Terminal Evaluation

Middle East

1. Outline of the Project

Country:
Arab Republic of Egypt

Project title:
Welding Technology for Palestinians

Issue/Sector:
Industrial Minerals

Cooperation scheme:
Third-Country Training Program

Division in charge:
Middle East and Europe Division, Regional Department IV (Africa,Middle East and Europe)

Total cost:

Period of Cooperation Fiscal Year 1999 - 2001

Partner Country's Implementing Organization:
The Central Metallurgical Research and Development Institute (CMRDI)

Supporting Organization in Japan:

Related Cooperation:
Dispatch of Expert "Welding Research Center"

1-1 Background of the Project

The Government of Japan had extended cooperation to establish and manage "Welding Research Center", dispatching experts to the Central Metallurgical Research and Development Institute (CMRDI) for eight years starting in January 1985. The Government of Egypt requested the Government of Japan to implement a training course on welding technology at CMRDI as a part of the Trilateral Cooperation Program for Africa in October 1988. The welding technology training course was initially implemented for African engineers in the field of machinery and metallurgical engineering until FY1998. Identifying similar needs in Palestine, Japan decided to implement the course for Palestinians from FY1999. The Training was implemented to support the reconstruction and development of the Palestine autonomous region after the declaration of Palestinian Authority (PA).

1-2 Project Overview

The Course's aim is to upgrade the skill, knowledge and teaching methodology of participants in the field of electric engineering by implementing the training to participants from Asian countries at EEPIS.

(1) Overall Goal

To provide Palestinians with an opportunity to improve their knowledge and techniques in the field of welding technology and nondestructive testing and, hence, contribute to human resources development.

(2) Project Purpose

1) To understand the general techniques of welding.
2) To understand the trouble areas in the welding of steel.
3) To understand the welding of panels and the selection of welding metals.
4) To understand welding impairments and the reasons for them.

(3) Outputs

Participants have the opportunity to acquire skills and to deepen their knowledge.

(4) Inputs

Japanese side:	
Short-term Experts	3
Local Cost	18 Million Yen
Egyptian side:	
Counterparts	12

(5) Participant Countries

Palestine

2. Evaluation Team

Members of Evaluation Team

Kazuaki HASHIMOTO, Project Formulation Advisor, JICA Egypt Office
Hala SHOUKRY, Executive Secretary, JICA Egypt Office
Makoto KABASAWA, Expert, Upgrading Metal Processing Technology Project, Central Metallurgical Research and Development Institute.

Period of Evaluation

15 September 2001 - 15 January 2002

Type of Evaluation:

Terminal Evaluation by Overseas Offices

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

The Palestinian Authority needs socioeconomic development in every field in order for the country to recover from nearly complete devastation. Rebuilding of infrastructure including ports, bridges and buildings requires skilled welders. It is also crucial for the Palestinian Authority to exploit every means for creating new jobs to minimize the adverse effects of becoming independent from the Israeli economy. As the PA has allocated a large budget for infrastructure building, the participants of the Training may have a chance to actively participate in infrastructure building, which means the Training was both relevant and appropriate.

(2) Effectiveness

The curriculum was well-structured, and the contents were useful because the curriculum included subjects such as aluminum welding, a problematic issue in Palestine, and also non-destructive testing, which participants had learned previously but only theoretically and, therefore, had no practical experience in this area. CMRDI's lecturers had excellent academic credentials and extensive experience as instructors of welding technology. The textbook coverage was comprehensive, as well. According to the answers ex-participants gave in the questionnaire survey, all of the respondents said that "the Training contributed to upgrading and updating their knowledge", therefore the Training was successfully implemented.

(3) Efficiency

1) There were a few suggestions to further improve the Training. For instance, there was demand for a more specific course rather than an "A-to-Z" course, and a suggestion that more time be allocated for practical work rather than focusing lectures on theories. These suggestions are typical of evaluation for a training course like this and are mostly due to the fact that each participant has different interests.
2) The Training was supported by CMRDI and was characterized by capable lecturers and staff, an understandable textbook and well-maintained facilities and equipment.

(4) Impact

In Palestine, participants were suffering from a lack of facilities, equipment and materials on welding technology. However, they

disseminated the acquired knowledge by giving lectures to welders, conducting on-the-job training and showcasing books and catalogs from Egypt. In fact, the ex-participants now actively participate in infrastructure projects in which the PA has allocated a substantial budget.

(5) Sustainability

As the number of targeted engineers who were qualified to participate in this Training is limited in Palestine, those participants have already been invited for training. In addition, since the worsening of the situation surrounding Palestinian territories hinders joining the training, some concerns on continuing this kind of training for Palestinians remain at present. Participants tried to implement the results of the Training, but lack the facilities and equipment, which impedes technical transfer within Palestine.

3-2 Factors that promoted realization of effects

(1) Factors concerning Planning

The curriculum of the Training included practical work and was devised so that participants would be able to learn the most appropriate welding methods and a knowledge of parameters to ascertain the cause of weld failures, while only the theory of welding had previously been taught in Palestine,

(2) Factors concerning the Implementation Process

The Training was conducted in their mother language (Arabic), which helped the participants to understand fully. Similar social and cultural atmospheres in Egypt were also positive factors for the participants from Palestine. In addition, the level of the technology on welding in Egypt was in line with the technical level in the Palestinian area.

3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

N/A

(2) Factors concerning the Implementation Process

N/A

3-4 Conclusion

The Training was successful and beneficial as a whole, because the implementation of the Training on welding technology was aimed at acquisition of fundamental and basic techniques and is relevant to the needs and present situation of the Palestinian area. However, the sustainability was not ascertained for there remained some concerns on the situation surrounding the Palestine area and the lack of facilities and funding.

3-5 Recommendations

(1) It is not necessary to continue this kind of training course for the skills of the Palestinians have reached a sufficiently high level.

(2) It would be helpful if JICA would provide some basic equipment to workshops where equipment is needed in order to materialize the result of the Training. It is also necessary to consider implementing other programs to upgrade welding techniques.

(3) The travel costs inside Palestinian areas up to the borders of Egypt or Jordan, the cost of visas and accommodations in Amman always cause problems due to the lack of receipts for all expenses. It is recommended that a fair allowance be decided and to all participants on an equal basis.

(4) It is necessary to take it into consideration the fact that many of the participants were living outside Palestine and were raised and educated in the foreign country, which causes some educational disparity among them.

3-6 Lessons Learned

N/A

3-7 Follow-up Situation

N/A