

Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keiko Asato Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Strengthening Health Service and Reference System in the Departments of Chinandega and Granada	January 2010 – December 2010

I Project Outline

Country Name	Republic of Nicaragua	
Project Period	June 2004-November 2005	
Implementing Agency	Ministry of Health	
Project Cost	Grant Limit: 828 million yen	Actual Grant Amount: 790 million yen
Main Contractors	(Construction) Konoike Construction Co., Ltd.	(Procurement) Mitsubishi Corporation
Main Consultants	Azusa Sekkei Co., Ltd	
Basic Design	“El Estudio de Diseño Básico del Proyecto de Fortalecimiento de los Servicios de Salud y del Sistema de Referencia en los Departamentos de Chinandega y Granada en la República de Nicaragua”, Japan International Cooperation Agency (JICA) and Azusa Sekkei Co., Ltd, Agosto, 2003	
Related Projects (if any)		
Project Background	Medical facilities and equipment are aging in Nicaragua as a result of low public investment during Nicaragua’s civil war (1979 to 1989). Moreover, most of the buildings which house Nicaragua’s primary care medical facilities have been borrowed from local governments and were not originally constructed for medical purposes. As a result, facilities have been repeatedly and inconsistently rehabilitated and extended. Under these circumstances, Nicaraguan medical facilities have not been able to properly meet the people’s needs for medical services.	
Project Objective	To construct health centers and to provide medical equipment in the provinces of Chinandega and Granada, in order to strengthen the network of appropriate primary care health/medical services, and to improve the referral system between primary and secondary level medical facilities.	
Output[s] (Japanese Side)	1. To construct 5 health centers (*) and to procure medical equipment for them. 2. To procure medical equipment for the preexisting health centers (**). (*) construction for each medical faculty (such as internal medicine, pediatrics, obstetrics and gynecology, dentist, emergency treatment, laboratory examination, baby delivery, supply and sterilization, and administration faculty) and its related equipment (**) medical equipment utilized for the following faculties: internal medicine; pediatrics; obstetrics and gynecology; and laboratory examination	

II Result of the Evaluation

Summary of the evaluation
<p>This project covered 7 health centers, including 5 new health/medical facilities (constructing and equipping) and 2 pre-existing health centers (equipping). The 5 new facilities included: the Chinandega health center in Chinandega province (hereinafter referred as ①), the Posoltega health center (②) and the El Realejo health center (③) at the province referred, and the Granada health center in the Granada province (④), the Diriomo health center at the same province (⑤). The 2 preexisting health centers included: the San Pedro health center at Chinandega province (⑥) and the Nandaimé health center at Granada province (⑦).</p> <p>The Project to construct the health facilities and to provide the regional health center with medical equipment for primary care coincided with both Nicaraguan and Japanese policies, because these facilities were originally used for other purpose such as residence and others. They have been repeatedly and inconsistently rehabilitated and extended and cannot properly respond to the needs and demands of the people. We could obtain the information of effectiveness of this project only from limited three health centers (①, ② and ③) out of 7 centers, where the number of treatment at target faculties was less than the one at the planning at the timing of target year. Whereas, at the time of ex-post evaluation, the number of baby deliveries, laboratory examinations and medical treatments were exceeding the target figures. Not only these quantitative effects, all the seven health centers reported also the qualitative improvement of their health/medical services due to this project.</p> <p>Regarding the operational status of equipment; at present, some advanced equipment (such as dental unit, vapor pressure sterilizer) at the health centers in the Chinandega province have some functional problems but the advanced equipment in Granada province are well utilized. In addition, most of the general equipment in both Chinandega and Granada provinces are, in general, well utilized.</p> <p>Regarding the facilities use, some problems exist, but no significant defects have been reported. The centers at Granada province assign the persons in charge and secure the technical level for the maintenance of facilities and equipments. On the other hand, the centers at Chinandega province still need more improvement in regards to personnel assignment for the facilities and equipment, and also information sharing in regards to maintenance. Regarding the budget, all the centers increased their entire budget since the time of planning, however, the budget specified for the maintenance of facilities and equipment is reported to be insufficient, except for the Granada health center.</p> <p>In light of the limited information stated above, this project is evaluated to be satisfactory.</p>
<Recommendation to the Ministry of Health of Nicaragua>

The health centers at the Chinandega province should raise the operation rate of the facilities and equipment by putting an appropriate person in charge and by repairing the facilities and equipment. Some centers, which are experiencing operational problems with equipment due to lack of Spanish instruction manuals, should be delivered copies and this should solve the operation problems.

<Constraints of the evaluation study>

This project covered 7 health centers in the Chinandega and Granada provinces, by constructing facilities and providing them with medical equipment. However, the information collected from the target centers, related to the effectiveness, impact and status of current operation and maintenance, was quite limited. This evaluation was done based on this restricted condition.

1 Relevance

(1) Relevance to the Development Plan of Nicaragua

The “National Development Plan (Plan Nacional de Desarrollo) 2003” at the time of planning of this project, indicated that strengthening regional health/medical service system (hereinafter SILAIS) was an important issue for the health sector. In addition, the health sector policy (Plan Nacional de Desarrollo) 2003 highly prioritized the decentralization of the health/medical service, the modernization of the regional health system, the enhancement of primary care medical service and the improvement of the referral system. The current national policy, “National Human Development Plan (Plan Nacional de Desarrollo Humano) 2008-2012” emphasizes the right of all Nicaraguans to receive health/medical services in order to reach “Equity of Development and Society”. In this plan, responding to the needs of the people in each region by renovating health facilities and equipment, and increasing public investment in medical infrastructure is considered a significant national policy so that the every person can enjoy quality health/medical services free of charge.

(2) Relevance to the Development Needs of Nicaragua

Before this project, aging medical facilities and equipment were problems for Nicaragua’s primary care medical system. Moreover, most of the primary care medical facilities borrowed from the local government, were not originally intended for medical purposes but were originally intended for other purposes such as private residences and therefore have been repeatedly and inconsistently rehabilitated and extended. Patients, therefore, who ought to have received health/medical services at primary care facilities, were shifted to secondary care medical facilities in order to obtain better medical service and this posed an additional burden on the secondary care regional hospitals. According to the current health policy “National Health Policy (Politica Nacional de Salud)”, not being able to respond to medical service requests at the primary care level is still part of their problem. In response to this problematic situation, the following issues need to be taken under consideration with care with good balance: improving primary care facilities and equipment; fostering medical professionals; and strengthening the network among the health facilities.

(3) Relevance to Japan’s ODA Policy

At the time of planning the Project, Nicaragua’s Country Assistance Program for Nicaragua (2002) designated the “field of health and medical services” as a priority area to be supported and the special emphasis was laid on strengthening institutional aspects of the regional health system.

In light of the above, this project has been highly relevant with the Nicaraguan development plan, development needs, as well as Japan’s ODA policy; therefore, its relevance is high.

2 Efficiency

(1) Project Output

Equipment was procured as planned. Regarding the facility construction, some modification was undertaken, such as target area of refining of basic construction and the form of basic framework. This happened because the basic design was prepared based on the sample 2 site survey, but the actual site conditions differed. However, practical adjustments were made without problem and additional budget was not required.

(2) Project Period

The Project took 17.5 months to complete compared to the 17 month planned period (103% of the planned period).

(3) Project Cost

The actual cost was 790 million yen (93% of the plan), against the planned cost of 846 million yen. Owing to fair bidding, procurement was made within the estimated price.

In light of above, the project cost was within the plan and the project period was almost as planned; therefore the efficiency of the Project is high

3 Effectiveness / Impact

(1) Quantitative Effects

This project's aims were to increase the number of medical treatments in 2007 from 2002 levels in the following areas: faculties including internal medicine, pediatrics, obstetrics and gynecology; and the field of dentistry. We could obtain the achievement information only from 2 centers at Chinandega province (①, ③) (regarding the dentistry, 3 centers (①, ② and ③)) out of 7 health centers. Even with this limited information, the achievement result at the target year in 2007 had fallen at all faculties compared with the figures in planning year, 2002. (For internal medicine: 542→268, pediatrics: 135→44, obstetrics and gynecology: 46→31 and dentistry: 65→28). Meanwhile, the number of laboratory examinations and baby deliveries showed a drastic increase (laboratory examinations: 120→337 and baby deliveries: NA→1,162). At the time of ex-post evaluation in 2009, the achievement level these indicators are as follows; internal medicine: 542→245, pediatrics: 135→105, obstetrics and gynecology: 46→49, dentistry: 65→60, laboratory examinations: 120→541 and baby deliveries: NA→1,079. We cannot identify the reason for the drastic decreased in the number of medical treatments for internal medicine. Even with this limited information, at the present, at half faculties, the number of treatment has increased.

(2) Impacts

Even though a decrease in the mortality rate of pregnant and parturient women and of new-born babies was expected as an effect of this project, we currently cannot obtain statistical data on these indicators. However, in terms of other indirect effects, all the centers reported that local people are being delivered better medical service at the primary care level including: obtaining appropriate prescriptions based on exact medical examinations; undertaking laboratory examinations that were not previously available; undertaking preventive dentistry and ultrasonic diagnosis; and providing private-care examination rooms. In addition, each health center has specific procedures to refer the patient to the higher-level health/medical facilities, some actions to improve the referral system have started to be taken. Moreover, we expected that the number of patients referred from primary care facilities to secondary care medical centers would decrease as an impact of this project. Improved primary care facilities would reduce the necessity of patients being sent to secondary facilities. Regarding this indicator, we could only obtain information from the Nandaime health center. However we cannot identify the expected effect.

With the limited information obtained as above, even we could not see the effect at the time of target year in 2007, at the present (at the time of ex-post evaluation), we can see the quantitative and qualitative effects partially by this project. In light of this situation, this project has somewhat achieved its objectives, therefore its effectiveness is fair.

4 Sustainability

(1) Structural Aspects of Operation Maintenance

Regarding the facilities, among the 5 newly constructed health centers, in the Chinandega province, only one (②) out of three health centers (①, ②, ③) assigns a person to be in charge of facility maintenance, and in the Granada province, both centers (④, ⑤) do assign a person. At the center mentioned in Chinandega (②), partial facility inspection is done when the technical group comes from Managua, whereas at the two centers in Granada, the administration section takes care of its daily inspection.

As for equipment maintenance, at the time of planning it was understood that internal staff could not technically afford to take care of it, and it was expected that technical support would be available from SILAIS or other secondary care hospitals (such as Spanish Hospital and Japan-Nicaragua Friendship Hospital). At the present, in Chinandega province, except Chinandega health center, all the health centers (②, ③, ⑥) receive technical support from either Spain Hospital or SILAIS. Also at Granada province, except Granada health center, all the health centers (⑤, ⑦) get technical support from either the Center for Medical Equipment Maintenance (CEMED) or the Japan-Nicaragua Friendship Hospital. Regarding the equipment, two types of equipment, the general equipment and advance equipment were included. As for the general equipment, at all the 7 health centers, the daily inspection and clean-up is done by the medical staff or the administrative staff. For advanced equipment, while two centers in Granada (④, ⑤) assign a specific person for that purpose, at Chinandega province, only one center (②) assigns a designated person. All the 5 centers that obtain facility and equipment maintenance support from SILAIS or other secondary care hospitals (②, ③, ⑤, ⑥, ⑦) expressed that they are generally satisfied with the service they receive. 4 out of 7 health centers (two at Chinandega province (③,⑥), and two at Granada province (④, ⑦) assign a person to be in charge of the stock management of spare parts.

(2) Technical Aspects of Operation Maintenance

All medical staff at each health center (including doctors, nurses, pharmacists and laboratory engineers) who use medical equipment on a daily bases, are required to have an academic degree in order to start working. When any new staff begins to work, in the three centers in Granada province (④, ⑤, ⑦), initial training of between 3 to 7 days is conducted, including instruction on how to use the medical equipment. On the other hand, the centers in Chinandega province do not carry out, such an initial training programs. However, we cannot identify any serious problem related to the usage of medical equipment at any health center. (It is reported that two centers (②, ③) in Chinandega has encountered some problems, one of which is caused by the lack of instruction manuals in Spanish)

(3) Financial Aspects of Operation Maintenance

At the 5 health centers which provided budgetary information, all the centers have increased their budgets as compared to their budgets at the time of the project's planning. However, all the centers, except the Granada health center, replied that they face a budget shortage to purchase consumables and spare parts, and to repair the equipment. The budget does not seem sufficient to maintain the facilities and equipment.

(4) Current Status of Operation Maintenance

Regarding the facilities operation (such as treatment room, drainage, ventilation, electric installation, air conditioner and others), Chinandega health center and Posoltega health center reported that they had some malfunctioning of a drainage pipe, a leak and problem with a door-fitting. Although these problems were found upon defect inspection and were repaired at that time, they are still reported as problems. Overall, even considering these problems, essentially serious problems (such as the inability to use facilities)

have been reported.

As for the operation status of equipment, we can collect information of roughly 60% of all equipment. In the Chinandega province, the advanced equipment (dental unit and vapor pressure sterilization) have malfunctions. At 2 centers (②, ③), dental units are not functioning and at one center (①), both pieces of equipment are not in use. Meanwhile, at 4 centers, more than 70% of all general equipment is being used in this province. On the other hand, in the Granada province, the advanced equipment at 2 centers (④, ⑤) are functioning well, and at all 3 centers, in general, more than 80% of general equipment is being used in good condition.

On the procurement of spare parts, the necessary consumables and spare parts are difficult for the all the centers, other than the Granada health center, to obtain at the time of their request due to budget constraints or the unavailability at the local market. Agents related to 3 centers in Granada (④, ⑤, ⑦) are functioning well, but the agents around 3 centers in Chinandega (①, ③, ⑥) are not operating, and it is difficult to get spare parts.

As for the transfer to the new health center, the Granada health center took time to move into the new facility. They completed their transfer in February 2007 (this project completed in November 2005). Before they moved to the new center, they assigned a person in charge to safely administer the facilities and equipment and keep checking their condition. Owing to this monitoring, when they moved to the new center, they did not find any problems in the facility and equipment, and were able to keep on using both the advanced and the general equipment and both are still in good condition.

In light of the above, some problems have been observed in the structural and financial aspects of the implementing agency, therefore, sustainability of the project effects is fair.