

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Miho Kawahatsu Waseda Research Institute Corporation (WRI)	Duration of Evaluation Study
Project Name	The Project for Renovation of Technical School for Medical Care in the Kingdom of Cambodia	January 2010 – December 2010

I Project Outline

Country Name	The Kingdom of Cambodia	
Project Period	August 2004-February 2006	
Executing agency	Technical School for Medical Care (TSMC)	
Project Cost	Grant Limit: 774 million yen	Actual Grant Amount: 773 million yen
Main Contractors	Obayashi Corporation	
Main Consultants	Pacific Consultants International	
Basic Design	July 2004	
Related Projects (if any)	JICA, "The Project for Human Resource Development of Co-medicals" (2003-2010) (Technical Cooperation Project) JICA, "The Project for Strengthening Human Resources Development System of Co-medicals" (2010-2015) (Technical Cooperation Project)	
Project Background	In light of the first and second Socio-Economic Development Plans, the Government of Cambodia was consistently addressing the need to promote medical workers' knowledge and skill through enhancement of the educational system. Furthermore, the Health Workforce Development Plan explicitly called for introduction of a new training course for medical X-ray technique. However, to respond to a call for support for the agenda above, the Technical School for Medical Care needed to be upgraded so as to provide the adequate level of training and to accommodate a suitably large number of students. The Cambodian government requested Japan to install upgraded facilities and educational equipment at Technical School for Medical Care (TSMC) as it was considerably urgent and was given high priority for action.	
Project Objective	To renovate the existing facilities, construct new facilities and procure educational equipment for training at the TSMC, in order to improve the quality of overall health care services in Cambodia.	
Output[s] (Japanese Side)	<ol style="list-style-type: none"> 1. Construction of school building <ol style="list-style-type: none"> (1) Main building (Administration, X-ray Technology Course, Laboratory Technology Course, Midwifery Course, Physiotherapy Course etc.) (2) Renovation work for the nursing course building, Seminar House, toilet. 2. Provision of equipment <ol style="list-style-type: none"> (1) Human anatomical model, Human skeleton model, Delivery simulator, Injection simulator (2) Wheel chair, Skeleton model, Joint model (3) Electronic balance, Hematocrit centrifuge, Binocular microscope, Teaching microscope, Deep freezer (4) General X-ray system, Mobile X-ray system, Automatic film processor, Manual film processor, Accessories for X-ray system, Ultrasound diagnostic system, Cranial phantom for X-ray, Joint phantom (5) Other equipment to produce teaching materials 	

II Result of the Evaluation

Summary of the evaluation
<p>The relevance of this project is extremely high. Regarding its efficiency, it took a bit longer than the original plan. Its effectiveness, in terms of the indicators and their target numbers identified in the project plan, while it notably appears in newly established X-ray technician training course, from the viewpoint of improving learning environment by the project, achievements have been limited on the whole, as the number of students has increased. Further, regarding its sustainability, while we note that there is a high degree of usage of equipments and facilities, there is concern and room for financial improvement regarding the operation and maintenance of several diagnostic equipments in particular.</p> <p>In light of the above, this project is evaluated to be fairly satisfactory.</p> <p><Recommendations></p> <p>As recommendations to the implementing, mentions is made of some concerns regarding operation and maintenance (O&M) of the equipment provided as part of the project. The role of the TSMC as an institution dedicated to medical care education is certain to increase in the future, resulting in greater demand for O&M of its equipment and facilities. The consequent increase in the importance of asset management suggests that for the TSMC to fulfill its mandate. It is essential to pay more attention on O&M and mobilize adequate funding for it. If this is done, greater results in terms of quantitative and qualitative education become possible.</p> <p>Concerning effectiveness of the project, there is a physical constraint on ability to accommodate the large number of students. Thus, it is necessary for TSMC to recruit more qualified full-time staff (including nurses, midwives, and lab technicians) with sufficient clinical experiences. Doing so will make it easier to produce high-quality graduates. Close cooperation with UHS will be valuable in this connection.</p>

<Constraints of this evaluation study>

It was not possible to obtain quantitative information on the TSMC's financial condition because UHS controls the TSMC budget as the latter is an affiliate of the UHS. No detailed analysis of expenditures or the major source of funds placed available to the TSMC.

1 Relevance

(1) Relevance with the Development Plan of Cambodia

At the time the project was planned both the First and Second Socio-Economic Development Plan (plan periods, 1996~2000 and 2001-2005) included elevation of the technical skills of health care and medical workers by the improvement of education and training. Specifically, in the First Plan, mention was made of the goal of promoting the training of lab technicians and X-ray technicians (at the time, there were no courses of instruction available for X-ray technicians).

Further, at the time of the ex-post evaluation, top priority was assigned in the Health Sector Strategic Plan for 2008~2015 (HSSP, successor to the HSSP for 2003~2007). From the context of the National Health Workforce Development Plan 2006~2015 and the National Policy and Strategies for Human Resources for Health 2006-2010, mention is made of the project in connection with the improvement of health care and medical services and development of human resources in these fields. Thus the project has relevance in connection with the nation's development planning.

(2) Relevance with the Development Needs of Cambodia

At the time the project was planned, there was high need for development of human resources (HR), notably for nursing, midwifery, lab technology, and X-ray technicians for work in the areas of basic health care. At the time of the ex-post evaluation, there was indisputable need for improvement of health care and medical services. It was recognized that broad benefits were accruing to the nation from the improvement of HRD by the TSMC, as the central national institution devoted to preparing people for work in the health care and medical services fields. The project had clear relevance to the development needs of Cambodia.

(3) Relevance with Japan's ODA Policy

As stated in the Japan's Country Assistance for Cambodia released in 2002, improvement of basic education and of the medical care fields were assigned high importance as being fundamental to support the socially vulnerable at the time of project planning. Thus, this project is consistent with prior policy.

This project has been highly relevant with Cambodia's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

2 Efficiency

(1) Project Outputs

The following changes were made regarding outputs from the Japanese side, according to JICA.

Configuration of the roof of the Main Building and generator room; placing the wooden pergola, restoration of the existing pond, addition of painted white lines in the parking area, increase in some general management costs in connection with the foregoing; change of the location of septic tank 2, partial change in the renovation method for buildings to be renovated (nursing course building, Seminar House), change in the location of rain water and waste water drainage; change in the materials for partitions in the toilet building), and changes in the air conditioning and ventilation system for the instruction materials preparation room in the Seminar House.

According to the responses from the questionnaires by the executing agency, the reasons for changes and delays were not clarified.

(2) Project Period (Project Inputs)

The project period was planned as starting August 2004 (at the time of the E/N) to January 2006, or 17 months; but required one month more than that and the project was completed slightly later, in February 2006 (106%).

(3) Project Cost (Project Inputs)

Total project cost was 773 million yen; the amount in the E/N was 774 million yen, so it was mostly accomplished as planned (100%).

Although the project period was longer than planned, the project cost was mostly as planned, therefore efficiency of the project is fair.

3 Effectiveness / Impact

(1) Quantitative Effects

The targets that had been established at the time the project was planned had the target year of 2010. Comparison is made below for the following with 100 as the score for cases when the 2010 target has been reached. At the TSMC, in addition to existing nursing, lab technology, physiotherapy, and midwives courses, an X-ray technician course was started after the project completion.

- Increase in actual study hours per student for practical training (cover ratio of curriculum requirement)
- Increase in the number of people who received postgraduate education (per year)
- Increase in the floor area (m²) for learning and practice per student
- Increase in the number of users of the library
- Increase in the pass rate for the graduation examination, and reduction of the number of times of re-examination

- (a) Because of the importance of the improvement of facilities particularly for on-hands education and training through this project, inquiry was made into the increase in practical training time per student required by the curriculum. The cover ratio of curriculum requirement was about 90~95% for all courses.
- (b) However, regarding postgraduate education at the TSMC, the base value in 2004 was 9,240 students and the target for 2010 was 35,000 students, but results for 2010 came to only 8,207 students. Achievement thus fell short of the target. The reason for this low result was given by the TSMC as a shortage of space for education and a shortage of equipment as well as insufficient educational materials/equipment to match diverse clinical needs.
- (c) Regarding the area of classroom and practice room space per student, scores for almost all courses were below target. Values were low relative to the 2004 base values, indicating that the smaller space per student meant some deterioration of the environment for learning. It is thought that this is due either to an error in projection of the estimated number of students toward the target year at the time of the project planning, or because the number of students turned out to be much higher than it was expected at the time.
- (d) Data for library usage in 2010 was not provided to us and therefore the achievement of this target could not be measured.
- (e) Regarding the graduation examination pass rate, the initial target at the time the project was planned was 80%. The rate in 2004, before project implementation, was 42%, but by 2008 it had risen to above 95%, indicating excellent results. This, and the synergistic effect of a JICA technical cooperation project that was begun in 2003 and completed in 2008, suggests that there has been improvement of the quality of education.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

As to direct effects of the supply of healthcare and medical services, we inquired into relations with regional medical entities, hospitals and the like, with regard to the hiring of TSMC graduates and possible improvement in the abilities or quality of health care workers. According to response to the questionnaires, the outstanding difference in TSMC graduates subsequent to project implementation is that there has been a clear increase in the number of persons who have qualified as nurses and midwives, as well as a trend for physiotherapists to increase in number. Regarding X-ray technicians, 14 persons have been trained since the course for this specialty was created. Moreover, in relation to the relationship between the TSMC and other institutions, responses indicated that trainees had been received from all of the 24 provinces. A high level of demand in the regions outside the capital for persons who had been trained in each of the courses established at the TSMC had been known to exist, and the persons who have been trained as X-ray technicians are engaged in out-reach activities, through both formal and informal means, for major hospitals, clinics and regional hospitals.

No adverse effect with regard to the natural environment, land acquisition, resettlement of residents, or other matters has been reported.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

The response received indicates that support for this project after its completion, by medical institutions, hospitals, etc. has continued. Further, after completion, since 2007 it has been possible for the TSMC to use its own funding source, as it has been promoted to be the semi-autonomous body under the management of UHS, the authority for making decisions on disbursement of money has been expanded and the process of disbursement has been speeded up. In comparison to the situation when the project was planned, the arrangement for O&M management has been changed; seven persons had been in charge and now reduced to five (one director and four vice directors).

(2) Technical Aspects of Operation Maintenance

Plans called for including in the curriculum of training courses routine checking and simple maintenance work for equipment not requiring special skills and used for instruction in the practice sessions for lab technicians and X-ray technicians, but the response stated that at the time of the ex-post evaluation such training in equipment O&M was not being provided.

(3) Financial Aspects of Operation Maintenance

The response stated that at present TSMC requests a budget allocation from the UHS for the expenses of management of O&M, and the future of that funding depends on UHS policy. Because the response also indicated that there was difficulty in the O&M of the equipment due to insufficient funds from the budget and TSMC earnings, and that funds from TSMC's own resources are not made available for project-related O&M. Thus, there is concern over the financial aspects of O&M of the project equipment.

(4) Current Status of Operation Maintenance

According to the executing agency, while the supplied equipment and facilities are being fully used, O&M was a challenge because of a shortage of O&M staff and a very high rate of usage of the equipment. In particular, among the equipment cited in the project plan as requiring technical support from outside the TSMC and equipment for which routine checks and repairs are difficult, the general X-ray system and the film processing system necessary for instruction of X-ray technicians are in need of repair, and there is a

shortage of spare parts for the ultrasound diagnostic system. In the event that this situation persists for a long time, it is expected that it will work as a constraint on the supply of trained X-ray technicians and on the diffusion of the use of X-ray technology. According to a report by JICA, support has begun to be provided for O&M through a technical cooperation project. JICA also reported that X-ray equipment has been repaired after the response made by the TSMC.

Some problems have been observed in terms of technical and financial aspects as well as current status of operation and maintenance, therefore sustainability of the project effects is fair.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for the Upgrading of the Sewer Cleaning Equipment in Colombo City	January 2010 – December 2010

I Project Outline

Country Name	Democratic Socialist Republic of Sri Lanka	
Project Period	February 2005-March 2006	
Implementing Agency	National Water Supply and Drainage Board (NWS&DB), Colombo Municipal Council (CMC)	
Project Cost	Grant Limit: 146 million yen	Actual Grant Amount: 121.45 million yen
Main Contractors	Mitsubishi Corporation	
Main Consultants	NJS Consultants Co., Ltd.	
Basic Design	"Basin Design Study on the Project for the Upgrading of the Sewer Cleaning Equipment in Colombo City in the Democratic Socialist Republic of Sri Lanka," NJS Consultants Co., Ltd., September 2004	
Related Projects (if any)	<ol style="list-style-type: none"> 1. JICA, "Development Study on Greater Kandy and Nuwara Eliya Water Supply" (1999) 2. JICA, Expert in Drainage Development (2002-2004) 3. JICA, Expert in Operation and Management of Drainage (2004-2006) 	
Project Background	<p>In Colombo the sewerage service areas are divided into the northern and southern areas. Since only preliminary treatment was carried out, the raw sewage was discharged from the pump stations to the ocean, and the discharged sewage sometimes caused water pollution in the ocean due to the absence of diffusion or dilution by current and wind. The sewerage system of Colombo and its suburbs faced many problems caused by many blockages which occur in the sewers due to the inflow of sand, sludge, domestic garbage, oils and fats.</p>	
Project Objective	To procure sewer cleaning equipment in order to enhance sewer cleaning operations and then to prevent sewerage overflow to drains, canal systems and water bodies	
Output[s] (Japanese Side)	<ol style="list-style-type: none"> 1. Procurement and installation works of the equipment 2. Technical support for planning the sewer cleaning 	

II Result of the Evaluation

Summary of the evaluation

This Project aimed to promote the cleaning activities of the sewers in Colombo City and its suburbs so as to improve the convenience of the citizen's life. In this target area, the National Water Supply and Drainage Board (NWS&DB) and the Colombo Municipal Council (CMC) conduct sewer cleaning. Before the Project, NWS&DB and CMC used to just attend the problems when the sewers were blocked, but since the equipment was procured by the Project, both NWS&DB and CMC has conducted preventive maintenance of the sewers. The cleaning achievement of both organizations is slightly less than the original objective, but they still conduct sewer cleaning based on the regularly-revised plan, and so they will achieve the objective in the near future.

A constraint of this evaluation study is that the information on financial matters of CMC was not available. Besides this, neither NWS&DB nor CMC face major problems in structural and technical aspects.

In light of the above, this Project is evaluated to be highly satisfactory.

<Recommendations to NWS&DB>

1. Even after cleaning the sewers in all areas of responsibility, it is recommended to continue the preventive cleaning activities based on the needs in each area.
2. Regardless of the financial deficit, the cleaning activities have been implemented due to their public utility characteristics. However it is necessary to secure sufficient funding for the drainage section. In the meantime, the management needs to continue the cleaning activities regardless of the financial status of the drainage section.

<Recommendation to CMC>

1. Even after cleaning the sewers in all areas of responsibility, it is recommended to continue the preventive cleaning activities based on the needs in each area.

1 Relevance

(1) Relevance to the Development Plan of Sri Lanka

In "Regaining Sri Lanka: 10-year Physical Infrastructure Development Plan" and "National Policy on Water Supply and Sanitation," which have been in effect since the commencement of the Project, the following is described—(i) Colombo City is the center for the politics, finance and transportation; (ii) It is necessary to control the pollution and protect environmental and natural resources for the improvement of the citizens' livelihood and economic development; and (iii) The sewage system is to be established in principal cities in the country.

(2) Relevance with the Development Needs of Sri Lanka

The sewerage system of Colombo and its suburbs has been established but frequently faced problems of sewer blockages due to the insufficient capacity of the facility, dumping of domestic garbage, etc. This brought inconvenience and hygienic problems to the citizen in the area. Most of these problems have been solved by this Project, but there are still sewer blockages and sewage flow. Thus, sewer cleaning is still necessary.

(3) Relevance to Japan's ODA Policy

In "Country Assistance Program for the Democratic Socialist Republic of Sri Lanka" prepared in 2004, improvement of infrastructure is one of the important issues. Also, this program points out the necessity of protecting the social environment, which includes water and sewerage, so as to promote environmentally-sound tourism development. Besides, this Project was implemented based on the discussions held at the Tokyo Conference on Reconstruction and Development of Sri Lanka in 2003.

This project has been highly relevant to the country's development plan, development needs, as well as Japan's ODA policy; therefore its relevance is high.

2 Efficiency

(1) Project Outputs

Outputs were generated as planned; The equipment was procured as planned in terms of quantity and specifications, and the technical training was implemented as scheduled. According to NWS&DB, the training was useful for planning the sewer cleaning and making the work efficient.

(2) Project Period (Project Inputs)

It took 14 months to complete the Project, shorter than planned (93% of the time planned).

(3) Project Cost (Project Inputs)

The actual cost was 121 million yen, 84% lower than planned. Due to the fair bidding, part of the procurement cost was saved.

Both project period and project cost were within the plan; therefore efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

After the equipments were procured, 224.55 km of the sewers were cleaned (169.7 km by NWS&DB and 54.85 km by CMC). The originally-set target by 2010 was 330 km, but when the equipments were procured this target figure was modified to 252 km. Comparing this modified target, about 90% was achieved.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

As a result of the sewer cleaning, the sewage blockages and floods have decreased. When the preventive cleaning was not done before 2006, as many as 110 complaints were made per year regarding the sewer blockages, but after the cleaning activities, these complaints decreased to 60. NWS&DB and CMC used to resolve 80% of the received complaints on average, but now they can work out more than 90%. Other impacts, after the sewage flood was decreased, include the improvement of traffic snarls and bad smell. Besides, it is reported that the clearing workers gained incentives from the new equipment, and that NWS&DB and CMC have come to realize the importance the preventive cleaning of the sewers, which hadn't been implemented before.

This project has largely achieved its objectives; therefore its effectiveness is high.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

When the Project started, NWS&DB and CMC newly established the Task Force for cleaning activities, but in 2007 this was dissolved. Now, each of NWS&DB and CMC formulate its cleaning team independently. This doesn't affect operation and equipment maintenance, because originally the two are different organizations and each has a target cleaning area. At NWS&DB, staff has been assigned as planned; It has 3 cleaning areas and in each area a leader, an assistant engineer, 3 operators/drivers and 4 workers are assigned. CMC has 2 cleaning areas, and in each an inspector, an operator, 2 drivers and 6 workers are assigned.

(2) Technical Aspects of Operation Maintenance

At NWS&DB, pre-service training is given to newly employed staff by the managers and engineers. Besides, technical training has been conducted annually for the supervisors, engineering assistants, operators, and laborers, using the training manual prepared by the Project. The clearing services have been conducted based on the annual cleaning program. The services are monitored directly by the inspector, and are reported to the Additional General Manager (AGM) via the engineering assistant and civil engineer. When the monitoring finds a problem, the AGM makes a decision on necessary actions to take.

At CMC, the training manual prepared by the Project has been utilized. The manual was revised to respond to the diversified priority cleaning areas, and based on this the technical staff and workers have been trained. The cleaning group report the monitoring result and people's complaints to the manager and AGM, via the engineers. When monitoring finds a problem, the manager or AGM makes a decision on necessary actions to take. Regular training has been conducted for the operators, and spare parts are available near the office.

(3) Financial Aspects of Operation Maintenance

In 2009, the budget for operation and maintenance of the drainage section of NWS&DB was 49.215 million rupees, and the expenditure was 131.31 million rupees. This section has constantly had a deficit since this Project started. However, the necessary amount has been spent for the drainage section, because its budget is just 1% of that of the total NWS&DB budget, and also because of the public utility of the sewer cleaning. As for CMC, the information related to the budget was not available, and so the financial status is not verifiable.

(4) Current Status of Operation Maintenance

The major equipment procured for NWS&DB is regularly inspected and functioning. Also, the equipment for CMC is regularly inspected and functioning after a repair. At both organizations, the equipment is maintained based on the sewer ledger.

Some problems have been observed in the financial aspects of operation Maintenance; therefore sustainability of the project effect is fair.

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Masaaki Shiraishi Waseda Research Institute Corporation (WRI)	Duration of Evaluation Study
Project Name	The Project for Improvement of Medical Equipment in Diakov Hospital in Tajikistan	January 2010 – December 2010

I Project Outline

Country Name	The Republic of Tajikistan	
Project Period	February 2005- February 2006	
Executing agency	National Medical Center of the Ministry of Health of the Republic of Tajikistan (Former Diakov Hospital)	
Project Cost	Grant Limit: 480.5 million yen	Actual Grant Amount: 465.2 million yen
Main Contractors	Sojitz Corporation	
Main Consultants	International Techno Center Co., Ltd.	
Basic Design	October 2004	
Related Projects (if any)	N.A	
Project Background	<p>In the Republic of Tajikistan, achieving independence from the USSR created a political vacuum which led to civil war that lasted until 1997. Although a full-scale post-independence economic reform finally begun in 2000, a large amount of external debts and debt repayment obligations weigh heavily on the government, adversely effecting ability to provide public services. A 2001 survey found that 83% of the nation's total population lived below the poverty line. In an attempt to avoid further deterioration, the Poverty Reduction Strategy Paper (PRSP) approved in 2003 aims to reduce poverty to 60% by 2015. However, financial rehabilitation has not sufficiently improved, and the health budget remains far below an adequate level.</p> <p>In the meantime, holdings of equipment and supplies at medical institutions have largely deteriorated over the years. Therefore, providing health care services to the poor is very difficult and is obviously evident in various health indicators of Tajikistan. It is deemed that improving health care services to children younger than 15 years old is especially urgent. In light of the above, Diakov Hospital was chosen because it plays a central role in the field of pediatric health care in the country. Tajikistan government requested Japanese government grant assistance for purchase of facilities and equipment for pediatric medical service.</p>	
Project Objective	Improvement of pediatric healthcare service in Diakov Hospital, a core venue for the pediatric healthcare, by renewal and replenishment of aging facilities and equipment in the Diakov Hospital and promotion of shared use of diagnosis and therapy equipment by technical guidance.	
Output[s] (Japanese Side)	<ul style="list-style-type: none"> - Infant Incubator - Patient Monitor - Ventilator - Laparoscope - Cysto-Urethroscope with Video Monitor - Bronchoscope, Fiber - Ultrasound Scanner, Doppler - Anesthesia Apparatus - Operation Light - Operation Microscope, Orthopedics - Operation Microscope, Neurosurgery - Neurosurgery Set - Diathermy Unit - Ophthalmic Examination Unit - CT Scanner - X-Ray Apparatus, C-arm with X-Ray Shield Apron - X-Ray Apparatus, Mobile with X-Ray Shield Apron - X-Ray Apparatus, General & Fluoroscopy 	

II Result of the Evaluation

Summary of the evaluation
<p>This project has high integrity with healthcare requirements and national healthcare policy. The project has been implemented nearly as planned. As result of evaluation based on the questionnaire response, as for expected outcomes, though there has been a little partial delay in achievement of targets, outcomes have been getting higher over time, and have amounted to large outcome as a whole. As for operation and maintenance, slight influence is observed in the decrease of staff due to lower salaries, and one of the essential pieces of equipment (CT-scan) has been broken and unusable since June 2010. It has not been repaired due to financial reasons. Although aggressive management including rationalization of hospital functions is highly appreciated, some problems are evident in organizational and financial aspects.</p> <p>In light of the above, this project is evaluated to be fairly satisfactory.</p> <p><Constraints of this evaluation study> Numerical discrepancies are found between the Basic Design Study Report and replies to the questionnaire, and caused difficulties in the evaluation study.</p>

1 Relevance

(1) Relevance with the Development Plan of Tajikistan

At the time of project planning, in the national policy statement in the Poverty Reduction Strategy Paper (2003), top priority was assigned to the health sector, notably to provide medical care treatment to every citizen and to ensure wide and fair access to primary health care services. Furthermore, the Fourth Three-Year Plan (2004-2006) indicates that public investment to the medical and health field accounted for 23.3% of the national budget.

At the time of the ex-post evaluation, the health sector remained a top priority. The current policies such as the Framework for National Health Improvement (2002) and National Health Maintenance Strategy toward 2020 (2010) address the improvement of medical care, better access to better services, and development of a long-term health delivery system. This project, in the above context, is consistent with the policy of Tajikistan.

(2) Relevance to with Development Needs of Tajikistan

For Tajikistan whose infant mortality is the highest in the Central Asian countries, strengthening of medical facilities and a budget increase for medical and health service are essential needs. On the medical front, dissatisfaction has been voiced regarding a fund shortage, while this project is highly regarded as having the function of meeting health care needs.

(3) Relevance with Japan's ODA Policy

This project is relevant to human security policy and aid policy for poverty-related healthcare as stated in the Japan's ODA Charter.

This project has been highly relevant with Tajikistan's development plan, development needs, as well as Japan's ODA policy, therefore its relevance is high.

2 Efficiency

(1) Project Outputs

Despite slight changes, outputs by the Japanese side have been attained essentially as planned.

(2) Project Period (Project Inputs)

The project implementation period has been slightly longer than planned (106.3%).

(3) Project Cost (Project Inputs)

The project cost has been lower than planned (96.8%).

Although the project period was slightly longer than planned, the project cost was lower than planned, therefore efficiency of the project is fair.

3 Effectiveness / Impact

(1) Quantitative Effects

As the targeted outcome of the quantitative effects to be attained by 2006, numbers of outpatients, inpatients, ultrasonic diagnosis and CT-scan diagnosis have been set up at the start of the project (2004). However, except the quantitative target of CT scan diagnosis, no specific numerical target was given for the other outcome items, only an indication of "be increased".

As for record of results on numbers of outpatients, inpatients, and ultrasonic diagnosis, as shown in the attached table, the number of diagnosed patients during the three year period of 2003 to 2006 has been remarkably increased by 2 to 3 times. But it must be noted that these numerical outcomes are not attributable only to effect of the project, but also due to other composite reasons including educational campaigns on health, improvement of general hygienic environment, etc. Nevertheless it is undeniable that there have been and now are patients visiting the hospital because of advanced facilities provided by the project. As for result of targeted outcome on CT scandiagnosis, however, was not attained in 2006 (achievement rate: 75.1%) but nearly reached the target number of patients in 2008 (achievement rate: 95.8%). Then, the number of diagnosed patients increased significantly through 2009 exceeding the target and justifying the project. However, reportedly, it is said that the CT scanner has been unusable since June, 2010, due to a serious breakdown. Despite some obvious outcomes of the project, due to nonattainment of a part of the targeted outcome, evaluation of the total effect of the Project is downgraded.

(2) Impacts (Impacts on the Natural Environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

No negative impacts due to destruction of nature, land expropriation, etc. took place. In regard to treatment of medical wastes, though preparation of Treatment Manual had been planned at the time of project implementation it has not been realized yet, but is reported as scheduled to be prepared by 2011. Proper treatment of medical wastes is to be properly treated as an urgent issue from the view point of reduction of environmental burden. As for impacts of the project on specific subjects such as strengthening of the referral system, reduction of infant mortality, and contribution to achievement of national targets in the health and medical fields, are all valued as highly effective by the executing agency.

This project has somewhat achieved its objectives, therefore its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

Diakov Hospital, the recipient organization in this project, has changed its name to "National Medical Center" under Ministry of Health. Although the performance of medical services in 2009 substantially increased in terms of the number of outpatients and inpatients compared to the levels of 2004, staff members of the National Medical Center decreased; i.e., medical doctors declined from 454 (2004) to 420 (2009), and nurses from 837 (2004) to 680 (2009). Reasons for the decrease of nurses are explained by low salaries. In addition, according to the executing agency, though neither numerical evidence nor policy documents were obtained, the number of beds and professional staff tends to decrease. There is fear that qualitative and quantitative debasement of medical service may be caused by this. On the other hand, non-professional staff such as in general affairs, accounting, or other departments have been increased from 42 to 53, indicating potential for further rationalization of the organizational structure of the entire hospital. In addition, the National Medical Center, as the top referral hospital in the region, has strengthened its systems (outpatient referral system, carrier system).

(2) Technical Aspects of Operation Maintenance

As for technical aspects of maintenance management by the hospital staff, it is required that all staff members take refresher training every five years. In regard to the technical training for operation and maintenance of the equipment supplied under the project, it is reported that basic and operation training are continuously conducted. Regarding service contracts with supply agents of equipment, it is reported that two contracts with equipment supply agents are valid, and their performance has been satisfactory. To the question about status of preparation of internal maintenance and operation manuals, no answer was received.

(3) Financial Aspects of Operation Maintenance

Since 2004, disbursement of budget to the National Medical Center by the government is favorably increasing. At the time of planning the project (2004), the government budget for Diakov Hospital was 0.7 million Somonies (approx. 25 million Japanese Yen), while the budget in 2009 was 6.15 million Somonies (approx. 132 million Japanese Yen) or 5.26 times of the one in 2004. Analysis in detail of the amount shows, it is confirmed that patients diagnosed by CT scan are subsidized by the government, while the hospital itself collects a certain amount of CT scan diagnosis fees, and the collected total sum was 0.2 million Somonies (approx. 3.8 million Japanese Yen) in 2009.

(4) Current Status of Operation Maintenance

Since June, 2010, the CT scanner, one of the durable equipment, is out of order and unusable. Since the number of patients for CT diagnosis has increased significantly, immediate repair of CT-scan is desirable to ensure satisfactory project outcomes.

Some problems have been observed in terms of technical aspects, therefore sustainability of the project effects is fair.

Table-1 Performance of Targeted Outcomes

Item of Outcome	Baseline	Target	Performance	After Target Year	
	2003	2006	2006	2008	2009
Nos. of Outpatients	28,169	Increased	90,268	91,324	92,781
Nos. of Inpatients	11,216	Increased	30,268	31,324	32,781
Ultrasound Diagnosis	1,589	Increased	3,628	3,680	4,180
CT-scan Diagnosis	0	2,000	1,502	1,915	3,136

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keiko Sakamoto Waseda Research Institute Corporation (WRI)	Duration of Evaluation Study
Project Name	The Project for Improvement of Equipments for Reproductive Health/Family Health Training Center	January 2010 – December 2010

I Project Outline

Country Name	People's Republic of China	
Project Period	July 2004-January 2006	
Executing Agency	National Population and Family Planning Commission	
Project Cost	Grant Limit: 279 million yen	Actual Grant Amount: 265 million yen
Main Contractors	Marubeni Corporation	
Main Consultants	INTEM Consulting, Inc.	
Basic Design	May 2004	
Related Projects (if any)	JICA, "The Project for Capacity Building of Reproductive Health and Family Health Service in Central and Western Regions, PRC" (2006-2009). (Technical Cooperation Project)	
Project Background	<p>The People's Republic of China (hereinafter "China") was switching its population policy from the existing one that officially controlled and supervised people focusing on population restraint to another that would lay emphasis upon improvement in the people's quality of life with special attention given to healthy living. Within this policy change, the Chinese government decided to introduce the Integration Project (IP) advocated by the Japanese Organization for International Cooperation in Family Planning (JOICFP). JOICFP's IP provides residents with a comprehensive approach to help create family planning on their own initiative through programs related to improvement in reproductive health (sexual health including health related to reproduction), supporting staff and methods, and by enhancing the awareness of the residents. To build capacity and train human resources necessary for promotion of IP, the Chinese government planned to construct China Reproductive Health/Family Health Training Center (CTC) in Taicang. However, the government could not purchase necessary equipment due to a shortage of funds and asked the Japanese government for grant aid for purchase of equipment required for training.</p>	
Project Objective	Purchase/Furnishing of equipment required in the new CTC for capacity building and training/retraining of IP staff that will be in service mainly in IP areas of Central and Western Regions of China	
Output[s] (Japanese Side)	<p>1. Medical equipment for practical training to be installed in the new CTC in Taicang City, Jiangsu Province: Audio-visual equipment for auditorium (projector, screen, sound units, etc.); Audio-visual equipment for international interchange room (projector, screen, sound units, etc.); Audio-visual equipment for reading room (VTR, TV, booths, etc.); Information equipment for PC training (PCs, projector, printer, etc.); Equipment for text preparation (video editing device, printer, copying machine, etc.); Training equipment (human phantom, food samples, etc.); Examination equipment for children health training (weight/height check scales, amblyoscope, ophthalmoscope, etc.); Audio-visual equipment for children health (VTR, TV, etc.); Equipment for woman health training (gynecologist examination table, electronic fetal monitor, blood pressure gauge, etc.); Audio-visual equipment for woman health (VTR, TV, etc.); Examination equipment for imaging diagnostic training (ultrasonic tomography, infrared mammary gland inspection unit, etc.); Examination equipment for geriatric/androgenous health training (blood pressure gauge, hauling bed, electrocardiograph, etc.); Equipment for radiography training (general X-ray plant, automatic developing machine, etc.); Examination equipment for reproductive health operation training (universal operating table for ladies, astral lamp, hysteroscope, etc.); Equipment for inspection training (full automatic biochemistry analyzer, ELISA system, etc.); Vehicles (chest X-ray exam. vehicle, minibus, microbus); Auxiliaries (autoclave)</p> <p>2. Equipment for 4 town service stations (4 places: Equipment for use in Shaxi Town Family Health Service Station, Fuqiao Town Family Health Service Station, Liuhe Town Family Health Service Station, Huangjing Town Family Health Service Station) Weight/Height check scales, blood pressure gauge for children, gynecologist examination table, microscope, blood pressure gauge, portable ultrasonic echoscope, infrared mammary gland inspection unit, fetal Doppler, electrocardiograph</p>	

II Result of the Evaluation

Summary of the evaluation

This project was highly relevant to China's policy and needs, as well as Japan's assistance policy; overall, therefore, its relevance is high. Although there was a change in the project period due to coinciding with the timing of the establishment of the new operating organization of CTC and a change of the construction site, these changes were unavoidable, and thus it can be said that the implementation of the project was efficient within the acceptable range.

In terms of effectiveness, estimating from the obtained numerical data, it is likely that the indicator for quantitative effects has not been achieved in the target year. On the other hand, indirect effects, though limited, were produced. Sustainability of the project is also believed to be high as no issues of concern are found viewed from any aspect, i.e., institutional, operational, technical or financial. Also, there is no problem from the viewpoints of maintenance and management.

In light of the above, this project is evaluated to be highly satisfactory.

<Constraints of this evaluation study>

A large change was introduced by the Chinese side in the facility scale of the CTC, which was constructed at the expense of the Chinese government, and its operation system during the project implementation. It is believed that the difference found between the target values and the actual values is attributable to these changes, and this should be taken into account when evaluating the efficiency and effectiveness of the project.

1 Relevance

(1) Relevance with the Development Plan of China

The following principles were stated in the "White Paper on Population and Growth of China in the 21st Century" published by the Chinese government in 2000: (1) Improvement in health level of women and children and improvement of the techniques of rearing infants through enhancement of reproductive health; (2) increase of health awareness among the farming population through implementation of health education activities in rural communities; and (3) Quality of Life (QOL) improvement through buildup of health services according to methods using an approach based on the age group of residents (periods of adolescence, pregnancy, perinatal, menopause and aged). The Population and Family Planning Act enforced in 2002 expanded the activities of the National Population and Family Planning Commission of China to cover reproductive health from family planning to adolescent education, STI/AIDS prevention and control, and outreach activities to encourage family planning. China's Eleventh Five-Year Plan (2006 - 2010) also assigns importance to the buildup of health services for mother and children, development and promotion of local healthcare, and improvement in health and medical service systems. As above, therefore, this project was relevant in that it was in line with the development policy of China all the while during the implementation period.

(2) Relevance with the Development Needs of China

During the implementation of the project, comprehensive health promotion service activities were ongoing in China. These activities include family planning, mother and child health, parasite control, nutrition improvement, etc.

In the Central and Western Regions of China that lag other regions in economic development, however, these health promotion service activities were limited, and especially for inhabitants in poor regions there was a pressing need to provide basic services and to help improve hygiene and health conditions through health education. Family planning staff engaged in general family health services in these regions had to be trained and family health service centers that would become bases for these activities were to be established. Even at the time of this ex-post evaluation the role that these service centers play is very important as there are many persisting problems such as the spread of HIV and other infections, increase of population mobility, rapid increase of the aged among the populace, etc., many of which began to surface in recent years. Therefore, there are many needs, and thus, this project is relevant in that it has been in line with the development needs of China not only at the time of planning but also at the time of ex-post evaluation.

(3) Relevance with Japan's ODA Policy

Japan's Economic Cooperation Program for China (2001) focuses on improvement in people's livelihood and welfare, human resources development, system formation, technology transfer, etc. in the inland regions; particularly, stress is placed on assistance and support to help overcome poverty, including grass-roots aids in the health and education areas and cooperation for livelihood improvements in the poverty regions. Furthermore, as part of the "cooperation in resolving environmental and other global issues," importance is assigned to the control of infections (HIV/AIDS, tuberculosis, etc.). Therefore, the project was relevant in that it was in line with the Japanese government's ODA policy.

This project has been highly relevant with China's development plan, development needs, as well as Japan's ODA policy; therefore, its relevance is high.

2 Efficiency

(1) Project Outputs

The outputs on the Japanese side were executed as originally planned. As to the construction of the CTC carried out under the responsibility of China, the scale of the design was enlarged greatly and the construction site was changed. Nevertheless, no delay was caused and completion was on time. (According to information received from the consultant of the project)

(2) Project Period (Project Inputs)

The actual project period was 19 months; the planned period was 12 months, so the project was accomplished at 158% of the planned period. According to the consultant of the project, the discrepancy in the delivery date of equipment between that planned and the actual date was caused because the delivery date was adjusted while verifying the level of preparedness of CTC's operational conditions.

(3) Project Cost (Project Inputs)

Total project cost was 265 million yen; the amount in the E/N was 279 million yen, so the project was completed at 95% of the

planned amount.

Although the project period was significantly longer than planned, it was to obtain the intended outputs. The project cost was lower than planned; therefore, efficiency of the project is high.

3 Effectiveness / Impact

(1) Quantitative Effects

The indicators for quantitative effects established at the time of planning the project are the number of training courses at the CTC (27 courses/year) and the number of trainees (1,780/year). The target year was 2006. No numerical data were available during this ex-post evaluation. Actual data that can be referenced are:

* JICA technical cooperation project in 2007: 10 training courses; 231 trainees

* Other training conducted in October 2005 through to September 2007 (approx. 2 years): 18 training courses; 956+α* trainees
(This is according to the interim evaluation reports of the relevant technical cooperation projects.)

Although a simple comparison cannot be made, it is likely that the intended indicator for quantitative effects of the project has not been achieved in the target year. This may be attributable to the absence of the expected integration of two service centers, namely, Taicang City Family Health Service Center (the training center is placed here) and Taicang City Mother & Child Health Service Center (these two centers, combined into one, were expected to work as the CTC). Consequently, the planned clinical and technical sections were not established. With respect to the equipment and materials furnished under the project, frequency in use of those installed in the CTC and town service stations is high according to the information received from the executing agency, while some are not used frequently; for example, equipment for text preparation are needed less, so frequency of use is low (information received from CTC).

*) The number of trainees is unclear for 1 course.

(2) Impacts (Impacts on the Natural Environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impacts)

One of the expected indirect impacts was: "the capacity of IP staff that will be in service mainly in IP areas of Central and Western Regions of China will be improved, then, as a result, IP activities in these regions will be vitalized and the quality of IP activities will be improved." Quantitative evaluation is not possible, but after the training, techniques and skills at family health service stations in the Central and Western Regions have improved a great deal, according to the CTC.

With respect to the other indicator: "healthcare level in IP areas will be improved," items related to mother and children health in 7 provinces of Central and Western Regions (Shanxi, Jiangxi, Henan, Hunan, Chongqing, Yunnan and Gansu)** were investigated. As a result, some declines were observed in the mortality rates of pregnant and perinatal women (death of fetuses and newborns) and the venereal disease rate. As above, therefore, it can be assessed that effects have been produced to a certain extent due to the synergetic effect with other factors including the technical cooperation project.

There were illegal residents on the land planned for construction the CTC and the construction work was to start after appropriate steps were taken for their relocation. However, because the Chinese side decided to enlarge the building scale, use of another site was arranged and no illegal residents were there, consequently, no problem occurred (according to the hearing from the consultant who was engaged in this project).

There were no other reports of serious adverse impacts.

***) Part of the model regions under the Project for Capacity Building of Reproductive Health and Family Health Service in Central and Western Regions, which is related to this project.

This project has somewhat achieved its objectives; therefore, its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

According to information from the CTC, this center is a substructure of the National Population and Family Planning Commission of China and its policies are decided in the committee comprised of the representatives from the local government of Taicang and those from the Population and Family Planning Commission of each administrative level (the central government, Jiangsu Province, Suzhou City and Taicang). The center obtains cooperation from Taicang Family Health Service Center, affiliate agencies, laboratories and research institutions of the National Population and Family Planning Commission of China, universities and other organizations for its training, practices, health techniques, etc. Therefore, its operation and management are ensured (according to the information from CTC).

(2) Technical Aspects of Operation Maintenance

Personnel in charge have been appointed for the maintenance and control of equipment (according to the information from CTC). Considering maintenance and repairs, manufacturers who have agents within China were selected as much as possible for the equipment and materials furnished under the project. Nevertheless, the technical level of these agents is not satisfactory (according to the information from CTC). In addition, as for the skills to operate and implement the training at CTC, the training by the specialists and the internal studying activities have been conducted to improve and strengthen the ability of the staff members (according to the information from CTC).

(3) Financial Aspects of Operation Maintenance

Operation maintenance costs of the CTC are covered by the subsidies from the government and revenues from training courses. No detailed data about its financial conditions were available, but they say that they have obtained enough funds since 2006. On the other hand, training revenues (CTC's own earnings) accounted for about 66% of the total revenues in FY2007 and FY2008, however, these earnings started to decline in FY2009, and fell to 45% in FY2010 according to the estimate (total revenues are also expected to

reduce in FY2010 to about 60% against FY2008) (according to the information from CTC). In any event, however, because of its position of being a substructure of the National Population and Family Planning Commission of China, it is believed that the CTC will be given necessary funds continuously.

(4) Current Status of Operation Maintenance

Periodical inspections are conducted by the Technical Supervisory Bureau of Taicang City for the equipment and materials furnished under the project. CTC is also conducting inspections of all these pieces of equipment once a year (according to the information from CTC), and thus, it is believed that there is no problem of maintenance. JICA's China Office also remarked "good maintenance and control" in its audit last year. With respect to training activities, various training courses, seminars, international conferences, etc. have been held recently with the cooperation of the United Nations Population Fund (UNFPA), Red Cross Society of China and various other donors as well as Provincial Population and Family Planning Commission and other government agencies (according to the information from CTC), and thus it is expected that the impact of the project will be positively sustained in the future.

No major problems have been observed in the operation and maintenance system; therefore, sustainability of the project effects is high.