

Terminal Evaluation

Middle East

1. Outline of the Project

Country:

Jordan

Project title:

Project for Specialized Training Institute

Issue/Sector:

Vocational Training

Cooperation scheme:

Project-type Technical Cooperation

Division in charge:

Second Development Study Division, Social
Development Study Department

Total cost:

1,118 million yen

**Period of
Cooperation**

1 October 1997 - 30
September 2002

Partner Country's Implementing Organization:

Ministry of Labor, Vocational Training Corporation (VTC)

Supporting Organization in Japan:

Ministry of Health, Labour and Welfare (MHLW), Employment and Human
Resources Development Organization of Japan

Related Cooperation:**1-1 Background of the Project**

Jordan's industrial development policies include the promotion of investment and building of industrial parks for the sustainable development of its economy. The nation's major goal focus on the improvement of productivity of the labor force and product standards, and reinforcement of educational and vocational training to foster qualified persons to cope with the needs of the labor market, in order to reinforce its international competitiveness. Based on this background, and under the direction of the Ministry of Labor, the Vocational Training Corporation (VTC) built new facilities to provide vocational training in the fields of metal works and machinery in the capital, Amman. The government of Jordan requested the government of Japan for technical cooperation on vocational training.

1-2 Project Overview

The project, for the purpose of enabling VTC to provide improved training at the Specialized Training Institute (STIMI) for local skilled laborers in the fields of metal works and machinery, cooperated in establishing an operation and management system at STIMI, preparing necessary equipment, and improving the capability of instructors in order to implement proper training courses in three fields; machinery, plastic forming and welding.

(1) Overall Goal

To satisfy the demands of the local metal-working and machinery industries for local skilled laborers.

(2) Project Purpose

To enable the VTC to bring up higher quality skilled labor in the fields of metal works and machinery at STIMI.

(3) Outputs

- 1) To establish the organization of management and administration in STIMI .
- 2) To provide the necessary machinery and equipment for training in the fields of metal works and machinery.
- 3) Development of capability of instructors at STIMI.
- 4) Implementation of adequate training courses in the fields of metal works and machinery.

(4) Inputs

Japanese side:

Long-term Experts	12	Equipment	481 million yen
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Short-term Experts	13	Local Cost	30 million yen
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Jordanian Side:

Counterparts	31		
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School Construction	Approx. 200 million yen		
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Local Cost	114 million yen		
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2. Evaluation Team

Members of Evaluation Team

Leader: Junsaku KOIZUMI, Special Technical Advisor, Planning and Evaluation Department, JICA
Vocational Training Administration: Yasuhiro HARUYAMA, Deputy Director, Overseas Cooperation Division, Ministry of Health, Labour and Welfare
Technical Training: Hiroshi SUGIMOTO, Senior Advisor, Human resources Development Guidance Department, Employment and Human Resources Development Organization of Japan
Cooperation Planning: Tomonori NAGASE, Staff, Planning Division, Social Development Cooperation Department
Evaluation Analysis: Yutaka Yamaguchi, K%D%Tech. CO. Ltd.

Period of Evaluation 13 May 2002 - 1 June 2002

Type of Evaluation:
Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

As Jordan is not rich in natural resources, investment in human resources is important for its development, and the government of Jordan has long placed priority on the vocational training sector through its development policies. The purpose of the project is consistent with the developmental needs of the country, as the Jordanian government emphasizes the expansion of training programs in quality and quantity, in accordance with the demands of the labor market indicated in the Economic and Social Development Plan (1999 - 2003). Skills in machinery, sheet metal processing and welding are widely in demand in the manufacturing industry in general, and in part of the construction industry as well. Recently, large projects have been planned, such as development of oil pipelines within the country, which are expected to increase the demand for skilled labors.

(2) Effectiveness

After the commencement of the project, all the graduates of the first training courses in the three target sections at STIMI passed the examination and obtained certificates of craftsman level, and their employment rate reached 87.8%. Considering the high unemployment rate among younger age groups in Jordan (37.9% from age 15 - 19), this was an extremely favorable result. Taking into account the future development of the machine industry in Jordan, technical level of the graduates would be appropriate as the demand from the industry utilizing special equipment (such as CNC and CAD/CAM) is expected to increase. The technical level of STIMI instructors has been upgraded to being high enough to conduct training of those in the craftsman level. Also, 22 upgrading courses were implemented, including training for instructors and courses for trainees from neighboring Arab countries and United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), as well as from private sectors and NGOs. Favorable evaluation results for the upgrading courses were obtained from trainees and their companies. The project taught not only teaching methods, but also methods to increase the accuracy of products, decrease the percentage of defective products, and improve productivity, to promote cost-consciousness concerning the defective products.

(3) Efficiency

VTC assigned more instructors to STIMI than other training centers under VTC, so that the technical transfer by the project could be executed efficiently. However, the technical transfer has been sometimes hampered, since there were a few instructors leaving STIMI temporarily (unpaid leave) to work outside of the country during the project. To cope with this unstable situation of instructors, the project promoted and facilitated transfer of technique in the same field among the instructors. Regarding the timing of inputs, VTC purchased land and constructed buildings for the operation of STIMI as scheduled. However, the allocation of Jordanians was partially delayed, which caused a delay in the progress of technical transfer. As the project did not set any quantitative targets, such as number of courses to be implemented or of participants to be included, its accomplishment could not be measured quantitatively. However, the project was evaluated as having achieved adequate outcomes, with regard to the effectiveness of instructor training, various training targets, and the implementation of training outside of Jordan. However, in conducting the upgrading training, some incentive problems, such as allowances to the instructors, were observed, and it is necessary to resolve these problems so that STIMI can implement training in a more sustainable manner.

(4) Impact

It would still take time to evaluate the achievement of the overall goal ("to satisfy the demands of local metal working and machinery industries for local skilled laborers"), but STIMI has been regarded as a model training institute for providing craftsman level training, and the project has contributed to the expansion of craftsman level training by VTC. STIMI also contributed to the improvement of courses by other training centers through training of their instructors. Such indirect impacts can be expected through activities of training centers other than STIMI.

STIMI collaborated with other organizations and made agreements with five institutes, such as the University of Jordan. Such agreements are expected to contribute to the improvement of instructors' capacities and curricula at STIMI, and to the further development of its activities. The project also implemented upgrading courses (third-country training program) for other countries such as Palestine, and these trainings have brought about initial impacts beyond the expected level.

(5) Sustainability

With regard to organizational and institutional aspects, VTC has been prepared to allocate necessary budget and appropriate number of personnel to STIMI. Judging from the established management system at STIMI, the capacity level of instructors and management of equipment, STIMI is expected to attain sustainability. One of the issues regarding technical sustainability is that instructors may have to leave to work abroad. To cope with this situation, it is necessary to make further efforts not to lower their technical standards by sharing techniques in the same field among the instructors. Financially, STIMI does not have any major problems. Also, they are making efforts to supplement its budget by taking orders from outside the institute (providing technical services such as heat treating, metal testing and metal product coating).

Japanese experts and Jordanian instructors collaborated in developing textbooks in the project. It is necessary to continuously develop textbooks to reflect the training needs of the industry. In order to keep the effects of the project after the completion of the project, one of the major problems is to secure applicants for training. As the Jordanians have been placing strong emphasis on higher education, the willingness to apply for vocational training institutions tends to be on the decline. Thus, It is necessary to promote wider publication activities to invite participants at STIMI.

3-2 Factors that Promoted the Realization of Effects

(1) Factors Concerning the Planning

N/A.

(2) Factors concerning the Implementation Process

N/A.

3-3 Factors that Impeded the Realization of Effects

(1) Factors Concerning the Planning

N/A.

(2) Factors concerning the Implementation Process

In the original plan of the project, VTC allocated more instructors in order to smoothly receive technical transfer from the Japanese side, and that there was no lack of personnel at the time of the final evaluation. However, as there are wage differences between Jordan and its surrounding Arabian countries, Jordan officials are legally permitted to take leave for a

contract longer than a year to work abroad (VTC also permits this systematically). Therefore, if the number of instructors who take such leaves increases in the future, it may adversely affect the technical level of STIMI.

3-4 Conclusion

The project is consistent with the vocational training policies in Jordan. The project purpose ("to foster high quality engineers in the fields of metal works and machinery at STIMI in Jordan") will be accomplished by the completion of the project. STIMI has established its administration and management system and is equipped with and has utilized necessary equipment for training. The technical levels of instructors at STIMI are high and are able to train those at a craftsman level.

The graduates of craftsman level achieved a high employment rate in 2001, and all the graduates have acquired the technical qualification of craftsman level. Based on the answers to the questionnaire survey in 2002, companies which hired craftsman level participants evaluated the participants favorably. The project implemented upgrading training for participants from surrounding Arabian countries and UNRWA, and attained favorable effects, indicating that the project was efficiently and effectively implemented.

3-5 Recommendations

(1) Considering the situation that instructors easily take leave to work abroad, it is important to provide technical transfer to more than one core instructor and to make further efforts to share techniques among instructors in the same field.

(2) Considering the mobility of instructors, it is necessary that VTC maintains the status quo in terms of the number of instructors at STIMI in order not to lower the technical standard of training.

(3) As the number of applicants to STIMI is decreasing, it is strongly recommended that a survey be conducted on the reason for the decrease.

(4) It is necessary to increase the number of applicants through active publication activities in order to maintain the technical standard of STIMI.

(5) In order to contribute more to the Jordanian industry, it is desirable to continue efforts to expand the scope of upgrading training for currently employed workers in the future.

(6) It is highly recommended to complete the translation of English textbooks into Arabian through collaboration of both Jordanian and Japanese sides in order to develop textbooks which meet the training needs of the industry.

(7) VTC should continue to support STIMI with sufficient budget allocation for maintenance and procurement of spare parts of the equipment at STIMI. Also, STIMI should utilize the information on contact points for the maintenance of the equipment, which is to be prepared by the project.

(8) As the survey on training needs should be continued, as it is very beneficial for the training at STIMI, and the results should be reflected toward further improvement of the contents of training.

(9) An advisory committee is expected to meet more frequently in order to coordinate the training programs with labor market needs.

3-6 Lessons Learned

(1) Assignment of qualified counterpart personnel during the implementation of the project is vitally important, so that the project activities are not delayed or hampered.

(2) Duration of more than one month is recommended for the assignment of short-term experts so that they can effectively implement activities.

(3) Production of training materials, including textbooks, is very important for the sustainability of the project effects.

3-7 Follow-up Situation

Five-year third-country training program, "Computer Drawing (CAD and CAM)" has been implemented since FY 2001 and will be completed in 2005.