

### Summary

<b>I. Outline of the Project</b>		
<b>Country:</b> Guatemala		<b>Project title:</b> Project for Maternal and Child Health in Quetzaltenango, Totonicapan, and Solola in the Republic of Guatemala
<b>Issue/Sector:</b> Health-Maternal and Child Health / Reproductive Health		<b>Cooperation scheme:</b> Technical Cooperation
<b>Division in charge:</b> Health Division 1, Health Group 1, Human Development Department		<b>Total cost:</b> <u>380,000,000 yen,</u>
<b>Period of Cooperation</b>	<b>(R/D):</b> 2011/3~ 2015/3	<b>Partner Country's Implementing Organization:</b> Ministry of Public Health and Social Assistance, Health Area Directions (Quetzaltenango, Totonicapan, and Solola)
		<b>Supporting Organization in Japan:</b>
<b>Related Cooperation:</b>		

## **1 Background of the Project**

Among the central American countries, the Republic of Guatemala were behind in improving indicators related to reproductive health, such as maternal mortality rate, neonatal mortality rate, infant mortality rate and mortality rate of the children under 5. In the country, all these indicators were worse than the ones in neighboring countries such as El Salvador, Honduras and Nicaragua. The Ministry of Public Health and Social Assistance (MSPAS) identified that these negative indicators were caused by limited technical skills and knowledge of the traditional birth attendants (midwives) and poor access of expecting and nursing mothers to health institutions. Therefore, MSPAS started implementing the 'National Health Policy (2008-2012)' which focused on improvement of health services, especially increasing the number of childbirth in health institutions in rural areas. According the Policy, selected health centers were newly named as CAP (24 hours medical examination center) and extended their service hours up to 24 hours in each department. CAIMI (general health center for mothers and children) were also established based on the financial support by the World Bank. The number of health service providers were also increased in rural areas since 2009.

Based on these situation, the 'Project for Child Health in Department of Quetzaltenango' was requested and started for four years in 2009. As a result of the project, the frequency of medical examination of infants and children under 5 was increased and the referral system from health centers to hospitals was improved. As the second phase of the project, MSPAS requested a new project, the 'Project for Maternal and Child Health in Quetzaltenango, Totonicapan and Solola' (hear in after 'the Project'). The Project was started for four years period in order to improve health condition of expecting and nursing mothers and infants in the three target departments in March 2011.

## **2 Project Overview**

### **(1) Overall Goal**

The health condition of women (expecting and nursing mothers) and children under 5 is improved in the three target departments.

### **(2) Project Purpose**

Women (expecting and nursing mothers) and children under 1 receive health services in better quality in the three target departments.

### **(3) Outputs**

- 1) The capacity of the Health Area Directions is strengthened to manage reproductive health services in each department.

- 2) The reproductive health services provided at the first and second levels are strengthened by establishment of close coordination with health institutions at the third level.
- 3) Community activities related to reproductive health are strengthened.
- 4) Outputs produced by the Project contribute to implementation of reproductive health services.

**(4) Inputs**

**<Japanese Side>**

Experts : 7 person (3 long term, 4 short term)                      Trainees received in Japan : 6 person

Third country training (Mexico & Honduras): 105 person              Third country training: 23.12 million JPY (Q 2million)

Local cost : 360 million JPY (Q28,642,000)                      Equipment : 64 million JPY (Q5,750,000)

**<Guatemala Side>**

Counterpart: 89 person (11 central level, 78 direction level)

Local cost : 0.4millionJPY (Q35,820 ) and Office space

**II. Evaluation Team (Members of Evaluation Team)**

Mr. Yoshiharu YONEYAMA	Team Leader	Deputy Director General, Human Development Department, JICA Headquarters
Ms. Mie AOKI	Cooperation Planning	Staff, Health Division 1, Human Development Department, JICA Headquarters
Ms. Mariko HOMMA	Evaluation	Consultant, INTEM Consulting Inc.
Ms. Yoshiko FUKUI	Analysis Translator	Japan International Cooperation Center

<b>Period of Evaluation:</b> 2/10 / 2014 ~ 17/ 10/ 2014	<b>Type of Evaluation :</b> Terminal Evaluation
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**III. Results of Evaluation**

## **1. Project Performance**

### **(1) Achievement of the Project Purpose**

All the Outputs are expected to be achieved by the end of the Project. However, some indicators of the Project Purpose other than the 'Maternal Mortality Rate' have not been achieved yet in some departments. During the Project period the statistical data management by the Guatemala government was improved and the capacity of the counterparts to deal with statistical data was also improved through the Project activities. These improvements resulted in different quality of figures collected in 2013 from the ones in 2010 (baseline). Therefore, it is not appropriate to measure achievement of some indicators based on simple comparison of the figures collected in 2010 and 2013. Furthermore, some Indicators were not realistic to be achieved during the Project period.

At the same time, the Project produced various qualitative improvements, such as capacity development of the counterparts in collection and analysis of data related to reproductive health services. Training materials and tools developed by the Project were also highly evaluated by the users. Considering these qualitative progress, the Project Purpose is prospectively to be achieved by the end of the Project if all the Outputs are achieved and management of the statistical data related to the Project is strengthened through implementation of the Project activities.

### **(2) Achievement of the Outputs**

1) Output 1 has been almost achieved as planned as follows.

- In each Health Area Direction a monitoring team is formulated and conducts periodical monitoring of health centers regarding health services targeting expecting and nursing mothers and new born babies and infants. A monitoring sheet was developed and is utilized for the monitoring. Supervision is conducted at the same time as the monitoring as necessary.

- Results of the monitoring and supervision are feedback to the service providers through various meetings, such as director meeting of the health centers and the referral/counter referral committees.
  - Monitoring sheets are developed in accordance with the protocols accepted by MSPAS in Quetzaltenango and Solola. In Totonicapan, existing checklists are applied as a monitoring sheet instead of developing a new one.
  - Health services targeting expecting and nursing mothers and new born babies and infants at all the levels are also monitored through the periodical meetings among the hospitals, the Health Area Directions and health centers, such as the analysis of fatal cases every two weeks and the referral/counter referral committees.
  - Apart from periodical monitoring of the Health Centers, training to assistant nurses is monitored based on the monitoring sheet about technical skills on antenatal examination. The sheet was developed by the Project and endorsed by MSPAS.
- 2) Activities to achieve the Output 2 were implemented as planned. However, some Indicators of the Output 2 have not been achieved yet. During the Project period, the statistical data management by the Guatemala government has been improved, and the capacity of counterparts to deal with statistical data was dramatically improved through the project activities, such as integration of UNIMAPI (information management system of mothers and children). These improvement resulted in different quality of data collected in 2013 from the ones in 2010 (baseline). Therefore, it is not appropriate to judge achievement of some indicators based on simple comparison of data collected in 2010 and 2013. However, considering qualitative progresses, the Output 2 is prospected to be achieved by the end of the Project.
- Health service providers, such as doctors and nurses, working in health centers received technical training on reproductive health. The number of the training participants and the frequency of the participation almost reached to the target.
  - The referral system was strengthened through establishment of referral/counter referral committees and development of new referral/counter referral sheets.
  - UNIMAPI was integrated to some institutions in order to follow up the referral system and other health services targeting expecting and nursing mothers and infants (especially infants in low weight).
  - Although statistical information was not fully available to judge the fulfillment of quantitative indicators, the number and/or ratio of accessing to health services in health institutions at the first and second level such as child birth, infant examination, antenatal/postpartum examination, was judged to be improved through the Project.

- As is mentioned in the previous section, the services provided in health centers is monitored based on monitoring sheets. In Totonicapan the services fulfilled 90% of the requirements listed in the sheet. In Quetzaltenango and Solola quality of the services provided by health centers has not been evaluated yet.

3) Output 3 has been almost achieved as planned as follows.

- Health Volunteers and Community Health Committees received technical training on reproductive health by Educators who improved their own skills and knowledge through the Project. After the training, the volunteers and committee members engaged in promotion of reproductive health and nutrition at the community level.
- Women's groups were formulated to conduct those health promotions. 'Amigas de embarazada' is included in the groups, It is a new volunteer system established based on the findings from training in Mexico.
- The number of the traditional birth attendances registered to the Health Area Directions reached to the target.
- The number of traditional birth attendances (midwives) and health volunteers who received technical training on reproductive health and engaged in health promotion reached to the target.

4) Achievement of the Output 4 was relatively slow during the first half of the Project period. However, according the recommendations from the mid-term review, activities to achieve the Output 4 were enhanced mainly by the counterparts at the central level as follows. Therefore, the Output 4 is expected to be achieved by the end of the Project.

- Information about the Project activities and the outputs was shared with various stakeholders in MSPAS and in various occasions, such as internal staff meeting, donor meeting at the central and regional level, meeting or field visit facilitated by other projects, periodical publications, and so on. Sharing opportunities were increased accordingly.
- As a result of these sharing, some outputs of the Project, such as promotion materials for community activities and referral/counter referral sheets are processed for their endorsement by MSPAS

### **(3) Prospects of the achievement of the Overall Goal**

Existing indicators to measure achievement of the Overall Goal are very close to (or almost the same as) the ones of the Project Purpose. Some were almost achieved in some departments. Therefore, it is necessary to modify the figures in order to measure the long term achievement and/or the expansion of the Project.

As is mentioned in the previous section, management of the statistical data was improved during the Project period. Although fulfillment of some indicators which could not be judged at the timing of this terminal evaluation, it is expected to be conducted after three to five years. If the Project activities are continued even after the termination of the Project, the Overall Goal is expected to be achieved.

## **2 Summary of Evaluation Results**

### **(1) Relevance**

Implementation of the Project was relevant.

- In Guatemala, indicators related to the reproductive health was not good. The situation was serious especially in the target area of the Project, where the majorities were native Indians.
- The Project matched to the policy of the Guatemala government which focused on improving reproductive health services. The Project also matches with the JICA's country strategy.
- The Project was implemented in accordance with the approaches taken by MSPAS.
- It was relevant that the Project targeted health service providers at all the level. Selection of three department as the target enhanced the Project to achieve the target through mutual cooperation and competition.
- The Project was implemented based on the experiences and outputs of the previous technical cooperation by JICA, such as the 'Project for Child Health in Department of Quetzaltenango (2005-2009)'.

### **(2) Effectiveness**

Implementation of the Project was effective.

- The Project targeted health service providers at all the levels and strengthened each functions through provision of technical training and medical facilities. It also strengthened the networking among the stakeholders through improving communications and institutional systems, such as integration of UNIMAPI, and improvement of referral/counter referral system and monitoring system. These approaches enabled counterparts to access to 'evidences' of health services and raised their awareness about necessity and effectiveness of the Project activities.
- The approaches adopted by the Project functioned effectively. Four Outputs were closely related with each other and produced synergy effects. As discussed above, it is highly possible that the Project goal will be achieved by the end of the Project.
- Implementation of research on nutrition provided evidences about nutrition of expecting and nursing mothers and infants in low weight. Analysis of the evidences enabled the counterparts to recognize the importance of the issue related to nutrition and accept comprehensive approach of the Project to improve reproductive health services.

### **(3) Efficiency**

It was relatively efficient to implement the Project.

- Medical equipment were provided to health institutions at all the levels. Selection of equipment was decided based on the requirement in the services provided by each institution. The Project efficiently utilized existing resources, such as Educators and CAIMI.
- As many as 85 stakeholders of the Project participated in training in Mexico. Training in Mexico was more reasonable than the one in Japan. The participants could also p the knowledge and experience from Mexico to the Project activities because the socio-economic situation in Mexico was close to the one in Guatemala.
- Assignment of the Project counterparts was not always stable. However, the Project activities were handed over to each successor without any problem.

### **(4) Impact**

Several impacts of the Project were observed through the evaluation study. Some of indicators of overall goal of the Project is highly resemble to maternal and child health indicators of the Project goal in the current PDM. Some of them are achieving the indicators. For measuring the long-term impact of this Project, it is highly recommend to revise some indicators.

- Establishment of tight network between the Western Regional Hospital (Hospital Regional de Occidente) and the hospitals in other department than the three target departments.
- Improvement of the health services accessed by the people in neighboring departments.
- Establishment of a health institution (Mothers and Children's Center) which mainly focus on provision of reproductive health services in Quetzaltenango,
- Establishment of an education center (Central Training Center), in which training to health service providers at the first and second levels is implemented,
- Enhancement of awareness of the regional authorities and male stakeholders about the importance of reproductive health services,
- Enhancement of awareness of the counterparts about the importance of intercultural understanding,
- Capacity building of counterparts on data collection and analysis through periodical monitoring of the Project.

### **(5) Sustainability**

Sustainability of the Project is relatively high.

- Improvement of reproductive health services is also considered as the important issue in the Policy (Pacto Hambre Cero 2012-2016). Therefore, the activities related to the Policy are considered to be supported by the government even after the termination of the Project.
- Through implementation of the Project activities, capacity of the counterparts was improved. Therefore, improvement of the quality of each activity would reinforce technical sustainability of them.



- Activities which were newly started or added functions by the Project, such as community activities, referral/counter referral committees, analysis of fatal cases, and UNIMAPI, are maintained by the counterparts with strong ownerships and motivation. Most of the activities are even secured their financial sustainability through allocation of budget for the cost.

### **3 Factors promoting sustainability and impact**

#### **(1) Factors concerning to Planning**

- Implementation of the new governmental Policy (Pacto Hambre Cero 2012-2016) which shares the same purpose as the one of the Project's enhanced achievement of the Project purpose and secured the sustainability.
- The third country training in Mexico enabled more stakeholders to access to training in abroad and enhanced the achievement of the Project purpose.

#### **(2) Factors concerning to the Implementation Process**

- According to the recommendation from the mid-term review of the Project, the PDM was revised based on the discussion among the stakeholders in each department. Through the process they raised ownerships about the Project.
- Various meetings and training opportunities among the stakeholders of the Project enhanced achievement of the Project purpose through smooth communication and coordination among the stakeholders.

### **4. Factors inhibiting sustainability and impact**

#### **(1) Factors concerning to Planning**

- Improvement of management of statistical information resulted in difficulties of measurement of achievement of the Project with quantitative indicators.

#### **(2) Factors concerning to the Implementation Process**

- As is mentioned in the previous section, revision of the indicators of PDM rose ownerships of the counterparts about the Project in each department. However, some indicators selected by the stakeholders were not preferable to judge the achievement of whole the Project.

### **5. Conclusion**

The Project was implemented with an effective approach which targeted health service providers at all the levels through strengthening each function by provision of technical training and medical facilities. The Project also strengthened the networking and coordination among those stakeholders through improving communications and service systems, such as integration of UNIMAPI, and improvement of referral/counter referral system and monitoring system. These approaches enabled the counterparts to access to 'evidences' and recognize the necessity of the Project based on the

analysis of the evidences. Improvement of the maternal mortality rate is considered as the biggest achievement of the Project. Considering the poor condition in the target area where the majority are native Indians, the effort to improve the maternal mortality rate by the Project is highly appreciated.

Some indicators of the Project Purpose and Outputs have not been achieved yet. However, it must be taken into accounts that limitations were produced from capacity building of counterparts on data collection and analysis. Additionally, some indicators were challenging to be achieve within the Project period. Considering these limitations and various qualitative progresses, it is judged that the Project produced fluent outputs enough to achieve the purpose. Therefore, it is appropriate to terminate the Project in March 2015 as is planned.

It is noted that inputs and activities of the Project implemented without any problem. The Project was also evaluated positively based on the Five Evaluation Criteria. Especially, the third country training in Mexico was marked as an enhancing factor to boost the efficiency of the Project. Strong ownership of the counterparts at all the levels is counted as an enhancing factor to maintain the sustainability of the Project. In order to strengthen the sustainability, the evaluation team expect the Project and the stakeholders to follow the recommendations listed in the next section.

One of the most importance approach applied by the Project is awareness raising of the counterparts through the 'evidence analysis'. What is highly noted is that measurement of the weight of children in low weight enhanced the counterparts to recognize the importance of nutrition of expecting and nursing mothers and children.

## **6. Activities to be recommended during and after the Project period**

- Agree on the plans/strategies about implementation of the Project activities after the termination of the Project among all the stakeholders. Indicators to judge the achievement after 3 to 5 years (the Overall Goal) are to be revised as well.
- Hold workshops and/or take any other means in order to share outputs of the Project with stakeholders in MSPAS at the central level and in other departments.
- Endorse the materials and tools developed by the Project.
  - Materials for the health promotion at the community level : Endorsed and integrated to the 'KIT'.
  - Training materials utilized in Central Training Center in the Western Regional Hospital (Hospital Regional de Occidente) : Taken appropriate measures to be maintained and utilized continuously,
  - Referral/counter referral sheet : Utilized continuously in the three target departments. Endorsed and introduced to other areas, if possible.
- Assign a staff who is in charge of arrangement of training in the Central Training Center in the Western Regional Hospital (Hospital Regional de Occidente).

## **7. Lessons Learned**

Following lessons were collected.

- Approaches to utilize existing resources, such as UNIMAPI, Educators, Women Volunteer Groups enhanced the efficiency and sustainability of the Project.
- Comprehensive approach targeting health service providers at all the levels strengthened the networking and coordination among them, and also improved the quality of services in each institution.
- Application of the resources from the third country where the socio-economic situation is close to the target areas is efficient especially in training to the service providers in the Central Training Centre, strengthening referral system, and implementation of community activities.
- Emphasis on evidences, such as analysis of fatal cases, raised awareness of the counterparts about the importance of the quality of health services and enhanced them to improve it.
- Revision of indicators of the PDM raised ownerships of the stakeholders about the Project in each department. However, it must be considered that indicators selected by counterparts may not be appropriate to judge the achievement of whole the Project with.