their effectiveness is high.

Relevance

This project has been highly relevant with China's national and regional policies and development needs at the times of both appraisal and ex-post evaluation.

These projects were designed to construct and expand a 253-km long east expressway linking Haikou and Sanya under the "Hainan Economic Development Strategy" for 1988-2000. They are also consistent with the policies of the 11th Five-Year National Development Plan for 2006-2010. Moreover, the projects are also consistent and in step with the economic development of Hainan.

Efficiency

Both project period and cost exceeded the plan; therefore the evaluation for efficiency is moderate. The projects cost more than planned (121% of the planned cost) and took slightly longer (104% of the planned period). Although the first and second phases of construction were completed as scheduled, the expansion work, which was carried out to cope with an increase in the traffic volume, took 120 months (10 years) to complete, five months more than the planned period of 115 months (9 years and 7 months).

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system; therefore sustainability of this project is high. The overall management of the O&M of the expressway has been the responsibility of the Command Headquarters for Hainan East-artery Highway Construction at the Department of Hainan Transportation and Communications of the Hainan Provincial Government (The headquarters was privatized and relaunched as the Hainan Expressway Co., Ltd. in April 1993). The design and the construction management has primarily been the responsibility of the Institute of Highway Planning and Design of the Road Department of the Ministry of Communications.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. It is advisable to improve project management skills, including stricter construction management over the whole project process, in order to better cope with implementation contingencies. In these projects, a cost overrun* occurred due to such factors as the privatization of the executing agency, design changes due to unexpected geological conditions, and changes to the original plan upon request from local residents.

* A significant increase in the project cost

Asia China

Harbin Electric Network Construction Project

Contributing to improving power supply reliability in Harbin by developing power transmission and distribution networks

【External evaluator】
Shinji Kaneko and Masaru Ichihashi, Hiroshima University
Ryo Fujikura, Hosei University

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To improve the supply reliability of the power grid by establishing and enhancing the transmission and distribution network in Harbin, Heilongjiang Province, thereby contributing to the economic development of this important industrial city of China.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 6,070 million yen / 4,119 million yen
- Loan agreement: March 2000
- Loan agreement: (I) January 1991; (II) October 1991; (Expansion) March 2000
- Terms and conditions: 2.2% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: July 2005
- Executing agency: State Grid Corporation of China
- Website URL: http://www.sgcc.com.cn/default.asp

Operational performance

Indicat	(Unit)	Baseline (1998)	Target (2005)	Actual		
				2005	2006	2007
Household electrification rate	(%)	100	100	100	100	100
SAIDI	(hrs/yr., household)	29.4 (2000)	17.3	0.7	1.9	0.8
Outage times	(times/yr.)	5.0 (2000)	2.7	0.9	1.4	1.2
Transmission and distribution loss	(%)	8.9	7.0	5.9	5.9	6.6
Sales volume	(GWh)	5,268	7,641	10,600	11,239	10,300
Peak load	(MW)	1,069	1,740	1,973	2,010	2,012
Voltage acceptance rate	(%)	98.0 (2000)	98.2	99.0	99.2	99.0

Source: Harbin Power Supply Bureau
Notes: SAIDI (System Average Interruption Duration Index) = Hours of outage per customer household in the project target area
Outage times = Number of outages of no less than one minute in the project target area
Transmission and distribution loss = (Net electric energy production (kWh) - volume of electric energy consumption within a plant (kWh) - receiving end electric energy production (kWh)) / net electric energy production (kWh)
Household electrification rate = (Number of electrified households) × 100 / (total number of households)
Voltage acceptance rate = (Accepted hours for the voltage standard value) / (hours of power distribution per year)

Effects of Project Implementation (Effectiveness, Impact)

The development of transmission/transformer and distribution facilities under this project has significantly contributed to reducing the number and duration of outages in the project area. Before the project, the average customer household experienced about five outages or a total of 30 hours of interruption per year. In 2007, these numbers dropped to 1.2 outages or a total of 0.8 hours. The transmission and distribution loss rate stood at 6.6% in 2007, below the planned value of 7.0%.

Since the launch of this project, power consumption in both the industrial and public sectors has been increasing significantly in Harbin, which has experienced rapid growth of its secondary and tertiary industries. The period between the project launch and 2006 saw an average economic growth rate of 11.6% per year. This growth is attributable to the fact that the stable power supply made possible by the expansion of the power transmission/distribution network has supported the industrial base.

Therefore, the project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with China's national policies and development needs at the times of both appraisal and ex-post evaluation.

Efficiency

This project cost less than planned but took much longer (206% of the planned period); therefore, the evaluation for efficiency is moderate. The implementation delay was caused by two major factors. First, the installment of 10 kV electric power distribution lines, which were scheduled in accordance with the progress in Harbin's urban development program, was significantly delayed in relation to the plan at the time of the appraisal since two projects under the program had fallen behind schedule. Second, surging copper prices resulted in prolonged negotiations over prices with the Chinese company that was awarded a contract to supply the electric power lines. Subsequently, there were delays in the procurement of the raw materials and the delivery of the electric power lines by this company.

Sustainability

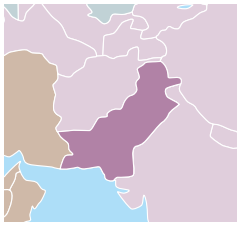
No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; therefore, sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

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

- Box: Some thoughts on the completion of the ex-post evaluation -
We had difficulty in obtaining the support of the executing agency in collecting information for the evaluation of this project as a whole. The agency cited the relatively small share of the Japanese ODA loan in the whole project budget. In addition, the project completion date and project scope (output details) described in the project completion report submitted by the agency are different from the actual results. It took us a considerable amount of person-hours of work to check the differences in detail.

Asia Pakistan



Rural Roads Construction Project

Contributing to better traffic conditions by paving rural roads as well as constructing new ones

【External evaluator】
Satoshi Ohira and Kazuhiro Takanashi, Keio University

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To improve rural traffic conditions by upgrading a total of about 936 km of existing unpaved local roads to all-weather motorable roads, as well as constructing new roads, in 33 districts of 4 provinces in Pakistan, thereby contributing to rural social and economic development.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 11,468 million yen / 10,545 million yen
- Loan agreement: August 1993
- Terms and conditions: 2.6% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: November 2004
- Executing agency: Ministry of Local Government and Rural Development (MLGRD)

Kabula, Punjab Province

Manak, Punjab Province

Effects of Project Implementation (Effectiveness, Impact)

This project has resulted in shortening travel distances and times and reduced transport costs between villages in rural Pakistan. (In some areas, the time has been reduced by more than half, from 60 minutes to 20 minutes.) The construction of new roads and the paving of existing ones almost automatically increased the convenience of travel within a village. It is also assumed that the replacement of dirt roads with paved ones has produced health benefits.

It is observed that these outcomes have produced socioeconomic benefits as well. For example, better access to markets and easier access to credit have helped vitalize agricultural production. Expanded commutable areas have led to increases in non-agricultural income. Above all, increased mobility has had a significant social impact on women. The employment of women has promoted their integration into society. An expanded scope of activity for female doctors has supported the improvement of the healthcare environment for women.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

The project has been highly relevant with Pakistan's national policies and development needs at the times of both appraisal and ex-post evaluation. At these two points in time, rural development remained high on the agenda for the economic development for Pakistan. Above all, rural road development is a central issue for rural development. This underlines the significance of this project.

Efficiency

Project costs was lower than planned (88% of the planned cost), but the period was much longer (234% of the the planned period); therefore the evaluation for efficiency is moderate. The implementation delay was caused by a number of factors, including a delay in the project launch itself and the extra time needed in connection with changes to the road design policy.

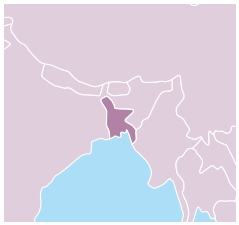
Sustainability

The sustainability of this project is fair. The executing agency has sufficient operation and management skills, although the budget is inadequate and there are a few problems with the current conditions.

Conclusion, Lessons Learned, Recommendations

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

Asia Bangladesh



Paksey Bridge Construction Project (1) (2)

Realizing a safe and efficient passage over a major river with the construction of a high-quality bridge

【External evaluator】
Hajime Sonoda, Global Group 21 Japan, Inc.*1

Rating

Effectiveness, Impact	b	Overall rating B*2
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To develop a land route crossing the western side of the country and establish a safe and sufficient transport grid by constructing a bridge over the Ganges River, which flows in an east / west direction through Bangladesh, and contribute to the development of the economy of the western side of the country using the port of Mongla, located in the southwest region, and to bolster the economic activities between the eastern and western areas.

Outline of the Loan Agreement

- Loan amount / disbursed amount: (I) 8,707 million yen / 8,620 million yen (II) 9,209 million yen / 7,211 million yen
- Loan agreement: (I) July 1997; (II) March 2003
- Terms and conditions: 1.0% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: (I) September 2004; (II) May 2007
- Executing agency: Road Highway Department (RHD)
- Website URL: http://www.rhd.gov.bd/Default.htm

Annual average traffic at Paksey (vehicles/day)

	Planned at the appraisal		Actual (% of planned value)	
	Vehicles with 4 or more wheels	Total	Vehicles with 4 or more wheels	Total
2005	2,869	3,105	1,280 (45%)	1,945 (63%)
2006	3,084	3,338	1,481 (48%)	2,292 (69%)
2007	3,316	3,589	1,599 (48%)	2,445 (68%)

Sources: The planned values have been calculated based on reference materials used for the appraisal.
The actual figures are from the toll data compiled by the RHD.

*1. Support came from Prof. Dr. M. Mazharul Hoque, Prof. Dr. Jobair bin Alam, Dr. Md. Shamsul Hoque, and Dr. Mizanur Rahman at the Faculty of Civil Engineering, Bangladesh University of Engineering and Technology, who, as local experts, participated in traffic surveys, economic analyses, and socioeconomic impact analyses.
*2. The overall rating for this project should be B (Satisfactory) according to JICA's rating system. However, it has been evaluated as "fairly satisfactory" here because the increased scope did not match the actual traffic volume.

Effects of Project Implementation (Effectiveness, Impact)

The completion of the bridge under the project has enabled safe and efficient passage over the Ganges River. However, the volume of traffic has not grown as expected due to such factors as the sluggish level of activity at Mongla Port and Khulna Port, and improvements in ferry services crossing the Padma River. The average daily traffic since 2005 has been 2,000 to 2,500 vehicles, or two-thirds of the planned volume at the appraisal. One-third of the traffic is represented by light vehicles mainly used for short-distance travel (two and three-wheeled vehicles and two-wheel vehicles that are equipped with a carrier for passengers and goods). The traffic volume of vehicles with four or more wheels is slightly less than half of the planned volume. Meanwhile, the project has had favorable impacts on the country's southwestern city of Kushtia, located near the bridge, such as improved access to and from Dhaka. In areas farther from the bridge, no significant socioeconomic impact has been observed.

Therefore, this project has produced certain effects, and its effectiveness is moderate.

Relevance

Although the fundamental necessity of this project has remained high, predictions for traffic demand and economic efficiency were overestimated at the time of the appraisal. Given the improved ferry services crossing the Padma River and the lowered status of Mongla Port, the importance of the bridge as part of a wide-area trunk road is considered to be lower than that envisioned at the time of the appraisal. However, since the level of traffic demand will likely justify the investment, the project is evaluated to have remained relevant.

Efficiency

The project period was longer than planned while the project cost was lower than planned; therefore the evaluation of efficiency is moderate. The opening of the bridge was two and half years behind schedule due to significant delays in the procurement of equipment for bridge construction. On the other hand, despite the expanded scope of the project to include river control facilities and other aspects, a high-quality bridge was completed within the planned cost. However, expansion of the project scope through implementation of the Special Assistance for Project Formation (SAPROF) and the appraisal, to increase the road width and to build toll booths and administrative buildings were rather unnecessary in light of the actual traffic volume projections.

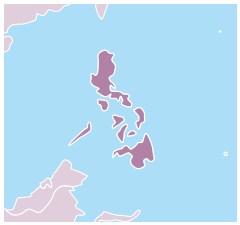
Sustainability

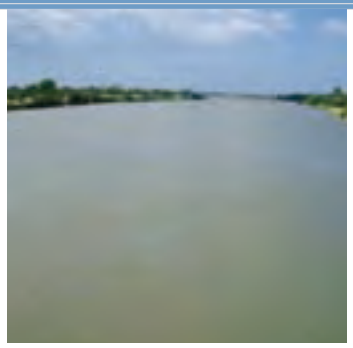
No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system, therefore sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be fairly satisfactory.*2 A major lesson learned is that if the economic relevance of a project might be undermined by a possible detour route, alternatives of that detour route should be carefully studied. Also, the volume of traffic to be diverted due to the possible detour route should be accurately predicted based on a detailed assessment. The evaluator has three major recommendations to make. First, the Road Highway Department (RHD) should have adequate technical skills to appropriately supervise the contractors for their operation and management of the bridge. Second, RHD should use a vehicle specially designed for bridge inspections when inspecting the bridge several years after completion. Third, the Bangladesh Railway should assess the damage to the revetments upstream of the Hardinge Railway Bridge and design an appropriate restoration project because they are now under its jurisdiction.

Asia Philippines





Agno and Allied Rivers Urgent Rehabilitation Project

Contributing to mitigating flood damages by rehabilitating existing flood control facilities

【External evaluator】
Junko Saikawa and Izumi Okata, KRI International Corporation

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To reduce flood damages by rehabilitating existing flood control facilities for which urgent measures are necessary on the lower reaches of the Agno River and the upper reaches of the Sinocalan River, thereby contributing to the stability of people's livelihood and the development of the regional economy.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 8,312 million yen / 8,280 million yen
- Loan agreement: August 1995
- Terms and conditions: 2.5% interest rate (2.1% for consulting services); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: June 2005
- Executing agency: Department of Public Works and Highways (DPWH)
- Website URL: http://www.dpwh.gov.ph/

Bank revetment along the Sinocalan River

Rehabilitation of a levee on the right bank of the Tarlac River

Effects of Project Implementation (Effectiveness, Impact)

A flood inundation analysis suggests that this project is supposed to reduce the damage of 5-year flood and 10-year flood to zero. In fact, no flood inundations have occurred as a result of a levee crevasse along the main course of the Agno River since the project completion.

According to a beneficiary survey of 218 local residents (188 people along the Agno River and the remaining 30 people along the Tarlac River), around 80% of residents recognize that the project has reduced the frequency, scale and risks of flood / inundation damages as well as reducing their concerns about these damages. Seventy-six percent of the respondents, or 116 residents, said that the reduced risks of flood / inundation damages contributed to improvement of their livelihood and job situation. In addition, 82% or 178 respondents have recognized improved health conditions in their communities due to the project. Some 89% or 160 respondents of the 188 residents along the Agno River have recognized that the asphalt pavement of the levee on the right bank of the river has resulted in better access.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. At these points in time, the development of flood control facilities in the areas affected by flood damages in the major river basins remained a priority in order to prevent the loss of people's lives and their property.

Efficiency

This project's cost was lower than planned, but took longer than planned (148% of the planned period); therefore, the evaluation for efficiency is moderate. The main reason for the delay is additional project components, including rehabilitation work for facilities that were damaged by a typhoon during the construction period.

Sustainability

No major problems have been observed in the technical and structural aspects of the Agno flood control project management office, which is responsible for the maintenance of the Agno and allied rivers. On the other hand, there are concerns about the financial aspect of the operation and maintenance of the project. Budget allocations and expenditure on O&M have been decreased dramatically for the past few years, although there are some signs of improvement in securing budget. Therefore, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. Sustaining the effects of this project requires the appropriate management of not just the rehabilitated facilities but also the river basin as a whole. It is essential to continue securing appropriate levels of O&M budget allocations. DPWH is advised to collaborate with other related organizations to collect and manage data of the scale and damage of actual floods and inundations, given the difficulty in measuring the effect of reducing flood damage.

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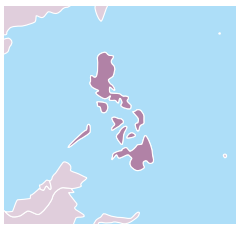


Local Government Units Support Credit Program

Contributing to the development of local social infrastructure by diversifying sources of funds for LGUs with policy finance

【External evaluator】
Junko Saikawa and Izumi Okata, KRI International Corporation

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

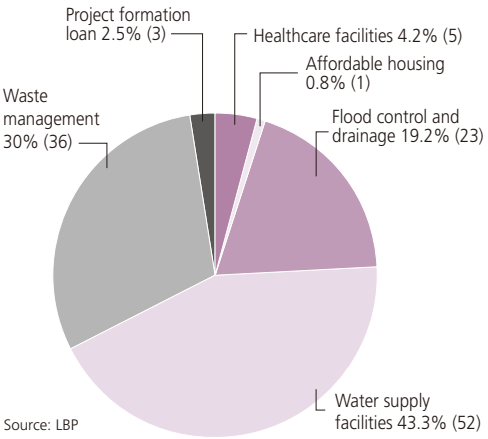
Project Objectives

To promote support social infrastructure development sector, including the environment, public health, and housing, where it is difficult to recover costs, by diversifying the means of fund procurement through offering low-interest, long-term funds to Local Government Units (LGUs) with a high to moderate level of creditworthiness,*1 and thereby contribute to promotion of decentralization of power and improvement of the lives of the people.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 6,072 million yen / 6,069 million yen
- Loan agreement: September 1998
- Terms and conditions: 0.75-2.2% interest rate; 30-40-year repayment period (including a 10-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); partially untied]
- Final disbursement date: January 2006
- Executing agency: Land Bank of the Philippines (LBP)
- Website URL: https://www.landbank.com/

Breakdown of loans by sub-project sector (%; the parentheses denote the number of loans)



Source: LBP

Effects of Project Implementation (Effectiveness, Impact)

Through this project, LBP has extended loans to 109 out of approximately 1,700 LGUs across the Philippines. A total of 120 sub-loan projects including water supply flood control and waste management have been financed by these loans. A total of 9.8 million people or about 1.95 million households have benefited from these sub-loan projects. The revolving funds*2 have been operated smoothly as well.

This project has allowed LGUs to implement priority projects in their respective development plans without waiting for subsidies from the central government. While promotion of local development by LGUs was slow, it is evaluated as a major effect of this project that has contributed to LGUs' social infrastructure development. Considering that approximately 70% of the 47 LGUs surveyed had no experience in receiving loans before this project, it is significant that this project expanded the LGUs' options for funding sources which contribute to the promotion of development projects.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. The sectors covered by sub-loan projects remained high on the policy agenda at both points in time. It has a substantial need for policy finance as an alternative source of funds for these social infrastructure development projects.

Efficiency

This project's cost was lower than planned, but took longer than planned (140% of planned period); therefore, the evaluation for efficiency is moderate. The main reasons for the delay are the reluctance of the LGUs to receive loans due to their lack of experience, and the non-competitive loan terms and conditions. Later, measures were taken, such as rivising the loan terms and conditions, and the loans proceeded.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; therefore, sustainability of this project is high. The collection of sub-loans and the operation of revolving funds have been satisfactory, and no major problems have been observed in the program operation.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. At the beginning of this project, many LGUs were reluctant to receive sub-loans due to their lack of experience and technical, operational and management skills. In any similar projects in the future, it is advisable to make better use of financing opportunities to contribute to enhancement of public service by incorporating capacity building components or collaboration with other technical cooperation agencies.

*1. The creditworthiness of LGUs is evaluated using the executing agency's creditworthiness rating system, which assesses its fiscal status, IRA allocations, existence of other loans, and repayment status. The rating scale runs from "low" through "moderate," "moderately high," and "high" to "top," depending on the LGU's fiscal strength (including revenues, fund management system, political situation (leadership, existence of internal conflict, etc.)), GRDP, main industries, and other factors.
*2. Surplus funds generated by the gap between the repayment period for a sub-loan and that for an ODA loan. A new loan will be offered by taking advantage of such a surplus.

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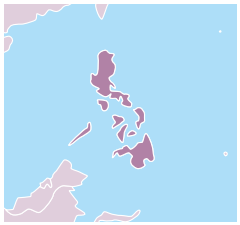


Pinatubo Hazard Urgent Mitigation Project

Providing relief to the victims and supporting the rehabilitation of the disaster areas toward creating a safe environment

【External evaluator】
Yasuhiro Kawabata and Yuriko Sakairi, Sanshu Engineering Consultant Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To (i) secure the arterial highway transportation network, and to prevent the geographical spread of the sedimentation of volcanic flows by reconstructing roads and constructing / reinforcing sabo and flood control facilities, as well as (ii) to prevent further disaster through river improvement, in the disaster areas, where volcanic mudflows have subsided, in Tarlac and Papanga Province located around the Sacobia-Bamban River middle-basin originating from Mt. Pinatubo, thereby contributing to economic growth in the affected area

Outline of the Loan Agreement

- Loan amount / disbursed amount: 6,911 million yen / 6,910 million yen
- Loan agreement: March 1996
- Terms and conditions: Main part: interest rate of 2.5% (or 2.1% for consulting services); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: July 2001
- Executing agency: Department of Public Works and Highways (DPWH)
- Website URL: http://www.dpwh.gov.ph
  * This ex-post evaluation has been conducted jointly with the National Economic and Development Authority (NEDA) of the Philippine government.

Maskup Dam

Effects of Project Implementation (Effectiveness, Impact)

The completion of the Maskup Dam has made it possible to control the 7,000 m^3 of volcanic mudflow sediments as planned. In fact, the affected land area of 11,753 ha has already been recovered. Some 8,700 residents in sand pocket areas, who had been evacuated from the volcanic mudflows, have returned to their land and are now engaged in farming as before the disaster. The convenience of the disrupted highway network has increased with the rehabilitation and the subsequent reopening of National Highway No. 3. The average daily traffic on this highway at the Mabalacat gate near the disaster area increased from the estimated 6,000 vehicles in 1995 to 8,500 vehicles in 1999 and further to 9,900 vehicles in 2004. In addition to better access, industrial establishments have been lured to the area, significantly contributing to the revitalization of the regional economy. More opportunities for farming and increased income were reported as the effects of this project in a beneficiary survey.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. In a situation where volcanic mudflows triggered by torrential rain had continually displaced residents since the 1991 eruption of Mt. Pinatubo, it was necessary to as soon as possible prevent the geographical spread of volcanic mudflows, reduce the damage, and secure a road network in the disaster area. In addition, economic development and natural disaster mitigation remained high on the agenda for the Medium-Term Philippines Development Plan that was in place at the time of the ex-post evaluation.

Efficiency

It took longer (137% of the planned period) and cost largely as planned (107% of the planned cost); therefore, evaluation for the efficiency is moderate. The implementation delay and additional costs were the result of additional construction work needed to recover from natural disasters, including a series of typhoons. The delay was kept to the relatively minimum level by introducing the CLG (Cemented Lahar and Gravel) method and increasing the civil engineering workforce.

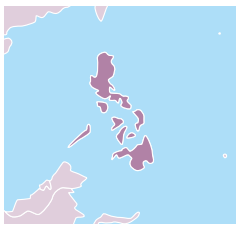
Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance (O&M) system at the time of the ex-post evaluation. However, the fact that the body of the Maskup Dam is always covered with volcanic mudflow sediments is a source of concern. Although their removal is necessary to forestall volcanic mudflow hazards triggered by torrential rain or other causes, adequate measures have not been taken toward that goal, including studies, project planning, and O&M budget allocations. Therefore, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. To ensure that the sabo dam remains effective and safe, regular sediment dredging is essential, which requires careful planning based on accurate surveying and the necessary budgetary allocations. It is advisable to secure such allocations as soon as possible.

Asia Philippines



Metro Manila Interchange Construction Project (4)

Relieving traffic congestion by building interchanges in Manila and thereby supporting the regional economy by building interchanges

【External evaluator】
Yasuhiro Kawabata and Yuriko Sakairi, Sanshu Engineering Consultant Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

Project Objectives

To alleviate the traffic congestion, which is becoming increasingly serious, and to improve the living environment by constructing three interchanges and undertaking detailed designs for four interchanges at major intersections along EDSA and C-5, which are the most important and heavily congested circumferential roads in Metro Manila, thereby contributing to economic development of the region.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 5,849 million yen / 5,096 million yen
- Loan agreement: September 1998
- Terms and conditions: 2.2% interest rate; 30-year repayment period (including a 10-year grace period); general untied [consulting services: 0.75% interest rate; 40-year repayment period (10-year grace period); partially tied]
- Final disbursement date: January 2005
- Executing agency: Department of Public Works and Highways (DPWH)
- Website URL: www.dpwh.gov.ph/
  * This ex-post evaluation has been conducted jointly with the National Economic and Development Authority (NEDA) of the Philippine government.

Travel speed of turning vehicles (km/hour)

Interchange		Target	Actual
EDSA / Quezon	Average speed	37	42
	Speed at peak hours	17	20
C-5 / Boni Serrano	Average speed	20	50
	Speed at peak hours	n/a	n/a
C-5 / Ortigas	Average speed	31	31
	Speed at peak hours	13	16

Source: DPWH

Effects of Project Implementation (Effectiveness, Impact)

The average travel time for turning at the EDSA / Quezon Interchange has reduced from 10 minutes at the time of appraisal to less than one minute. The average turning time for the other interchanges is also below one minute now. Both the average speed and the speed at peak hours are above the targets, virtually eliminating congestion (see the table below). A beneficiary survey showed that nine out of every ten respondents have experienced the elimination of congestion and improvements in accessibility and mobility. As major effects of this project, a reduction in transport costs was identified by some 60% of the respondents, contributions to local economic activities by 50%, and more business and employment opportunities by 70%. Improvements in environmental aspects such as air quality and noise levels due to the elimination of congestion were also noted.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. Infrastructure development was high on the agenda for the Medium-Term Philippines Development Plan (MTPDP) that was in place at the time of the appraisal and whose overall goal was economic development. The MTPDP at the time of ex-post evaluation also aimed to promote economic growth and increase job opportunities. One of its priorities toward these two goals was the development of road and railway networks aimed at reducing congestion in Metro Manila.

Efficiency

This project's cost was lower than planned (97% of the planned cost) but took much longer than planned (279% of the planned period); therefore, the evaluation for efficiency is moderate. The major causes for the implementation delay include an underestimated schedule at the time of the appraisal, and extra time needed for procurement and land acquisition as well as accommodating changes to design and civil works arrangements.

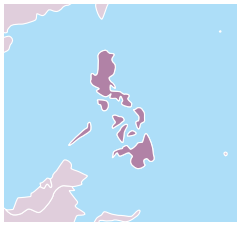
Sustainability

No major problems have been observed in the operation and maintenance (O&M) of this project. The pavement surfaces are largely in good repair. However, inadequate O&M budget allocations remain a source of concern, especially in the face of the possibility that major renovation work will be necessary in several years. Though these problems have been observed, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. The evaluator has drawn three major lessons for the design and preparation phases before the start of the construction work. First, a more detailed technical study and design should be undertaken to forestall any changes to the design that would cause a delay in construction work or a cost overrun. Second, a framework should be established for closer coordination among the DPWH, Local Government Units, and other stakeholders in the public and private sectors for smooth land acquisition. Third, a schedule should be developed that takes full account of the time required for land acquisition, bidding, and construction.

Asia Philippines



Industrial and Support Services Expansion Program (2)

Encouraging the growth of supporting industries with increasing medium- and long-term financing to SMEs

【External evaluator】
Yoichi Hara, Taichi Sakano and Hajime Onishi, Mitsubishi UFJ Research and Consulting Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	a	

Project Objectives

To provide medium- and long-term financing mainly to small and medium enterprises in the manufacturing and related industries of the Philippines through DBP and also to provide technical assistance including technical / management guidance and marketing support to companies in supporting industries for the purpose of promoting the manufacturing industries and developing the supporting industries, thereby creating employment and contributing to the economic development of the Philippines.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 35,350 million yen / 35,260 million yen
- Loan agreement: December 1999
- Terms and conditions: 0.75% interest rate; 40-year repayment period (including a 10-year grace period); general untied (or bilateral tied in parts)
- Final disbursement date: March 2006
- Executing agency: Development Bank of the Philippines (DBP)
- Website URL: http://www.devbankphil.com.ph/

* This project was evaluated jointly with the DBP.

Breakdown of borrowers by asset size and lending method

	Asset size	No. of projects	%
Retail by the DBP	Large (over 100 million pesos)	29	18.0%
	Medium (15-100 million pesos)	81	50.3%
	Small (less than 15 million pesos)	51	31.7%
	Total	161	100.0%
Wholesale via PFI	Large	51	33.8%
	Medium	85	56.3%
	Small	15	9.9%
	Total	151	100.0%

Source: Project Completion Report (PCR)

Effects of Project Implementation (Effectiveness, Impact)

This project has produced the expected outcomes, including the profitability of small and medium-sized enterprises (SMEs), through (i) providing medium- and long-term finance by using two-step loan framework, and (ii) technical assistance for the development of supporting industries. Phase I of this project or, the Industrial and Support Services Expansion Program (I), offered only one method of financing which indirectly financed through private financial institutions (PFIs) (wholesale method). In this project, direct financing from DBP to SMEs was added (retail method). The adoption of the retail method has resulted in promoting loans to smaller enterprises, contributing to the development of SMEs. A comparison of the business conditions of end-users before and after receiving the loans under this project shows an increase in gross income (up 18.4%), net profit (up 31.1%), and total assets (up 49.2%).

Furthermore, factoring and business matching through technical assistance have also improved the environment for supporting industries.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. At both points in time, support for SMEs remained high on the agenda for employment creation and the development of supporting industries. It is an important challenge to relieve the shortage of investment funds and the level of cash flows that are needed by SMEs.

Efficiency

Both project period and costs were almost as planned; therefore, efficiency of the project is high.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; therefore, the sustainability of this project is high. DBP has a well-established operational framework for each financing program, with a clearly defined division of duties. The agency also enjoys a sound financial base as a bank.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. As a major lesson learned from this project, it is advised to consider adequately how to balance between the wholesale and retail methods and how to determine the sub-loan interest rate amid falling of market interest rates in the context of supporting SMEs in the Philippines.

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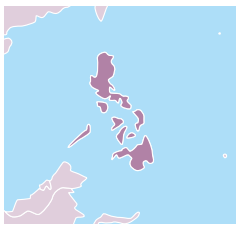

Environmental Infrastructure Support Credit Program (2)

Promoting environmental investment with medium- and long-term financing that contributes to industrial pollution control

【External evaluator】
Yoichi Hara, Taichi Sakano and Hajime Onishi, Mitsubishi UFJ Research and Consulting Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	a	

Project Objectives

To provide medium- and long-term financing to private enterprises of mainly to small and medium size of in the Philippines through DBP and provide technical assistance to end users and private financial institutions (PFIs) as well as DBP for the purpose of promoting investment activities that will help improve the environment; thereby contributing to the prevention and mitigation of industrial pollution

Outline of the Loan Agreement

- Loan amount / disbursed amount: 20,529 million yen / 20,529 million yen
- Loan agreement: December 1999
- Terms and conditions: 0.75% interest rate; 40-year repayment period (including a 10-year grace period); general untied (or bilateral tied in parts)
- Final disbursement date: March 2006
- Executing agency: Development Bank of the Philippines (DBP)
- Website URL: http://www.devbankphil.com.ph/

* This project was evaluated jointly with the DBP.

Pollution control and environmental benefits of this program

Improved field	Asset
Amount of water pollutants reduced	BOD: 470,100 kg/year COD: 940,000 kg/year TSS: 1,012,600 kg/year Cr^{6+}: 6kg/year
Amount of air pollutants reduced	Particulates: 857 MT (metric ton)/year NOx: 1,286 MT/year SO_2: 3,690 MT/year CO: 117 MT/year
Amount of resources saved (efficient use of energy; recycling)	Energy: 6,930 MWh/year Water: 20,498,700 m^3/year Raw materials: 21,200 MT/year
Amount of solid waste managed	28,100 MT/year
Amount of hazardous waste/ materials treated	12,236 MT/year

Source: Technical Assistance Component Final Report
Notes: BOD: Biochemical Oxygen Demand; COD: Chemical Oxygen Demand; TSS: Total Suspended Solids; Cr^{6+}: hexavalent chromium; NOx: nitrogen oxides; SO_2: sulfur dioxide; CO: carbon monoxide

Effects of Project Implementation (Effectiveness, Impact)

This project has produced the expected outcomes by (i) encouraging investment in facilities and equipment which contributes to preventing industrial pollution, such as water pollutants treatment, natural resources conservation, and waste treatment, through medium- and long-term financing using two-step loan framework, and (ii) offering technical assistance to the DBP, the end-users, and PFIs through consulting services. A major outcome of this project is that DBP has established technical and environmental assessment procedures, including Project Evaluation and Endorsement Reporting (PEER),*1 Environmental Performance Monitoring (EPM),*2 and Environmental Management Information System (EMIS).*3 These procedures and systems have been adopted for financing other programs implemented by the DBP as well, indicating that this project has had a broader impact on the bank as a whole.

As in the first phase of this project, industrial associations, chambers of commerce, and other organizations have mounted information campaigns on environmental investment for private enterprises.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. At both points in time, environmental improvements in such fields as air quality, water quality, and waste management are required. It is an important challenge to relieve the shortage of environmental investment funds that are needed by SMEs.

Efficiency

Both project period and costs were almost as planned; therefore, efficiency of the project is high.

Sustainability

No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; therefore sustainability of this project is high. DBP has a well-established operational framework for each financing program, with a clearly defined division of duties. DBP also enjoys a sound financial base as a bank.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. It is recommended that SMEs continue to be motivated to make investments in the environmental sector. For this purpose, it is important for DBP to continue information campaigns under public-private partnership, and to further raise the awareness of enterprises about environmental investment.

*1. A standardized system for information and documents required for the screening process for environmental loans. PEER has allowed DBP to standardize a set of procedures, information and documents that are needed to evaluate and analyze the environmental and technical aspects and subsequently approve loan applications.
*2. A standardized system for procedures for environmental monitoring and reporting by enterprises who have received a loan from DBP, including a reporting format. Loan recipients are required to submit such a report to DBP quarterly.
*3. A corporate on-line system for environmental information. EMIS allows DBP employees to access a wide range of information, including lending manuals for environmental assessment, document formats, learning materials that were used in environmental training courses, data on environmental technologies, and information on sub-projects.

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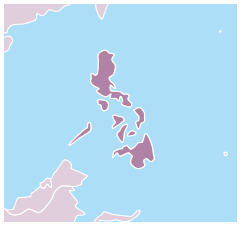


Special Economic Zones Environmental Management Project

While some progress has been made in public health and environmental pollution control, improvement in the rate of plant operation remains a challenge.

【External evaluator】
Yasuhiro Kawabata and Yuriko Sakairi, Sanshu Engineering Consultant Co., Ltd.

Rating

Effectiveness, Impact	c	Overall rating D
Relevance	a	
Efficiency	c	
Sustainability	a	

Project Objectives

To promote pollution control and to improve public wellbeing in the neighboring areas by establishing sewage treatment plants and treated wastewater reuse facilities, and strengthening PEZA's capability in the planning, regulation, and environmental monitoring in the Special Economic Zones (ECOZONES) of Mactan, Baguio City, Bataan and Cavite, thereby promoting investments in the Philippines.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 2,746 million yen / 534 million yen
- Loan agreement: March 1997
- Terms and conditions: Main part: interest rate of 2.5% (or 2.1% for consulting services); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: July 2005
- Executing agency: Philippine Economic Zone Authority (PEZA)
- Website URL: www.peza.gov.ph/

* This ex-post evaluation has been conducted jointly with the National Economic and Development Authority (NEDA) of the Philippine government.

A joint evaluation feedback meeting (in July 2008)

Effects of Project Implementation (Effectiveness, Impact)

This project has produced limited effects by the time of this evaluation, although some improvements are expected; therefore, its effectiveness is low.

The sewage treatment plants in Mactan, Baguio, and Bataan that have been constructed or renovated under this project are underused due in part to the fact that the drainpipe network is not completed at some points. The rate of plant operation in 2007 was low; 21% at Mactan, 37% at Baguio, and 7% at Bataan. PEZA is now completing the drainpipe networks urgently. These plants, on the other hand, purify wastewater from enterprises at a level on par with or below the effluent standards set by the Department of Environment and Natural Resources. The project has thus made a significant contribution in terms of public health and environmental pollution control. This project constructed a wastewater reuse plant in the Mactan ECOZONE, where water shortages are a source of concern. The treated wastewater is used for firefighting and other purposes.

Relevance

This project has been highly relevant with the Philippines' national policies and development needs at the times of both appraisal and ex-post evaluation. At the time of the appraisal, there was a pressing need for environmental monitoring and plants designed to treat wastewater and solid waste appropriately amid growing investment in ECOZONEs. The four ECOZONEs are situated in areas defined as hubs for economic growth by the Medium-Term Philippines Development Plan at the time of the ex-post evaluation. It was therefore important to promote investment and create employment opportunities in these ECOZONES by developing and improving the environmental infrastructure and enhancing services for enterprises operating there.

Efficiency

This project cost far less than planned (37.7% of planned cost) due to reduced outputs resulting from legislative revisions and policy changes within PEZA, but it took much longer than planned (196% of planned period). Therefore, the evaluation for efficiency is low. The implementation delay was due to two major reasons. First, PEZA took much time for the procurement due to the lack of experience using an ODA loan. Second, changes in the project scope led to changes in the procurement components, resulting in a prolonged process for bidding preparation.

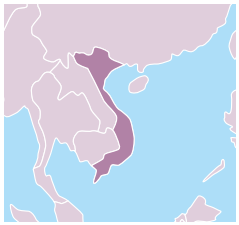
Sustainability

No major problems have been observed in the capacity or the operation and maintenance (O&M) system of the executing agency and the subcontractors responsible for operation; therefore, sustainability of this project is high. PEZA enjoys a sound financial base, posting an annual profit of two billon yen on average. Most of its expenditures are on the O&M of its economic zones. PEZA gives top priority to environmental conservation and better services for tenant enterprises.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be unsatisfactory. The executing agency should incorporate components required to produce the planned effects (drainpipe networks in this project) into the project plans. JICA should do so in the appraisal process as well.

Asia Vietnam



Phu My Thermal Power Plant Project (1) - (4)

Contributing to increased power supply and economic revitalization in southern Vietnam by constructing a thermal power station

【External evaluator】
Koki Hagiu and Yumi Ito, Japan Economic Research Institute

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To meet the increasing power demand and to ensure stable power supply in the southern region by constructing a gas combined-cycle thermal power plant and related transmission lines / substations in Phu My, Ba Ria-Vung Tau Province, near Ho Chi Minh City, thereby contributing to the revitalization of the regional economy.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 61,932 million yen / 59,434 million yen (total)
- Loan agreement: January 1994 (I)
- Terms and conditions: Interest rate: 0.75-2.3%; repayment period: 30-40 years (including a 10-year grace period); general untied (partially tied in parts)
- Final disbursement date: July 2005 (IV)
- Executing agency: Vietnam Electricity (EVN)
- Website URL: http://www.evn.com.vn/

Operation and output performance of the Phu My Thermal Power Plant

	Availability factor				Maximum output	Annual electric energy production	Auxiliar power ratio
Planned at the appraisal	Around 83-90%				1090 MW	5,450 GWh	Around 3-5%
	GT11	GT12	GT13	GT14			
2002	85.0	78.7	76.6	74.5	1091	5,795	1.54
2003	90.2	86.7	90.6	84.5	1091	6,398	1.77
2004	92.6	85.0	88.1	94.9	1091	6,521	1.88
2005	89.6	92.5	85.7	99.0	1091	7,170	1.91
2006	77.1	75.7	88.8	83.5	1071	6,416	1.87
2007 (Jan.-Oct.)	90.5	92.5	91.0	99.9	1071	6,744	1.78

Source: Phu My Thermal Power Company
Notes: Auxiliary power ratio = (Volume of electric power consumption within a plant per year / annual power production) × 100

Effects of Project Implementation (Effectiveness, Impact)

The power plant constructed in this project has produced more electric power since 2002 than the value planned at the time of the appraisal (5,450 GWh/year). The annual power production in 2006 stood at 6,416 GWh. Its availability factor has largely remained high. The maximum output has been almost on par with the planned value, with a low auxiliary power ratio of 2% or lower. In both the southern region and the country as a whole, power consumption in the commercial and manufacturing sectors grew 70% to 100% between 2001 and 2005. This power plant accounts for some 21% of the power production in the southern region and about 11% of the national power production. It is therefore reasonable to conclude that this project has significantly contributed to increased power supply in Vietnam and supported rapid economic growth in recent years throughout the country as well as the southern region.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation. At the time of the appraisal, there was a need to meet the growing power demand, and to cope with the looming demand and supply gap. In addition, at the ex-post evaluation, meeting the power demand, which is likely to continuously increase, remained an important issue to be addressed.

Efficiency

This project cost lower than planned (89.7% of planned cost for Phase IV) but took longer (119% of planned period); therefore the evaluation for efficiency is moderate. The extension of the project period was caused by a number of factors, including the change in the power generation method from the conventional type to that of a gas combined-cycle, the prolonged procurement process, and the behind-schedule construction of both the plant itself (mainly delays in approving subcontractors, supplying power and fuels, and installing a cooling water system) and the construction of transmission (in large part delays in land acquisition).

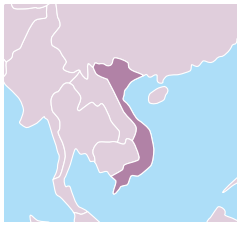
Sustainability

No major problems have been observed in the capacity of the executing agency, nor its operation and maintenance system; therefore, sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. This project provides a good example of an effective project that has built not only a generator set, but also common facilities to be jointly used by another power plant within the same power generating complex and has promoted private sector investment in the power generation sector concurrently with the power generation capacity expansion with the ODA loan. Two major lessons have been learned from this project. First, it is important that any power-distribution company involved should train its staff and strengthen partnerships with external organizations so that it will be able to cope with difficulties, including the need to handle new equipment that uses novel technologies. Second, prompt action should be taken to address mechanical malfunctions after the completion of the plant. To this end, effective coordination should be established as necessary among the organizations concerned.

Asia Vietnam



Pha Lai Thermal Power Plant Project (1) - (4)

Contributing to increased power supply and economic revitalization in northern Vietnam by constructing an additional thermal power station

【External evaluator】
Koki Hagiu and Yumi Ito, Japan Economic Research Institute

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

Project Objectives

To meet the increasing power demand and ensure a stable power supply in northern Vietnam by constructing an additional anthracite coal fired power plant, adjacent to the existing power plant, namely the Pha Lai Thermal Power Plant No.1 located in Hai Duong Province near Hanoi City, together with two substations and related transmission lines, thereby contributing to revitalizing the regional economy.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 72,096 million yen / 65,118 million yen (total)
- Loan agreement: April 1995 (I)
- Terms and conditions: Interest rate: 1.8-2.3%; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: September 2004 (IV)
- Executing agency: Vietnam Electricity (EVN)
- Website URL: http://www.evn.com.vn/

Operation and output performance of the Pha Lai Thermal Power Plant

	Availability factor		Maximum output	Plant load factor	Annual electric energy production	Auxiliary power ratio	Gross thermal efficiency
Planned at the appraisal	Around 83-90%		300 MW × 2 units	Around 70-90%	3,680 GWh	Around 8%	35-40%
	Unit1	Unit2					
2003	57.04	85.21	300	61.45	3,230	9.37	36.68
2004	78.76	76.51	300	67.03	3,533	9.26	36.05
2005	87.07	93.14	300	81.89	4,304	8.95	36.30
2006	86.31	83.47	300	82.13	4,317	8.67	36.17
2007	78.44	95.10	300	79.87	4,198	8.78	35.52

Source: Pha Lai Thermal Power Joint Stock Company

Effects of Project Implementation (Effectiveness, Impact)

The power plant constructed in this project has produced since 2005 more electric power than the value planned at the time of the appraisal (3,680 GWh/year). The annual power production in 2006 stood at 4,317 GWh. The maximum output has been on par with the planned value. The plant load factor has been about 80% since 2005. The availability of the desulfurization equipment to generator operation hours has remained high, above 90% since 2005. In both the northern region and the country as a whole, power consumption in the commercial and manufacturing sectors grew 70% to 100% between 2001 and 2005. This power plant accounts for some 19% of the power production in the northern region and about 7% of the national power production. It is therefore reasonable to conclude that this project has significantly contributed to increased power supply in Vietnam and supported rapid economic growth in recent years throughout the country as well as the northern region.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with the Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation. At the time of the appraisal, there was a need to meet the growing demand for power and ensure stable power supply in both the dry and rainy seasons. In addition, at the ex-post evaluation, meeting the increasing power demand remained an important issue to be addressed.

Efficiency

This project cost less than planned (72% of planned cost for Phase IV) but took longer (126% of planned period); therefore the evaluation for efficiency is moderate. The extension of the project period was caused by delays in a number of aspects, including employment of a consultant in the engineering services, the procurement process, the construction of the power plant itself (bankruptcy of a member of the joint venture contractors affected by the Asian Financial Crisis and delays in land acquisition), and the construction of the transmission lines / substations (delays in land acquisition).

Sustainability

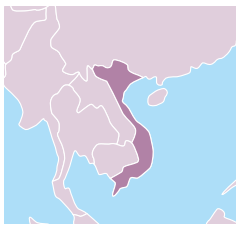
No major problems have been observed in the capacity and the operation and maintenance system of the executing agency; therefore, sustainability of this project is high.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. Experiences and technologies acquired through this project have indirectly contributed to technical transfer to other power plants in the country. Therefore, in a country where construction of a number of power plants are planned, more effective contribution is expected by placing more importance on technical transfer. Another lesson is that construction of the resettlement site needs to be carried out as promptly as possible.

Asia Vietnam

National Highway No.1 Bridge Rehabilitation Project (I-1) (I-2) (I-3) (II-1) (II-2) (II-3)



Contributing to more efficient road transport in Vietnam by rehabilitating and replacing bridges

【External evaluator】
Vietnam-Japan joint evaluation study team 2007*1

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	b	

Project Objectives

To improve road traffic along National Highway No. 1 by rehabilitating and replacing 62 of its aging bridges, thereby contributing to regional development and better living standards.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 35,853 million yen / 31,562 million yen (total)
- Loan agreement: January 1994 (Phase I-1)
- Terms and conditions: Interest rate: 2.3% (I-1: 1.0%; I-2 and II-3: a combination of 1.8% and 0.75%); repayment period: 30 years, including a 10-year grace period (parts of II-3: 40 years, including a 10-year grace period); tied status: partially tied (II-2: general untied; II-3: general untied [consulting services: bilateral tied])
- Final disbursement date: October 2006 (Phase II-3)
- Executing agency: Project Management Unit No. 18 (PMU18), Ministry of Transport (MOT)
- Website URL: http://www.mt.gov.vn/eDefault.aspx?tabid=8

Reductions in travel times and improvements in average travel speeds

Sections along National Highway No. 1	Before the project		After the project	
	Travel time	Average travel speed	Travel time	Average travel speed
Lang Son - Hanoi (170 km)	5h	34km/h	2.5h	68km/h
Dong Ha - Nha Trang (630 km)	21h	30km/h	10h	63km/h
Nha Trang - Ho Chi Minh City (550 km)	18h	31km/h	9h	62km/h

Source: PMU18

Effects of Project Implementation (Effectiveness, Impact)

After the completion of this project, travel time on National Highway No. 1 fell by half and average travel speed doubled on National Highway No. 1. For example, the travel time between Dong Ha and Nha Trang (630 km) dropped from 21 hours to 10 hours, while the average travel speed for the same section rose from 30 km/h to 63 km/h. The annual average daily traffic for 2006 between Dong Ha and Hue and the subsection between Hue and Da Nang fared well, recording 170% and 300% of the planned values, respectively. However, the same data fared badly in most sections and subsections along the highway (20-60% of the planned values). Major factors for this may include overestimated traffic demand forecasting, and some discrepancies between the traffic monitoring points for the planned values and those for the actual values. Overall traffic on National Highway No. 1 has been on the rise.

A total of 27 provinces / municipalities along the highway sections covered by this project have been experiencing rapid industrial development. A total of 55 industrial parks are already in operation and 34 others are in the works in these provinces / municipalities (with a total population of 44 million or half of the national population). A beneficiary survey of residents and enterprises along these sections has shown that improvements in transportation, logistics and socioeconomic conditions, as well as increased business opportunities, are among the recognized positive changes resulting from the project. Negative changes that have been noted in the survey include an increase in traffic accidents and increased flood hazards in the rainy season due to poor drainage associated with this project.*2

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation.

Efficiency

The project period was longer than planned while the project cost was lower than planned; therefore the evaluation of efficiency is moderate. The project completion was two years and ten months behind schedule. It cost less than planned although additional works resulted in more outputs than expected. Yet the period needed to produce the planned outputs was almost the same as the planned duration.

Sustainability

No major problems have been observed with the technical and structural aspects of the executing agency or the organizations responsible for the operation and maintenance (O&M) of the highway. However, O&M budget allocations should be increased to reasonable levels. Therefore, the sustainability of this project is fair.

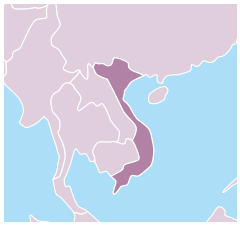
Conclusion, Lessons Learned, Recommendations

In light of the above, this project evaluated to be highly satisfactory. The evaluation team proposes three recommendations. First, it is necessary to build the capacity of the executing agency and organizations responsible for land acquisition and the resettlement of the residents, especially that of local governments. Second, road authorities should take measures to ensure traffic safety in both physical (e.g., grade-separation of intersections) and non-physical (e.g., information campaigns) forms. Third, continued efforts should be made to secure financial sources for O&M, including the setting up of a fund dedicated to road maintenance.

*1 The ex-post evaluation of this project was conducted jointly with the Ministry of Planning and Investment (MPI) and the Ministry of Transport (MOT) of Vietnam, together with the Hanoi - Ho Chi Minh City Railway Bridge Rehabilitation Project (I) - (III) and the National Highway No.5 Improvement Project (I) - (III). The joint evaluation team for this project is made up of eight members, including seven Vietnamese evaluators (from MPI, MOT, the executing agency and other organizations concerned, and an evaluation consulting firm) and Keishi Miyazaki, an external evaluator from OPMAC Corporation of Japan.

*2 These changes are considered part of the combined impact of road rehabilitation projects for National Highway No. 1 by the World Bank and the Asian Development Bank and this project.

Asia Vietnam



National Highway No.5 Improvement Project (1) - (3)

Improving the main artery road in northern Vietnam to significantly increase the efficiency of road transportation, thereby contributing to the economic development of areas along the corridor

【External evaluator】
Vietnam-Japan joint evaluation study team 2007*

Rating

Effectiveness, Impact	a	Overall rating B
Relevance	a	
Efficiency	b	
Sustainability	b	

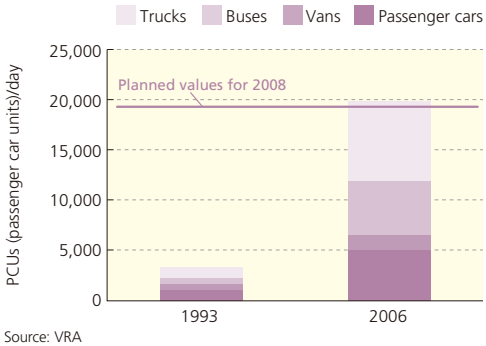
Project Objectives

To respond to increasing traffic demand and to realize smoother and more efficient flow of passenger and cargo transport by improving the National Highway No. 5 (NH-5) directly linking Hanoi and Hai Phong, the largest international trade port in northern Vietnam, thereby contributing to the restoration of trade and industry and to the improvement of living standards in the north.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 20,961 million yen / 18,723 million yen (total)
- Loan agreement: January 1994 (Phase I)
- Terms and conditions: Interest rate: 1.0% (1.8% for Phase II, 2.3% for Phase III); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: July 2004 (Phase III)
- Executing agency: Project Management Unit No. 5 (PMU5), Ministry of Transport (MOT)
- Website URL: http://www.mt.gov.vn/eDefault.aspx?tabid=8

Traffic volume on National Highway No. 5



Source: VRA

Effects of Project Implementation (Effectiveness, Impact)

The annual average daily traffic on the sections covered by this project stood at 19,781 PCUs (passenger car units) in 2006, a more than six-fold increase over the 1993 level; already surpassing the planned value for 2008. Despite the increasing traffic, the travel time between Hanoi and Haiphong has been cut by more than half due to such factors as an increase in the number of lanes, separation of passenger vehicles from other vehicles, and improvements to bridges and intersections.

The provinces / municipalities along these sections (with a total population of about 4.78 million) have been experiencing rapid economic growth, especially in the industrial sector. It is apparent that such growth is underpinned by the improvementsin National Highway No. 5, the main artery road in northern Vietnam. Above all, a number of new industrial parks have been developed along the highway in the originally rural provinces of Hung Yen and Hai Duong, providing employment opportunities for local residents. In a beneficiary survey of residents and enterprises along these sections, the respondents largely expressed satisfaction with the economic benefits of National Highway No. 5 and with the project itself. However, many of them also noted an increase in traffic accidents, and inconvenience due to difficulty in crossing the road, poor drainage, and the like.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation. In addition, it has been increasing in importance as a lifeline for logistics in northern Vietnam.

Efficiency

Though the project cost was lower than planned, the project period took much longer to produce the planned outputs; therefore the evaluation for efficiency is moderate. The project cost was within the original budget but the period needed to produce the planned outputs significantly exceeded the planned duration. Extension of the original project period was necessary to make up for the delays in land acquisition and the relocation of residents, which resulted mainly from the lack of experience in large-scale infrastructure development on the part of the executing agency and the local governments.

Sustainability

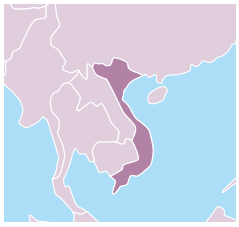
No major problems have been observed in the capacity of the executing agency nor its operation and maintenance system; However, the O&M budget allocations are inadequate and some damage to the road surface remains unattended to. Therefore, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be satisfactory. A major lesson learned from this project is the need to design a project that takes account of the possibility that the traffic pattern will change significantly after the project. Another lesson is that it is necessary to fully consider the implementation capacity of the executing agency and the organizations responsible for land acquisition and the resettlement of residents. As recommendations, road authorities should take measures to ensure traffic safety from both the physical (e.g., grade-separation of intersections) and non-physical (e.g., information campaigns) aspects to reduce traffic accidents on National Highway No. 5. In addition, continued efforts should be made to secure financial sources for the O&M, including setting up a fund dedicated to road maintenance.

* The ex-post evaluation of this project was conducted jointly with the Ministry of Planning and Investment (MPI) and the Ministry of Transport (MOT) of Vietnam, together with the National Highway No.1 Bridge Rehabilitation Project (I-1) (I-2) (I-3) (II-1) (II-2) (II-3) and the Hanoi - Ho Chi Minh City Railway Bridge Rehabilitation Project (I) - (III). The joint evaluation team for this project has ten members, including 9 Vietnamese evaluators (from MPI, the executing agency and other organizations concerned, and an evaluation consulting firm) and Takako Haraguchi, an external evaluator from International Development Associates Ltd. of Japan.

Asia Vietnam



Hanoi - Ho Chi Minh City Railway Bridge Rehabilitation Project (1) - (3)

Contributing to better safety and reliability of railway services between Hanoi and Ho Chi Minh by replacing aged bridges

【External evaluator】
Vietnam-Japan joint evaluation study team 2007*

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	b	

Project Objectives

To provide safe and reliable train services and to improve the transport efficiency by replacement or reinforcement of nine deteriorated railway bridges along the Hanoi-Ho Chi Minh City railway line which need urgent safety countermeasures, thereby improving the transport of goods between the north and south and contributing to the development of regional economies.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 11,437 million yen / 9,332 million yen (total)
- Loan agreement: January 1994 (I)
- Terms and conditions: Interest rate: 1.0% (1.8% for Phase II, 2.3% for Phase III); 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: July 2005 (Phase III)
- Executing agency: Vietnam Railways Corporation (VNR)
- Website URL: http://www.vr.com.vn/English/

Interviews with officials at the People's Council of Binh Thuan Province

Interviews with passengers at Hue Station

* The ex-post evaluation of this project has been conducted jointly with the Ministry of Planning and Investment (MPI) and the Ministry of Transport (MOT) of Vietnam, together with the National Highway No.1 Bridge Rehabilitation Project (I-1) (I-2) (I-3) (II-1) (II-2) (II-3) and the National Highway No.5 Improvement Project (I) - (III). The joint evaluation team for this project has ten members, including night Vietnamese evaluators (from MPI, MOT, the executing agency and other organizations concerned, and an evaluation consulting firm), and Keishi Miyazaki, an external evaluator from OPMAC Corporation of Japan.

Effects of Project Implementation (Effectiveness, Impact)

After the completion of this project, the travel time between Hanoi and Ho Chi Minh was reduced 20% or by 7 hours from 36 hours to 29 hours. The speed limit for the target bridges increased significantly, from 15 to 30 km/h to 60 to 80 km/h. Above all, the project increased the structural strength of the target bridges, enhancing the safety and reliability of railway services. Between 1994 and 2006, the passenger traffic volume of the Hanoi - Ho Chi Minh line rose significantly; 60% in terms of the number of passengers and 210% in terms of passenger-kilometers. Likewise, the freight traffic volume grew 60% in terms of tons and 140% in terms of ton-kilometers. The number of trains per day on the same section in both directions increased three-fold, from four in 1993 to 12 in 2007.

The 21 provinces / municipalities along the Hanoi - Ho Chi Minh line with a total population of 38.4 million or about 46% of the national population have been experiencing rapid industrial development. A total of 46 industrial parks are already in operation and 24 others are in the works in these provinces / municipalities. Some impacts include development of tourism in the southern central coastal region, especially Nha Trang, one of the most famous beach resorts in the country, and private sector participation in the railway passenger and freight sectors. According to a beneficiary survey, 93% of the passengers are satisfied with the current railway services, citing shortened travel times, comfortable train rides, and enhanced safety.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation. The Hanoi - Ho Chi Minh line is extremely important, accounting for 80% of the passenger traffic and 60% of the freight traffic of the entire railway system of Vietnam as of 2007.

Efficiency

The project period took much longer (6 years) than planned while the project cost was less than planned despite the inclusion of additional works; therefore, the evaluation of efficiency is moderate. It should be noted that the period needed to produce the planned outputs was almost the same as the planned period.

Sustainability

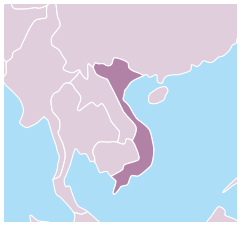
Although no major problems have been observed with the capacity of the executing agency nor its operation and maintenance system, the O&M budget is not at reasonable levels; therefore, sustainability of this project is fair.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. The evaluation team proposes three major recommendations to Vietnam Railways (VNR). First, they should upgrade project planning and design capabilities to international standards. Second, they should increase procurement management capacity. Third, they should continue efforts to secure financial sources for the operation and maintenance.

Asia Vietnam

Third, Fourth and Fifth Poverty Reduction Support Credit



Providing strategic support for poverty reduction and economic growth in Vietnam in partnership with other donors and in combination with other assistance schemes

【External evaluator】
Masumi Shimamura, National Graduate Institute for Policy Studies

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	a	
Sustainability	b	

Project Objectives

To help the Vietnamese government to press ahead with various reforms for the purpose of supporting the achievement of three policy issues identified by its Comprehensive Poverty Reduction and Growth Strategy (CPRGS): (i) a transition to a market economy, (ii) inclusive and sustainable development, and (iii) establishment of modern governance, thereby contributing to poverty reduction and economic growth in Vietnam.

Outline of the Loan Agreement

- Loan amount / disbursed amount: 7 billion yen / 7 billion yen (total)
- Loan agreement: December 2004 (Third)
- Terms and conditions: 1.3% interest rate; 30-year repayment period (including a 10-year grace period); general untied
- Final disbursement date: August 2007 (Fifth)
- Executing agency: The State Bank of Vietnam
- Website URL: http://www.sbv.gov.vn/en/home/index.jsp

Effects of Project Implementation (Effectiveness, Impact)

Vietnam's economy has been experiencing rapid growth; its real growth rate was over 7% between 2002 and 2004 and it has maintained the rate at more than 8% since 2005. The percentage of the poor in the total population fell from 58.1% in 1993 to 19.5% in 2004.

Apart from the financial sector, Vietnam has been moving ahead with reforms in most of the sectors on which the Japanese government and JICA place special emphasis: public financial management, planning processes, private sector development, and state-owned enterprise reform.

Regarding improvement of the investment climate, the increase in investment to Vietnam (from the world and from Japan) has coincided with the implementation of PRSC. Moreover, policy consultations under PRSC have culminated in specific projects for technical cooperation and project-type ODA loans, contributing to the realization of reforms.

Therefore, this project has largely achieved its objectives and its effectiveness is high

Relevance

This program has been highly relevant with Vietnam's national policies and development needs at the times of both appraisal and ex-post evaluation.

This program has been a useful tool to support Vietnam's reforms and has helped the implementation of CPRGS and other reform programs being conducted by the Vietnamese government. The program has responded flexibly to changes in the development objectives and priorities for Vietnam over the years. As a program that respects ownership by the Vietnamese government, it has also promoted donor alignment to Vietnam's development policies.

Contributions from the Japanese government and JICA in the form of expressing Japan's view and strategically combining traditional bilateral aid (technical cooperation, project-type assistance, etc.) with multilateral aid (e.g., PRSC) were evaluated highly by other donors

Efficiency

This program is considered to be implemented efficiently. PRSC funds have contributed to additional spending on various reforms promoted by the Vietnamese government. The program was implemented efficiently under certain pressures based on the PRSC cycle, although the government did not have total control of its implementation schedule due to political and other factors. To minimize transaction costs, an effective framework for coordination was in place within the Vietnamese government, between donors, and among Japanese institutions involved.

Sustainability

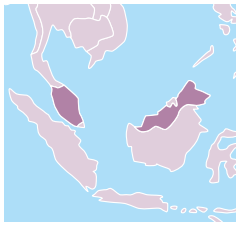
The sustainability of this program is fair. The PRSC mechanism itself will likely be terminated in 2011 when Vietnam is expected to "graduate" from the status of a low-income country. For the framework and functions developed through PRSC to be sustainable, it is important to develop the following three mechanisms:

- A mechanism that curbs coordination costs and ensures flexibility and efficiency
- A mechanism that can cope with rapidly changing trends of the international markets surrounding Vietnam
- A mechanism that enables the complementary implementation of technical cooperation to ensure the effectiveness of reforms

Conclusion, Lessons Learned, Recommendations

This program is evaluated to be highly satisfactory. Since the PRSC process builds on local initiatives and calls for sustained involvement, it is essential to develop local capacity. It is important to analyze and make recommendations from a mid-long term perspective to ensure consideration to overall, cross-sectoral issues for Vietnam. In the future, the development objectives of Vietnam should be addressed through a multi-dimensional approach that systematically combines bilateral and multilateral aid while taking account of the synergy between technical cooperation and PRSC.

Asia Malaysia



Hospital Universiti Kebangsaan Malaysia (HUKM)

Contributing to community healthcare and advanced R&D as one of the best medical educational institutions in Malaysia

【External evaluator】
Jun Arakawa, Mitsubishi UFJ Research & Consulting Co., Ltd.

Rating

Effectiveness, Impact	a	Overall rating A
Relevance	a	
Efficiency	b	
Sustainability	a	

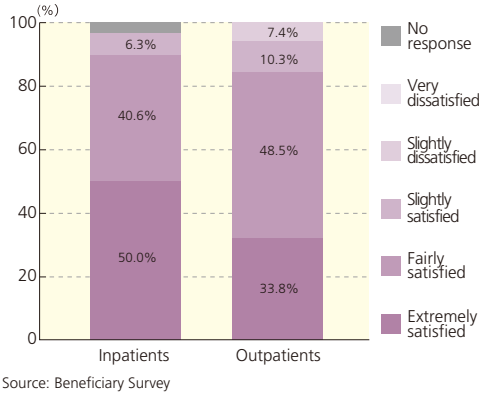
Project Objectives

To support (i) better medical skills and expertise among UKM medical students and graduates (through retraining after graduation) and the training of nurses, (ii) research and development in the clinical field, and (iii) the provision of healthcare services by constructing a medical education facility with state-of-the-art medical equipment at UKM, the only medical school without an affiliated hospital among the three in Malaysia, thereby contributing to better health in the surrounding areas

Outline of the Loan Agreement

- Loan amount / disbursed amount: 10,215 million yen / 8,203 million yen
- Loan agreement: September 1993
- Terms and conditions: 3.0% interest rate; 25-year repayment period (including a 7-year grace period); general untied
- Final disbursement date: January 2001
- Executing agency: Ministry of Higher Education
- Website URL: Ministry of Higher Education; http://www.mohe.gov.my/webkpt_v2/index.php?lang=ENG

Overall Satisfaction with HUKM's Healthcare Service



Source: Beneficiary Survey

Effects of Project Implementation (Effectiveness, Impact)

In relation to the training of health professionals, HUKM has increased the numbers of teaching staff, students, graduates, and nurses to the planned levels. As for the support for research in the clinical field, HUKM has fared well in terms of subsidized research, international research projects, and the number of theses, prizes, and patent registrations. For the provision of healthcare services, HUKM has achieved the planned number of specialized outpatients. It has almost achieved the planned level in terms of inpatient capacity utilization.

A beneficiary survey shows that some 90% of the patients are from local communities. They are generally quite satisfied with healthcare services provided by HUKM. Many patients appreciate the "easy access to the hospital" and "more accurate and better treatment." As a major medical educational institution, HUKM is considered to be making a contribution to the alleviation of the shortage of doctors and their disproportional distribution among the regions of Malaysia.

Therefore, this project has largely achieved its objectives and its effectiveness is high.

Relevance

This project has been highly relevant with Malaysia's national policies and development needs at the times of both appraisal and ex-post evaluation. The sixth national health plan that was in place at the time of the appraisal called for some measures, including this project, that aimed at easing the chronic shortage of doctors and rectifying regional disparities in the number of doctors. At the time of the ex-post evaluation, the government allocated significant funding to the health sector as it directly linked with the "quality of life." Special emphasis was placed on the "expansion and improvement of healthcare facilities," "health improvements in rural areas," and "healthcare-related training."

Efficiency

Although accurate information on the outputs (procured equipment) is not readily available, it is estimated that the project cost was almost as planned. The project period was much longer than planned (270% of the planned period) mainly because the work for building the hospital, which was funded by the Malaysian side, was behind schedule due to bad weather and the additional construction work required. Therefore the evaluation for efficiency is moderate.

Sustainability

No major problems have been observed in capacity of the executing agency nor its operation and maintenance system; therefore sustainability of this project is high. The operation and management of procured equipment is outsourced. HUKM has been generally in the black, with funds coming from government subsidies as well as its operating income.

Conclusion, Lessons Learned, Recommendations

In light of the above, this project is evaluated to be highly satisfactory. The problem was that the project completion report was not submitted by the deadline, making the evaluator difficult to conduct an accurate evaluation of this project. A major lesson is the need to ensure that both the executing agency and JICA strictly observe the rules concerning documentation, document management and keeping data gathering, and reporting.