

# Terminal Evaluation

## Asia

### 1. Outline of the Project

**Country:**

Kazakhstan

**Project title:**

Technical Cooperation for the Improvement of Health Care Services in the Semipalatinsk Region

**Issue/Sector:**

Health/Medical Care

**Cooperation scheme:**

Dispatch of Expert Team (presently titled the Technical Cooperation Project)

**Division in charge:**

East, Central Asia, and the Caucasus Division, Regional Department II (East, Southwest, Central Asia, the Caucasus and Oceania))

**Total cost:**

130 Million Yen

**Period of Cooperation**

1 July 2000 - 30 June 2003

**Partner Country's Implementing Organization:**

Health Department of Semipalatinsk City, Health Department of the State Government of East Kazakhstan Region etc.

**Supporting Organization in Japan:**

Oita University of Nursing and Health Sciences, Radiation Effects Research Foundation (RERF), Hiroshima Atomic Bomb Casualty Council, Hiroshima University, Nagasaki University

**Related Cooperation:**

Grant Aid; "Project for Improvement of Health Care Services in the Semipalatinsk Region"

### 1-1 Background of the Project

There were 470 nuclear tests conducted around the Semipalatinsk region by the Soviet Union in the last forty years or so. As a result, the people of the surrounding region were severely affected by air, water, and food contamination by radioactive fallout. Members of the United Nations agreed on proceeding assistance to the Semipalatinsk region in 1997, and Japan proposed convening an international conference concerning the Semipalatinsk region in the United Nations General Assembly in 1998. Japan decided to assist the Semipalatinsk region on its health sector and dispatched Japanese experts and the Project Formulation Study Team to investigate the current situations on organizations for health administration and medical facilities. Japan also held "The Tokyo International Conference on the Semipalatinsk" and presented Japan's policy to the world regarding future assistance for the people of the Semipalatinsk region, the Expert Team Dispatch Program, and Grant Aid.

### 1-2 Project Overview

The project supported to establish systems for primary screening, secondary and final diagnosis and fostered human resources in highly contaminated Semipalatinsk city areas.

(1) Overall Goal

To improve health care services in Semipalatinsk city and the region around the city.

(2) Project Purpose

To improve systems for primary screening, secondary and final diagnosis for the populations in highly contaminated Semipalatinsk city areas and around the Semipalatinsk nuclear test site.

### (3) Outputs

- 1) To assist the government and the residents to understand radiation effects over health.
- 2) To implement primary screening efficiently and systematically, using health care facilities and mobile examination vehicles.
- 3) To implement secondary diagnosis efficiently and systematically on those who are transferred from primary screening.
- 4) To implement the final diagnosis on the basis of the secondary diagnosis among residents severely affected by radiation who may have frequently occurring diseases.
- 5) To accumulate the data covering the primary, the secondary and the final diagnosis in an appropriate organization.
- 6) To enable the government to utilize data accumulated in the appropriate organization.

### (4) Inputs

Japanese side:

Short-term Experts	41	Equipment (portable equipment)	15 million yen
Trainees received	3	Local Cost	8 million yen

Kazakhstan's Side:

Counterpart                                 1 or more/Japanese expert

Land and Facilities

Local Cost                                     28.228 million tenge (24 million yen)

## 2. Evaluation Team

### Members of Evaluation Team

Team Leader/General: Takamasa HAYASE, Director, Planning Division, Regional Department II, JICA  
Cooperation Policy: Tamotsu IKEZAKI, Assistant Director, Technical Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs  
Technological Analysis 1: Tomoko KUSAMA, President, Oita University of Nursing and Health Sciences  
Technological Analysis 2: Shunichi YAMASHITA, Professor and Chairman, Department of International Health and Radiation Research, Atomic Bomb Disease Institute, Nagasaki University School of Medicine  
Planning Observation: Yukiko MIZUNO, East, Central Asia and the Caucasus Division, Regional Department II, JICA  
Assessment Analysis: Tadashi YOSHITSUGU, Consultant, Higashi & Associates, Inc.  
Interpreter: Jun KATORI, Japan International Cooperation Center (JICE)

### Period of Evaluation

24 January 2003 -8  
February 2003

**Type of Evaluation:**  
Terminal Evaluation

## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

#### (1) Relevance

The project purpose is consistent with such national programs of Kazakhstan as "2002 - the Year of Health" and "2003 - 2005 Health of the Village". Japan is the sole nation which suffered from the outcomes of atomic bombing, which resulted in the accumulation of know-how and experiences of medical care for "Hibakusha". It was considered that the accumulated knowledge and skills could contribute to the improvement of health care in Kazakhstan. The project is one of three Japan's cooperation strategy towards Kazakhstan, titled "Consideration for Environment and Health".

## (2) Effectiveness

The levels of achievement of the six outputs were different: As for the techniques and methods of primary screening, effects of the project were almost at the satisfactory level, but the data was not accumulated. However, the six points of outputs were steadily in progress, aiming at their respective goals. In order to achieve the project purpose, it is necessary to integrate each output systematically and to establish a comprehensive health examination system.

## (3) Efficiency

Due to the delay of the Exchange of Note and signing it and of the ratification by the parliament of Kazakhstan, the delivery of the equipment under the Grant Aid Project was completed after 18 months from the commencement of the project. This had serious adverse effect to the progress of the project. However, the equipment was utilized smoothly at a high operating rate. Each counterpart organization made its own effort to obtain consumable materials and reagent, in addition to the special financial assistance from the national and regional health care department in Kazakhstan.

Two out of three administrative officers trained in Japan left their job, and the expected effect of disseminating the project outputs in Kazakhstan was not obtained.

## (4) Impact

A cytological diagnosis method, "Papanicolaou Staining", was introduced for the first time in Kazakhstan, whose importance was widely recognized among medical staff. Primary screening using a mobile diagnostic vehicle was widely recognized as "Yaponskaya Programma (Japanese Screening Program)" by the residents of the region. The number of patients who received secondary and final diagnosis in medical institutions has been on the rise as a result of the improved primary screening and introduction of modern equipment. Owing to the improvement of ability and skills of diagnosis, the number of patients diagnosed by one doctor and the utilization rate of beds increased, and average period of patients' stay in the hospital became shorter. The importance of early diagnosis, early detection, and treatment of cancer are now recognized widely.

## (5) Sustainability

The financial support of national and regional governments was essentially needed to achieve continuous activity of the project, because there were some problems in a city-run emergency hospital to obtain consumable materials for equipment. All the equipment provided was operating in good condition at the terminal evaluation. However, taking all the possible conditions into consideration, it is necessary to train technical staff who are engaged in the maintenance of each equipment. The established system of cooperation among the counterpart hospitals helped enhance the sustainability of the project to a great extent.

### **3-2 Factors that promoted realization of effects**

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#### (1) Factors Concerning the Planning

The technical level of diagnosis was remarkably upgraded because there were synergetic effects brought about by the following factors: That the equipment with state-of-the-art technology was introduced through Grant Aid; the transfer through Technical Cooperation was the accumulated experience of medical services to the victims of atomic bombing and the diagnostic techniques utilizing the capacity of the equipment to the maximum extent.

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

As for the primary screening using the mobile diagnostic vehicle, counterpart medical institutions mutually cooperated by organizing a team, and each institution allocated necessary personnel and shared the cost. The Health Department of the City of Semipalatinsk cooperated with the project by listing up the residents in need of counseling in the highly contaminated areas by liaising with regional governmental organizations and hospitals. The Ministry of Health and the State Government of East Kazakhstan Region gave special financial assistance to purchase the reagents and the consumables for the equipment. A cooperation scheme among counterpart medical institutions was established on the primary screening system as described above, which greatly promoted the sustainability of the project.

### **3-3 Factors that impeded realization of effects**

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#### (1) Factors Concerning the Planning

N/A.

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

Two out of three administrative officers trained in Japan left their jobs, and the expected effect of disseminating the project outputs in Kazakhstan was not obtained.

### **3-4 Conclusion**

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As for the diagnostic methods for primary, secondary and final diagnosis for the populations in highly contaminated Semipalatinsk city areas, health examination techniques of each stage have been improved, but no comprehensive health examination system has been established yet. There is room for improvement in each six points of the outputs, but progress is currently visible to achieve the final goal of the project.

### **3-5 Recommendations**

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- (1) To achieve the project purpose, it is important to conduct a field trip for primary screening from April or May 2003 similar to the previous one in 2002 .
- (2) Technical transfer in the field of Cytology should also be included in the project activities at other counterpart hospitals, more so than medical institutions for diagnosis. These counterpart hospitals include the Oncology Center and Medical Academy Hospitals, so that they become capable of conducting cytological diagnosis.
- (3) The basic statistical program should be established by entering all the data collected from all 5,045 people which was acquired through the field trip for primary screening in 2002 for the data base server.
- (4) Data base programmers have to take the Oracle Training to upgrade their skills.

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

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(1) The technical level of diagnosis was remarkably upgraded because there were synergetic effects brought about by introducing up-to-date equipment to Kazakhstan through Grant Aid by transferring accumulated experience on medical services for atomic bomb victims and by transferring diagnosis techniques maximally utilizing the capacity of equipment through technical cooperation.

With the detection rate of the affected on the rise, and the effects of the projects became obvious, which greatly changed the recognition of the counterparts on technical cooperation. The equipment introduced by Grant Aid can be useful for the beneficiary country by itself, but to enhance its effect it is desirable for the experts to input the technical instruction.

(2) Due to the delay of signing the Exchange of Note and the ratification by the parliament of Kazakhstan, the delivery of the equipment under the Grant Aid Project was delayed. Under the circumstances, it was implemented to the priority dispatch of the experts in cytodiagnosis and pathology which did not require the equipment. It led to minimize the delay of the project. It is certainly effective for the smooth progress of the project as a whole, to flexibly change the schedule based on the progress status of each element of the project.

(3) The cooperating system established by counterpart organizations is essential for the continuity and sustainability of the project. It is necessary to introduce successful examples such as this project to the counterpart organizations implementing similar projects.

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

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N/A