Terminal Evaluation

Latin America and the Caribbean

1. Outline of the Project

Country: Project title:

Mexico The National Center for Environmental Research and Training (Phase 2)

Issue/Sector: Cooperation scheme:

Environment Project-type Technical Cooperation

Division in charge:Second Development Study Division, Social

898 Million Yen

Development Study Department

Period of

Cooperation

1 July 1997 - 30 June Partner Country's Implementing Organization:

2000 National Institute of Ecology

Extended period:

1 July 2000 - 30 June

2002

Office of Environmental Cooperation, Global Environment Bureau, Ministry of

the Environment

Technical Cooperation Division, Trade and Economic Cooperation Bureau,

Ministry of Economy, Trade and Industry

Supporting Organization in Japan:

Environmental Affairs' Office, Industrial Science and Technology Policy and

Environment Bureau, Ministry of Economy, Trade and Industry

Overseas Environmental Cooperation Center

Related Cooperation:

Project-type Technical Cooperation; "The National Center for Environmental Research and Training(Phase 1)"

1-1 Background of the Project

In Mexico, air pollution and hazardous waste engendered by the high concentration of the population mainly in the Mexico City Metropolitan area were causing serious environmental problems. The Mexican Government, recognizing that personnel who were engaged in environment protection activities were not well prepared for their tasks, settled the National Center for Environmental Research and Training (CENICA) in 1993 and requested Project-type Technical Cooperation from the Japanese Government for human resources development. In response to the request, JICA implemented a preliminary survey in March 1994. As a result, it was recognized that there was an important and urgent need for CENICA; however, the acceptance scheme was not developed on the Mexican side, and the activity plan was poorly prepared. After careful consideration, the technical cooperation was divided into two phases. The first two-year cooperation, "The National Center for Environmental Research and Training (Phase 1)", commenced on 1 July 1995, establishing the organization of CENICA and transferring the basic techniques related to air, waste and industrial pollution management. The three-year cooperation, Phase 2, commenced on 1 July 1997 with the aims of enhancing the organization, its functions and activities.

In January 2000, terminal evaluation for Phase 2 was implemented, and it was determined that there still remained the necessity to continue the cooperation to strengthen CENICA, strengthen clarify the action plan and cope with individual issues for practical research and development. Based on the results of a survey, the cooperation would be continued till the end of June 2002. This evaluation covers extended period of the Phase 2.

1-2 Project Overview

To enforce the organization, functions and activities of CENICA, the Project implemented for the staff of CENICA activities such as (1) advice or instructions related to the operation and management of CENICA, (2) technical transfer related to the provision, collection and analysis of information on air pollution countermeasures and other information related to the environment, (3) governmental support for the appropriate disposal related to the analysis and classification methods of hazardous substances and (4) planning and implementation of a training course and seminars in the field of the environment for public and private sectors.

(1) Overall Goal

To improve the ability of environmental protection in Mexico.

(2) Project Purpose

Structures and activities of the National Center for Environmental Research and Training (CENICA) are strengthened.

- (3) Outputs
- 1) The management of CENICA is improved.
- 2) Operation and management of the monitoring stations and the laboratory are strengthened.
- 3) Technical information related to the establishment of environmental protection standards is provided to the relevant Mexican authorities.
- 4) The knowledge and techniques of federal government officials, local authorities and industry personnel on environmental protection are improved.
- 5) The role of CENICA to collect data and to make publications related to environmental matters is improved.
- (4) Inputs

Japanese side:

Long-term Experts	5	Equipment	42 Million Yen	
Short-term Experts	9	Local Cost	22 Million Yen	
Trainees received	8			
Chilean side:				
Counterparts	54	54		
Land and Facilities	5 Mill	5 Million Yen		
Local Cost	220 Million Yen			

2. Evaluation Team

Members of Evaluation Team

Team Leader/General: Junsaku KOIZUMI, Special Technical Advisor, JICA Technical Evaluation Hazardous Waste: Kiyotaka MATUSBA, Environmental Cooperation Office, Global Environment Bureau, Ministry of the Environment Technical Evaluation Air Pollution: Masami MIZUGUCHI, Senior Advisor (Environment), JICA

Evaluation Planning: Akiko KOMORI, Second Technical Cooperation Division, Social Development Cooperation Department, JICA

Evaluation Analysis: Mitsue MISHIMA, Overseas Project Management

Consultants, Ltd.

Period of Evaluation 2 December 2001 - 16 December 2001 **Type of Evaluation**:

Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The Project was relevant to current policy in the Mexican government, "the promotion of scientific and technical research in relation to the environmental issues" that is stated in the "National Development Plan 2001-2006". CENICA's activities were also in line with the "National Progress of Natural Resources and Environment 2001- 2006" by the Environmental and Natural Resources Ministry (SEMARNAT). The Project was also relevant to the Japanese Official Development Assistance (ODA) policy for Mexico, which positions environment-related project as one of the prioritized areas. Regarding the needs of the target group (i.e., the staff and the Long-term Experts of CENICA), the Project generally met their requirements, since more than 80 percent of the total of questionnaire survey respondents answered that the Project met with their needs. Therefore, the Project is considered to have high relevance.

(2) Effectiveness

The Project Purpose, the "Structures and activities of the CENICA are strengthened", was for the most part either achieved or will be achieved. In terms of the organization, CENICA has become one of the General Directorates in INE, and the number of personnel was increased from 34 to 54. During the Phase 2-Extension period, various research, training courses and seminar were actively conducted, and the number of research activities were increased compared with the period before the Phase 2-Extension. The technical skills of CENICA were improved during the Project as a whole, although there were some differences in progress depending on the sector. There are some items that are in the middle of preparation, such as formulation of a midterm plan, laboratory accreditation, and resources/documents rooms. However, examining the work progress, it is likely that these activities will be finished or almost completed by the end of the Phase 2-Extension period. Given all of this empirical evidence, the effectiveness of the Project will reach a significant level by the end of the Phase 2-Extension.

(3) Efficiency

For the Japanese side, generally, the timing of Inputs was as scheduled, and its content was adequate except for the delay in dispatching the Long-term Experts in the hazardous waste area. The equipment donated by Japan has been utilized adequately in general. For the Mexican side, in terms of the assignment of counterparts, the number of counterparts was increased as a result of Mexican-government efforts even though the total number of personnel in INE tended to be decreasing. However, disbursements to cover local costs were sometimes delayed in the beginning of a fiscal year, which delayed implementation of the Project.

(4) Impact

It is too early to evaluate the impact from the viewpoint of unbiased status. During the extension period, the work done by CENICA has steadily penetrated the fabric of Mexican society; for example, a total of nine regulations related to the Environment were established in collaboration with CENICA. Moreover, CENICA has participated in meetings concerned with the formulation or modification of standard regulations, which indicates that CENICA has become more influential as a source of advice and information. It is planned that there would be more formulation or modification of Environmental standards under the guidance of CENICA.

(5) Sustainability

In terms of institutional sustainability, there was progress; CENICA has become one of the General Directorates in INE, plays a more important role than before, and the number of personnel was increased. However, considering the fact that the increases in activities were requested inside the government, CENICA has to make efforts further to manage its budget, number of staff and arrangement of work plans. Concerning financial sustainability, the Mexican government had not yet made of decision on continuous financial support. CENICA requested an increased budget and made efforts toward increasing the number of collaborative research projects or works in which they share the budget with external organizations. Technical skills were advanced during the cooperation period. The number of activities and research commissioned to CENICA has been increasing, and to address with, CENICA has to continue to polish its skills.

3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

N/A

- (2) Factors concerning the Implementation Process
- 1) The related persons both from the Japanese and Mexican sides held management meetings (once a month on average) according to the need, discussed the activities implementation plan and decided the detailed contents.
- 2) The related persons both form the Japanese and Mexican sides maintained good relations and made efforts to ensure that the Project would be implemented smoothly. The Mexican side enforced the organization and activities of CENICA. For example, more persons were allocated, CENICA was upgraded organizationally, and the management budget for CENICA became bigger. On the Japanese side, efforts were made to purchase as much equipment as possible in Mexico to save time, and the Short-term Experts were timely dispatched according to the necessity.

3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

In Mexico, as the society becomes increasingly more concerned with environmental problems, CENICA implemented an urgent survey in compliance with the request from the governmental organization in addition to the planning activities of the Project. During the cooperation period, the policy was changed according to the change of the government, and the staff was reallocated. This was an unexpected situation. However, considering the time restriction to implement the Project, two years, implementation of all the planned activities was impractical.

(2) Factors concerning the Implementation Process

N/A

3-4 Conclusion

It has been confirmed that the Project has progressed smoothly as a whole, and that the capability of CENICA has been enhanced steadily with the contribution of the Japanese side and with the self-support efforts of the Mexican side. As a result, the capability of CENICA has been improved from the view of organizational management and technology. However, Mexico is still facing serious environmental problems, and these problems require CENICA to continuously enhance its organization and improve its techniques.

3-5 Recommendations

- (1) It is necessary to have further information sharing among the staff in each sector. It is also advisable to provide equal opportunity for all staff in their training to enhance the capability of each member of the staff.
- (2) Considering the necessity of further development of research activities, the number of staff and the budget are slightly below what is necessary. These have to be increased as well as the space for their operations.

3-6 Lessons Learned

- (1) It is desirable to prolong the dispatch period of the Short-term Experts at least two months.
- (2) The counterpart training in Japan is a good opportunity not only to acquire the needed techniques, but also to experience the spirit of teamwork. This will enhance the counterparts' awareness of the importance of each member of the project.
- (3) A consistent support system in Japan is favorable, such as that where experts in the same sector are continuously dispatched from one designated organization, and one designated organization accepts counterpart training.

3-7 Follow-up Situation

Long-Term Expert (2002/12/11-2003/12/10): Municipal Solid Waste Management Long-Term Expert (2003/1/23-): Hazardous Waste and Contaminated Soils Treatment Short-Term Expert (2004/2/5-2004/2/27): Modeling Synoptic Air Pollution Trends Short-Term Expert (2004/2/169-2004/3/6): Analytical Methods for Volatile Organic Compounds in Air Third Country Training Program (2002-2006)