Summary of the Evaluation Study

1. Outline of the Project	
Country: Republic of the Philippines	**Project title:** Project for Cordillera-wide Strengthening of the Local Health System for Effective and Efficient Delivery of Maternal and Child Health Services
Sector: Health	**Cooperation scheme:** Technical Cooperation Project
Division in charge: JICA Philippines Office	**Total cost:**566 million yen
Period of Cooperation: February, 2012 – February, 2017 (5 years)	**Partner country's Implementing Organization:** Department of Health (DOH), Department of Health Cordillera Regional Office (DOH-CAR)
	Supporting Organization in Japan: System Science Consultants Inc.

1-1 Background of the Project

The Maternal Mortality Rate (MMR) in the Philippines in 2006 was 162 per 100,000 live births. Although this figure was slightly lower than the 172 recorded by the Demographic and Health Survey (DHS) in 1998, there was a prevailing view that achievement of the relevant Millennium Development Goals (MDG) by 2015 (i.e. 62 per 100,000 live births) would be difficult unless the rate of decrease was considerably accelerated. Meanwhile, both the mortality rate of children under five years of age and the Infant Mortality Rate (IMR) showed a declining trend in a period of 15 years from 55 per 1,000 live births (1998 – 1992) to 34 (2003 – 2007) for the former and from 34 per 1,000 live births to 25 for the latter (DHS: 2008). The Department of Health (DOH) believed that the MDG of reducing the mortality rate of children under five years of age to 21 per 1,000 live births by 2015 would be achieved by reducing the infant mortality rate. To ensure the successful reduction of these mortality rates, the DOH announced the Maternal, Neonatal and Child Health and Nutrition (MNCHN) (AO 0029 Series of 2008), an ambitious mother and child health policy focusing on the qualitative improvement of parturient care, illustrating its emphasis on the mother and child health program as a highest priority issue.

In the Cordillera Administrative Region (CAR) located in the northern part of Luzon Island of the Philippines, ethnic groups with different languages and cultures account for 70% of the local inhabitants. As many of these people live in the Cordillera mountain range, they are geographically isolated, resulting in poor access to health services. The ratio of poor people is higher than the national average and Abra and Apayao Provinces are counted among the 10 poorest provinces in the Philippines. Against this background, the DOH has designated the region a "Geographically Isolated and Disadvantaged Area (GIDA)", making it a priority area for the implementation of the MNCHN. Health service providers in CAR faced a number of problems, including (i) insufficient training of health personnel in addition to a shortage of the absolute number of such personnel, (ii) lack of the minimum equipment required to provide adequate health services at many health care facilities, (iii) shortage of medicines, (iv) lack of effective as well as efficient functioning of the referral system and (v) lack of a sufficient health budget required to provide adequate health services. At the same time, there were problems regarding local inhabitants receiving health services, including (i) an unwillingness to access suitable medical care for cultural reasons, (ii) financial inability to pay the facility usage fee and cost of medicines and (iii) lack of appropriate knowledge of available health services. These problems on both the providing and

receiving sides of health services made the effective implementation of the health program difficult.

Under these circumstances, JICA implemented two technical cooperation projects in CAR: "the Project of Strengthening of Local Health System in the Province of Benguet" (2006 – 2011) and "Mother and Child Health Project" (2006 – 2010 in Biliran and Ifugao Provinces). The present Project aims at developing a framework capable of providing efficient and effective mother and child health services by means of strengthening local health services in the Cordillera Region in line with the current national health policy, making the best use of the outcomes of and lessons learned from the two preceding technical cooperation projects.

1-2 Project Overview

(1) Overall Goal

Health status of people in the region is improved, particularly of women and children.

(2) Project Purpose

Local health system in the region is strengthened to deliver effective and efficient Maternal and Child Health (MCH) services.

(3) Outputs

1) Health governance and financing are strengthened through functional Inter-Local Health Zones (ILHZs) in the target sites.
2) Service delivery framework for MCH is strengthened in the target sites.
3) Hospitals, Rural Health Units (RHUs), and Barangay Health Stations (BHSs) become Basic Emergency Obstetric and Newborn Care (BEmONC) capable and RHUs and BHSs become Maternity Care Package (MCP) accredited by Philippine Health Insurance Corporation (PhilHealth) in the target sites.
4) Lessons learned and good practices of the project are disseminated nationwide as well as region-wide.

(4) Input (at the time of Terminal Evaluation)

＜Japanese side＞

Experts: Total: 127.66MM (actual results for 1st – 4th year and plan for 5th year)
Local cost: Approximately 153 million yen (actual results for 1st – 4th year and plan for 5th year)
Counterpart training: 16 persons (1 more person planned for 2016)
Procured equipment: Approximately 3.2 million yen

＜Philippines side＞

Assignment of C/P: Approximately 89 persons
Facilities necessary for the Project: office space, utilities, meeting space, etc.
Activity cost for the Project: 859.95 million PhP (actual results of 1st – 4th year)

2. Evaluation Team			
Members of Evaluation Team:		Name	Title and Affiliation
	＜Japanese side＞		
	Team Leader	Tomoya Yoshida	Director, Health Team 3, Health Group 2, Human Development Department, JICA
	Technical Advisor (Maternal and Child Health)	Shogo Kanamori	Health Adviser to DOH
	Cooperation Planning	Misaki Kawaguchi	Representative JICA Philippines Office
	Cooperation Planning	Akiko Ito	Deputy Director Health Team 3, Health Group2, Human Development Department, JICA
	Evaluation Analysis	Hajime Sonoda	Senior Consultant Global Group 21, Japan
	＜Philippines side＞		
		Maylene M. Beltran	Director IV, Bureau of International Health Cooperation, Department of Health
		Jocelyn T. Sosito	Senior Health Program Officer, Bureau of International Health Cooperation Department of Health
		Grace R. Buquiran	Chief Health Program Officer, Project Monitoring Division Bureau of International Health Cooperation, DOH
Period of Evaluation:	September 19 – October 6, 2016		**Type of Evaluation:** Terminal Evaluation

3. Results of Evaluation

3-1 Achievement

(1) Achievement of Outputs

On the whole, output 2 was thought to be achieved as with the achievement of all indicators of output 2. Output 1 and 3 were largely thought to be achieved as allmost all the indicators have been achieved in both outputs.

Output 1: Health governance and financing are strengthened through functional Inter Local Health Zones (ILHZs) in the target sites. (Target sites: Dolasan and VPP ILHZs in Abra, ILHZs in Apayao)

- Training was conducted in 2 Zones in Abra and 4 Zones in Apayao. In total 6 ILHZs were formulated. All the ILHZs prepared and implemented ILHZ annual plan, and established

Common Health Trust Fund (CHTF) by March 2015. 3 ILHZ has utilized the CHTF and other 3 ILHZ is accumulating fund for future utilization.

- The proportion of health budget in each provincial budget in 2015 increased from 7.7 % (as of 2012) to 27.2 % in Abra, while that in Apayao was 14.8%, unchanged from the inception of the project. However, the health budget in Apayao has increased by 20 % between 2012 and 2015. Therefore, compared with the health budget 2012 in both provinces, the both budget 2015 have been increased respectively (Abra: 81,419,587→1,056,159,889PHP, Apayao: 79,601,633→221,855,676PHP).
- The proportion of provincial health budget in 2015 increased to 27.2% in Abra, but remained almost same at 14.8% in Apayao. While, the amounts in Apayao increased by 20% from 2012 to 2015. The median of proportion among the 13 cities / municipalities in 2015 was 7.9%, which is slightly less than 8.6% in 2012. However, including the reimbursement gained by the municipalities, it is inferred that the median of proportion would be higher.
- All the 26 municipalities in the target area enacted promotion of Facility Based Delivery (FBD) by December 2013. In total 25 municipalities (out of total 26 municipalities) in the target area have enacted support of Community Health Team (CHT) activities
- During the period between 2011 – 2015, number of PhilHealth members in the target sites increased by three times, and the amount of reimbursement increased by 22 times.

Output 2: Service delivery framework for MCH is strengthened in the target sites. (Target sites: Dolasan and VPP ILHZ in Abra, Apayao, Benguet)

- A MNCHN manual which incorporate local traditions related to delivery was prepared. Training on the manual was conducted to the medical personnel in the target sites in cascade.
- Referral is practiced based on the referral guidelines for MNCHN prepared in each ILHZ.
- Maternal / Neonatal Death Review (MNDR) has been held with more than 10 cases since 2013 by all the 6 provinces in CAR and Baguio City. MNDR at regional level in CAR is also held repeatedly
- Manual and tools for Supportive Supervision and Monitoring for BEmONC capable facility (hereinafter referred to as "BEmONC Monitoring") were prepared. After the training on them, each province formulated BEmONC Monitoring Team and started BEmONC Monitoring since 2015.
- Flipcharts and banners for CHT were developed and distributed together with family health diaries during the CHT meetings. Family health diaries were reproduced and orientations were given to CHT for their utilization.
- 356 Barangays out of the total 360 Barangays in the target sites integrated the MNCHN emergency and preparedness plan into the Barangay Disaster Risk Reduction and Management Plan.

Output 3: Hospitals, Rural Health Units (RHUs) and Barangay Health Stations (BHSs) become BEmONC certified by DOH and RHUs and BHSs become MCP accredited by PhilHealth in the target sites.

- By March 2014, all the 129 health professionals available for training were trained on BEmONC, and 182 health professionals were trained on harmonized BEmONC.
- As of January 2016, total 108 facilities (15 hospitals, 19 RHUs and 74 BHSs) in the target are

capable to provide BEmONC. As of December 2015, total 97 facilities (15 hospitals, 19 RHUs and 63 BHSs in the target area were entitled MCP accreditation by PhilHealth.

Output 4: Lessons learned and good practices of the project are disseminated nationwide as well as region-wide.

- By March 2016, the project issued one (1) fact sheet, eight (8) newsletters, and six (6) press releases. There have been 67 newspaper articles issued, 25 TV / radio broadcasts on the project. A Good Practice Booklet was issued.
- In 2013 "Project Expansion Plan" was prepared by DOH-CAR, and being implemented.
- Taking opportunities when stakeholders from in and out of the region get together, 24 presentations have been given on the experience and good practice of the Project. National forum was conducted in the 3rd year with 277 participants.

(2) Achievement of the Project Purpose

Project Purpose: Local health system in the region is strengthened to deliver effective and efficient MCH services.

Indicators for the target sites (6 municipalities in Abra, Apayao and Benguet)		Baseline 2012	2013	2014	2015	Target 2017
FBD Rate		79%	**86%**	**89%**	**93%**	85%
Pre-Natal Care Completion Ratio		63%	75%	**81%**	**84%**	80%
Post-partum Care Completion Ratio		90%	**96%**	**97%**	**98%**	90%
Indicators for entire CAR	Baseline 2011	2012	2013	2014	2015	Target 2017
Number of active ILHZ	7	**11**	**12**	**14**	**17**	increase
Number of Province/City conducting MNDR	0	0	**7**	**7**	**7**	7
Number of BEmONC capable health facilities	0	0	32	166	**188**	177*
Number of RHU / BHS with MCP accreditation	12	23	53	88	**144**	131*

Notes: Figures with underline are those figures equal or more than the target level.
Target figures with (*) are elevated targets through the revision of PDM in June 2015.

The post-partum care completion ratio rose to 90 % in the first year of the project, from 70 % before the inception of this Project, which has already been exceeded the national target at 80 %. Therefore, the target was set at 90 % to maintain the outcome of the Project.

3-2 Summary of Evaluation results by Five Evaluation Criteria

(1) Relevance

The framework and purposes of the Project is consistent with the Philippines national policy on health (*Kalusugan Pangkalahatan*) and its MNCHN policy to facilitate facility-based deliveries. These policies have been maintained till the time of terminal evaluation. While, the Project is also relevant to the priority areas of the Philippine Health Agenda (2016 – 2022) adopted by the Duterte administration.

As DOH defines CAR as a GIDA, it was appropriate that the Project targeted CAR. The selection of the Project's target provinces in CAR is also deemed relevant because Apayao and Abra are among the poorest provinces with most needs of assistance, and JICA had another project in CAR which

experiences could be well utilized.
In addition, Japanese Government's assistance to the Project can be justified as its scope and objectives are in line with Japanese Government's Assistance Strategy in the Philippines in 2012 and Japan's Strategy on Global Health Diplomacy as well as the framework of "JICA's Operation in Health Sector – Present and Future –".

(2) Effectiveness

As shown in "3-1 (2) Achievement of the Project Purpose", pre-defined targets for the Project Purpose, including those targets revised up in 2015, have been already achieved by the end of 2015, two-year ahead of the original target year. Therefore, effectiveness of the Project is high. There are following reasons for the high effectiveness of the Project.

- Project activities covering various aspects of MNCHN services, namely institutional, technical, infrastructural and financial aspects were planned as a package in a comprehensive and integrated manner, and implemented steadily as planned through concerted efforts by the JICA Experts and counterpart personnel.
- Commitment of provincial and municipal local governments to MCH has been attained through repeated advocacy to the governments and Local Chief Executives (LCEs). As a result, Local Government Units (LGUs) in the target sites have been taking such important actions for MNCHN services; prohibiting home based delivery, improvement of infrastructure for RHUs and BHSs, providing additional cash incentive for CHT members as well as pregnant women, sponsoring the insurance premiums for PhilHealth, etc.
- Utilization of MCP of PhilHealth has been enhanced to secure quality MNCHN services and create additional motivation of LGUs and medical personnel at municipal and barangay levels by availing the reimbursement.
- BEmONC Monitoring and MNDR were introduced to assure the quality of MNCHN services

(3) Efficiency

The Outputs of the Project have been fully or mostly achieved. Inputs from both Japanese and Philippine sides have been adequate, and the activities have been conducted as planned. There have been no problems in communication within the Project, and mechanism for monitoring and decision making through Joint Coordination Committee (JCC) and Regional United Project Management Committee (RUPMC) and other meetings was adequate. Following factors are identified which affected the implementation of project activities and production of the Outputs.

- In order to uphold commitment of LCEs, the Projectcontinuously advocated the issue especial when new LCEs became in position.
- PDM has been revised twice in order to accommodate newly recognized needs and deal with limited availability of information; uplift some targets based on the results of early project years. Various minor adjustments have been made in the approach of the Project to cope with the changes in relevant policies and regulations. Thus, the Project has been managed with flexibility and readiness to adjust itself to the changes of its context.
- Three Filipino field consultants employed by the Project have technical background in Medicine or public health and experiences in governmental health services in CAR and other regions in Philippines. Especially in Apayao and Abra provinces which are far from the project office in Baguio, continuous presence of such field consultants has been very helpful for the efficient implementation

of the Project.

(4) Impact

Among the indicators for the overall goal, FDB Rate and MMR in CAR have been improving since 2010, while no such improvement is confirmed for IMR although the IMR has been below the MDGs target of 19 (per 1,000 live births) since the inception of the Project. all the three (3) indicators have been attaining the MDG targets or the Project's target set for overall goal. As far as these indicators are concerned, the Overall Goal had been achieved.

	2010	2011	2012	2013	2014	2015	Target
FBD Rate	68%	73%	78%	83%	**90%**	**92%**	85%
MMR	65	62	71	66	**50**	**45**	52
IMR	**9**	**11**	**10**	**10**	**8**	**11**	19

Note: Figures with underline are those figures equal or more than the target level.

While the improvement of FDB Rate can be regarded as direct impact of the Project, impact on MMR and IMR would be indirect. Project's contribution to MMR and IMR needs further examinations.

Followings are pointed out as other impacts of the Project.

- In order to assess FBD Rate and Pre-Natal / Post-Partum Care completion rates more accurately, the Project developed RB-TCL (Residence Based TCL) by re-compiling the occurrence based TCL which is a part of regular (Field Health Service Information System) FHSIS practice. It was proved that residence based obstetric indicators compiled for each municipality and barangay population are very useful for LGUs in conducting monitoring and evidence based planning, as they are more accurate. Considering its usefulness, DOH-CAR decided to take the same approach in compiling indicators on immunization. In addition, DOH-Region I has requested to the Project to extend technical assistance for introducing Residence Based-TCL in the Region.
- The Project will have some positive impacts which are not limited to MCH but an improvement of medical and health services related to patient referral and transport in emergencies , for example, the effective referral system and improved infrastructure, equipment and enhanced capacity at RHU / BHS.

(5) Sustainability

In view of the followings, sustainability of the Project is considered to be fairly high; DOH-CAR and health workers at provincial and municipal governments in the target sites have acquired sufficient technical capacity to continue the activities initiated by the Project; it is expected that its approaches and basic institutional framework will be maintained in general; DOH-CAR and all the LCEs interviewed by the evaluation team expressed their firm commitment to the continuation of the project activities.

However, there are following issues which may affect the sustainability of the Project's effects and require attention;

- Lowering of priority by the changes of LCEs after elections; While the Project has been promoting enactment of ordinances and resolutions in order to minimize negative influence of the changes of LCEs, it would be necessary for DOH-CAR to continue advocacy so that all the LGUs have relevant

ordinances and resolutions.

- Changes of trained local health workers; DOH-CAR would need to continue training in cooperation with Baguio General Hospital.
- Gradual implementation of the Project Expansion Plan; There was a delay in procurement of equipment by DOH and restriction on training due to limited availability of trainer and some trainees. Steady implementation of the Project Expansion Plan would be necessary.
- Changes in PhilHealth policies; There is a risk that PhilHealth might modify insurance fee and premium of the MCH care package, in future when sufficient funds are no longer available for PhilHealth.

3-3 Promoting Factors of Project

(1) Planning aspect

- Interventions on MNCHN service were planned as a package in a comprehensive and integrated manner. These interventions, which are in line with the Philippine's policy on MNCHN, pulled out active efforts of the Philippine side and would lead to sustainability after the completion of the Project.

(2) Implementation aspect

- Implementation had flexibility allowing modifications of PDM in response to the necessity related to indicator and changes in relevant policies.
- Three filed consultants with sufficient technical background and experiences were assigned in each province.

3-4 Hindering Factor of the Project

(1) Planning aspect

- No major problem was identified.

(2) Implementation aspect

- No major problem was identified.

3-5 Conclusion

The Project is high relevant to the Philippines' policies on universal health care, MNCHN service delivery, and the development needs of CAR. Its efficient implementation led to full achievement of the indicators of Project Purpose by the end of 2015, two-year ahead of the original target year. Fruitful results of the Project are attributed to the fact that the interventions were planned in a comprehensive and integrated manner as a package, and were steadily implemented through the concerted efforts of the counterpart personnel and the JICA Expert team. Considering the completion of technical capacity building for the counterpart personnel and the commitment of local authorities regarding the continuation of activities, sustainability of the Project is fairly high. Part of the indicators defined for the Overall Goal has shown improving trend, while the Project's contribution to these indicators needs further examination. In view of the above, the Project is expected to be completed highly satisfactory.

3-6 Recommendations

1. <u>ILHZ as a functional platform for strengthening SDNs</u>

【DOH】The Project's successful experiences in establishing functional ILHZs shall be referred to by the ongoing initiative of DOH in strengthening Service Delivery Networks (SDNs). Essential

components to make ILHZs functioning, as identified through the project's experiences, include establishment of governing framework supported by MOA among participating LCEs, profiling of facilities within ILHZs, development of referral rules and protocols, and regular meetings at ILHZs to discuss key operational issues such as maternal referrals. These components could also be considered as key elements to strengthen SDNs.

2. Institutionalizing supportive supervision for sustainable quality assurance of BEmONC capable facilities

【DOH】To ensure the service quality of BEmONC capable facilities in the project target areas, regular conduct of the supportive supervision has been institutionalized by means of executive orders or Resolutions at the provincial level. In addition, DOH-CAR is in the process of making a satisfactory performance demonstrated by BEmONC-trained staff during the supportive supervision as a pre-requisite for Licence To Operate (LTO). It is suggested that the concerned offices of DOH explore the possibility to institutionalize the BEmONC supportive supervision requirement at the national policy level as well as to encourage provincial governments to legislate the support to conducting supervision of BEmONC capable facilities.

【DOH-CAR】In order to keep providing quality BEmONC services, DOH-CAR should continuously provide complete BEmONC training for newly positioned health workers and refresher training for existing health workers. Moreover, DOH-CAR should ensure continuous practicing of BEmONC supportive supervision by provincial governments in order to identify any gaps in health service delivery to be filled.

3. Institutionalizing regional MNDR for improving the management at the hospital level

【DOH】Based on the successful introduction of the MNDR mechanism to the Project's target provinces, DOH-CAR initiated regular sessions of MNDRs at the regional level. With the participation of specialist doctors at Baguio General Hospital, the regional MNDRs aimed to review death cases that required technical knowledge above provincial review teams' capacity and to provide mutual learning opportunities within the region. Taking lessons learned from CAR Region, the concerned offices of DOH may also look into the possibility for countrywide application of the regional MNDRs.

4. Application of residence-based definitions of key maternal and infant care indicators

【DOH】The Project demonstrated the usefulness of the residence-based definitions of the key maternal and infant care indicators, such as FBD Rate, Pre-Natal / Post-Partum Care Completion Rate and Fully Immunized Children Rate, particularly in effective performance monitoring down to the barangay level and evidence-based decision making at each LGU level. DOH is advised to explore the possibility of endorsing the residence-based definitions of the indicators to enable LGUs to effectively mobilize resources toward achievement of Universal Health Care. Revisiting FHSIS's definitions and the existing pre-natal TCL could be one way, whereas, introducing a residence-based TCL at birthing homes to facilitate data aggregation may be another option. Suitable modalities to meet local needs shall be identified among concerned offices of DOH.

【The Project】While the Project has successfully introduced the residence-based definitions of the key maternal and infant care indicators to the project target sites, data aggregation and analysis are still performed under the guidance of the Japanese experts. It is therefore recommended that, by the

end of the project period, the Project conduct activities to institutionalize the data management process involving data collection, aggregation, analyses and presentation by producing a manual/guiding note, and to capacitate DOH-CAR to provide guidance to LGUs in data analysis and their utilization for better decision making. The Project is also expected to extend its assistance in building capacity of DOH Region I in adopting the residence-based definitions in response to its official request. In addition, "Delivery Tracking Chart" used as a companion tool of the residence-based TCL in the target sites of the Project may also be disseminated to other provinces/regions.

5. Promotion of local legislation and its enforcement

【The Project / DOH-CAR / DOH】Considering that the major challenge for sustainability is possible shift of priorities by LCEs and decline of funding for MNCHN services, the Project and DOH-CAR need to promote relevant local legislation by Ordinance and Resolutions. To secure enforcement of such legislation, DOH-CAR also need to make persistent efforts to convince the LCEs. Municipal governments are also advised to facilitate legislation of corresponding municipal ordinances / resolutions at barangay level. Meanwhile, it is also important that local health workers fully understand the importance of the activities initiated by the Project and are able to convince their LCE by demonstrating the results. In addition, DOH may consider to incorporate the status of the availability of concerned local ordinance and resolutions as part of the LGU scorecard indicators.

6. Disseminating the good practices in entire CAR

【DOH-CAR】 The Project Expansion Plan prepared by the Project is being implemented since 2014 through 2016. DOH-CAR would need to provide sufficient resources to disseminate the Project's good practices to the entire CAR through its steady implementation and on occasions of Kapihans (press conference) and regional forums.

3-7 Lessons learned

1. Usefulness of Residence Based Definitions of Maternal and Child Health Indicators

The target client list introduced in this Project to identify all pregnant women in the target area, has been created by BHW and CHT members, who are working closely with the community. The list was excellent in that even if all the services were provided in different places, it can be grasped based on the place of residence and can be followed to provide the services. Moreover, the performance of health services in each area can be accurately monitored in actual number rather than estimates, and also it can accurately monitor the efforts of health service providers, which has contributed to increasing the motivation of the health service providers. It has the potential to be widely utilized in developing countries where the resident registration system has not been established.

2. Necessity for an Integrated Approach in Remote Areas

The Project planned to improve access to MCH services in geographically isolated areas of mountainous area, and was achieved the target goal. However, not only the need in health sector but for a comprehensive approach to MCH services has emerged. The municipality in the target area of the Project said that improvement of road network was needed to further reduce maternal and neonatal deaths. Improving MCH services should consider not only health interventions but comprehensive efforts across sectors, such as development of roads to access to the health services.

3. Deployment of Field Consultants by Target Area

Under the Project, field consultants were deployed in each of the three target provinces. Each field consultant had experience of working as a doctor or nurse in the public health sector in CAR and was able to play a part in the technology transfer to the counterparts in each province under the guidance and supervision of the Japanese experts stationed in Baguio. This type of personnel deployment is believed to be more advantageous than the repetition of short visits by a Japanese expert to each province because of the facts that (i) a close alignment and strong relationship of trust was fully established between the counterparts and the Japanese side and (ii) the field consultants were always ready to provide a quick response when required while maintaining good communication with the Japanese experts. For a technical cooperation project which simultaneously target multiple areas, JICA should consider the continued deployment of field consultants with adequate qualifications and experience.