Summary

1. Outline of the Project

Country: The Republic of Tunisia

Project Title: The Project for the Establishment of the Vocational Training Center for the Electric and Electronics Industry

Issue/Sector: Vocational training

Cooperation Scheme: Technical Assistance Project

Division in Charge: 2nd Group, Human Development Department, JICA

Total cost (as of the time of evaluation): 723,924 thousand Japanese yen

Period of Cooperation (Duration):

February 1, 2001 - January 31, 2006

(R/D): December 1, 2000

(Extended):

(F/U):

Partner Country's Implementing Organization: Ministère de l'Education et de la Formation (MEF), Tunisian Agency of Professional Training (ATFP), Centre Sectoriel de Formation en Industries Electriques et Electroniques (CSFIEE)

Supporting Organization in Japan: Human Resource Development Bureau, Ministry of Health, Labor and Welfare; Employment and Human Resources Development Organization of Japan

Related Cooperation:

1-1 Background of the Project

Having signed the FTA (Partnership Agreement) with the European Union (EU) in 1995, the Government of Tunisia has committed itself to the elimination of tariffs with the EU over a 12–year period beginning in 1996. This is a task of pressing urgency for Tunisia, which seeks to enhance its international industrial competitiveness and develop competent industrial human resources. The 10th National Development Plan (2002-2006) cites increased job opportunities as its primary issue to tackle and places a priority in vocational training. Meanwhile, the JICA's Country-Specific Program for Tunisia cites assistance for the purpose of enhancing international competitiveness in the area of industry as one of its priority issues.

This project is based on a request by the Tunisian government for the provision of technical assistance aimed at improving vocational training in electrical and electronics sectors. Based on the results of the Project Formulation Study implemented

between February 23 and March 7, 1998, it was agreed that support would be provided to the Centre Sectoriel de Formation en Industries Electriques et Electroniques (CSFIEE), which was decided to be newly established in Tunis. The R/D was signed in December 2000 and the five-year cooperation program began in February 2001.

The purpose of this project is to develop technical human resources in the electrical and electronics sectors at the CSFIEE through the achievement of the following: (i) the establishment of training courses for the electrical and electronics sectors; (ii) the capacity building of instructors to effectively implement the training courses; (iii) the establishment of a CSFIEE administration and management system for the sustainable implementation of the training courses; and (iv) the effective use and maintenance of equipment.

The Project Consultation Study was conducted in February 2003 and the Mid-Term Evaluation was implemented in January 2004 with a view to ascertaining the achievements of activities and the state of operations up to that point.

The Final Evaluation, implemented six months prior to the end of the project period, was implemented for the purpose of making an evaluation of project activities and output based on the five criteria, so as to produce recommendations for the future of the project, as well as for the purpose of confirming lessons leaned from the project.

1-2 Project Overview

(1) Overall Goal

The quality of technicians in the electrical and electronics sectors is improved.

(2) Project Purpose

The newly established CSFIEE is developed to turn out competent technicians in industry.

(3) Project Outputs

1) Relevant training courses in electric and electronics sector are established.

2) Instructors will be able to implement the training courses effectively.

3) The CSFIEE administration and management system is established for the sustainable implementation of the training courses.

4) Equipment is used and maintained effectively.

(4) Project Inputs (as of this terminal evaluation)

Japanese Side:

Long-term experts	10 persons
Short-term experts	17 persons
No. of trainees received in Japan	21 persons

Equipment supply 294,000 thousand yen
Local cost 376 thousand Tunisian dinar (TND)
Tunisian side:
Assignment of personnel 41 persons
Procurement of land and facility for the Project The CSFIEE building (newly constructed at a cost of 3.3 million TND), land for facilities, furniture and consumables

2. Evaluation Team Overview
Members of the evaluation team
(Area in charge: name, title)
Team leader:
Shokichi Sakata
Team Leader, Administration Team, 2nd Group, Human Development Department, JICA
Electrical/Electronics:
Yutaka Goto
Employment and Human Resources Development Organization, Lecturer at Kyushu Polytechnic College
Cooperation planning:
Kaori Tanaka
Technical Education Team (Advanced/Technical Education), 2nd Group, Human Development Department, JICA
Evaluation analysis:
Yasuhisa Kuroda
OPMAC Corporation
Interpreter:
Mariko Sekita
Evaluation Period
From September 12, 2005 to September 25, 2005
Evaluation type: Terminal evaluation

3. Overview of Evaluation Results

3-1 Achievements

Opinions from those involved and actual data regarding input in this project, output achievements and project purpose achievements were obtained through a

questionnaire survey and interviews. As a result of the analysis thereof, it was confirmed that the project is generating adequate results.

The CSFIEE, newly established as a part of this project, is being operated in line with the vocational training system employed in Tunisia (Competency Approach) with a view to incorporating the needs of industries in its training course. Initial goals have been reached in terms of both graduation and job-placement ratios, and 75% of the employers who have recruited CSFIEE graduates have expressed their satisfaction in regards to their performances. Based on these facts, the Tunisian Agency of Professional Training (ATFP), the Centre National de Formation des Formateurs et d'Ingenieurs de Formation (CENAFFIF) and the Fédération Nationale de l'Electricité (FEDELEC) all consider that the human resources being developed in this project meet the needs of industries that place importance on practical studies, and the project has been highly evaluated.

3-2 Summary of Evaluation Results

(1) Relevance: High

The project purpose and overall goal are relevant to the improvement of the quality and quantity of vocational training required for the conclusion of Partnership Agreement between Tunisia and the EU and the achievement of international competitiveness, as stated in the 10th Development Plan (2002-2006). On a yearly basis the number of candidates applying for admission to the CSFIEE is more than double the enrollment limit, and trainees are expressing a high degree of satisfaction over the training courses. The project also conforms to Japan's ODA policy of placing priority on providing assistance aimed at strengthening international industrial competitiveness. Therefore, it is judged that the relevance of this project is high.

(2) Effectiveness: High

The CSFIEE is implementing a two-year pre-service training course and a short-term in-service training course geared for employed workers, in accordance with its plans. Most counterparts are acquiring high levels of practical skills/knowledge, instruction ability and operational capability as a result of the training courses. The graduation ratio for the first graduating class (those graduating in September 2004) was 85% and their job-placement ratio was 84.8%, meaning that the initial goals were achieved. The CSFIEE is being operated under a new management model developed by ATFP. The project has already established a performance record and satisfactory

operating skills, including the appointment of the instructors and administrative staff necessary for the maintenance of the project, and the implementation of necessary budgetary appropriation. An equipment management system was constructed for the management of the machinery, equipment and furniture necessary for training, all of which is subject to regular maintenance. Therefore, the ability of the CSFIEE to provide training is being strengthened and it is considered that the project purpose is being achieved.

(3) Efficiency: High

The input from both the Japanese and Tunisian sides has been appropriate in terms of quantity, quality and timing. It is particularly worth noting that there were no delays on the Tunisian side upon the construction of the training facility. However, there were delays in the assignment of personnel from the Tunisian side, and four instructors and one administrative staff member have yet to be appointed as of the time of evaluation. The appointment of instructors notably affected the progress of the technical transfer from the Japanese experts to their Tunisian counterparts. Still, the input from both sides has basically been in line with the original plan and it is considered that the project has been implemented in an efficient manner.

In terms of costs, although it is difficult make simple comparisons, there are case examples of similar cooperation projects in the electrical and electronics sectors, such as the reform of the CEPEI school with support from the French Development Agency (AFD), wherein 350 trainees per graduating class were trained at a cost of 7.9 million TND (approximately 672,000 thousand yen) in total, and the training of 850 trainees per graduating class at the Borj Cedria school, with the cooperation of the World Bank, with the input of 9.2 million TND (approximately 1,445,000 thousand yen) for the construction of facilities and the provision of equipment. Compared to these cases, it is considered by way of comparison that the input for this project (construction of facilities, provision of equipment and technical cooperation) has been sufficient.

(4) Impact: Positive impact is expected.

It would be premature at this point to pass judgment on the level of satisfaction among enterprises, as only one year has passed since the graduation of the first graduating class in September 2004. However, the questionnaire survey implemented during the project revealed that the satisfaction rate of enterprises employing graduates of the first graduating class attained 75%, that it is expected that the CSFIEE will consistently produce technicians into the future, and that the content of

the courses is being based on the Competency Approach aimed at fulfilling the needs of industries to the greatest extent possible. Therefore, the project is expected to make a positive impact.

Although the electrical and electronics industry is a growing industry within the economic fabric of Tunisia, which had been suffering from difficult condition as a result of the country's battered textile industry, the employment environment in this sector should be carefully monitored.

(5) Sustainability: Independent operation by Tunisian counterparts following the conclusion of JICA support is possible.

1) Policy level sustainability

The Vocational Training Policy of the Tunisian government under the 10th Development Plan advocates the strengthening of the framework for vocational training. This policy aims to increase the number of trainees and to reinforce the Alternated Training System, wherein a 50/50 ratio between training provided at training centers and that provided by enterprises themselves is maintained. In line with this policy, this project is being implemented under the principle of developing high quality trainees.

At the Joint Coordinating Committee (JCC) held in November 2004, the Japanese side suggested that additional personnel, budgetary concessions and equipment would be necessary in order to increase the number of trainees admitted. As for the contents of training under the Alternated Training System, the Japanese side suggested that in order for the level of training contents to be maintained, 70% of the training would need to be provided at the Center, while the remaining 30% could be provided by enterprises. The Tunisian side is proceeding with such preparations as undertaking budgetary measures in accordance with the consensus and JCC suggestions. It is considered that the project is sustainable in line with the Vocational Training Policy with the result of the project maintained.

2) Institutional sustainability

The CSFIEE is operated under a management model developed by the ATFP, and a cycle of planning, implementation and evaluation has been established. The turnover rate for the Tunisian counterparts remains virtually at zero and the training is implemented with a high awareness and a strong consciousness. Therefore, institutional sustainability is also expected.

3) Technical sustainability

Most of the project's counterparts have acquired sufficient skills and knowledge to perform their duties as instructors. Practices are in place wherein instructors share

their newly acquired skills and teaching materials within the CSFIEE. Under the Competency Approach, the needs of enterprises shall be reflected in the timely updating of relevant training modules. Equipment and material management systems have also been established, and as such there should be no particular problems so long as said systems are working properly. Therefore, technical sustainability has also been ensured.

3-3 Problems and Factors that Raised Problems

While efforts such as measures aimed at ensuring the compliance of the contents of training courses with the Competency Approach in accordance with the Vocational Training Policy of the Tunisian government, the increasing of the number of trainees accepted and the introduction of the Alternated Training System have been undertaken during the time of the project, it has been possible to undertake measures in regards to the policies of Tunisia while ensuring the achievement of the project's goals by way of holding discussions between the Japanese and Tunisian sides.

Delays in the appointment of Tunisian counterparts have affected the progress of the project.

3-4 Conclusion

The project is in conformity with the policy of the government of Tunisia and the needs of Tunisian industry, and also with the cooperation policy of Japan. It is judged that the project purpose and the output of the Project have achieved most of the original plan. The project has been successfully implemented with sufficient effectiveness and efficiency while maintaining strong relevance, and positive impacts and sustainability are expected. It is considered that the project will contribute to the provision of high-quality human resources to the electrical and electronics sectors in Tunisia.

Therefore, it is judged as reasonable to terminate JICA's technical cooperation in this project aimed at improving the capability of the CSFIEE in developing technicians in the electrical and electronics sectors on January 31, 2006 as scheduled.

3-5 Recommendations (Specific Measures, Recommendations and Advices on this Project)

(1) Promotion of graduation rate

While the graduation rate of the first graduating class satisfied the target of

85%, those of the second and third graduating classes did not reach their targets. It has been confirmed that the graduation rate has gradually increased by way of holding extra classes and supplemental examinations for unearned modules. Still, further measures such as expanding the breadth of activities of the CSFIEE development unit will be necessary.

Also, because the graduation rate for the Brevet Technicien Professionnel (BTP), which is the basic-level qualification, remains low compared to that of the Brevet Technicien Specialisé (BTS), the advanced-level qualification, close support such as the measurement of the aptitude of BTP trainees or the reinforcement of the teaching methods provided to them will be necessary.

(2) Recruiting of necessary staff

As for the assignment of the four instructors and one administrative staff member for which positions are currently vacant, it has been confirmed that budgetary steps have been taken and that actual recruiting activities have been implemented. However, it is critical that this lack of personnel be supplemented in order to ensure the adequate management of the CSFIEE. While the Tunisian side has mentioned that measures including the appointment of part-time instructors should be taken before the end of 2005, implementation of appropriate measures at an early stage is necessary.

(3) Preparation for the introduction of the Expansion Plan and the Altered Training System

It is necessary to implement at an early stage the personnel, budget and equipment adjustment that was agreed upon at the JCC held in 2004. Because the Tunisian side is maintaining a policy that aims to double the number of trainees admitted from September 2005, the establishment of the framework necessary for implementing the necessary training is expected.

As for the Altered Training System, the Japanese side has suggested that 70% of the training be executed at the CSFIEE and 30% by enterprises. The Tunisian side has agreed with this suggestion, and preparation is currently being made for the introduction of such a system. Because the Altered Training System is also scheduled for introduction in September 2005, Japanese experts must also give technical advice in regards to the introduction of this system and to make efforts aimed at ensuring the sustainability of the project's effects.

3-6 Lessons Learned (Matters Helpful for Discovering/Forming Similar Projects Derived

from this Project and Implementation, Operation and Administration Thereof)

(1) Importance of the job-placement support system

Because recruitment by enterprises in Tunisia is implemented on an irregular basis, students usually search for jobs after graduation from schools or vocational training centers over a period of about one year. The ATFP is planning to establish a development unit in charge of public relations and job-placement support at all vocational training centers in order to strengthen cooperation between training centers and enterprises. Development unit have also been institutionalized in the CSFIEE, wherein know-how is being shared through such activities as the sharing of job-placement support systems utilized in vocational training centers in Japan by way of joint visits to enterprises by Japanese experts and experts and persons in charge in development units. The CSFIEE considers that the development unit, which is a rather new mechanism in Tunisia, is in fact functioning thanks to these efforts.

It is expected that the experience of this job-placement support system can be applied to other similar projects.

(2) Flexibility in the process of the project

Since the initiation of the project, the government of Tunisia has exerted strong leadership, taking a decisive approach in preparing training programs, increasing the number of trainees and implementing the Altered Training System based on the Competency Approach in the CSFIEE. While none of these measures are employed in vocational training centers in Japan, it has been possible to institute cooperation by taking advantage of the comparative superiority of Japan while respecting the policy of the Tunisian counterparts by way of repeated discussions between the Japanese and Tunisian sides. Implementation of the project aimed at coping with policy changes on the part of the Tunisian side and to maintaining consistency with such policies should serve as a reference for future projects as an example of a flexible project implementation process. Because the Competency Approach and the Altered Training System are training approaches that are also employed in many other developing countries, it is recommended that the experiences gained from this project be utilized as reference material in for future implementation of technical education/training projects in other countries.