Terminal Evaluation

Asia

1. Outline of the Project

Country:
Sri Lanka

Project title:
Construction Equipment Training Center Project

Issue/Sector:
Construction Equipment

Cooperation scheme:
Project-type Technical Cooperation

Division in charge:
First Technical Cooperation Division,
Social Development Cooperation Department

Total cost:
851 Million Yen

Period of Cooperation
1 October 1996 - 30 September 2001

Partner Country's Implementing Organization:
Ministry of Urban Development, Construction & Public Utilities, Institute for Construction Training and Development

Supporting Organization in Japan:
Policy Bureau, Ministry of Land, Infrastructure and Transportation

Related Cooperation:
Grand Aid; "Project for Establishment of Construction Equipment Training Center"

1-1 Background of the Project

The Government of Sri Lanka actively promoted improving and consolidating the social infrastructure such as electricity, telecommunication and transportation, and aggressively introduced the construction equipment under the 14th public investment plan (1992-1996). While there were training facilities to foster construction equipment operators, there were no facilities to implement systematic skills training for the maintenance of construction equipment. Therefore, it was difficult to systematically meet the demand for human resources in the area. In order to improve the situation, the Government of Sri Lanka planned to establish a Construction Equipment Training Center (CETRAC) to foster mechanics and upgrade their construction equipment maintenance skills. The Government submitted the proposals to the Government of Japan with a request for Grant Aid in September 1990 and Project-type Technical Cooperation in June 1993 to foster the necessary personnel.

1-2 Project Overview

The Project transferred the skills to the staff of CETRAC to develop its management system, prepare training materials and establish and implement the training course with the aims of fostering mechanics and upgrading construction equipment maintenance skills.

(1) Overall Goal

Management and maintenance of construction equipment (C.E.) are improved in the Construction sector of Sri Lanka.

(2) Project Purpose

The CETRAC develops human resources related to the management and maintenance of C.E.

(3) Outputs

1) Management system is established in the Center.
2) Materials necessary for the training courses are completed.
3) Systematic in-service skill-up training system on C.E. is established.
4) In-service skill-up trainings on C.E. are conducted with sustainability.

(4) Inputs

Japanese side:

Long-term Experts	11	Equipment	147 Million Yen
Short-term Experts	25	Local Cost	43 Million Yen
Trainees received	21		

Sri Lankan Side:

Counterparts	19
Land and Facilities	15,710 m^2
Local Cost	67,504,362 Rupee (94 Million Yen)

2. Evaluation Team

Members of Evaluation Team

Team Leader: Eiji INUI, Director, First Technical Cooperation Division, Social Development Cooperation Department, JICA
Maintenance Technique of Construction Equipment: Kouichi OZAKI, Director, Machinary Division road Department, Shikoku Regional Bureau, Ministry of Land, Infrastructure and Transportation
Management of Training Center: Kenichi FUJINO, Director, Information system Division, Planning Department, Hokuriku Regional Bureau, Ministry of Land, Infrastructure and Transportation
Evaluation Planning: Miyako KOBAYASHI, Staff, First Technical Cooperation Division, Social Development Cooperation Department, JICA
Evaluation Analysis: Shinsuke KUBO, Consultant

Period of Evaluation

20 May 2001 - 31 May 2001

Type of Evaluation:

Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The Government of Sri Lanka advocated improving the operational efficiency of construction equipment in its "National development plan"(1999-2004). According to the "Necessity to training in the construction industry (2001-2005)", drawn up by University of Moratuwa in April 2001, there would be a strong demand for trained construction equipment mechanics in the near future. Therefore, the Overall Goal, Project Purpose and Outputs were all relevant to the development policy of Sri Lanka and the needs of the construction sector.

(2) Effectiveness

At the terminal evaluation, there were 1,219 trainees in the seven sectors designated in the original plan and 817 trainees in additional new sectors. According to the results of the questionnaire to the business managers of organizations or enterprises where ex-participants worked, all of the respondents said that they were "satisfied with the effects of the training at CETRAC", reflecting the effectiveness of the Outputs. The ex-participants utilized the acquired techniques and skills in their regional work places, and the number of repeat participants going on to the advanced training courses was 70. Therefore, the attainment of the Outputs contributed to achievement of the Project Purpose, "The Center develops human resources related to the management and maintenance of C.E.".

(3) Efficiency

The Project was efficiently conducted with timely Inputs (human resources, products, funding) of the right quality/quantity. As the

training center for construction equipment maintenance, the Center has established a management/operation system and developed the 180 textbooks for training, and 106 training courses in the main seven sectors and 56 training courses in additional sectors. However, based on the results of the questionnaire to the Japanese experts, it was revealed that the counterpart personnel turnover rate was too high (11 counterparts), which had an adverse effect on efficiency.

(4) Impact

Based on the "Report on Construction Equipment Survey" conducted by CETRAC in March 2001, 60 percent (63 out of 106 companies) of the respondents indicated that the training at CETRAC contributed to upgrading the capacity of their staff. According to the interviews at the companies at the terminal evaluation, the participants brought back to their organizations the acquired techniques on CE management and maintenance and have disseminated these to their colleagues, indicating achievement of the expected effects insofar as the fostering of human resources is concerned.

(5) Sustainability

The Center has the equipment and materials for training in place, and the Japanese experts have mostly transferred the proper techniques to the staff of CETRAC. Therefore, CETRAC can implement independent training courses independently. The budget for the activities at CETRAC in FY2001 has been assured. A regular budget from the Central Government is essential for the sustainability of the Project. Concerning this point, the Sri Lankan Government made a definite promise which was recorded in the minutes of the meeting with the evaluation team. In the meantime, CETRAC has developed the plan for 2001-2005 and estimated the necessary budget, is now trying to increase revenues by accepting repair work and lending its facilities.

3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

The Project flexibly coped with a variety of needs of the construction sector. For example, the Japanese Experts and additional equipment were provided for the construction work in new fields as such machine building and road construction.

(2) Factors concerning the Implementation Process

The project Outputs were disseminated to the staff at the on-site level. The ex-participants played leading roles in introducing the techniques at the companies where they worked, and transferring techniques and know-how on the management/maintenance of construction equipment.

3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

The method of obtaining the indicators and evaluation criteria in the PDM prepared at the planning stage were inappropriate because the social environment and statistics were not fully understood, so part of the PDM needed to be corrected at the time of evaluation research.

(2) Factors concerning the Implementation Process

The Project could not respond to the decline in the technical level because of the Center's high staff turnover. The Center's management system seems to be problematic in this regard.

3-4 Conclusion

The Project has accomplished the Project Purpose and has efficiently and effectively contributed to the needs of the Sri Lankan Government and the Industries to improve both the management techniques and maintenance techniques of construction equipment.

3-5 Recommendations

(1) The Sri Lankan Government should continue to allocate an appropriate budget to ensure the smooth operation of CETRAC after completion of the Project.

(2) CETRAC should consider training and assigning at least two Training Officers and two Demonstrators to each course, so that even should a technical staff member resign, the somewhat difficult practical teaching/training skills of its technical staff can be retained.

(3) CETRAC must immediately fill the vacancies of the Manager and Deputy Manager to ensure a stable management system.

(4) CETRAC should boost its income generation activities in order to sustain its activities even after the completion of the Project without affecting training programs and should take measures to retain its staff. The Ministry of Urban Development, Construction & Public Utilities should take the necessary measures to eliminate any difficulties hindering the smooth introduction of CETRAC income generation activities.

(5) CETRAC should develop National Skill Standards (NSS)/National Trade Tests (NTT) in the area of construction equipment maintenance in conjunction with both the National Apprenticeship & Industrial Training Authority (NAITA) and the world of Industrial construction. NSS/NTT should contribute not only to the improvement of quality and the technical standard of construction equipment maintenance but also to the assurance of the Center's sound existence.

(6) The Government of Japan should consider cooperation in the field of income generation activities on the repair and maintenance of construction equipment, new course development for rod construction and development of NSS/NTT.

3-6 Lessons Learned

The Center should maintain close contact with the Industry and implement training courses reflecting the up-to-date needs of the Industry.

3-7 Follow-up Situation

N/A.