

## Simplified Ex-Post Evaluation for Grant Aid Project

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Project Name	The Project for Tuberculosis Control in Poor Areas (Phase IV)	Oct. 2011 – Apr. 2012

### I Project Outline

Country Name	People's Republic of China	
Project Period	Jul. 6, 2004 - Feb. 8, 2006	
Implementing Agency	Ministry of Health of the People's Republic of China	
Project Cost	Grant Limit: 405 million yen	Actual Grant Amount: 404 million yen
Main Contractors	(Procurement: Lot1) Ogawa Seiki Co., Ltd. / (Procurement: Lot2) Iwatani Corporation	
Main Consultants	Japan International Cooperation System	
Basic Design	“Basic Design Study Report on the Project for Tuberculosis Control in Poor Areas (Phase IV)”, JICA, March 2004	
Related Projects (if any)	“The Project for Tuberculosis Control in Poor Areas (I - III)”	
Project Background	<p>China faces the challenge of being the country with the world's second largest number of tuberculosis sufferers, after India. Since the majority of the tubercular patients were in the young or middle-age groups, they tended to be the primary wage earners for their families. As a result, the disease was recognized as a serious socio-economic problem and a social impediment to the development of the society, especially in poor regions. With this situation and awareness, the Ministry of Health of China had been tackling the disease by adopting a DOTS (Directly Observed Treatment, Short-Course) strategy. The DOTS is a standardized short-course chemotherapy for tuberculosis control; each individual patient is under direct and supportive observation by a doctor, who ensures the right drugs are taken at the right time, for the full duration of the treatment. The Government of China formulated a program “Tuberculosis Control in Poor Areas” and requested Japan to support the procurement of anti tuberculosis drugs and other related materials to implement the program.</p>	
Project Objective	<p>The objective of the project is to help the Chinese Government strengthen effective measures against tuberculosis based on the DOTS strategy by providing necessary materials and equipment such as anti-tuberculosis drugs and microscopes.</p>	
Output (Japanese Side)	<p>Provision of anti tuberculosis drugs, binoculars (microscopes) and materials for health education and publicity to expand DOTS strategy in the poor area of 9 provinces and 3 autonomous regions (Sichuan, Qinghai, Henan, Jiangxi, Shanxi, Anhui, Guizhou, Yunnan, Shaanxi, Guangxi, Xizang, Inner Mongolia), and conducting the study for Basic Designing of the project.</p>	<p>Procurement:</p> <ul style="list-style-type: none"> <li>- Anti tuberculosis drugs HRZE: 567,793 boxes, HR: 836,864 boxes, HRE: 298,698 boxes</li> <li>- Injection drug: 57,250 boxes, Solution for injection: 57,250 boxes, Syringes: 57,250 boxes</li> <li>- Binoculars (microscopes): 310 units</li> <li>- Pamphlet: 5,187 packages, Poster: 867 packages, Advertising plates for Xian (counties): 276 units, Advertising plates for Xiang (towns): 1,839 plates, Nameplates: 125 plates</li> </ul>

### II Result of the Evaluation

Summary of the evaluation
<p>This project was intended to procure and supply materials such as anti-tuberculosis drugs, which could enable China, a country with a high burden imposed by tuberculosis, to expand a DOTS strategy particularly in poor regions. The project can be highly evaluated in terms of relevance with development policy of the Government of China and the needs of China. In terms of Efficiency, this project was implemented generally as planned.</p> <p>As to Effectiveness and Impact, the tuberculosis cure rate, targeted at 85% in 2006 (target year), reached 92%, and the overall rate at the time of ex-post evaluation was maintained at 90%. In this sense, effectiveness of this project is high. The tuberculosis incidence has also decreased. Also, some synergetic effects are thought to have been generated by other tuberculosis-related projects supported by other donors in the project area, in addition to the efforts of the Chinese government. Therefore, it can be judged that this project has contributed to the strengthening of anti-tuberculosis measures by increasing the cure rate. As to sustainability, under the systematic operational structure from the central government to the local governments, no particular issues were identified as a whole though there was a shortage of staff to be engaged in anti-tuberculosis activities in the provinces with large population and/or without sufficient budget.</p> <p>In light of the above, the evaluation of this project is very high.</p> <p>As the procurement system of the medicine and equipment as well as the budget has greatly improved, it is expected that the government will continue these efforts so as to constantly reduce the number of tuberculosis patients.</p> <p>&lt;Limitations of the evaluation study&gt;</p> <p>This evaluation is solely based on the answers to the questionnaire by the executing agency and other documents/materials without any on-site surveys in China. Therefore, no judgment backed by direct observation is made in this report.</p>

1 Relevance
<p>(1) Relevance with the Development Planning of China</p> <p>In 2000, the Government of China made commitments internationally to strengthen the country's effort to control tuberculosis and announced a plan to adopt a DOTS strategy and apply it to 90 percent of the population across the country by 2005. The State Council proclaimed the "National Program on TB Prevention and Control" ["全国结核病防治规划"] (2000), and formulated the "Guide to the Implementation of Tuberculosis Control Program" ["中国结核病防治规划实施工作指南"] and an action plan to realize this (in 2001 - 2006), in which it is stated that there will be an increase in the DOTS coverage to 90 percent and provision of treatment for a total of 2 million tuberculosis patients. By 2010, furthermore, the target adopted was to detect, monitor and treat a total of 4 million patients. In addition, in the China's Tenth Five-Year Plan for the health services ["卫生事业第十个五年计划"] (2001-2006), a national priority plan for healthcare, tuberculosis was stated as one of the most important epidemics to control. At the time of ex-post evaluation, tuberculosis treatment and prevention is included in the Twelfth Five-Year Plan for the health services (2011 - 2015) as a priority issue. Therefore, this project is considered to have been in conformity with China's development plans.</p> <p>(2) Relevance with the Development Needs of China</p> <p>According to WHO, China ranked second after India as a high burden country in terms of the incidence of tuberculosis (estimated 1.4 million patients in 1998) with 636,000 new cases of sputum smear-positive tuberculosis discovered every year. Furthermore, tuberculosis was the leading cause of death (as a single disease) in rural areas (mortality rate: 7.88 per 100,000 people, [Zhongguo Weisheng Nianjian 2000] and three-quarters of the patients were in the economically productive age bracket (young and middle age), so it was not only the patients themselves but also the family members of the patients who were suffered because of the disease, for financial reasons. Although China had already been working on tuberculosis control with a DOTS strategy, financial distress hindered the progress of the activity, especially in regions of widespread poverty areas. Even in 2010, China remains the world's second most serious sufferer of tuberculosis in terms of the number of patients [WHO Database], and the incidence of tuberculosis in this project's target areas is still high. Therefore, it is still important to take measures against the disease in this area and the project could still be said to be highly consistent with the development needs of China at the time of this evaluation.</p> <p>(3) Relevance with Japan's ODA Policy</p> <p>In "Japanese Economic Cooperation Policies for China" [Economic Cooperation Program for China, 2001] at the time this project was planned, "cooperation towards resolving environmental and other global issues" was one of the priority issues, and tuberculosis was regarded as a challenge which needed to be tackled urgently. Another priority issue was "Assistance for poverty alleviation"; the program document advocated that Japan provide support to the poor at grass-roots level in the areas such as education and health, which form the foundation for future human resources development. This project was identified with these policies, so it could be said that it was consistent with Japan's ODA Policy.</p> <p>In light of the above, this project has been highly consistent with the country's development plan, development needs, as well as Japan's ODA policy; therefore, its relevance is high.</p>
2 Efficiency
<p>(1) Project Outputs</p> <p>The output produced on the Japanese side was as planned.</p> <p>(2) Project Period</p> <p>The originally planned project period was 18 months and the actual project period was 19.4 months. The actual period was slightly longer than the planned period (108%).</p> <p>According to the consultants engaged in this project, the delay was caused by the road closures in some areas because of snow (about one month), and by the time taken up for acceptance inspection of procured items. It can be judged that the delay by the snow was force majeure, in other words, an external factor beyond control.</p> <p>As all the items delivered were procured from local vendors in China, there was no problem in terms of Customs procedures.</p> <p>(3) Project Cost</p> <p>The total project cost was 404.47 million yen; the amount in the E/N was 405.40 million yen, so the project cost was almost as planned in the original budget (99.8%).</p> <p>Both project period and project costs were generally as planned; therefore, efficiency of the project is high.</p>
3 Effectiveness / Impact
<p>(1) Quantitative Effects</p> <p>The quantitative effects planned in the target year of 2006 were:</p> <ol style="list-style-type: none"> <li>1. Appropriate examinations of suspected tuberculosis patients (10 to 20 times of 217,000 tuberculosis patients) will be made.</li> <li>2. More than 85 percent of 217,000 tuberculosis patients will be cured.</li> </ol> <p>The reported number of patients was 199,000 in 2006, and the cure rate already reached 92%. Also at the time of ex-post evaluation, more than 85% of the new sputum smear-positive patients were cured except for Guizhou and Xizang out of the 12 provinces covered under this project, and the overall cure rate reached 90%. While no detailed surveys have been conducted with a focus on tuberculosis infections, the national epidemiologic survey conducted in 2010 has revealed that the prevalence rate of tuberculosis has been declining year on year.</p> <p>(2) Qualitative Effects</p> <p>At the time of planning, it was expected that 'tuberculosis patients in poor areas will be able to receive appropriate treatment with anti-tuberculosis drugs at no charge' as the qualitative effect of this project. According to the executing agency, treatment of the tuberculosis patients has been provided free of charge with the use of anti-tuberculosis drugs.</p>

### (3) Impacts

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

The anticipated impacts of this project at the time of planning were:

1. By the treatment of active carriers of tuberculosis, the spread of infection to family members and neighbors is prevented
2. Productivity will be increased as a result of cured patients' return to their society
3. By the supply of binocular microscopes, equipment for pathogen testing is enhanced

Regarding 1, the tuberculosis incidence rate declined as a whole according to Zhongguo Weisheng Nianjian, so it can be said that the impact of this project on prevention of the disease has been observed. While 2 is uncertain as the verification of cause-and-effect link is difficult, 3 is assumed to have had a certain level of achievement as the pathogen testing facilities of the local governments have been greatly strengthened after the Chinese Center for Disease Control and Prevention (CDC) procured microscopes to them.

It is noteworthy that during the time this project was implemented, there were many other donors' programs, which were related to tuberculosis prevention, in operation in the target areas; the programs, for example, were of the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Bank, WHO and International Union Against Tuberculosis and Lung Disease (IUATLD), Nordic Investment Bank, Italy, Germany and England [Zhongguo Weisheng Nianjian 2006]. Therefore, it is assumed that synergetic effects have been generated as a result of the inputs contributed from other donors.

With regard to the positive/negative impacts, it was deemed essential at the time of planning to dispose of injection syringes appropriately by incineration. In fact, syringes are properly disposed of based on the medical waste management regulation and no problems have arisen by the disposal.

In light of the above, planned project effects have been generated as a result of the implementation of this project, therefore effectiveness is high.

## 4 Sustainability

### (1) Structural Aspects of Operation Maintenance

This project was implemented by the Clinical Center of Tuberculosis in charge of tuberculosis issues in the Chinese Center for Disease Control and Prevention (CDC), Ministry of Health. At a local level, provinces and autonomous regions had health agencies, cities and counties had health bureaus, and towns had sections responsible for prevention and treatment of tuberculosis within the health administration offices. Provinces, autonomous regions, cities and counties provide instructions and seminars to the lower administrative bodies, and counties and towns are undertaking the duties of discovering, registering and treating the tuberculosis patients.

The number of staff necessary for tuberculosis prevention measures at the time of ex-post evaluation was 20 – 30 at a province and autonomous region level and 15 – 20 at a city level, as seen prior to the project implementation. However, while the number used to be 5 – 8 for every 300,000 – 500,000 people in the past at a county level, the current structure is to add another staff member for every increment of 50,000 people if the population is over 400,000. This arrangement can be said to be a sign of the enhancement of organizational structures.

As to the actual number of staff engaged in tuberculosis measures, there are some issues seen in that Sichuan and Henan Provinces are short of staff due to their large population sizes and in that Qinghai, Jiangxi, Shanxi Provinces and Xizang Region are short of staff due to the insufficient allocation of budget.

According to the executing agency, the national and provincial governments have established a supervising and guiding system to the lower level medical institutes through the confirmation of infections and the enhancement of the referral network among medical institutions.

### (2) Technical Aspects of Operation and Maintenance

The Ministry of Health has a sufficient level of technique to procure and manage medicines such as anti-tuberculosis drugs and equipment such as injection syringes, and according to them, no issues of quality degradation due to the passage of time have occurred. With regard to the techniques of storing, stocktaking and delivering among the administrative divisions of the country, applications of the demand plans for medicine are made in the form of a bottom-up approach from counties to cities and to provinces. At a county level, demand is calculated by considering the estimated number of incidences for the year and the amount used in the previous year. These applications are eventually compiled by the provinces, which distributes medicines every quarter. With this arrangement, each administrative territory maintains a stock sufficient for 1 – 4 months at all times.

Training activities to carry out such adequate inventory management are also sufficiently provided. According to the executing agency, it has promoted a nationwide standard operation process (SOP) of medicine management since 2008 and held 5 seminars attended by the staff in charge from all the provinces and some cities. At a province level, similar seminars targeting the staff in charge in the counties are also held. At the national-level seminars held every year, activities of medicine management are summarized for that year and the plan for the following year is prepared, which provides a platform for the staff in charge from provinces to exchange information with each other. In addition, the Chinese plan for tuberculosis prevention and treatment / anti-tuberculosis drugs management manual, formulated in 2005, was revised in 2011 and has been distributed to the institutions in the country concerned with prevention and treatment of tuberculosis.

### (3) Financial Aspects of Operation Maintenance

According to the information from the executing agency, the MOH's budget of 48 million Yuan allocated for tuberculosis measures in 2005 increased to 560 million Yuan in 2011, indicating sufficient allocation of budget for the activities.

### (4) Current Status of Operation Maintenance

All the medicines and equipment procured in this project were utilized and, as described in 'Technical Aspects of Operation and Maintenance', a systematic inventory management and distribution is in place. It can be said that the status is generally excellent.

In light of the above, operation and maintenance of this project does not have any problems in terms of technique, finance and the current status; therefore, sustainability of the effects generated in this project is high.