添付資料

# 添付資料 6-1 評価結果要約表(英語およびロシア語)

(1)英語

#### Summary

## Evaluation conducted by Maekawa, INTEM Consulting, Inc.

1. Outline of the Project	
Country : Republic of Kazakhstan	Project Title : Project for the Improvement of Health Care Services in the
	Semipalatinsk Region in the Republic of Kazakhstan
Issue/Sector : Health / Medical Care	Cooperation scheme : Technical Cooperation Project
Division in charge : Medical Dept.	Total cost : 373 million yen
The Second Division for Medical	Partner Country's Implementing Organization : Ministry of Health
Cooperation	(MOH), Dept. of Health and Management of East Kazakhstan Oblast
(Present : Human Development Dept.	(EKS)
Health Systems Division)	
Period of Cooperation :	Supporting Organization in Japan: Nagasaki University, Hiroshima
March 20, 2000 – June 30, 2005	University, Oita University of Nursing and Health Sciences, Radiation
	Effects Research Foundation, Hiroshima Confederation of A-bomb Sufferers Organizations
	Related Cooperation : Grant Aid (Project for Improvement of equipments
	for Health Care Services in the Semipalatinsk Region)

# 1-1. Background of the Project

About 470 nuclear tests conducted around Semipalatinsk region in the era of the Soviet Union during the 40 years affected the people of the neighbouring region through air, water, and soil contaminated by radioactive fallout. Members of the United Nations agreed on proceeding the assistance to Semipalatinsk region in 1997, and Japan proposed convening an international conference on Semipalatinsk region in the United Nations General Assembly in 1998. According to the result of the conference, Japan decided to assist Semipalatinsk region on health sector. Japan hosted an international conference on Semipalatinsk region in Tokyo in 1999 and presented Japan's direction for future assistance technical cooperation and grant aid.

In this context, JICA dispatched the preliminary study mission for twice and exchanged the M/M on March 2000 for agreement on commence the "Technical cooperation for the Improvement of Health Care Services in the Semipalatinsk Region. And JICA implemented the technical cooperation project for three years in purpose of establishment of systems for screenings, detailed health examination and diagnoses for the people in the project site where highly polluted, assistance for the analysis and collection of the data after the screenings and diagnoses, training of human resources, and provision of equipment.

## 1-2. Project Overview

The project provided opportunity of medical check-up to the people lived in the project site by conducting primary screening and investigated health condition of the people, and conducted mobile examination by vehicles, technical transfer on cell diagnoses for detailed health examination and establishment of data base for the examination aiming for improvement of systems for primary screening, detailed health examinations and diagnoses.

## (1) Overall Goal

Health care services around Semipalatinsk region are improved.

## (2) Project Purpose

Systems for screenings, detailed health examination and diagnoses for the population in the project site are improved.

## (3) Outputs

1) Understanding by the public and the government in effects of radiation on health is promoted.

2) Screening is implemented effectively and systematically using the existing health care facilities and mobile examination vehicles.

3) The detailed health examination is implemented effectively and systematically on those who were picked up for the examination.

4) The diagnosis is implemented for the confirmation of 4 diseases targeted under the project.

5) Data on the screening, the detailed health examination and the diagnosis are accumulated.

6) The local government utilizes the data on the screening, the detailed health examination and the diagnosis.

(4) Inputs (as of the Project's termination) :

Japanese side :

Long-term Expert Short-term Expert Trainees received 0person 83person 13person Dispatch of Experts Acceptance of Trainees Equipment Local cost Others 257,397 thousand yen 14,549 thousand yen 50,253 thousands yen 18,714 thousand yen 18,560 thousand yen

Kazakhstan side : Counterpart 1,004 person Land and Facilities

2. Evaluation Team		
Members of	Evaluation Analysis : Akira Maekawa	Director, Business Management Dept., INTEM Consulting
Evaluation	Inc.	
Team		
Period of	24/04/2009 - 02/05/2009	Tour of Fuel and an a Fuerrant
Evaluation	15/05/2009 - 30/05/2009	Type of Evaluation : Ex-post

# 4. **Project Performance**

**3-1.Performance of Project Purpose** (Almost attained as of terminal evaluation. The following figures are at the time of ex-post evaluation.)

Indicaor1 : Number of examinees of primary screening and examinees remarked

25,186 persons had primary screening and input the results in the database. The number of examinees remarked is unidentified.

Indicator2 : Number of examinees of detailed health examination and diagnosis

5,801 person received detailed health examination. 98 person of the 5,801 identified targeted diseases of the project.

Indicator3 : Number of medical counterparts acquired "Papanicolaou" method

After the cooperation finished, Semipalatinsk Counselling and Diagnostic Center and East Kazakhstan Oblast Oncology Dispanser have been implementing trainings and technical guidance on the same methods. Number of the trainees who were trained by the counterparts newly is unidentified.

**3-2.Achievement related to Overall Goal** (The overall goal was evaluated according to alternative indicators since no indicators were set in the PDM as of terminal evaluation.)

The overall goal tends to be realized judging from number of cancer early detected, average days of confinement, rate of surgery operation, rate of aggravation after operation, birth rate, mortality rate, mortality rate of pregnant women, average life of expectancy in the target area, and number of medical doctors and nurses who have higher qualification in Eastern Kazakhstan.

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

Reccomendation1 : Utilization of database and clarification of the ownership

Semipalatinsk Counselling and Diagnostic Center has been revising the database and the Center has the ownership. The

data has been utilized based on requests from the other relevant hospitals. On the other hand, however, those hospitals have been establishing their own databases according to their respective objectives.

Reccomendation2 : Establishment of follow-up system for the examinees

Age of the examinees, trend of diseases by areas can be evaluated from the database the Project made, monitoring of the examinees cannot be done from the same database.

Reccomendation3 : Organizing special team exclusively for the screening

A hospital has been organizing special team consists of paediatrician, neurologist, and physician for digestive organs exclusively for the screening and doing screening by the mobile examination vehicle.

Reccomendation4 : Technology dissemination

The "Papanicolaou" method has been expanded through trainings etc. since the Ministry's decree obliged to adopt the same method in all detailed health examinations.

## 4. Results of Evaluation

## 4-1. Summary of Evaluation Results

### (1) Relevance

Relevance of the Project was high. The Project was coherent to the Kazakhstan policy and assistance policy of the government of Japan. The purpose also met the need of the target group. In beginning of the Project, "Promotion of public health" was one of the priorities identified in "Long-term Strategy by the Year of 2003". The Project was a part of "National Program for health examination of 4.5 million people in rural areas" which was started by the president's order in August of 2001. Assistances to Semipalatinsk and the neighbouring regions are in line with new Japan's overall ODA policy in which assistance in health sector is pointed as one of the priorities and the importance with a viewpoint of "human security" is stressed.

## (2) Effectiveness

The effectiveness of the Project was high since the Project purpose was almost achieved and the overall goal would be achieved in the near future. Of the 6 outputs under the Project purpose, only one output "The government utilizes data accumulated on primary screening, detailed health examination, and diagnosis" was not achieved. However, the same output seemed to be an important assumption for the achievement of the overall goal. A series

of the system for screening, detailed health examination, and diagnosis for the people was established. However, it was pointed out that a part of the examinees remarked could not have the detailed health examination, diagnosis and medical treatment by economical reason or problem of distance from their residential place to Semipalatinsk.

## (3) Efficiency

Overall, the Project was implemented in efficient way. Although no long-term expert was dispatched, the timely and repeatedly dispatch of same short-term experts and coordinators, sufficient support from Kazakhstan side, no change of the project coordinator and director of the Department of Health and Management of East Kazakhstan Oblast covered disadvantage comes from no long-term expert's assignment.

#### (4) Impact

## (a) Degree of achievement of Overall Goal

Because no indicators were set in the PDM, the alternative indicators were chosen from 14 kinds of data in total. Those are accumulated data in the 4 hospitals, as counterpart organizations in Semipalatinsk (Existing Semey City) and data of Medical Information Analysis Center established earlier in East Kazakhstan Oblast in 2001 than in nationwide afterwards. Number of cancer early detected, the Project target diseases newly detected have been increasing in the hospitals in the target area. It means that accuracy of detailed health examinations and diagnoses might be improved. Good trend can also be seen in average days of confinement, rate of surgery operation, rate of aggravation after operation, birth rate, mortality

rate, mortality rate of pregnant women and average life expectancy. The trend deems to mean improvement of medical technology in the relevant hospitals. Number of medical doctors and nurses who have higher qualification in East Kazakhstan Oblast has been increasing. The overall goal tends to be realized taking these facts into account.

(b) Positive and Negative Impacts

- "Papanicolaou" method introduced to Kazakhstan by the Project initially, was obliged to use in all detailed health examinations in medical institutions by decree of the Ministry of Health in 2005. Medical doctors who have experiences about "Papanicolaou" method have a merit of being added point for acquiring higher qualification as medical doctor.
- Accuracy and speed of diagnosis were improved in the medical institutions in the target areas.
- Techniques of MDs etc. for diagnosis and medical treatment were improved in the medical institutions in the target areas.
- People who lives in rural areas has been getting more opportunities than before to have primary screening in medical institutions or by utilizing mobile examination vehicle. As the result, health condition and disease trend among the people have been being clarified. Ministry of Health of the Republic of Kazakhstan has been increasing budget in health and medical care sector taking this fact into consideration. This is an evidence of influence to the national policy.
- The database the Project made has been being renewed and added the information up to today. However, the data has become less meaningful since other institution, KazN II has been accumulating data about 140,000 A-bomb victims. Therefore, the data of Semipalatinsk Counselling and Diagnostic Center has not been commonly used among the relevant medical institutions.
- During the Project period, screening by the mobile examination vehicle was done by good coordination and collaboration between the relevant medical institutions. Although the mobile examination team has been implemented cheered by Semipalatinsk Counselling and Diagnostic Center under the coordination of the Department of Health and Management of the East Kazakhstan Oblast by asking the relevant medical institutions in plan even after the Project completion, those institutions have made their own special examination team work. This fact has made unification of data collection difficult regarding to data on detailed health examination, diagnoses, medical treatment as well as result of screenings.
- A new system of the Medical Information Analysis Center has been working actively since 2005 collecting data on screening, detailed health examinations, diagnoses and medical treatments from each medical institutions in order to make national statistics in health sector and decide allocation of budget to the medical institutions. Ministry of Health utilizes the data for the administrative purposes.

## (5) Sustainability

#### (a) Political aspects

According to the decree of the Ministry of Health "The Program on Quantity of Free Medical Services" enacted on November 17 in 2004, Kazakhstan nationals were guaranteed free access to all medical treatment, confinement, medicine in any kinds of sickness basically. The program also covers budget for provision of equipment and consumables, repair works, medical staffs which are needed in the medical institutions. In addition, according to the decree No. 600 of the Ministry of Health in 2006, free primary screening for about 1.6 million people in East Kazakhstan Oblast was enacted focusing some important diseases such as cancer, heart disease, women's diseases (over 39 years old), child diseases (0-18 years old), and therefore, sustainability on even primary screening is sustained from political aspect.

(b) Organization and human aspects

Most of the ex-counterparts are still working in the same departments or divisions of the same medical institutions comparing to the Project period. Therefore, technologies transferred by the Project have been sustained. Moreover, in the each relevant medical institution, those who used to be counterparts of the Japanese experts have been continuing technical exchange with the Japanese ex-experts and learning more technical or theoretical skills, therefore, technical

sustainability is also high.

## (c) Financial aspects

In the financial aspect, the budget as a whole in the health sector and the budget for the primary screening of East Kazakhstan Oblast have been increasing year by year until 2009 since the Project's period. Operational budget in each relevant medical institution has also been increasing annually since 2005. There have been less problems to purchase necessary materials and consumables, and simple repairs of equipment which are needed for the diagnoses and medical treatments.

The medical equipments introduced by the Japanese grant aid in 2002, have been used effectively in good operational performances since Kazakhstan side has been making big efforts to replace parts and repair affordable locally. However, these equipments used exceeding their service life, and some unable to repair due to limit of the service life as well as the exceeding frequency of use. It is a time of renewal of the equipments.

## (d) Technical aspects

There were 36 counterparts who trained "Papanicolaou" method provided by the Project by the end of the Project. The actual number of increase afterwards cannot be identified. A cell morphologist of Semipalatinsk Counselling and Diagnostic Center has been instructing "Papanicolaou" method in the training course for laboratory assistant at the Medical Collage of Semey. Since the method was obliged to use in all the detailed health examination in 2005 according to the decree of the Ministry of Health, the demand towards the training on the method has been expanding. Semipalatinsk Counselling and Diagnostic Center has distributed a manual on the method, which the Project had made on demand. The manual must be used in the training at the same time, since the contents are not easy to understand for beginners.

Regarding the database the Project made, a person in charge has been adding and renewing the data up to today in Semipalatinsk Counselling and Diagnostic Center. However, from the aspect of total number of the samples, the data is rather meaningless because the other institute, KazN II has its own database with 140,000 atomic bomb victims, larger number of the samples. The database the Project made has not been shared and utilized fully among the relevant medical institutions.

#### (e) Operational aspects

In the operational aspect, Semipalatinsk Counselling and Diagnostic Center has been implementing primary screening as well as screening by the mobile examination vehicle continuously for residents in the Semipalatinsk region even after the completion of the Project. The Center plays core role of primary screening even now and has been adding results of the screenings into the database the Project made. Regarding to screening by the mobile examination vehicle, it was implemented under good collaboration of Semipalatinsk Counselling and Diagnostic Center and KazN II during the Project period, when East Kazakhstan Oblast Oncology Dispanser, Clinical & Training Center of Semipalatinsk State Medical Academy, East Kazakhstan Oblast Tuberculosis Center cooperated to dispatch necessary medical staffs to the team for the screening. After the completion of the Project, the relevant medical institutions have been making diagnoses and medical treatments according to their respective objectives and specialties gradually. Therefore, the relevant medical institutions show less intimate collaboration today than that of the Project period. However, it is the fact that Semipalatinsk Counselling and Diagnostic Center as a core organization has been implementing screenings by the mobile examination vehicle even today for about 2,000 peoples annually under the coordination of the Department of Health and Management of East Kazakhstan Oblast.

## 4-2. Factors that have promoted project

## (1) Impact

• "Papanicolaou" method used for detailed health examinations was introduced by the Project initially in Kazakhstan. Due to continuous guidance of the Japanese experts, the method was transferred smoothly to the medical doctors and technical staffs who used to be counterparts of the Japanese experts. Since most of the counterparts have not been moved out after completion of the Project, technologies transferred have been expanded and the fact has generated positive impacts from political aspect. Namely, it is obliged to use "Papanicolaou" method in all detailed health examinations. Continuous efforts done by Kazakhstan side for securing budget has been contributing to high rate of the human stability of mobilization.

- Though arrival of the equipment provided by the grant aid project was delay, the aid enabled to conduct screening by the mobile examination vehicle and provide opportunities to have health examinations for the residents who live in remote areas and had had less chance to have health examinations before, and know their health conditions. This is due to harmonious implementation of the technical cooperation and grant aid provided medical appliances including mobile examination vehicle. The aid had also improved technologies of diagnoses and medical treatments in the 5 medical institutions in Semey city.
- Efforts of the Government of Kazakhstan and East Kazakhstan Oblast to increase budget in health sector enabled to provide opportunities for all the residents with free of charge to have diagnoses as well as medical treatments. The budget increased enabled people lives in remote areas to have diagnoses and medical treatments in Semey, though they had had difficulty before to come to Semey to do so.

## (2) Sustainability

- Primary screening has been implemented continuously and number of detailed health examination and diagnosis has been increasing year by year. This is because of increase of yearly budget of the Ministry of Health as well as Department of Health and Management of East Kazakhstan Oblast. In addition, increase of the budget has been contributing to purchase of consumables, operation and maintenance of the equipment and materials as well as provision of spare parts in the respective medical institutions.
- A total of 1,004 counterparts during the Project period have been continuing their same works in the same medical institutions. This fact contributes to continuity of the affairs in the each respective medical institution.

## 4-3. Factors that have inhibited project

## (1) Impact

• Recommendations of the terminal evaluation include unification of the data of health examinations, more precisely possessing the database jointly. It has not been realized yet. During the Project period, the Project as a coordination body induced linkage and cooperation from the relevant medical institutions and screening by the mobile examination vehicle was done smoothly. After the completion of the Project, the extent of the linkage and cooperation among the relevant medical institutions has not been stronger than in the Project period, though Department of Health and Management of East Kazakhstan Oblast has been making big effort to be a coordinating body. Hence, the each relevant medical institutions manages their own data on examinations and the medical institutions provide data on demand of the other medical institutions. This trend has come out according to the objectives of the each institution taking the each specialty into consideration.

## (2) Sustainability

• There are no negative factors prevent the sustainability.

## 4-4. Conclusions

The Project was implemented smoothly under good cooperation system between Kazakhstan and Japan. Relevance, effectiveness, efficiency and sustainability are high and several positive impacts observed from 5 evaluation criteria in the result of ex-post evaluation.

The overall goal as an impact planned, namely an improvement of regional medical service system tends to be achieved as long as you judge from the data of Department of Health and Management of East Kazakhstan Oblast and relevant medical institutions. However, it is recommended to unify data of examinations and medical treatments in order to improve more the regional medical service system. Joint possession of the examination database made by the Project, a recommendation of the terminal evaluation in 2005 has not been realized yet. The data of 25,186 people, which was accumulated in the database up to the ex-post evaluation have neither been fully utilized in diagnoses and medical treatments after screenings at the medical institutions nor utilized to make examination plans for the administration by this reason. However, on the other hand, the relevant medical institutions have been implementing examinations with their own specialties from a viewpoint of conducting examinations done by special examination team which was also included in the recommendations at the time of terminal evaluation. The regional medical service system has been showing expansion as a form of specialty and role sharing among the relevant medical institutions, though extent of linkage and coordination among the medical institutions has been becoming weaker than that of the Project implementation period.

**4-5. Recommendations** (Concrete measures, recommendations, and advices related to the Project) To the Ministry of Health, and Department of Health and Management of East Kazakhstan Oblast :

- It should make more effort to disseminate and educate "Papanicolaou" method since the method was obliged to use for all detailed health examinations. Trainings and educations are necessary for the "Papanicolaou" method, since the contents of the manual the Project made are not easy for the people who study the method newly.
- Joint possession of examination data, one of the recommendations of the terminal evaluation held in 2005, has not been realized yet. It is expected that the issue is to be considered to solve continuously and to establish integrated database system in order to connect the examination data with medical treatment and health management of the residents, and utilize same data among the each medical institution without loss of the data.
- The medical equipment introduced by Japan has been utilized effectively. This is due to financial efforts of the Ministry of Health, Department of Health and Management of East Kazakhstan Oblast, and the each relevant medical institution as well as technical efforts of the same parties for the maintenance and operation of the equipment. It is further expected to secure more budget to renew those equipment taking frequency of use and service life of the equipment into consideration.
- **4-6.** Lessons Learned (Points extracted from this Project and can be referred for findings, formulation, implementation, operation and management of other similar projects)
- Unless clear indicators set, it is very difficult to measure extent of the achievement of the overall goal. The clear indicators should be set before the Project or during the Project. It is also important to consider measures to collect indicators taking cost needed, data reliance, and easiness or difficulty of the data collection into consideration at the same time.
- The Project was implemented together with provision of medical equipment introduced by the Grant Aid Project. Though there was about 1.5 years delay of the provision of equipment by the grant aid due to delay of signing E/N and procedure for congress ratification of Kazakhstan side, the Project activities were not affected at all as the result. This is because the activity plan was modified redundantly for example, training as one of technology transferring which can be done without use of equipment for instance, cell diagnosis was conducted in advance. It means that flexible process supervising shall be necessary.