

Terminal Evaluation

Latin America and the Caribbean

1. Outline of the Project

Country:

Mexico

Project title:

The Project on Engineering and Industrial Development Center for Small and Medium Scale Industries in Queretaro State

Issue/Sector:

Industry/General

Cooperation scheme:

Project-type Technical Cooperation

Division in charge:

First Technical Cooperation Division,
Mining and Industrial Development Study
Department

Total cost:

726 Million Yen

**Period of
Cooperation**

1 February 1998 - 31
January 2002

Partner Country's Implementing Organization:

Engineering & Industrial Development Center (CIDESI)

Supporting Organization in Japan:

Ministry of Economy, Trade and Industry, Nuclear and Industrial Safety
Agency, Safety Section

Related Cooperation:

Development Study "Study on the transfer of Essential Technologies to the Supporting Industries in Mexico"

1-1 Background of the Project

Mexico, reflecting on the debt crisis in the 1980s, has shifted its policy emphasis from protecting domestic industries to economic liberalization and modernization by opening up its markets. However, Small and Medium Sized Enterprises (SMEs), many of which depend on parts production, lack the capacity to compete with imported products. Under the circumstances, the foremost concern has been raising social instability engendered by the increasing number of bankruptcies and the unemployment rate. Therefore, the Mexican government has set as a main priority strengthening of the competitiveness of SMEs.

Under these circumstances, the Government of Mexico requested the Government of Japan to provide Project-type Technical Cooperation to implement the Project on SMEs Development. The Engineering & Industrial Development Center (CIDESI), under the Ministry of Public Education, National Council for Science and Technology, administers the project with the aim of expanding its functions and strengthening the support system for SMEs.

1-2 Project Overview

The project aims at the transfer techniques to CIDESI in the fields of Material Testing and Non Destructive testing in order to promote SMEs competitiveness. It also helps to establish a system that provides for the transfer of techniques through seminars, training, testing, advisory activities, and technical consultation to SMEs, at education and research institutions in and around Queretaro State.

(1) Overall Goal

CIDESI and other institutes will be able to provide the appropriate technical services in the fields of Material Testing and Non Destructive Testing for SMEs in Mexico.

(2) Project Purpose

CIDESI will be able to provide the appropriate technical services in the field of Material Testing and Non Destructive Testing for SMEs in and around Queretaro State.

(3) Output

- 1) The management system of the Project will be enhanced.
- 2) The machinery and equipment necessary to implement testing services in the fields of Material Testing and Non Destructive Testing will be provided, installed, operated and maintained properly.
- 3) The technical capability of the counterpart personnel will be upgraded in the above mentioned fields.
- 4) Seminars and training courses in the above mentioned fields that meet the needs of SMEs in and around Queretaro State will be established and managed.
- 5) The technical support for SMEs will be systematized.

(4) Input

Japanese side:

Long-term Experts	7	Equipment	207 Million Yen
Short-term Experts	22	Local Cost	24 Million Yen
Trainees received	15	Other	26 Million Yen

Mexican side:

Counterparts	20
Equipment	56 Million Pesos (8 Million Yen)
Local Cost	80 Million Pesos (12 Million Yen)
Other Costs (Equipment management cost)	162 Million Pesos(24 Million Yen)

2. Evaluation Team

Members of Evaluation Team	Leader:Yukio NAKAJIMA, Managing Director, Mining and Industrial Development Cooperation Department, JICA	
	Technology Transfer Planning:Tatsumi TAKEHANA, Manager, High Pressure Gas Safety Laboratory, The High Pressure Gas Safety Institute of Japan	
	Evaluation Management:Ken KUBOKURA, First Technical Cooperation Division, Mining and Industrial Development Cooperation Department, JICA	
	Evaluation Analysis:Hiromi OSADA, I.C. Net Limited	

Period of Evaluation	26 November 2001-12	Type of Evaluation:
	December 2001	

Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The Project Purpose and the Overall Goal have been consistent with the National Science and Technology Plan under the National Development Plan which aimed at strengthening SMEs competitiveness. In addition, the technical needs of the SMEs are high in the Material Testing and Non Destructive testing sectors. For these reasons, the Project is relevant.

(2) Effectiveness

As a result of the Project, CIDESI became able to provide seven new Chemical Analysis services, nine new Metallography services, six new Mechanical Testing services, and four new Non Destructive Testing services. CIDESI also managed training courses and seminars for Industry/Industry/Academy trainees in which its staff members are the instructors. According to the questionnaire survey conducted by CIDESI, which covered 59 client industries in the year 2001, the clients highly evaluated the scope, reliability, and technical level of CIDESI's testing services. For these reasons, the Project Purpose will be achieved by the end of the Project.

(3) Efficiency

In both fields of the experts' specialization, the cooperating institutions in Japan made the necessary adjustments during the Project, and the timing of experts dispatch was efficiently planned. All equipment was purchased locally considering maintenance and its cost; however, the given amount of time before delivery was shortened in most cases, but in some delayed delivery affected the activity plan. As for the counterparts, due to CIDESI's efforts to improve conditions, such work conditions, its turnover rate remained low. Also, efficiency was improved by monitoring Project progress and discussions on the activity plan through the semiannually held meetings of the Joint Coordinating Committee. Therefore, the inputs and activities were appropriately planned, practiced, and efficiently translated into Outputs.

(4) Impact

The impact of the technical services of CIDESI has not yet been recognized across Mexico. Thus, the Overall Goal has not yet been achieved. However, CIDESI's technical training and seminars are not limited to around Queretaro State. They are conducted in many cities throughout Mexico and, hence, it is expected that the Overall Goal will be achieved by the trainees' activities in the future. Also, some positive impacts which were not initially expected have been observed. For instance, in 2001, a seminar was held inviting participants from four Latin American countries aside from Mexico, and creation of a network among agencies in charge of SMEs support was agreed upon.

(5) Sustainability

The role and policy importance of CIDESI's technical services to Mexican industries has increased. Counterparts are able to practice technical services (request testing/on-site advisory services/etc.) for SMEs on their own. They have acquired the skills of management and evaluation for seminars/training, as well as the skills to maintain the equipment. The independent revenues of CIDESI from its technical services account for 19.3 percent of overall management expenses, and revenues earned by the targeted section of the Project have almost tripled. Furthermore, it is expected that the Government subsidy will continue as before: hence the funds necessary to continue the activities started by the Project will also be secured. In summary, it is expected that the organizational, technical, as well as the financial sustainability will be ensured hereafter.

3-2 Factors that promoted realization of effects

(1) Factors concerning the planning

The members of preparatory study mission included the experts that were expected to be dispatched after Project commencement, and this enabled the planning of technical transfer based on a detailed survey of the technical capabilities of counterparts. This contributed to the smooth operation of the Project immediately after its start, and resulted in its overall efficient implementation. Also, the effect of high quality was materialized through the combination of participatory analysis and analysis by specialists in the appropriate technical disciplines.

(2) Factors concerning the Implementation Process

- 1) It was effective for project management that the Project could assign a Long-term Expert throughout the Project period who was very familiar with the background situation.
- 2) Highly motivated and qualified counterparts, as well as the high ability of the Japanese experts, all contributed greatly to the Output.
- 3) CIDESI managed to obtain support both for budget and personnel from superordinate institutions and the competent ministry. This led to prompt arrangements in assigning counterparts, and procuring equipment.

3-3 Factors that impeded realization effects

(1) Factors concerning the planning

N/A

(2) Factors concerning the Implementation Process

N/A

3-4 Conclusion

All expected outputs have been achieved, and thus the Project Purpose will soon be achieved. However, the Overall Goal is not yet accomplished, and the ex-trainee's activities utilizing what was delivered by CIDESI's training are counted on for achievement of the Goal.

3-5 Recommendations (concrete action, proposition and project suggestions)

(1) CIDESI should further collaborate with the Government, Education and Research, and Financial Institutions in order to strengthen the comprehensive supporting system to promote SMEs.

(2) The counterparts still lacked the practical experience of consulting enterprises, so it is necessary to foster them through On-the-Job Training (OJT) to raise their level to that of senior consultant. Therefore, it is desirable for a few more years of follow up cooperation, including the dispatch of Short-term experts.

3-6 Lessons Learned (Any matter which as a reference might be used to discover, form, enforce, and manage other similar projects)

During the preparatory study of a project, the following should be carefully be considered:

(1) In order to ensure a quality project design, it is effective to have the experts dispatched as Project members serve also as members of the preparatory study team. This will enable planning the technical transfer based on detailed information on the skills level of counterparts.

(2) Select an implementing institution which is able to make appropriate arrangements regarding budget and personnel.

(3) Survey the skills level of counterparts and their motivation towards acquiring transferred skills carefully.

(4) Formulating a detailed equipment plan is another way of ensuring the success of a project.

3-7 Follow Up Situation

N/A