Summary

1. Outline of the Project

Country: The Republic of Bolivia

Project Title: The Project for Strengthening Regional Health Network in Santa Cruz

Department

Issue/Sector: Healthcare and medical care

Cooperation Scheme: Technical Assistance Project

Division in Charge: Human Development Department, JICA

Total cost (as of the time of evaluation): Approx. 640 million Japanese yen

Period of Cooperation:

November 1, 2001 - October 31, 2006

Partner Country's Implementing Organization: Ministry of Health and Sports, Health Service Department of Santa Cruz, City of Santa Cruz, Warnes City, Okinawa City, Saavedra City, Minero City, Fernández Alonso City, San Pedro City

Supporting Organization in Japan: International Medical Center of Japan

1-1 Background of the Project

The government of Bolivia highlighted in the "Five-year Action Plan for the National Development 1997-2002" the improvement of access of local communities to primary health care facilities as one of its focus issues in the area of healthcare. Particularly in the Santa Cruz Department, which faces the problem of rapid population growth, the reconstruction of the health systems under the decentralization of authority is expected as a means of improving access in the community.

Santa Cruz Department has already seen the "Santa Cruz General Hospital (now the Japanese University Hospital) Project" and the "Santa Cruz Health and Medical Care Delivery System Project," implemented by way of support from Japan. This project aims to strengthen the regional health systems, mainly for primary health care, based on these past performances and experiences.

1-2 Project Overview

(1) Overall Goal

The improvement of the health conditions of local communities in the Santa Cruz Department

(2) Project Purpose

The strengthening of the health systems so that health services can be adequately

provided to local communities in the pilot region

- (3) Project Outputs
- I. The effective utilization by local communities of preventive, treatment and education services at primary healthcare facilities, namely Centro de Salud (CS)
- I-1. Improvement of preventive, treatment and education activities of CS
- I-2. Participation of local communities in activities related to their regional healthcare problems
- II. Establishment of adequate system for supporting the healthcare service network
- II-1. Full maintenance of medical equipment at medical facilities
- II-2. Improvement of referral and counter-referral
- III. Adequate improvement of management and operation capability at all levels of decision-making
- III-1. Improvement of planning, implementation and supervisory capabilities of the Servicio Departamental de Salud (Departmental health service) (SEDES), the Directorio Local de Salud (board of directors on local health) (DILOS), the Departamento Municipal de Salud (municipal health department) (DMS) the Red de Servicio de Salud (health service network) (RED), and medical facilities
- III-2. Improvement of management and operational capabilities in terms of financing and logistics of SEDES, DILOS, RED and medical facilities
- (4) Pilot region of the project

The pilot regions of the project are four REDs, namely RED Sur and RED Norte within the city of Santa Cruz (metropolitan area), RED Warnes and RED Obispo-Santiestevan. The project covers the local communities and CSs of these four REDs. As for CSs, a total of 16 CSs, namely seven CSs in the metropolitan area operating 24 hours a day and nine CSs in other regions wherein more than one doctor are posted, are the prioritized target of the project.

(5) Project Inputs

Japanese Side:

Long-term experts 9 persons (289.3MM) Short-term experts 19 persons (23.7MM)

No. of trainees received in Japan 27 persons

Equipment supply Approx. 118.74 million Japanese yen

Local cost Approx. 9.46 million Japanese yen

Bolivian side:

Exclusive staff for the project 11 persons

Project cost Approx. 120.53 million Japanese yen

2. Evaluation Team Overview

Members of the evaluation team

(Area in charge: name, title)

Team leader:

Yojiro Ishii

Group Director, Group III, Human Development Department, JICA

Health system:

Tamotsu Nakasa

Director, 2nd Expert Service Division, Bureau of International Cooperation, International Medical Center of Japan

Project planning:

Ritsuko Yamagata

Health Administration Team, Group III, Human Development Department, JICA

Monitoring and analysis:

Shigeki Taniho

TA Networking Corp.

Evaluation Period

From July 4, 2006 to July 23, 2007

Evaluation type: Terminal evaluation

3. Overview of Evaluation Results

3-1 Summary of Evaluation Results

(1) Relevance

It is evaluated that the relevance of the project is high. Changes such as population increase and the expansion of residential area are notable in the targeted region, and most of the internal migrants, the major region for such changes, are impoverished people. Thus, the project meets regional needs such as the strengthening of healthcare activities and medical services mainly for mothers and children, and the improvement of access to such services. Although the government of Bolivia changed twice during the project period, there were no changes in the government's policy to place priority on poverty reduction programs and healthcare issues. The National Health Plan also consistently highlights the strengthening of regional healthcare as one of its healthcare strategies. Therefore, the project is also consistent with the policy of the government of Bolivia. At the same time, measures to fight poverty and improve the health systems also match the ODA policy of Japan. In addition, because Japan has

been involved in cooperative projects in Santa Cruz Department, with consistent exchange between the hospital and regional activities, it has advantages in terms of aspects such as the utilization of human resources networks developed by way of technical transfers from Japan.

(2) Effectiveness

Although there was a delay in some activities, each output was accomplished in a generally favorable manner, as described below, and it is expected that by the end of the duration of the project, the purpose of the project will have been achieved.

- 1) Primary health care facility service (Output I-1): In the four REDs targeted by the project, Committees for the Improvement of Service Quality were established/reinforced. The implementation of training programs and the creation/usage of educational materials planned by such committees contributed in promoting behavioral changes on the part of staff of the prioritized 16 CSs and increasing the satisfaction level of users.
- 2) Healthcare activities through community participation (Output I-2): Introduction of the "Proyecto de Fortalecimineto de la Red de Salud Regional para el Departamento de Santa Cruz (Project for Strengthening Regional Health Network in Santa Cruz Department) (FORSA)" Model and active health promotion activities were carried out, which resulted in changes in the levels of awareness of communities and an improvement in their ability to take action.
- 3) Maintenance of medical equipment (Output II-1): Through the activities of Instituto Municipal de Equipos Médicos (medical equipment maintenance center) (IME) of Santa Cruz City, professional technologists were fostered, the operation rate of equipment were increased, and the management capacity for equipment administration information and preventive maintenance was enhanced.
- 4) Referral and counter-referral (Output II-2): The number of adequate referral cases from CSs increased and a system for counter-referrals from hospitals was established. Thus, referral of patients between CSs was introduced. Reinforcement of system for the transportation of patients is also progressing.
- 5) Planning, implementation and supervising capabilities (Output III-1): Based on Plan Operativo Annual (annual operation plan) (POA) and supervision manuals, capability formulating annual plans and administration for the improvement of medical care and organization at healthcare institutes at all levels, and formulating reformation plans for primary healthcare facilities for the effective use of facilities and the improvement of medical care were implemented.
- 6) Management and operational capabilities (Output III-2): Operational manuals for

healthcare institutes at all levels were created, and the improvement of operational service was carried out mainly at CSs. Also, with the introduction of Sistema de Información Administrativa-Financiera (financial management system) (SIAF), the financial management capability of tertiary hospitals and CSs were strengthened.

(3) Efficiency

The project was for the most part implemented efficiently. The dispatching of Japanese experts was generally appropriate in terms of quantity, period and timing. However, because there was a delay in the dispatching of experts in the fields of pediatric healthcare and obstetrics and the successive dispatching of experts in fields wherein the local communities were participating, there were delays in activities in these fields. The training for 27 trainees that took place in Japan covered all the fields of the project, and through human relationship training in particular, the trainees' motivation in regards to health promotion increased, which promoted the project activities. As for the supply of equipment, although the installment of ultrasonic diagnostic equipment was behind schedule due to delay in the dispatching of obstetrics experts, the equipment itself contributed significantly to improving the level of antenatal care. The provision of devices for the maintenance of medical equipment to IME contributed in the establishment of a maintenance system by IME. Also, the provision of equipment for training programs to the Regional Healthcare Training Center contributed to the enhancement of various training activities. The equipment provided is being used appropriately for the most part.

As for inputs from the Bolivian side, 11 counterpart (C/P) staff members in total were appointed as exclusive staff for the project (in particular, the Project Coordinator was appointed for five consecutive years). In addition, there were inputs from all eight municipalities involved in the project, covering such matters as the procuring of sites for IME and regional healthcare training centers or the provision of ambulances, contributing significantly to the smooth implementation of the project.

(4) Impact

The Ministry of Health and Sports were interested in the effectiveness of healthcare activities through community participation under the FORSA Model, and a seminar aimed at introducing the FORSA Model was held, targeted at health promotion personnel within the Ministry of Health and Sports and all departments as well as at stakeholders in the cities in question. IME are now receiving not only requests for medical equipment maintenance but also inquiries on the construction/renovation of

hospitals or the installation/maintenance of equipment. In addition, a reformation plan was made/implemented in Montero City through the use of the same method used in the primary healthcare facilities reformation plan for Santa Cruz City. The operational manual for primary and secondary healthcare facilities created as part of the project was selected for use throughout the entire department, and a plan for a training program was also formulated. Furthermore, the Regional Healthcare Training Center were constructed through the project, resulting in the acceleration of training activities in other healthcare fields as well.

(5) Sustainability

The technical sustainability of the project is forecast as follows. Through measures such as the preparation of various manuals, the introduction of obstetrics ultrasonic diagnostic equipment and the implementation of technical training at CSs, the securing of human resources for the FORSA model, the establishment of an equipment maintenance system by the IME in Santa Cruz City and the introduction of SIAF within CSs and REDs, future succession and development in these fields can be expected. However, the activities, analyses and resolution of problems on the part of the Sistema de Referencia y Contra-Referencia (referral and counter-referral system) (SRCR) are still insufficient.

Organizational sustainability is expected to a certain extent, with Committees for the Improvement of Service Quality and Community Participation Healthcare Committees based on each RED are already firmly established. On the other hand, arrangements and instructions regarding the function of the SRCR are still being provided by the Japanese experts, leading to concerns regarding continuity after the termination of the project. There are also other issues regarding the IME and the Sistema Integrado de Servisios Médicos de Emergencia (emergency medical service system) (SISME), such as the fact that they are not recognized as official city organizations, as well as the weakness of their coordination ability with the ownership of SEDES, which is in the position of supervisor of all the relevant activities.

As for the financial sustainability of the project, the negative effects of delay in the approval and enforcement of the DMS budget on the healthcare activities in general are becoming obvious. At the IME, some components cannot be retained due to delays in the purchase procedure, interrupting its activities. In addition, while municipalities are securing funds for healthcare activities through the participation of local community in some REDs, in some cases, the participants must pay their own transportation expenses in order to participate in the Committee for the Improvement of Service Quality, so this

remains a problem.

3-2 Factors Contributed in the Production of Effect

(1) Planning

Human resource development (training), which was set out as one of the outputs in PDM 0, was incorporated under each item in PDM 1. Healthcare activities through community participation were also added to the outputs. Following the traveling guidance research, PDM 2 was proposed by further clarifying the "health administrative bodies" as "SEDES, DMS, RED and area." In addition, RED made alterations and reforms based on the introduction of a law regarding the Seguro Universal Materno Infantil (universal mother and child insurance) (SUMI), which is the basic healthcare policy, and DILOS that were newly added to the decision-making level, where incorporated in PDM 3. This was further revised as PDM 4, including the designation of 16 prioritized CS and the organization (breaking up) of municipalities within the pilot regions, as proposed by the Mid-term Evaluation Team.

As explained above, the revision of PDM in accordance with changes in the policies of the Bolivian government and the progress in activities made it possible for the project to match actual circumstances.

(2) Implementation process

- The approach that focused on respect for the Bolivian side's ownership of the project and close communication with project experts promoted independence and motivation on the Bolivian side.
- Patients' access to primary healthcare facilities increased by way of the continuation of the Popular Participation Law and SUMI announced during the project period. Also, healthcare activities through community participation were backed up as policies.
- DILOS, consisting of representatives from the city, SEDES and residents was selected as the top policymaking group on healthcare in all of the regions. As a result, the system supporting the project was reinforced.
- Following the foundation of Health Promotion Bureau in the Ministry of Health and Sports in 2004, Health Promotion Division was also established in the SEDES of Santa Cruz Department in 2005. As a result, healthcare activities through community participation were promoted.
- Cooperation with tertiary hospitals (Japanese University Hospital and children's hospitals in particular) was achieved, such as the creation of clinical manuals and cooperation in the pilot project for SRCR. As a result, project activities were promoted.

3-3 Problems and Factors that Raised Problems

(1) Planning

Because of the frequent changes in PDM, the targeted values of the index were undetermined until PDM 4, which is the final version.

(2) Implementation process

- Due to frequent personnel replacements and reshuffles, the period wherein the decision-making level of administrative bodies was involved in the project became extremely short.
- There was a hindrance in the entirety of the project's activities due to delays in budgetary enforcement in Santa Cruz City.
- There was a delay in activities resultant from the construction of IME and human resources appointment came to be behind schedule.
- There was an interruption in healthcare activities through community participation due to personnel reduction at the CS level in RED Sur.
- There was an interruption in healthcare activities through community participation in RED Warnes because of administrative confusion on the part of the municipal government.
- Because C/P for SEDES in the field of community participation-based healthcare activities was absent during the first half of the project, technical transfer in said field could not be implemented.
- In RED Sur, due to the fact that its health promotion activities competed with the activities of NGOs, resultant from a failure in coordination by SEDES and RED, activities in the region were interrupted.
- Because the SEDES authorization for the supervision manuals and operational manuals to be used in primary healthcare facilities, secondary healthcare facilities and RED was delayed, there was a delay in the improvement of management and operation.

3-4 Conclusion

This project was initiated with the aim of strengthening the health systems so as to ensure the adequate provision of healthcare services to local communities of the pilot region in Santa Cruz Department of the Republic of Bolivia. It is expected that the scheduled activities will for the most part be completed as of the end of the project, and that the project's outputs have generally been achieved. Therefore, it is probable that the project purpose derived from the outputs, namely "the strengthening of the health

systems so that health services are adequately provided to local communities of the pilot region," will also be achieved.

Although project operations (implementation process) were unstable at first, as a result of the enhancement of Japanese experts and active inputs from the Bolivian side in terms of human resources and local costs, it became possible to maintain a stable operation system for the project.

The project is consistent with the development policy of Bolivia and with the ODA policy of Japan. It also meets the needs of the targeted region, and so the relevance of the project is high. With five subsystems functioning effectively and a change in awareness and behavior of the local community apparent, it is clear that the project has also been highly effective. In terms of efficiency, it is assessed that the project was implemented efficiently, in consideration of the appropriate input of experts and equipment as well as the proactive participation in project activities by the trainees who completed the training programs in Japan and returned to the country with increased motivation. In addition, there is a movement at the national level towards the introduction of the FORSA Model, so it is evaluated that the project has had a large impact. Although technical sustainability of the project is expected, concerns remain in terms of the retention of human resources and organizational sustainability, and so the guidance, coordination and supervision of SEDES will be necessary.

- 3-5 Recommendations (Specific Measures, Recommendations and Advices on this Project)
- (1) Short-term recommendations until the end of the project
- 1) Recommendations to SEDES
- Human resources in charge of the coordination and guidance of SRCR should be appointed.
- Paramedical technical staff for SISME should be appointed.
- 2) Recommendations to Santa Cruz City
- Efforts should be made to secure budgetary concessions for DMS and to promptly enforce said funding in order to not interrupt any medical services.
- The training program for system administration engineers provided by the Hospital Information Committee of the city should be completed within the project period. At the same time, efforts should be made to develop the SIAF system in three CSs within the city (Norte, San Antonio and 10 de Octubre) by way of obtaining support from the Committee.
- IME should be positioned as official city organizations and the current staff should be

recognized as official employees. A component purchasing process should be implemented promptly in order to repair medical equipment without any trouble. In addition, support should be provided for continuous training for regional medical equipment maintenance engineers at IME. In doing so, Santa Cruz City should conclude agreements with other cities in accordance with this regulation.

- SISME should be positioned as an official city organization and the current staff should be recognized as official employees. Funding should be secured and enforced as necessary, and the presence of a control center office should be ensured.
- 3) Recommendations to other cities
- Each city should continuously prepare a budget for the Committee for the Improvement of Service Quality and the Community Participation Healthcare Committee, and execute it appropriately.
- Fernández Alonso City should fill the currently vacant post of technician.
- Each city should support the continuous implementation of training for regional medical equipment maintenance engineers at IME. In doing so, each city should conclude agreements with Santa Cruz City in accordance with the regulation.
- 4) Recommendations to each RED
- Committees for the Improvement of Service Quality in each RED should implement follow-ups and training related to the actual activities of pediatric practice guides in cooperation with the Committee for the Improvement of Pediatric Practice.
- (2) Long-term recommendations after the termination of the project
- SEDES should take responsibility in exerting its coordination ability with the ownership of the project with a view to expanding the achievements of the project. To this end, SEDES should appoint adequate human resources within its organization. In addition, it should reinforce the Health Promotion Division in order to develop health promotion activities.
- SEDES should give due consideration to actual functions upon implementing personnel reshuffles and appointments at the CS level, and implement such reshuffles and appointments adequately in consultation with DILOS.
- In order to resolve the operational problems of medical facilities, comprehensive cooperation not only from medical facilities but also from the RED in charge, SEDES, DILOS and DMS is essential. The organizations involved should ensure due coordination with such cooperation.
- Each RED should appropriately supervise and support activities conducted in all areas under its jurisdiction in order to maintain and promote healthcare activities through

community participation.

3-6 Lessons Learned (Matters Helpful for Discovering/Forming Similar Projects Derived from this Project and Implementation, Operation and Administration Thereof)

(1) Benefit of community participation in regional healthcare activities

In the FORSA Model, a system wherein local communities, the beneficiaries of regional healthcare activities, can participate in the implementation of such activities at every stage of planning, implementation and evaluation in a position equal to the administration. The CSs that have implemented this model have organized a Community Participation Healthcare Committee and have implemented activities such as the promotion of maternal feeding. As a result of community participation, regional needs among communities have been ascertained and a system wherein the community voluntarily plays a role in activities at the stage of implementation has been established, and a notable achievement was confirmed in ensuring the efficiency and continuity of these activities. This had the effect of clarifying the benefits of community participation at all stages of regional healthcare activities, from planning to implementation.

(2) Improvement of communication within and between organizations

This project provided an occasion for staff at all levels, such as Committees for the Improvement of Service Quality, to participate in opinion and information exchanges within and between organizations. With staff in different positions and contexts discussing various issues, solutions from further multilateral points of view could be considered. This also contributed to the development and maintenance of motivation in regards to activities on the part of all the participants. Furthermore, the project has seen the implementation of training related to human relationships aimed at disseminating adequate communication methods among those involved. Such reinforcement of communication among those involved contributed significantly to the strengthening of their collaboration and improving the quality of the activities.

(3) Adequate personnel appointment

There were interruptions and stagnations of activities in some regions during the project as a result of personnel who had assumed central roles being suddenly transferred or dismissed due to personnel reductions. Although personnel reshuffles are inevitable for organizations, it is recommended that due consideration be given, such as paying attention to the continuity of activities and the balance of staff numbers and workload throughout workplaces, and the assurance of sufficient preparation time.

(4) Gradual improvement of regional healthcare program in three phases

As was previously mentioned, this project implemented activities focused on the development of health systems and the strengthening of healthcare activities through community participation, which had been rather neglected in the field of regional healthcare, based on the achievements of the "Santa Cruz General Hospital Project" and the "Santa Cruz Health and Medical Care Delivery System Project." At the planning stage, a more detailed plan that those of previous projects was formulated, based on information obtained through such projects. Also at the stage of implementation, networks of those involved on both the Japanese and Bolivian sides that had been established in the previous cooperative projects were utilized in implementing the project efficiently. Cooperative activities with the Japanese University Hospital, the site of previous projects, were also carried out in this project, which led to the further improvements to the functions of the hospital.

(5) Dissemination of the achievement of the project

It became clear that the five subsystems (the Committee for the Improvement of Service Quality, the FORSA Model, the medical equipment maintenance system, SRCR and the healthcare administration management system) implemented in this project are effective in strengthening the health systems and are contributing significantly to the improvement of community health. It is expected that the approach taken by this project will be introduced and implemented in other regions as well with a view to improving regional healthcare.

3-7 Follow-ups

As a follow-up for this project, plans are currently underway for the implementation of a local training program (for the period of five years) from FY2007 and the expansion of the five subsystems within Santa Cruz Department (other than the pilot region of the project) and in other departments. Also, the Human Development Bureau of Santa Cruz Department is planning to implement a project (over a three—year period) to strengthen the three subsystems (the FORSA Model, the healthcare administration management system and SRCR) through an independent budget.