

Summary of Evaluation

1. Outline of the Project	
Country: India	Project title: Reproductive Health Project in the State of Madhya Pradesh (Phase 2)
Issue/sector: Health Sector - Mother and Child Health	Cooperation scheme: Technical Cooperation Project
Division in charge: JICA India office	Total cost (at the time of the Evaluation): 320 million JPY
Period of Cooperation	January 2007 to January 2011 (4 years)
	Partner Organization: Madhya Pradesh State Department of Health and Family Welfare (DoHFW)
	Supporting Organization:
<p>1-1 Background of the Project</p> <p>Despite India's emphasis on the maternal child health and rural health as important national policy, people in north India, considered as less developed area in general, still suffer from high rate of maternal and neonatal mortality, respectively 254 and 53 (Central Bureau of Health Intelligence, Status of Mortality Statistics Reporting in India 2004 -2006, 2008).</p> <p>In order to tackle the threat to life of mother and child, the Government of India announced the National Rural Health Mission (NRHM) in 2005 for the improvement of national healthcare system in rural areas through strengthening of states' health system.</p> <p>The Reproductive and Child Health Program Phase 2 (RCH-II) was launched in April of the same year as a core program toward the acceleration of NRHM. RCH-II, based on the reflection of the previous RCH-I, is programmed to promote States' autonomous self-planning and achieve the outputs in areas such as 1) populations stabilization; 2) maternal health; 3) sexually transmitted infection control; 4) newborn and child health; 5) adolescent health; and 6) special consideration for socially vulnerable.</p> <p>In the light of the above government initiatives in health sector, following preparatory phase (Reproductive Health Project Phase 1 2005-2006), Japan International Cooperation Agency (JICA) with the Government of Madhya Pradesh (GoMP) launched JICA Madhya Pradesh Reproductive Health (JICA/MP RH) Project (phase 2) (hereinafter "the Project") for the improvement of the quality of maternal healthcare in Sagar Division, Madhya Pradesh on January 2007 for 4 years cooperation period. The Project has been working with GoMP for improvement of maternal healthcare system with emphasis on capacity building of frontline healthcare services providers such as auxiliary nurse midwife (ANM) and lady health visitor (LHV) in a framework of NRHM/ RCH-II program. Main focus of the Project is Human Resource Management (HRM), Total Quality Management (TQM), Health Management Information System (HMIS), and Information, Education and Communication (IEC) and Behaviour Change Communication (BCC).</p> <p>In February 2009, at the half-way period of the cooperation, the Mid-term Review was conducted by GoMP and JICA evaluation team. The team confirmed that the Project remained highly relevant as it is implemented in the framework of NRHM and suggested to focus on the activities for ANM cadres and functions. In September 2010, the Joint Evaluation Team was formed in accordance with the JICA Guideline for Project Evaluation for the purpose of reviewing the Project progress, assessing achievement level of outputs and providing recommendations for the further realization of the Project Outputs, Project Purpose and Overall Goal in a remaining cooperation period. The Terminal Evaluation has been conducted by the Joint Evaluation Team consisted of the authorities concerned of India and Japanese members.</p> <p>1-2 Project Overview</p> <p>(1) Overall Goal: The State health sector ensures quality mother and new born child health services.</p>	

(2) Project Purpose:

To increase the number of pregnant women and mothers who receive quality maternal health services by the nursing cadres, with special emphasis on the ANMs.

(3) Outputs:

1. ANMs and related cadres are capacitated to conduct quality services.
2. The workplace environment is improved for the quality maternal child health services at the health facilities, such as Sub Health Centres (SHC), Primary Health Centres (PHC) and Community Health Centres (CHC).
3. ANMs become effective data managers.
4. ANMs' communication capacity is enhanced.
5. Project achievements and lessons learned in the pilot area are disseminated and scaled up to the project area.

(4) Inputs:

Japanese Side:

- Long term experts: 2 persons (Chief Advisor /Project Coordinator)
- Short term experts: 2 persons
- Local staff: 7 India staff were assigned to the Project office in Bhopal; 8 Indian staff were assigned as field coordinators at the District/Block level.
- Training in Japan: 2 persons participated in "Midwifery course for Safe Motherhood" and 2 persons participated in "Workshop on Safer Motherhood Strategy for Asia" in FY 2007.
- Training in Jordan: 2 persons and 1 Project local consultant participated in "The Regional Workshop of Sharing Experiences & Learning from Good/Successful Practices in the Islamic Communities" in FY2008.
- In-country training:
- Operational Expenditure (as of 1st Quarter of FY 2010): Rs. 43,134,500

Indian Side:

- Assignment of counterpart personnel
- Allocation of Budget: the costs for printing MH cards, improving health facilities and so forth.

2. Review Team

Members	<p>2.1. Indian side</p> <p>(1) Mr. J.N. Kansotiya (I.A.S) Commissioner, Health Services</p> <p>(2) Dr. K.L. Sahu, Regional Joint Director, Bhopal and Sagar Division</p> <p>(3) Dr. J.P. Khare, Deputy Director- Immunization, VHND, Pulse Polio</p> <p>2.2. Japanese side:</p> <p>(1) Mr. Shohei Hara (Leader) Director, South Asia Department, JICA</p> <p>(2) Dr. Akiko Hagiwara (Reproductive Health) Senior Advisor for Health, JICA</p> <p>(3) Ms. Makiko Konohara (Cooperation and Planning) Project Formulation Advisor, JICA India Office</p> <p>(4) Ms. Junko Sato (Evaluation Analysis) Consultant, TAC International, Inc.</p>	
Period of Evaluation	22 August -10 September 2010	Type of Evaluation: Terminal Evaluation

3. Results of Evaluation

3-1. Verification of Performance

3-1.1 Activities and Outputs

(1) Output 1: ANMs and related cadres* are capacitated to conduct quality services. * Related cadres: LHV's, Multi-purpose (Health) Worker- males (MPW-males), Male Supervisor

A series of training on maternal health services were conducted and the capacity of participants is improved, which is confirmed from the result of the external evaluation done by National Institute of Health and Family Welfare (NIHFW), and the interviews of ANMs, related cadres and supervisors. In the Districts of Damoh, Tikamgarh and Panna, total 625 ANMs and LHV's (approximately 80% in the

area) participated in the ANM trainings.

The Project also developed training modules and materials, including Skilled Birth Attendant (SBA) training modules, facilitator guide, antenatal care (ANC) checklist etc. The Project was a part of the national level “Expert Group Meeting for SBA training methodology”. In order to ensure the quality of health services, the Project provided continues support through supervisions by closely working with counterparts such as Block Medical Officer (BMO) and Block Programme Manager (BPM). Hence, a collective action motivated ANMs and enabled them to provide better services, Improvement of their work environment, which occurred simultaneously with the capacity building of the ANMs, also promoted ANMs to provide better Maternal Newborn Child Health (MNCH) services.

(2) Output 2: The workplace environment is improved for the quality maternal child health services at the health facilities (SHCs, PHCs and CHCs).

In order to make sure clean and safe deliveries, the Project provided proper guidance and developed illustrated guideline and Information Education and Communication (IEC) materials for the improvement of the Maternity Wing of PHC and CHC, which is in line with Indian Public Health Standard (IPHS).

Also, the Project facilitated the community health facilities with standardization of the prerequisite of each level of centres (following IPHS), actual renovation, rehabilitation, provision of basic equipment and furniture. And total quality management all initiated by the cooperative work of health facility director (BMO) and committee members.

Progress has been also seen in Bio Medical Waste (BMW) management at health facilities. The Project provided BMW management orientation. The Project provided technical support for BMW management in collaboration with Madhya Pradesh Pollution Control Board (MPPCB) by dispatching resource person to the workshop organized by MPPCB at divisional level at Gwalior and Vidisha.

Introducing geographic information system (GIS) was also effective in improving the health facilities. Mapping the status of Maternal Wing organisation and BMW management by block enabled the local authorities to recognize the need for further improvement of their facility. It indicated the importance of visualizing and demonstrating the steps required. It was reported that this visualization accelerated the process of improvement of the health facilities: not only had the director of the health facilities but also workers of various cadres understood the progress of the facility improvement in comparison with other health facilities.

Another important factor to be noted is the availability of United Fund of NRHM and related personnel assigned such as BPM and DPM. It helped to maximize the inputs of the Project in improving health facilities. It should be highlighted that the roles of BPM and BMO were enhanced and promoted by the regular contact with Block Coordinators (BCs) who were selected, trained, mentored and consulted by the Project.

(3) Output 3: ANMs become effective data managers.

Through the activities under Output 3, a series of trainings were organized and ANMs were trained for effective data management. The Project assisted in designing and revising NRHM reporting format, which was announced as a single national standard by the central government. The Project was a part of the national level “Expert Group Meeting for revising NRHM reporting format”, the Project provided its orientation to ANMs/Staff Nurses (SNs) at block level and data managers (BPM and Data Entry Operator (DEO) etc.) in Sagar Division.

The Project introduced Maternal Health (MH) cards; by which it made possible to track services seeking behaviours of mothers by names and reduce the missing opportunity of ANC. According to the result of the external evaluation by NIHFV and the interviews, ANMs utilize MH cards for ANC and postnatal care (PNC) of mothers, which enabled them to tell the conditions of each mother and identify/deal with complications easily. As for intranatal care (INC). Many facilities use “Obstetric Record Card” that was

developed by the government. The Project provided guidance how to fill the card.

Data collected at each health facility are compiled in monthly report and submitted to block level and above on time, which is managed by computer and analysed for future activities. The Project also initiated Evidenced Based Planning and Management by using GIS. The Project assisted the state to prepare GIS maps on key thematic issues related to MNCH. It was observed by the evaluation study team that regular monitoring is jointly conducted by BC (the Project), BPM (NRHM), BEE (GoMP) and BMO (GoMP) and the results and proper guidance are given to ANMs at Block meeting or Sector meeting. The Project provided guidance on supervision to BPM, which was newly created post by NRHM to support BMO.

As room for improvement, it is necessary to make sure ANMs and related cadres keep records in proper manner. It was observed in some facilities that necessary information was not kept properly (e.g. lack of partograph, no record of blood pressure, pulse).

(4) Output 4: ANMs' communication capacity is enhanced.

It was confirmed that communication capacity of ANMs was strengthened in providing MNCH services in communities especially through the implementation of Village Health and Nutrition Days (VHND), hence it led to the enhancement of community awareness and support for health motherhood.

The Project supported VHND activities by coordinating with Department of Health and Family Welfare (DoHFW). In that sense, BCs played an important role to encourage community mobilization by close collaboration with BMOs and BPMs. Some of the BCs interviewed stressed that getting cooperation from community leaders such as Panchayati Raj Institution (PRI) members was the keys to success for promoting VHND activities. The Project also produced VHND operation manuals and IEC materials. VHND video was useful for health workers and PRI to understand the VHND activities. Role-playing and poster presentation through 6-day ANC training was also effective in strengthening ANM's communication capacity.

By getting those supports mentioned above, ANMs could clearly understand their role in outreach activities and provided good quality of services by making full use of the knowledge and skills acquired from the activities under Output 1,2, and 3. One of the interviewed Medical Officers (MOs) explained that the progress of ANM's communication skill can be seen in the increased number of referrals to hospitals. In case ANMs cannot deal with complications, they send them to a hospital with detailed information of mothers, which makes it easier for doctors to understand the status properly. Availability of good quality services by ANMs through VHND led to community trust on ANMs and their self-confidence to act as a gateways to essential health services in communities. This one of the biggest achievement of the Project as ANMs are important actors to sustain outreach activities in the communities.

(5) Output 5: Project achievements and lessons learned in the pilot area are disseminated and scaled up to the project area.

The Project shared its experiences and lessons learned with central ministry of health as well as with other development partners as the occasion of health policy meeting and development partners' meetings in Delhi. Upon the request made by the Ministry of Health and Family Welfare officials, the Project coordinated the site visit in Madhya Pradesh and shared some of the project activities with Ministry of Health and Family Welfare (MoHFW). In that sense, the Project contributed to giving inputs to National Health Policy indirectly.

The Project outcomes are also shared at monthly meeting at district level, in which all BMOs attend. Further, the Project outcomes can be also seen in block meeting and sector meeting, in which necessary technical transfer and face-to-face guidance are provided to ANMs by supervisors such as BMO who get the support from the Project.

As for scaling up, the following points could be raised as the Project achievements.

- Initiated by the Project, DoHFW (GoMP) started to utilize GIS for Evidence Based Planning and Management;
- SBA training is conducted under the initiative of GoMP based on the methodology of TOT training supported by the Project;
- “Illustrated guideline to operationalize Delivery Care at District Hospital, CHC, and PHC” and “Illustrated guidelines to operationalize Maternal Health Care at SHC” were accepted by GoMP as state standard guideline in 2008;
- The Project provided the support for drafting the checklist for accreditation of SHC for normal delivery;
- 3 audio-visual materials on SHC/CHC with special focus on ANC practices by ANMs, maternity wing organization at CHC/PHC and conducting VHND by ANMs were adapted by the state;
- Persons on ANC, PNC, Active Management of the Third Stage of Labour (AMTSL) and SHC protocols were adapted by the state and distributed to 50 districts.

3-1.2 Project Purpose: To increase the number of pregnant women and mothers who receive quality maternal health services by the nursing cadres, with special emphasis on the ANMs.

- Overall, the quality of MH services has been improved due to capacity development of ANMs by the Project, which could be reinforced by the following aspects. SHC/PHC/CHC satisfied the requirement of IPHS, which means quality services is available in these facilities;
- The service improvement was also brought by collaboration between committee and health facilities in improving facility and getting necessary equipment;
- ANMs become empowered and confident as service provider. Ensuring enabling environment for ANMs was also significant;
- No. of referral of high-risk cases has increased, which means ANMs more properly identify high risk cases.

Although the knowledge enhancement by the 6-day ANC training has been monitored by means of pre- and post- test, such quantitative evaluation has not applied to the 2-days core competency training.

3-2 Implementation Process

3-2.1 Project Management and Monitoring

In addition to Japanese experts, the Project assigned local counterparts and BCs. The Project benefited from their expertise and local network for its smooth implementation of the Project activities and encouragement of the local stakeholders. While those Project staff played a leading role in providing training and technical guidance, and making necessary coordination at the initial stage of the Project, the government counterparts have been gradually succeeding their roles. For example, block meetings and sector meetings are utilized as training and peer opportunities for ANMs under the initiative of BMO and BPM in consultation with the Project staff especially BCs.

In general, the Project activities have been implemented according to PDM. Besides, the Project sometimes took flexible actions to be aligned with NRHM. The progress of the Project was shared among stakeholders and development partners by being present at various meetings in Delhi.

Joint Coordination Committee (JCC) meetings have been held three times (2007, 2008 and 2009) by the time of Terminal Evaluation. Indian counterparts, the Project team and JICA representatives made annual review of the Project activities and shared the plan of the following year at JCC.

3-2.2 Participation of target groups to the Project

The strategy of the Project focused on the empowerment and entitlement of ANMs' function, and ensured its enabling environment for ANMs in order to provide quality MH services. This could be multiplied by external factors brought by the government side through NRHM such as provision of united fund, Janani Suraksha Yojana (JSY), assignment of DPM and BPM, which is fully integrated to improvement of services provided by ANMs. Such positive impact of the Project further accelerated ANMs' motivation and commitment, and created the community demands for quality services and participation in promoting MH services. Involving community leaders such as PRI members was also

the key to the successful implementation of the activities.

3-3. Summary of Evaluation Results

(1) Relevance

The relevance of the Project is very high.

- The Project is integrated into NRHM-RCH II, in which maternal and child health is focused as a priority area and the strategies to improve basic health care delivery system are proposed for equity. The Project aimed to improve access to quality MNCH services for vulnerable people especially in rural areas by strengthening the services. Management and community mobilization, which is realization of the mission stated in NRHM.
- The Project is in line with the context of Global Health as well. Global Health community pays special attention on maternal, newborn and child health (MNCH) because if the delays in achievement of MDGs 4 and 5. 50% of all maternal deaths occur in Sub Saharan Africa and another 35% in South Asia. In achievement of MDG 5, focus is on 1) the scaling up the package of MNCH interventions which effects are confirmed with evidence; 2) equity of receiving basic health services as well as on; 3) the collective efforts of development partners and recipient countries for the better results.
- One of the most effective interventions known is promotion of delivery attended by SBA. Global Health Workforce Alliance (GHWA), which is affiliated in WHO, advocates the significance of recruitment, retention, and deployment of SBAs at all levels of health care facilities. The Project challenges the capacity development of the most advanced actions in the global efforts in the achievement of MNCH.
- The Project is also in line with Japan's foreign aid policies. As endorsed by the Health and Development Initiative launched by Japan in 2005 and the G8 Hokkaido Toyako Summit in 2008, Japan demonstrated its commitment and support to strengthening health systems and capacity building for health workers to improve maternal health care. JICA sets "Improvement of Basic Social Services" as one of the priority areas for assistance to India and improvement of maternal health is included under the health program. Accordingly, the project concept and strategy are consistent with these Japan's policies and JICA strategy.
- As for the selection of target area, Madhya Pradesh has high MMR and IMR in India and it is placed as one of the 18 states, which have weak public health indicators need special focus by Ministry of Health and Family Welfare. Sagar Region has the poorest figures in the state. Further, ANMs didn't have training opportunities for their capacity development though their role is important to provide health services to communities. In these contexts, the selection of target area and target group was appropriate.

(2) Effectiveness

Reviewing how the Outputs have contributed to the achievement of the Project Purpose, the Project has been effective; however. There is room for further improvement and strengthening.

- Most activities were conducted according to PDM, and its effectiveness has been recognised particularly in capacity strengthening on ANC checkup, facility management by improving maternity wing and BMW, outreach activities through VHND, which are all essential tasks of ANMs. ANMs improved MNCH services through the Project supports, which let to community appreciation towards their work and brought them the feeling of empowerment and self-esteem.
- Development of materials such as "Illustrated Guidelines for MH services in SHCs", "Illustrated Guidelines to operationalize delivery care at District Hospital/Community Health Centre/Primary Health Centre", "10 contents of ANC checkup". "VHND Operational Manual" gave clear instruction to front workers "how to do" and proved to be very effective to practice quality services. Active involvement of community leaders, such as PRI members let to successful launching of VHND and encouraging community people to utilize MNCH services provided by ANMs.
- Accordingly it can be concluded that synergistic effect of all the outputs mentioned above maximized and boosted the quality of MNCH services conducted by ANMs. In fact, they are essential components of ANMs routine responsibilities thus it is quite natural for ANMs to cope with all components. This approach was effective to empower ANMs. Comprehensive approach of health system strengthening at policy, management, service delivery at community levels, realised

actual improvement of community health system with visible changes for ANMs and community people made a positive cycle of community health improvement.

- The areas to be strengthened for further scaling-up of the Project outcome include standardization and institutionalization of training system for ANMs, articulation of ANMs' role and responsibility, coordination among districts, all of which need stronger initiatives from the State government.

(3) Efficiency

Overall, the Project has been efficient in terms of quality quantity and timing of the provision of most inputs being adequate and utilized for the achievement of the Outputs.

- The Project team consists of 2 Japanese experts and 6-7 Project local consultants and 8-9 field coordinators locally assigned. Their expertise and understanding social-cultural context in India enhanced the achievement of the Project Outputs.
- It is noteworthy that the Project focused on capacity development of frontline workers, which led to empowerment and entitlement of ANM's function, and ensured supportive environment for ANMs.
- In addition, short-term experts from Japan also contributed to capacity development of ANMs utilizing their expertise in midwifery, TQM, Gender/Social Analysis.
- JOCVs assigned to District Program Management Unit and district hospitals in Tikamgarh and Damoh also contributed to the Project activities although they are not officially integrated part of the Project. They utilized their skills in SBA training and promoting HMIS introducing GIS software.

(4) Impact

There were several positive impacts observed as follows.

- As stated earlier, the Project outcome was complemented by the maximum use of NRHM scheme including united fund, JSY scheme, and allocation of DPM/BPM. It can be said that such synergy effect led to improving the quality of MNCH services provided by ANMs and to demand creation for institutional delivery. A good example picked up during the field interview was that community people come to health facilities with quality of service instead of going to District Hospital where people used to prefer for having delivery service.
- Some of the project resources and outcome were utilized and shared at national level. For example, HRM consultant of the Project was assigned as trainer for Basic Emergency Obstetric and Newborn Care (BEmONC) training at national level, and also became a member of National Task Force for Consultation on JSY. Further, TQM consultant was invited to national meeting on quality improvement, which was organized by Lal Bahadur Shastri National Academy of Administration, and made a presentation on TQM activities of the Project. HMIS consultant contributed to developing new NRHM form based on the analysis of existing recording and reporting formats.
- It is difficult to tell through set indicator (MMR) that Overall Goal "The state health sector ensures quality mother and new born child health services" can be achieved within several years after termination of the Project. However, if training of ANMs and related cadres, facility improvement and good data management are carried on with the initiative of GoMP, it will be possible to achieve Overall Goal.

(5) Sustainability

Government commitment to achieving MDGs on maternal health is expected to be sustained. In addition, the Project is integrated in NRHM-RCH II, in which maternal health care is included as one of the priority issues. Accordingly, sustainability will be ensured if collective actions are taken in line with NRHM.

For technical sustainability, roles of skilled supervisors are essential in providing ANMs with technical support and mentoring (supportive supervision) through regular supervision. Effective use of institutional capacity such as State Institute of Health Management & Communication (SIHMC) might be worth considering for sustainability in capacity development of health personnel.

4. Conclusion

As a result of series of meetings, interviews and surveys involving beneficiaries, organisations, stakeholders, experts and other personnel related to the Project, it is found that the whole set of the results and impacts produced by the Project has been outstandingly valuable in the light of improving

reproductive health in Madhya Pradesh. Regulations and policies related to the health system strengthening at the community level are already there in the NRHM; however the technical capacity to materialise the written norms were scarce in the State, Division, District and Block levels. JICA Project took initiatives in implementation of the written norms at the most difficult rural areas where the health and economic indicators were deteriorating. Achievements of the JICA Project in Madhya Pradesh are getting special attention from the central government.

First of all, the Project succeeded in the materialization of NRHM with the concrete operation in the fields. Secondly, the Project succeeded in capacity building and empowerment of the ANMs. Various innovations were introduced in the Project such as teaching methodology, training materials, supportive supervision system as well as the empowerment strategies of ANMs.

The Project assisted in designing and revising NRHM reporting format, which was announced as a single national standard by the central government. The Project was invited series of orientation on the accurate usage of the new format conducted by the State. Community Health activities were also promoted by the Project such as VHNDs. All of these achievements are inter-related and contributed to the improvement of the MNCH services as well as the increase of the users of those services. In fact, they are essential components of ANM's routine responsibilities and thus it was quite natural for ANMs to cope with all components.

Some of the Project activities are taken over by GoMP. Training methodology of SBA developed and tested by the Project in 5 districts was disseminated to other districts through state level TOT. Audio-visual training materials 1) Antenatal Care at Health Post; 2) How to organize Maternity Wing at Peripheral Hospital (CHC/PHC); 3) How to conduct VHND were already approved by the State and distributed to all 50 districts in Madhya Pradesh; 4) Biomedical Waste Management is also going to be completed and distributed. Some the audio-visual materials are used outside of Madhya Pradesh as well.

Project achievement had impact on the national level. The Project consultants joined 1) "Expert Group Meeting for review of SBA Training Package" and 2) National Task Force for Consultation on JSY 3) "Expert Group Meeting for revising NRHM reporting format". The Project gradually gained influence on the MNCH issues at the national level. Achievements of the Project were also presented at the international conferences, such as 4th Asia Pacific Conference on Sexual, Reproductive Health and Rights (2007) in Hyderabad, International Conference on Midwifery (2009). In addition, presentations by the Project local consultants are scheduled at Asian Network of Quality Congress, Annual Conference in October 2010.

The achievements of the Project are well documented by the external evaluation conducted by NIHFV and the positive implications of the Project were confirmed by NIHFV.

5. Promoting factors: the success of the Project is attributed to the following factors.

- The Project initiated various small-scale "plan-do-see" cycles in order to visualise the changes in promotion of quality MNCH services at the sub-health centre level. Small visible changes encouraged and motivated project staff, local administration officers and target population to participate in the project activities with more enthusiasm.
- Project activities were implemented by the Project local consultants who were knowledgeable about socio-cultural context in India. Cultural norms are particularly important in the rural areas.
- Chief Advisor (Project Manager) was knowledgeable about management, group dynamics as well as local culture and language so that he was able to make maximum use of capacity of the Project local consultants and run the Project smoothly.
- Training method as well as training materials for ANMs' in-service technical training were appropriate.
- Audio-visual teaching materials (such as DVD) provided better learning opportunity for ANMs as well as for the community.
- ANM training program was comprehensive as well as short enough to focus on the most essential skills and stronger attention was paid for the follow-up supportive supervision, such as on-the-job coaching, mentoring and consultation.

- Rapport was established among instructors and ANMs at the training so that the follow-up consultation was smoothly conducted by the instructors.
- NRHM fund (united fund) was available on time in improvement of the health facilities in the village.
- Assignment of DPM, BPM and other NRHM staff contributed to the improvement of health facilities as well as community health activities.
- There may be synergistic effect with JSY scheme. The Project contributed to ensure the quality of services of MNCH as JSY scheme promotes the institutional delivery.
- Active participation of the community organization in health sector meeting and community health activities were facilitated by BCs.
- Synergetic effect of ANMs' training and supportive environment of ANMs generated by NRHM such as health facility improvement, cooperation with the community organization, promoted the empowerment of the ANMs, which led to the improvement of the MNCH services provided by ANMs.
- Demand of the quality MNCH services was created among community members.
- Introduction of GIS motivated health manager to improve the health facilities and health services.
- The Project took strategy for scaling-up by contacting some key officials at central as well as state level by showing the achievement of the Project for policy advocacy.

6. Constraints:

- Human Resources for Health are scarce and there are various disparities in coverage of the basic MNCH services.
- Tutors and Supervisor for ANMs are particularly needed.
- Absence of the min-, long-term strategies of development of Human Resources for Health at national and state level.
- Job Description of ANM, LHV and SN are not clear and thus it is not easy for them to work as a team.
- Although there is no clear job description for ANMs, expected responsibility for ANMs is expanding and their workload is increasing. Population growth is another factor for overloading ANMs. As a result, busy with other community outreach activities such as immunization, nutrition and family planning counselling, and health education.

7. Recommendations

Based on the above conclusion, the following points should be taken into consideration before completing the entire project period. Now it is time to generalize the accumulated small success into the knowledge and package of techniques for the public use.

(1) Documentation and packaging of Pilot District experiences

- Uniqueness and innovation ideas of the Project should be shared by other districts, states, central government and development partners firstly by direct observation of the project site and secondly by documentation. While site visits can be arranged to share Project activities and achievement, it may be more feasible to prepare reports and audio-visual materials which summarizes the essence of the activities and achievements.
- Teaching methodology, training materials, supportive supervision system as well as the empowerment strategies of ANMs should be compiled into the minimum package.
- These documentation processes are indeed the significant first step towards scale-up.

(2) Confirm the impact of some interventions with evidence

- A case control study (e.g. 20 ANMs with JICA 2-days core competency training and 20 ANMs without JICA 2-days core competency training) on the ANM's actual performance is recommended to confirm the impact of the synergetic effect of all four outputs that the Project produced (HRH, TYQM, HMIS, IWC/BCC). Performance of the ANM should be evaluated by the ANM checklist that the Project developed.
- It may be useful for scaling up TQM/BMW if the impact of TQM/BMW on the health indicators (impact) is evaluated, since this approach is unique especially at the level of CHC/PHC.
- Since VHND is conducted in all the districts in India, the impact and the uniqueness of VHND in the Project sites should be demonstrated with objective indicators.

(3) Re-production of IEC-BCC materials

- Posters for SBA skills, maternity wing organization, BMW, VHND etc. can be shared with all the districts without constraints as they were developed according to the national standards. These posters should be re-produced for sustaining the activities in the pilot districts as well as for sharing them beyond pilot districts.
- Since the demand is high, the Project may coordinate with other development partners for reprinting posters with the condition of acknowledgement of GoMP and JICA Project for any reproduction.

(4) Project Achievements and good practices should be shared with stakeholders in India as well as developing countries and development partners outside of India.

- Achievements of the Project may be presented at International conferences, such as 1) Global Health Workforce Alliance Forum, at Bangkok (2011) 2) Global Forum for Maternal and Child Health, New Delhi (2010).

(5) Tentative ideas for future directions

- Further strengthening of the community health in rural areas with the special focus on capacity development of ANM/LHV/SN and community health workers (ASHA). Training method and training materials can be scaled up to the national level. The cadre for supervision is currently conducted by BPM and other staff, skill supervision, supportive supervision and follow-up technical training should be further strengthened.
- Strengthening of the planning, implementation and evaluation process at District level based upon the data obtained by HMIS. The Project together with the central government is currently conducting a pilot in Tikamgarh district in Madhya Pradesh utilizing the HMIS for district planning.
- Further strengthening of the HMIS utilizing the GIS is especially useful for District Health Society to plan and manage the health services. GIS may be also useful for the State in planning and monitoring distribution and coverage of health services, health human resources as well as the drug and other logistics.