

# Terminal Evaluation

## Middle East

### 1. Outline of the Project

**Country:**

Tunisia

**Project title:**

Technologies on Waste Treatment and Environmental Pollution Control

**Issue/Sector:**

Environment

**Cooperation scheme:**

The Third-country Training (South-South cooperation)

**Division in charge:**

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

**Total cost:**

30 million yen

**Period of Cooperation**

Fiscal Years 2001 - 2003

**Partner Country's Implementing Organization:**

Laboratory of Water and Environment / National Institute of Scientific and Technical Research (INSRT)

**Supporting Organization in Japan:****Related Cooperation:****1-1 Background of the Project**

Despite the fact that the necessity of the waste treatment was pointed out in African and Middle Eastern countries, the waste treatment in those countries lagged far behind. The environmental pollution caused by the waste was a concern of the "Abdjan Declaration" announced in 1996. Tunisia had stronger economic power than many other African countries and was in the process of enhancing environmental administration and waste management. Tunisia was one of the top-ranking countries in the fields of drainage and waste treatment among African and Middle Eastern countries. It had many practical examples and was expected to aggressively contribute to the environmental measures needed in the region.

On March 31, 1999, the Japanese and Tunisian government entered into an agreement concerning the Triangular Technical Cooperation for the promotion of South-South cooperation. The two governments agreed to effectively combine their human, technological and financial resources in order to support social and economic development efforts in the African countries. JICA and Tunisian Technical Cooperation Agency (ATCT) are the governmental implementing bodies responsible for implementing the agreement. As a result, third-country training was implemented for training in the field of reproductive health by National Office for Family and Population (ONFP) and in the field of environment by INRST. As a part of the South-South cooperation, a third-country specialist dispatch program, by which Tunisian specialists were sent to other countries in Africa, was implemented. Specialists in the field of fishery were dispatched to the Islamic Republic of Mauritania. The planning for the project began in 2000 after the dispatch

**1-2 Project Overview**

The project was implemented for participants from countries in Africa and the Middle East such as Tunisia so that the knowledge and the skills in the fields of waste treatment and environmental pollution control were improved.

**(1) Overall Goal**

- 1) Participants from the beneficiary countries acquire appropriate knowledge on technologies of waste treatment and environmental pollution control and establish a network of environmental specialists.
- 2) INRST acquires the capability to implement and manage training courses, and promote the South-South cooperation in Africa and Middle East.

## (2) Project Purpose

Participants from countries in Africa and Middle East region improve to their knowledge and techniques in the field of waste treatment and environmental pollution control.

## (3) Outputs

- 1) Participants acquire the latest knowledge on waste treatment technologies.
- 2) Participants acquire the latest knowledge on environmental pollution control technologies.
- 3) Participants acquire the ability to utilize practical techniques on waste treatment.
- 4) Participants acquire the ability to utilize practical techniques on environmental pollution controls.

## (4) Inputs

Japanese side:

Long-term Experts	3	Local Cost	9 million yen/year
-------------------	---	------------	--------------------

Tunisian Side:

Counterparts	15
--------------	----

Land and Facilities

Local Cost	27,850 Tunisian dinar (3 million yen/year)
------------	--

## (5) Participant Countries

Tunisia, Yemen, Morocco, Mali, Jordan, Burkina Faso, Ghana, Cameroon, Palestine, Egypt and other African and Middle East countries.

## 2. Evaluation Team

<b>Members of Evaluation Team</b>	JICA Tunisia Office (Commissioned to: MALEK NOURDDINEóBEN CHARRADA, Sami ABID and Mustafa HARRABI (Engineering of Hydraulic Infrastructure and Environment))
-----------------------------------	---

<b>Period of Evaluation</b>	1 February 2003 - 31 March 2003	<b>Type of Evaluation:</b> Terminal Evaluation by Overseas Office
-----------------------------	---------------------------------	--

## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

---

#### (1) Relevance

Implementation of the training in Tunisia was relevant as the country had advanced techniques in the given fields and had similar geographical, social and economical conditions to those of the other countries of the training. Therefore, it was easier to transfer the required techniques in Tunisia than in Japan.

#### (2) Effectiveness

As no test was conducted, the evaluation on the effectiveness of the project was based mainly on the comments given by the ex-participants. According to interviews, understanding of the contents of the training was about 80%. However, only a limited part of the acquired knowledge was utilized in their daily work.

#### (3) Efficiency

The level of information and techniques offered in the training were high. They were in line with the advanced technical skills of

the dispatched Japanese experts and Tunisian lecturers. Through their participation in the training, participants were motivated to implement similar projects in their respective countries. The training cost in Tunisia was one third of the cost in Japan. Judging from the above information, implementation of the training was effective.

#### (4) Impact

The participants acquired a lot of information and technical skills in the field of environment through the training, and the impacts were huge. Participants will relate the acquired knowledge and techniques through the training to the development of projects individually after returning to their respective countries. INRST (the implementing organization), familiar with the training, tried to fulfill the contents of activities on a regular basis and prepared for future training. The project contributed to the building of the networks among the specialists in the field of environment in Arab and African countries and had a major influence on the Triangular Technical Cooperation.

#### (5) Sustainability

The motivation of INRST increased as the training was evaluated by Tunisian government, and INRST was able to gain experience as the implementing organization. The Tunisian government paid careful attention to the implementation of the Triangular Technical Cooperation and issues concerning the environment. However, there remained the need for financial support for the training.

### **3-2 Factors that Promoted the Realization of Effects**

---

#### (1) Factors Concerning the Planning

- 1) The training was implemented more skillfully as the implementing organization was experienced and had suitable human resources and textbooks.
- 2) The implementation of the training was backed by the Tunisian government which had a positive attitude toward coping with environmental pollution and which implemented the Triangular Technical Cooperation.

#### (2) Factors concerning the Implementation Process

With the cooperation of related organizations (National Environmental Protection Agency (ANPE), Institute for Agricultural Research of Tunisia (INRAT), and others) in the field of environment, the training achieved its outputs.

As INRST flexibly coped with the needs of the participants and beneficiary countries, the training was smoothly implemented.

### **3-3 Factors that Impeded the Realization of Effects**

---

#### (1) Factors Concerning the Planning

The correspondence from both Tunisian and Japanese sides was late, and the commencement of preparation was behind schedule.

#### (2) Factors concerning to the Implementation Process

- 1) While many of the lecturers specialized in solid waste management, participants specialized in wastewater treatment. The participants therefore could not utilize the acquired knowledge.
- 2) Due to the lack of coordination by INRST in advance, the training had difficulty getting the cooperation of the ATCT.

### **3-4 Conclusion**

---

The training was successfully implemented, making use of past experiences, as it was the second time INRST had managed the training. Many of the participants highly evaluated the training and wished continuance of the training. The network has been developing among the related personnel, including ex-participants.

### **3-5 Recommendations**

---

(1) It is recommended that preparation work start as early as possible, so that applicants can obtain information about the training before the commencement of the project.

(2) It is recommended to make a website for the project and to enhance the network among the related personnel so that the training will attract more applicants in the future.

(3) It is recommended that a steering committee be organized and managed by those who implement the training to decide on issues such as scheduling, and to determine the organizations/people responsible for case studies, and so on.

(4) It is recommended that relevant personnel recognize that the support from JICA is an important key toward more effective adjustments.

### **3-6 Lessons Learned**

---

(1) The expectations of the government of Japan toward South-South Cooperation are huge. There is much consultation done with organizations to provide training related to the project. It is necessary to stay in contact with those organizations regularly.

(2) It is necessary to consider follow-up activity conduct for the ex-participants, so that the policies can be clarified.

### **3-7 Follow-up Situation**

---

N/A.