

# 1. Background of project

For many years, Syria put industrial development as a priority over agricultural development, but then wanted to increase agricultural production. In the 7th Five Year Plan, one objective of the agricultural sector was to plan crops production based on agricultural policies. However, for the formulation of agricultural policies, the appropriate and regular submission of basic agricultural statistics was not guaranteed due to the lack of reliability of estimation, inefficiency of data compilation, delay of data publication, and insufficient equipment for statistical research. As a result, these problems hindered the implementation of the policies. To solve these problems, experts were dispatched from the Government of Japan.

# 2. Project Overview

## (1) Period of Cooperation

1 June 1996-31 May 1999

## (2) Type of Cooperation

Experts Team Dispatch Program

## (3) Partner Country's Implementing Organization

Planning and Statistics Directorate, Ministry of Agriculture and Agrarian Reform

## (4) Narrative Summary

- Overall Goal Agricultural productivity is increased in Syria.
- 2) Project Purpose The precision and reliability of agricultural statistics are improved and the results of statistical findings are made quickly available for use in appropriate agricultural policy making.
- 3) Outputs
  - a) The precision of statistics is improved.
  - b) Efficiency in compilation and estimation is achieved.
  - c) Collected data is published promptly.

d) Technical training in agricultural statistics is conducted.

### 4) Inputs

Japanese Side	
Long-term experts	2
Short-term experts	5
Trainees received	8
Equipment	44 million yen
Local cost	3.35 million syrian pounds
	(7.6 million yen)

Syrian Side

Counterparts 5 Land, facilities and equipment Local cost

# 3. Members of Evaluation Team

### Team Leader:

Katsuhiko EBINA, Resident Representative, JICA Syria Office

## **Agricultural Statistics Administration:**

Masaaki SASAKI, Director of the Office of International Affairs, Department of Statistics and Information, Ministry of Agriculture, Forestry and Fisheries

### **Survey Method:**

Yasuhiro MIYAKE, Section Chief, Office of International Affairs, Department of Statistics and Information, Ministry of Agriculture, Forestry and Fisheries

### **Evaluation Analysis:**

Shinji GOTO, Assistance Resident Representative, JICA Syria Office

# 4. Period of Evaluation

13 May 1999-23 May 1999

### 5. Results of Evaluation

### (1) Efficiency

The planned inputs by both Japan and Syria were all achieved. The stationing of competent counterparts with few personnel changes was a major factor contributing to the efficient technology transfer. Also, the three-month counterpart training in Japan was sufficient to cover a wide range of technologies from the basic technologies to applied ones, which met the needs of Syria; therefore, it is perceived that there were considerable impacts from the training.

#### (2) Effectiveness

Through the technical transfer of the concepts and methods of sampling survey in this project, staff in the Ministry of Agriculture and Agrarian Reform were able to conduct research based on the sample design related surveys on their own. Also, with new computers and other equipment, human errors of compilation were reduced, and correction time for errors was reduced by the fax arrangement and the improvement of the information system, so precision and speed of data compilation were significantly improved.

#### (3) Impact

Because statistics have only an indirect impact on agricultural productivity, it is difficult to perceive any direct impact from the project.

#### (4) Relevance

The improvement of agricultural statistics is listed as a priority in the 7th Five-year Plan in Syria. Particularly, agricultural statistics are the base of the production plan that the Ministry of Agriculture and Agrarian Reform formulate every year, so their precision and reliability are critical. There was also a move in Syria to expand the use of agricultural statistics in the private sector and agribusiness, including agriculture producers and traders, and the needs for up-to-date and reliable statistics are high; therefore, it was perceived that the relevance of the project is high.

#### (5) Sustainability

The Government of Syria recognized the importance of agricultural statistics, and therefore, it was considered that the function of the Ministry of Agriculture and Agrarian Reform would further be strengthened. Financially, the cost of maintaining the existing equipment and statistics surveys would presumably be covered by the annual budget. But other budget arrangements would be needed for training and equipment to enhance technologies. Technically, despite the technical transfer on the computer system, the skilled technicians were still short of skills needed to develop the database and expand the network in the future, and they were unable to improve capacity on their own.



A flash report of cotton-production statistics



Agricultural Statistics information is provided on CD-ROM

## 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

In order to enhance efficiency in technical cooperation, it is important to examine competence of expected counterparts in the preliminary stage and also to confirm whether personnel changes are scheduled during the cooperation period.

#### (2) Recommendation

The dispatch of this team was terminated as planned at the end of May 1999. It was expected that through the next agricultural census, which would be conducted in the near future, the sampling surveys and skills of field survey that were transferred to the counterparts would be put into practice, and the Government of Syria would continue to support financially the improvement of agricultural statistics.



# 1. Background of Project

The Syrian Government recognized the need to establish measurement standards in order to manufacture reliable and high-quality products and develop industry. Therefore, the Syrian Government established measurement standards in the fields of electricity and temperature with the help of technical cooperation from JICA from October 1987 to October 1992. Following this first phase project, the Syrian Government requested a second phase of Project-type Technical Cooperation from the Japanese Government with the purposes of 1) establishment of measurement standards in the fields of length, mass, pressure and force and 2) Follow-up of the first phase project, i.e. improved accuracy of electricity and temperature measurements.

# 2. Project Overview

## (1) Period of Cooperation

1 December 1995-30 November 1999

## (2) Type of Cooperation

Project-type Technical Cooperation

## (3) Partner Country's Implementing Organization

National Standards and Calibration Laboratory (NSCL)

## (4) Narrative Summary

1) Overall Goal Measurement sta

Measurement standards (traceability) system is established in Syria.

2) Project Purpose NSCL becomes a national standards laboratory that can supply calibration services regarding length, mass, pressure, electricity and temperature to domestic industries in Syria.

- 3) Outputs
  - a) Operation system of the project is established.
  - b) Standards of length, mass and pressure, as well as relevant measuring and calibration techniques are established.
  - c) Measurement standards system and management

system regarding electricity and temperature is improved.

- d) Calibration services regarding electricity are more widely extended.
- e) Technical capability of the counterpart personnel is upgraded.

# 4) Inputs

Japanese Side	
Long-term experts	5
Short-term experts	44
Trainees received	19
Equipment	450 million yen
Local cost	12 million yen
Syrian Side	
Counterparts	24
Staff	26
Buildings and facilities	
Local cost	45 million syrian pounds (approx. 102 million yen)

## 3. Members of Evaluation Team

### **Team Leader:**

Mitsuru HAGINO, Development Specialist, JICA

**Technical Cooperation Planning:** 

Kazumi SAGISAKA, Chief of Measurement Standards Unit, Weights and Measures Office, Machinery and Information Industries Bureau, Ministry of International Trade and Industry (MITI)

### Measurement Standards:

Yoshiaki AKIMOTO, Senior Officer of International Relations, National Research Laboratory of Metrology (NRLM), MITI

### **Evaluation Management:**

Hironori KIMURA, First Technical Cooperation Division, Mining and Industrial Development Cooperation Department, JICA

### **Evaluation Analysis:**

Hajime SONODA, IC Net Limited

# 4. Period of Evaluation

20 August 1999-7 September 1999

## 5. Results of Evaluation

## (1) Efficiency

Inputs were in generally adequate. Assignment of the long-term expert for length standards was shortened because of his health condition. Several short-term experts for length standards were dispatched in order to make up for the absence of the long-term expert. The dispatch of the long-term expert for length standards was further delayed because of the Iraq crisis in 1998, and it was foreseen that it would be difficult to complete all the activities within the cooperation period. A working group was, therefore, created in Japan and facilitated technical transfer regarding length standards. As a result of these extensive efforts, the technology was expected to be successfully transferred according to the plan.

#### (2) Effectiveness

The operations manual and calibration procedure for each field were almost completed. The calibration service vehicle for on-site calibration of electrical measurement was mobilized inside and outside Damascus, and had provided 379 calibration site visits by the time of the project evaluation. The technical evaluation by bilateral international comparison<sup>1)</sup> was high. Full scale calibration services for length, mass and pressure were about to be started. With these achievements, the project purpose was expected to be realized by the end of the cooperation period.

### (3) Impact

With the enhanced technological capability brought through implementation of the project, NSCL started providing calibration services on electrical, temperature and mass measurement to the Industrial Testing and Research Center (ITRC), the secondary calibration institute providing calibration services to Syrian industries. By providing measurement standards to the secondary institutions in this general way, the project contributed to the establishment of the Syrian measurement standards system, i.e. the overall goal of the project.

#### (4) Relevance

The Syrian Government highly sought the enhancement of the international competitiveness of its industrial products. The establishment of a measurement standards system was vital to achieving that goal. Thus, the overall goal of the project was relevant to the national policy. The project purpose was also relevant because it met the need for reliable calibration services from the Syrian industry.

#### (5) Sustainability

The NSCL acquired the appropriate organizational structure and managerial capability through the project. It also established a management system for providing extensive calibration services outside of the laboratory. In



National Standards and Calibration Laboratory

addition, the Scientific Studies and Research Center (SSRC), the upper organization of the NSCL, made a commitment to provide continuous political support for the NSCL. Considering these factors, the institutional sustainability of the NSCL was considered high. Regarding financial sustainability, judging from the satisfactory budget allocation in the past and SSRC's strong commitment for continuous support, it was expected that sufficient financial resources would be secured for the NSCL. With regard to technical aspects, by accumulating practical calibration services ecperience outside the laboratory, maintaining and upgrading the technical level of NSCL was viewed as probable.

# 6. Lessons Learned and Recommendations

#### (1) Lessons Learned

At the planning stage of a project, not only the priority needs of the recipient country, but also the availability of Japanese experts should be taken into account. Based on these considerations, the appropriate period and scope of cooperation should be decided and the purpose of the project clarified. Back-up and support systems from Japan for proper technology transfer is also crucial.

#### (2) Recommendations

Although the Syrian side expressed its anticipation for the third phase cooperation for further expansion of the coverage of the measurement standards, it was considered to be more important to fix and improve the technology transferred through the project.

#### 7. Follow-up Situation

Beginning in fiscal year 2001, the Third-country Training Program on "Measurement standards and calibration technology in the field of electricity and temperature" is underway for three years.

International comparison of measurement standards conducted between two countries