

## Summary

Evaluation conducted by: **SERIZAWA Akemi**

<b>1. Outline of the Project</b>	
<b>Country</b> : Tunisia	<b>Project title</b> : The Project for the Establishment of the Vocational Training Center for the Electric and Electronics Industry
<b>Issue/Sector</b> : Vocational training	<b>Cooperation scheme</b> : Technical Cooperation Project
<b>Division in charge</b> : Human Development Department, Group II	<b>Total cost</b> : 700million yen (Estimate at the Terminal Evaluation. No record available on the actual total cost at the end of the Project)
<b>Period of Cooperation</b>	From 1 February 2001
	To 31 January 2006
	<b>Partner Country's Implementing Organization</b> : Ministère de l'Education et de la Formation ; Agence Tunisienne de la Formation Professionnelle (ATFP) ; Centre Sectoriel de Formation en Industries Electriques et Electroniques (CSFIEE)
	<b>Supporting Organization in Japan</b> : Ministry of Health, Labour and Welfare, Human Resources Development Bureau; Employment and Human Resources Development Organization
<b>Related Cooperation</b>	(N/A)
<p><b>1-1. Background of the Project</b></p> <p>The Government of Tunisia and the European Union concluded a Partnership Agreement in 1995 to eliminate tariffs by 2010. Tunisia is committed to the improvement of its international competitiveness through the development of human resources. In its 10th National Development Plan (2002-2006), Tunisia selected employment creation and vocational training as priority areas. JICA's country assistance program for Tunisia places emphasis on enhancement of international competitiveness in the industrial sector.</p> <p>This technical cooperation project was implemented for five years from February 2001 to respond the request by the Government of Tunisia for assistance in establishing the Vocational Training Center for the Electric and Electronics Industry (Centre Sectoriel de Formation en Industries Electriques et Electroniques: CSFIEE) to improve vocational training in the electric and electronics sectors .</p> <p><b>1-2. Project Overview</b></p> <p>(1) <b>Overall Goal</b> The quality of technicians in electric and electronics sectors is improved.</p> <p>(2) <b>Project Purpose</b> The newly established CSFIEE is developed to turn out competent technicians in the industry.</p> <p>(3) <b>Outputs</b></p> <ol style="list-style-type: none"> <li>1. Relevant training courses in electric and electronics sectors are established.</li> <li>2. Instructors will be able to implement the training courses effectively.</li> <li>3. The administration and management system of CSFIEE is established for the sustainable implementation of the training courses.</li> <li>4. Equipment is used and maintained effectively.</li> </ol>	

<p>(4) <b>Inputs</b> (as of the terminal evaluation: no record is available on the inputs as of the termination of the Project)</p> <p><b>Japanese side :</b></p> <table border="0"> <tr> <td><b>Long-term Experts</b></td> <td>10</td> <td><b>Equipment</b></td> <td>290million yen</td> </tr> <tr> <td><b>Short-term Experts</b></td> <td>17</td> <td><b>Local Costs</b></td> <td>376,000 TND (30million yen)</td> </tr> <tr> <td><b>Trainees received</b></td> <td>21</td> <td><b>Others</b></td> <td></td> </tr> <tr> <td></td> <td></td> <td><b>Total</b></td> <td><u>700million yen</u></td> </tr> </table> <p><b>Tunisian side :</b></p> <table border="0"> <tr> <td><b>Counterpart</b></td> <td>41</td> <td><b>Equipment</b></td> <td>(included in the Local Cost below)</td> </tr> <tr> <td><b>Land and Facilities</b></td> <td>CSFIEE building (3.3million TND=250million yen)</td> <td><b>Local Cost</b></td> <td>486,000TND (37million yen)</td> </tr> </table> <p><b>Others</b></p>				<b>Long-term Experts</b>	10	<b>Equipment</b>	290million yen	<b>Short-term Experts</b>	17	<b>Local Costs</b>	376,000 TND (30million yen)	<b>Trainees received</b>	21	<b>Others</b>				<b>Total</b>	<u>700million yen</u>	<b>Counterpart</b>	41	<b>Equipment</b>	(included in the Local Cost below)	<b>Land and Facilities</b>	CSFIEE building (3.3million TND=250million yen)	<b>Local Cost</b>	486,000TND (37million yen)
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<p><b>3.PROJECT PERFORMANCE</b></p> <p><b>3-1. Performance of Project Purpose</b>          “The newly established CSFIEE is developed to turn out competent technicians in the industry”.</p> <p><b>Indicator 1. Number of in-service training courses (target value: at least 5/Y courses)</b>          Five in-service training courses were conducted in both 2004 and 2005.          After the project period, two in-service training courses were conducted in 2008, and none in 2006 and 2007.</p> <p><b>Indicator 2. Percentage of graduating students (target value: at least 85%)</b>          The first group of trainees attending the pre-service training courses achieved the required target, while the 2nd and 3rd groups did not. The average graduation rate between the 1st and 9th groups was 64% (enrolled 1,304; graduated 832).</p> <p><b>Indicator 3. Employment ratio of pre-service training graduates (target value: 80%)</b>          Employment rate of the graduates between the 1st and 3rd groups was almost 80%, whereas the rate of the 4-5th group was 80%, 6-7th 70%, and 8-9th 40% according to the records kept by CSFIEE. The Director explained that 80% of the graduates found a job within 6 months of graduation.</p> <p><b>Indicator 4. Evaluation by industry (in regard to graduates and in-service training)</b>          Questionnaire survey of employers of CSFIEE graduates (June 2005): 75% of the respondents found the graduates “excellent” or “good”.          Interviews of employers (conducted during the Terminal Evaluation in September 2005): three out of four respondents were satisfied with the performance of the CSFIEE graduates.          Questionnaire survey of employers of CSFIEE graduates (conducted during the Ex-post Evaluation in January 2009): 19 out of 20 respondents were satisfied with the performance of the graduates “very much” or “sufficiently”.          Interviews of some enterprises and FEDELEC (conducted during the Ex-post Evaluation in January 2009): According to the respondents: “CSFIEE produces technicians with a good</p>																											

foundational knowledge.” “CSFIEE is better than other training institutions in the same technical areas and is equipped with modern machines.” However, there is a gap between the technical level of the graduates and that which is required in the workplace. CSFIEE graduates often do not have sufficient language skills (French and English).

### **3-2. Achievement related to Overall Goal**

**“The quality of technicians in electric and electronics sectors is improved.”**

**Indicator: Satisfaction level of enterprises for employment**

It was concluded in the Terminal Evaluation that CSFIEE would be able to contribute to the improvement of the quality of the technicians in these sectors, while it was too early to determine at that stage as the first group of trainees had graduated the year before. The Ex-post Evaluation confirmed that CSFIEE had started to contribute to the improvement of the technician skills. The employers appreciated the level of the CSFIEE graduates, and the 40% of the graduates who responded to the questionnaire survey were already engineers or senior technicians. CSFIEE is the only institution in the sector that gives training in production skills.

### **3-3. Follow-up of the Recommendations by Terminal Evaluation Study**

#### **Recommendation 1. To improve the graduation rate**

This recommendation was in response to the low graduation rate of the second and third groups of pre-service trainees. The graduate rate between the first and ninth groups is only 64%. CSFIEE does not take specific actions to improve the graduate rate as they see this level is normal among vocational training institutions.

#### **Recommendation 2. To fill vacant posts**

There were five vacant posts when the Terminal Evaluation was conducted. These vacancies have been filled since then, and new posts were created, which include counselors to strengthen links between trainees and employers.

#### **Recommendation 3. To introduce the “Expansion Plan” and the “Alternate Training System”**

CSFIEE developed a new pre-service training course in automation and industrial information to respond to the needs of the industry, increase the number of trainees and create new posts of staff members. The alternate training system is now fully functioning. The pre-service training courses are equally divided into training at the center and training at the enterprises.

## **4. Results of Evaluation**

### **4-1. Summary of Evaluation Results**

#### **(1) Relevance**

The relevance of the Project was maintained throughout the Project period and up until the present. The Project was in line with the national development policies of Tunisia and responded to the growing importance of the electric and electronics sectors in the country. CSFIEE has also responded to the needs of the beneficiaries (trainees and employers), which was confirmed by their satisfaction with the Center. The Project was also in line with Japan’s development assistance program in Tunisia.

#### **(2) Effectiveness**

The Ex-post Evaluation confirmed the findings of the Terminal Evaluation, namely that the Project was effective as the Project Purpose had been almost achieved, and the produced Outputs contributed to the achievement of the Project Purpose. After the Project period ended, however, CSFIEE did not sustain the sufficient system levels to implement the in-service training courses, to improve the graduation rates and to assist trainees in job finding.

#### **(3) Efficiency**

It was concluded in the Terminal Evaluation that the Project was efficient because the Inputs were appropriate in terms of quantity, quality and timing, and also because the scale of the Inputs was

almost the same as that of similar technical cooperation projects. The Ex-post Evaluation confirmed its efficiency from examinations of the Output achievement, Input implementation, the process in which the Inputs contributed to the Outputs, and comparisons of the scale of the Project with similar projects.

#### **(4) Impact**

Regarding the Overall Goal: “the quality of technicians in electric and electronics sectors is improved”, while it is still too early to expect concrete effects as only four years have passed since the graduation of the first group of trainees, the contribution of CSFIEE has begun to become apparent. Employers appreciate the performance of the CSFIEE graduates, and the 40% of the graduates who responded to the questionnaire survey in the Ex-post Evaluation had already gained employment as engineers or senior technicians. CSFIEE is the only institution in the sector that gives training in production skills, and its share of the trainees in the sector is about 4%.

Employers and organizations that participated in the interviews and questionnaire surveys in the Ex-post Evaluation appreciated the good foundation of skills gained by the CSFIEE graduates. However, they also recognize the gaps between the skills of CSFIEE graduates and those required in the workplaces arising from the rapid development of technology in the sector. They also found that the language skills (French and English) of the CSFIEE graduates to be insufficient.

Most CSFIEE graduates who participated in the questionnaire survey in the Ex-post Evaluation (who graduated in 2004 or 2005) believe that they benefited from CSFIEE. Training at CSFIEE improved their skills and knowledge, made easy for them to find an employment, and provided them with a better level of employment.

#### **(5) Sustainability**

The Ex-post Evaluation confirms that the sustainability of the Project is positive in political, organizational and technical viewpoints, which was also concluded in the Terminal Evaluation. However, CSFIEE has not sustained the same level of activities in some areas after the Project ended. One area that needs attention is the strengthening of direct links with companies. This is important to further understand the needs of businesses so that these can be integrated into training courses. Furthermore, closer links to business are helpful in assisting graduates in their search for employment after graduation. In-service training is another area which has not been fully sustained.

### **4-2. Factors that have promoted project**

#### **(1) Impact**

1) The Project targeted skills in demand in the growing sectors. It gave CSFIEE clear missions and comparative advantages to distinguish it from other training institutions in the same technical areas. CSFIEE is now fully operational.

2) CSFIEE recruited competent staff members. Their turnover rate is low.

3) The Project made conscious efforts to respond to the needs of the industry during the Project period. These efforts include FEDELEC becoming one of the steering committee members; CSFIEE introducing the competency approach; a curriculum that includes training at the enterprises, which has now been developed as an alternate training system; and that the Project made employer visits possible.

#### **(2) Sustainability**

1) The management system of CSFIEE is fully established and its budget is secured.

2) CSFIEE employs competent and committed staff members.

#### **(3) Others**

### **4-3. Factors that have inhibited project**

#### **(1) Impact**

After the Project ended, CSFIEE did not fully sustain its links with enterprises. CSFIEE has recognized this problem, and is currently working towards solving these challenges by recruiting counselors and arranging for the Director to visit companies personally.

#### **(2) Sustainability**

The Project made efforts to create links between CSFIEE and enterprises. These links have not been fully sustained by CSFIEE after the Project ended.

**(3) Others**

**4-4. Conclusions**

CSFIEE is fully operational as a training institution and has successfully produced competent technicians in the electric and electronics sectors, which are of growing importance in Tunisia. The contributing factors of the success of the Project were that it targeted highly demanded skills in the growing sectors, that it gave CSFIEE clear missions and comparative advantages, that CSFIEE established the management system with a secured budget, that it recruited competent staff members, and that the Project made conscious efforts to respond to the needs of the industry during the Project period. CSFIEE needs to strengthen some areas that have been weakened after the Project ended, which include links with enterprises to assess their needs and assist trainees/graduates in job finding, and in in-service training.

**4-5. Recommendations**

- 1) To strengthen linkages with enterprises. It is necessary for CSFIEE to grasp the needs of the industry and integrate them into the training curricula. Linkages with enterprises are also useful to increase employment opportunities for trainees/graduates. It is also recommended that they strengthen assistance in job finding and support of trainees in enterprise training.
- 2) To have a clear image of the quality of CSFIEE graduates. CSFIEE should continue to produce graduates with good foundational knowledge. At the same time, CSFIEE is recommended to follow-up on technological developments, as it might need to re-train the teaching staff, revise the training modules, or to update the equipment to respond to the needs of the industry.
- 3) To establish a vision of in-service training.
- 4) To create and update lists of graduates from the pre-service training courses and trainees in the in-service training courses, including information on employers, so that CSFIEE can grasp and analyze its performance and take the necessary follow-up actions.

**4-6. Lessons Learned**

- 1) Technical cooperation projects to establish vocational training institutions need to target highly demanded skills and technical areas, and to give the institutions clear missions and comparative advantages.
- 2) Technical cooperation projects with vocational training institutions need to create a sustainable system to make linkages with the industry in order to understand their needs and to increase employment opportunities.