

Country Name	Project for Strengthening Health Network in Rural Region Focusing on Mother and Child Health
Plurinational State of Bolivia	

I. Project Outline

Background	<p>In the Department of La Paz, the access to health facilities is relatively easy in urban areas, while in rural areas, the utilization rate of health services is low and maternal and infant health status are poorer than other departments. The neonatal mortality ratio was 34 per 1,000 live births in 2008, which was higher than the national average. The rate of delivery at health facilities was only 58%. In the Health Network No.4 where many indigenous people live, they are not very motivated to visit because of their limited knowledge on maternal and child health services, low trust in health services, poor access to health facilities, etc.</p>																	
Objectives of the Project	<p>Through capacity building of health facilities and personnel, community participation in decision making related to health issues and networking of the Health Network and municipalities, the project aimed at improving services and management with community participation for maternal and child health in the Rural Health Network No.4 of the Department of La Paz, thereby contributing to better maternal and child health.</p>																	
	<p>Overall Goal: Maternal and child health is improved in the Rural Health Network No.4 of the Department of La Paz. Project Purpose: Health services and management with community participation for mother and child health are improved in the Health Network No.4 of the Department of La Paz.</p>																	
Activities of the project	<p>Project site: 10 Municipalities in the No.4 Health Network (Achacachi, Ancoraimas, Huarina, Quiabaya, Combaya, Santiago de Huata, Sorata, Tacacoma, Chua Cocani and Huatajata).</p> <p>1. Main activities: training of health personnel on maternal and infant health, organizing health committees in the community, training of community health facilitators, training of community people on maternal health, support for committees for information analysis, etc. 2. Inputs (to carry out above activities)</p> <table border="0"> <tr> <td>Japanese Side</td> <td colspan="2">Bolivian Side</td> </tr> <tr> <td>1) Experts from Japan: 4 persons</td> <td colspan="2">1) Staff allocated: Health Network Coordinator, Supervising Nurse and statistician. Municipal heads of 8 municipalities.</td> </tr> <tr> <td>2) Training in Japan: 4 persons</td> <td colspan="2">2) Land and facilities: Office space, etc.</td> </tr> <tr> <td>3) Equipment: office equipment, medical equipment, etc.</td> <td colspan="2"></td> </tr> <tr> <td>4) Operational cost for hiring local experts, travel expenses, etc.</td> <td colspan="2"></td> </tr> </table>			Japanese Side	Bolivian Side		1) Experts from Japan: 4 persons	1) Staff allocated: Health Network Coordinator, Supervising Nurse and statistician. Municipal heads of 8 municipalities.		2) Training in Japan: 4 persons	2) Land and facilities: Office space, etc.		3) Equipment: office equipment, medical equipment, etc.			4) Operational cost for hiring local experts, travel expenses, etc.		
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Project Period	August 2010 to August 2014	Project Cost	(ex-ante) 260 million yen, (actual) 207 million yen															
Implementing Agency	Ministry of Health and Sports (Restructured as the Ministry of Health (MOH) in 2014), Autonomous Department Government of La Paz, Department Health Service (SEDES) of La Paz, Health Network Coordination No.4																	
Cooperation Agency in Japan	None.																	

II. Result of the Evaluation

[Special Perspectives Considered in the Ex-post evaluation]

- In the Project Design Matrix (PDM), the Indicator 2 of the Project Purpose was set as the percentage of number of patients referred to a higher health facility (referral cases) of diarrheal diseases (EDAs) and acute respiratory infections (IRAs). However, it was considered appropriate to verify the number itself of referral cases, rather than the ratio against the total number of referral cases, because decrease in the number of unnecessary referral cases was attributed to improved maternal health services (improved diagnosis and care provided by lower-level facilities). Therefore, at the ex-post evaluation, the number of referral cases was used as an indicator for verification of the achievement level of the Project Purpose.

- The Indicator 3 of the Project Purpose was added after the Mid-term Review. However, it was not verified at the Terminal Evaluation, and no related information was mentioned. At the ex-post evaluation, the data for the Indicator 3 was collected to verify continuation status of the effects after the project completion was verified.

- In PDM, all indicators of the Project Purpose and Overall Goal did not have target values. At the ex-post evaluation, if improvement compared to before the project (or beginning of the project) is confirmed, it was judged as achieved.

1 Relevance

<Consistency with the Development Policy of Bolivia at the time of ex-ante evaluation and project completion>

The project was consistent with Bolivia's development policy on improving maternal and child health situations and promoting social mobilization and community health, as set forth in the "National Development Plan 2006-2010," "Social Development Plan 2011-2015," "National Strategy for Improvement of Maternal and Child Health" (2009-2015) and "Intercultural Community Family Health Policy" (2008).

<Consistency with the Development Needs of Bolivia at the time of ex-ante evaluation and project completion >

The maternal and infant mortality ratios (222/100,000 births and 63/1,000 births, respectively, in 2008) were the second highest in the Central and South America, and the situation in the Department of La Paz was worse than the national average. These needs for improving maternal and child health in La Paz remained same at the time of the project completion. Thus, the project was consistent with Bolivia's such development needs.

<Consistency with Japan's ODA Policy at the time of ex-ante evaluation>

In the Country Assistance Program for Bolivia (2009), one of the priority areas was social development which includes health.

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement for the Project Purpose at the time of Project Completion>

The Project Purpose was achieved. The percentage of facility-based delivery increased in six out of the surveyed eight municipalities (Indicator 1), and in the other two the percentage decreased by one percent and remained stable. The number of unnecessary referral cases of under-five children of EDA and IRA decreased (Indicator 2), due to capacity development of the health personnel of appropriate diagnosis and care and also establishment of the Committee of Referral/Counter-referral. This improvement can be confirmed by the increase in the percentage of health facilities which met quality standards with regard to maternal and child health (Indicator 4). Information on preparation of Information Analysis Committees' (CAI's) action plan was not confirmed (Indicator 3), as sufficient data had not been accumulated after this indicator was added after the Mid-term Review.

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have continued. The percentage of facility-based delivery has increased in all of the target municipalities (Indicator 1). The percentage surpasses 80% in seven municipalities. Data on referral cases of under-five children of EDA and IRA were not available, but there have been few cases since the project completion (Indicator 2). Concretely, the increase in the percentage of health facilities which meet quality standards with regard to maternal and child health (Indicator 4) has led to more appropriate diagnosis and care, and as a result, it is considered that the number of referral cases to higher level facilities has reduced. CAIs of most health facilities have prepared the action plan which reflects behaviors prioritized by the community (Indicator 3). Thus, it can be said that community participation has been sustained for solving health issues in collaboration with health facilities. As supplemental information, other services strengthened by the project have been sustained as well. For example, health facilities have followed compliance with care protocols for partogram¹, active delivery², episiotomy, delivery position and delivery accompanying. They have also continuously provided postnatal checkups for mothers and newborn babies.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has been partially achieved. Since the project completion, there were maternal mortality cases only in two municipalities in 2015 (Indicator 1). Although the reason for the high mortality ratio in Quiabaya in 2015 could not be confirmed at the ex-post evaluation survey, there was no case in 2016, the following year. The infant mortality ratio was marginally low at around 1/1,000 from 2015 to 2017 (Indicator 2), and it considerably improved from 63/1000 in 2008. On the other hand, the ratio of under-two children with chronic malnutrition has increased (Indicator 3), like in other Health Networks in La Paz According to the Coordination Office of the Health Network Office No.4, it was probably because of the change of the denominator calculated with the new information system (Primary Health Care Software: SOAPS), though it was still analyzing its causes at the time of the ex-post evaluation.

<Other Impacts at the time of Ex-post Evaluation>

First, according to MOH and the Coordination Office of the Health Network No.4, men have shown more attention to women's health and the importance of the pregnant women' organization (pregnant women' club) to analyze health issues. Operation of the clubs was technically supported by the project in accordance with the Intercultural Community Family Health Policy (SAFCI)³. The club also functions as an opportunity for prenatal checkups and other health activities of the health facilities. Second, the project experience, including operation of the pregnant women's clubs, was incorporated in the "Local Guideline of Education on Healthy Life" It was approved as the national guideline before the project completion and has been referred to in JICA's following projects, "Maternal and Child Health Network Improvement Project in Potosi" (2013-2017) and "Mother and Child Health Network Improvement Project in Oruro" (2016-2020). Third, the 18 best practices and techniques on care for mothers and newborn babies which were introduced by the project have been widely applied in various trainings for the health personnel in the country, as they are based on WHO/PAHO's principles on perinatal health.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

Achievement of the Project Purpose and Overall Goal

Aim	Indicators	Results										
(Project Purpose) Health services and management with community participation for mother and child health are improved in the Health Network No.4 of the Department of La Paz.	1 The percentage of facility-based delivery in the Health Network increases.	<u>Status of achievement: Achieved (Continued).</u> (Project Completion) - The percentage of facility-based delivery increased from 46.7% in 2010 to 47.1% in 2013. (Ex-post Evaluation) - The percentage of the health facility-based delivery has increased (in the Health Network No. 4) 36.9% in 2014, 83.0% in 2015, 81.5% in 2016 and 81.9% in 2017.										
	2 The number of referral cases of under-five children of EDAs and IRAs at the health facilities of the Health Network decreases.	<u>Status of achievement: Achieved (Continued).</u> (Project Completion) - The number of the referred cases of EDAs and IRAs from Achacachi Hospital, Sorata Hospital and Ancoraimas Health Center were 7 in 2013 and 5 in 2014. (Ex-post Evaluation) - The exact number of referred cases were not available at the time of the ex-post evaluation, but according to the Health Network, there have been very few referred cases to hospitals outside the network. - Cases of under-five children suffering from EDAs and IRAs have decreased in the Health Network No.4.										
		<table border="1"> <thead> <tr> <th></th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017</th> </tr> </thead> <tbody> <tr> <td>Cases of EDAs</td> <td>3,058</td> <td>2,599</td> <td>2,580</td> <td>2,552</td> </tr> </tbody> </table>		2014	2015	2016	2017	Cases of EDAs	3,058	2,599	2,580	2,552
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¹ Graphical record of key data during delivery.

² Active delivery is supported under management of uterotonic agents after the birth of the child and cord treatment.

³ SAFCI is a policy which respects a cultural diversity and prevention rather than treatment and sets out the concept of a multicultural integrated care model that incorporates values of indigenous peoples based on individuals, families and communities.

		Cases of IRAs	10,290	10,028	9,881	9,749
3 The percentage of action plans of CAI of health facilities which include behaviors prioritized by the "Community Health Team" increases.		Status of achievement: Not verified at the project completion (Partially achieved at the time of the ex-post evaluation). (Ex-post Evaluation) - The percentage of action plans prepared by CAI of health facilities which included behaviors prioritized by the "Community Health Team" has increased in two out of the four surveyed municipalities.				
			2014	2015	2016	2017
		Achacachi	78.6%	80.0%	82.1%	94.6%
		Ancoraimes	68.8%	74.2%	89.5%	85.2%
		Huarina	80.0%	75.0%	80.0%	75.0%
		Sorata	92.6%	89.5%	83.3%	88.6%
4 The percentage of health facilities which meet quality standards of selected cares related to maternal and child health increases.		Status of achievement: Achieved (Continued). (Project Completion) - Appropriate use of the instruments: 40% in 2013 to 80% in 2014. - Following norms and protocols: 50% in 2013 to 80% in 2014. - Coherence between diagnosis and attention: 70% in 2013 to 80% in 2014. (Ex-post Evaluation) - Three clinical files for each year were observed in the surveyed eight health facilities. The percentage of health facilities which met quality standards of selected cares related to maternal and child health has been on an increasing trend.				
			2014	2015	2016	2017
		Appropriate use of the instruments	50%	33%	38%	71%
		Following norms and protocols	58%	38%	50%	63%
		Coherence between diagnosis and attention	88%	79%	88%	96%
(Overall goal) Maternal and child health is improved in the Rural Health Network No.4 of the Department of La Paz.	In the Health Network No.4; 1. The maternal mortality ratio per 100,000 births is reduced.	Status of achievement: Mostly achieved. (Ex-post Evaluation) - Since 2014, there have been maternal mortality cases only in 2015 in Achacachi and Quiabaya among the 10 target municipalities. The maternal mortality ratio per 100,000 birth was 176 and 2,000, respectively. The ratio in Quiabaya was much more than the national average (222) in 2008.				
	2. The infant mortality ratio per 1,000 live births is reduced.	Status of achievement: Mostly achieved. (Ex-post Evaluation) - The infant mortality ratio per 1,000 live births has been at marginally a low level.				
			2014	2015	2016	2017
		Neonatal mortality ratio	n.a.	2	0	0
		Infant mortality ratio	n.a.	0	1	1
		Under-five mortality ratio	n.a.	2	2	4
	3. The ratio of under-2 children with chronic malnutrition is reduced.	Status of achievement: Not achieved. (Ex-post Evaluation) - The ratio of under-2 children with chronic malnutrition has been an increasing trend in the Health Network No.4--10.7% in 2014, 14.2% in 2015, 27.9% in 2016 and 23.0% in 2017.				

Source: Terminal Evaluation Report, data provided by SEDES La Paz, and observation at the field survey.

3 Efficiency

Both the project cost and period were within the plan (ratio against the plan: 80% and 100%, respectively). Outputs were produced as planned. Therefore, the project efficiency is high.

4 Sustainability

<Policy Aspect>

The "Social Economic Development Plan 2016-2020," "Institutional Strategic Plan 2016-2020" of MOH and "Territorial Plan for Integral Development (La Paz) 2016-2020" hold policies and programs for maternal and child health. Also, community-based health is based on the concept of SAFCI. Thus, services strengthened by the project are backed up by these policies at least until 2020.

<Institutional Aspect>

Personnel turnover and shortage have been issues. One technician for health promotion has been assigned at each of the Coordination Office of the Health Network No.4 and SEDES La Paz. At the time of ex-post evaluation, each office considered that the two technicians were not sufficient, as they have not been full-time engaged in maternal and health child health but have needed to cover all health issues. In the health facilities in the Network No.4, 58 qualified health personnel (physicians, licensed nurses and assistant nurses) have been assigned for providing maternal and child health services. However, the number has not been sufficient to attend all referred patients, due to the budget shortage. Regarding biosecurity and waste management, all of the health facilities have been equipped with necessary supplies. There was no problem for initial and intermediate storage at the eight visited health facilities, but only half complied with protocol of final storage, because it requires much investment for necessary facility and equipment including incinerators. All of the health facilities have conducted monthly CAI meetings with the community health team and the mayor's representative. Services of the health facilities have been supervised by SEDES La Paz twice a year. All of the surveyed municipal governments have held meetings once or twice a year to understand health issues and reflect them in their annual plan and budget plan.

<Technical Aspect>

Health personnel mostly have sustained sufficient knowledge and skills for promotion of FORSA methodology introduced by the project. The personnel of the Coordination Office of Health Network No.4 have sustained sufficient skills on supervision of health facilities, according to the Coordination Office itself and SEDES La Paz, though some new personnel needed training. Regarding the health facility

level, the personnel have sustained sufficient knowledge and skills on maternal child health and community health promotion, as confirmed as a result of the regular monitoring of SEDES La Paz. Though both the Coordination Office and municipalities have provided training for the health personnel, but the training plan has not been based on their needs. As mentioned earlier, the “Local Guideline of Education on Healthy Life” has been utilized in other department but not much diffused in La Paz. Among the eight visited health facilities, only two knew it and none had the document, since copies were not distributed by SEDES La Paz due to the frequent change of the responsible staff.

<Financial Aspect>

Budgets of the Coordination Office of Health Network No.4 have remained mostly stable since the project completion (16,860 Bolivianos planned for 2018). These have not been specific for maternal and child health or community health. These were not for service operation but office supplies.

<Evaluation Result>

Therefore, the sustainability of the effects is fair.

5 Summary of the Evaluation

The Project Purpose was achieved, and the effects have continued. Health services including facility-base delivery, referral/counter-referral and information analysis in collaboration with the community which were strengthened by the project have been sustained. As a result, maternal and infant mortality cases have decreased much, though children’s chronic malnutrition has been on an increasing trend. And, the project experience was accumulated as guidelines which was officially approved. Regarding sustainability, although issues including personnel turnover, limited diffusion of the guideline and budget shortages have been identified, health personnel mostly have sustained sufficient knowledge and skills for promotion of the methodology introduced by the project.

Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

- When the Coordination Office of Health Network No.4 cannot conduct any FORSA-related activity due to the budget shortage, it is recommended that SEDES La Paz should bear necessary expenses by conducting joint activities.
- It is recommended that the Coordination Office of Health Network No.4 would give instructions to the municipal governments where health facilities are not equipped with materials to complete medical waste management so that they construct necessary facility and equipment for waste classification and disposal, in order not to produce negative impacts nearby.

Lessons learned for JICA:

- The project supported operation of the pregnant women’s club and it has caused positive changes including more positive male attitudes towards maternal health. The club also functions as an opportunity for prenatal checkups and other health activities of the health facilities. It does not require much cost to establish and operate this kind of club. In maternal health projects, this kind of non-costly but effective organization are much recommended for awareness raising of pregnant women and men, as long as such an organization is functions and receives a good reputation from the community. It is important to consider dynamics of the community at the entry point of the activities at the project design phase. It is necessary to identify a community organization which may function and involve it in the project activities, in order to ensure sustainability. In addition, much impact can be expected by including component of making policy recommendation to institutionalize such organization.



Infant medical examination conducted with the equipment procured by the project at the Ancoraimes Health Center



Training on delivery care for nurses at the Huarina Health Center



Classification of waste at the Sorata Health Center