

## Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keiko Watanabe Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Expansion of Immunization against Neonatal Tetanus	January 2010 – December 2010

### I Project Outline

Country Name	The Islamic Republic of Pakistan	
Project Period	6 August 2003-25 August 2004 (Completion certificate) (28 November 2005 (Completion of vaccine test)	
Implementing Agency	National Institute of Health (NIH), Ministry of Health	
Project Cost	Grant Limit: 240 million yen	Actual Grant Amount: 188.9 million yen
Main Contractors	Procurement: (Lot1) Iwatani Corporation, (Lot2) SEM Corporation	
Main Consultants	Japan International Cooperation System	
Basic Design	20 May-23 June 2003	
Related Projects (if any)	<p>1. Grant Aid: ①“Polio Eradication Program” (each year in 1996-1999, 2000), ②“The Project for Expansion of Immunization against Neonatal Tetanus” (each year in 1999-2001), ③“Support for Special Medical Equipment” (2003)</p> <p>2. Technical Cooperation: “EPI/Polio Control Project” (Sep. 2006-Aug. 2011)</p> <p>3. Other Donors assistance: ①“Survey on tetanus monitoring” (-2003) by WHO, ②“Campaign against tetanus” by UNICEF (assisting in technical training, operation cost, monitoring, National Campaign Day), CIDA (operation cost), and Save the Children, USA (training material development and production)</p>	
Project Background	<p>Pakistan had one of the poorest ratings among the 17<sup>th</sup> countries judged unsatisfactory in eliminating neonatal tetanus (NNT). It was assumed that the number of neonatal tetanus deaths within 28 days of birth was as many as 22,000 cases a year. Because of this, the Government of Pakistan prioritized measures against infectious diseases in the “National Health Plan” and has made effort to control infectious diseases including tetanus (TT) through immunization. Since it has been understood that vaccinating pregnant women against TT is the most effective measure for eliminating NNT, from 2001 the government had a TT vaccination campaign for women of reproductive age (15-45 years old) in high-risk areas. The Government of Pakistan, therefore, requested the Government of Japan grant aid cooperation to support to procure equipment to conduct the TT immunization campaigns.</p>	
Project Objective	<p>To procure the necessary vaccination equipment for NNT High Risk Areas (HRA) in 65 targeted districts to extend TT immunization to the 11.26 million women of reproductive age residing in these High Risk Areas. (According to Basic Design, the target beneficiaries was 11.26 million women of reproductive age residing in 65 targeted districts as above, however, the implementing agency of Pakistan reported that the target was 5.147 million women of reproductive age in 57 districts. Therefore, this evaluation was based on the reported number from the implementing agency of Pakistan.)</p>	
Output[s] (Japanese Side)	Procurement of TT Vaccine (20 doses vial), Auto-disable Syringes, Safety Boxes	

### II Result of the Evaluation

Summary of the evaluation
<p>The Project procured the necessary equipment for TT vaccination (TT vaccine, auto-disable syringe, safety box), which enabled the conducting of vaccination campaigns to women of reproductive age in the 57 neonatal tetanus high risk areas (HRAs). NNT is one of major causes of infant death; For this reason, the government put a high priority on its elimination. Under these circumstances, the relevance and demand for implementing this Project were very high. It was reported that the NNT mortality rate has decreased in recent years due to the efforts by the government, donors, and other agencies, however, as of 2009, the vaccination coverage against TT was still unsatisfactory and NNT remains as one of main reasons of infant death.</p> <p>Some impacts were observed after the Project, including the development of similar campaign plans in other HRAs and concurrent implementation of other immunizations in the target areas of the Project. Increasing the number of vaccinators and supervisors, and conducting technical training with the assistance from the Global Alliance for Vaccination and Immunization (GAVI), UNICEF and other agencies have also strengthened the immunization system. JICA and WHO are also conducting training on the storage and transport of vaccine. Since the Expanded Programme for Immunization (EPI) is one of the prioritized areas of national budget, financial concerns were not observed. Therefore, sustainability of the project effects is ensured.</p> <p>In light of the above, this Project is evaluated to be highly satisfactory.</p> <p>&lt;Recommendation for JICA&gt;</p> <ul style="list-style-type: none"> <li>The necessary equipment for the Project was procured within the expected period and cost. However, it took more than one year for a part of procured vaccine to receive final approval because of quality control testing. 40% of procured vaccine was rejected after quality control examinations by the national laboratory under the Ministry of Health. Several re-examinations were</li> </ul>

conducted, but, the results were the same. Finally, approval was given by a laboratory outside Pakistan. The reasons for the delay and rejection, which were also acknowledged by the Ministry of Health, were the lack of technical capacity and the poor facilities of the national laboratory. Actually, the vaccine itself was satisfactory. In order to avoid this kind of interruption, where vaccine needs to be checked by local recipient-country laboratories, their capacity and facilities should be examined beforehand. Otherwise, it is recommended, considering the cost and time, that the vaccine should be procured from existing WHO recommended vaccine providers, so that local examination would be exempted.

- Since the EPI is a prioritized issue in Pakistan, the institutional capacity of the national laboratory including human resources, facilities and equipment should also be strengthened from the viewpoint of capacity development of the Ministry of Health. It is recommended that JICA consider the need to assist the national laboratory by for example, sending experts, providing training and enhancing the facilities in the future, considering the other donor assistance in the same area.

#### <Constraints>

The statistical data on the number of target area vaccinations, nor that of TT women immunized by the procured equipment in the campaign could not be obtained from the implementing agency. Furthermore, the government has been conducting routine immunizations every year in addition to the campaign activities. Therefore, it was not possible to measure the quantitative effectiveness of the Project separately.

### 1 Relevance

#### (1) Relevance to Development Plans of Pakistan

“The Ninth Five-Year Plan (1998-2003)” stipulated health as an important issue, especially the reduction of infant and child mortality rates and the increase in immunization rates were raised as priority areas. The above Plan has not been revised yet and the priority issues are still valid. The primary health, especially in the areas of expansion of immunization for mother and children, eradication of Polio and control of NNT and measles, is one of the important issues in the “Social Action Program (SAP) II (1997-2002)”, which is the basis of budget allocation.

#### (2) Relevance to the Development Needs of Pakistan

Tetanus has been one of the major causes of infant death in Pakistan with NNT cases being 4.1 per 1,000 live births (1999). Pakistan had one of the poorest ratings among the 17th countries judged unsatisfactory in eliminating neonatal tetanus (NNT). WHO and UNICEF set the target to reduce NNT cases to fewer than 1 case per 1,000 live births by 2005; therefore, the government had to strengthen the immunization activities to achieve the international target. As of 2009, the TT immunization rates of infants and women in reproductive ages were as low as 55% and 18% respectively. The need for immunization against TT are still high.

#### (3) Relevance with Japan’s ODA Policy

“The Country Assistance Policy of Pakistan (developed in 1997)” raised the “Social Sector” as one of four priority areas and emphasized in supporting SAP. Japan has supported expansion of immunization against neonatal tetanus since 1999 in Pakistan through grant assistance to procure necessary equipment for vaccination, therefore, the continuous support had significant meaning.

This Project has been highly relevant with the country’s development plan, development needs, as well as Japan’s ODA policy; therefore its relevance is high.

### 2 Efficiency

#### (1) Project Outputs

The necessary vaccination equipment (TT vaccine, syringe, safety-box (syringe disposal box)) was procured as planned. The syringe model was changed from the initial plan (width of the needle changed from 25G to 23G), which reflected a request from the Pakistan after the basic design study. According to the confirmation of the contractors by the procurement consultant, the change of the model did not affect the functions physiologically or their costs.

#### (2) Project Period (Project Inputs)

The project implementation period was as planned; the planned period was 12 months and actual period was 12 months (equal to 100% of planned period).

#### (3) Project Cost (Project Inputs)

The total cost of the Project was 188.9 million yen, which is lower than planned (78.7% of the estimated cost of 240 million yen) with attainment of expected effect.

Both project period and project cost were as planned; therefore, efficiency of the Project is high.

### 3 Effectiveness / Impact

#### (1) Quantitative Effects

The Project aimed to promote TT immunization by enabling an immunization campaign for 5.147 million women of reproductive age in 57 NNT HRAs. The procured vaccines, syringes and safety boxes were delivered to the National Institute of Health (NIH) and those which passed the quality control testing were distributed to the target areas within one week and utilized in the immunization campaign. The effectiveness of the TT immunization campaign in Pakistan was confirmed in a report detailing the reduction of NNT cases observed after the campaign. The project effectiveness, however, could not be clearly judged because the number of actual beneficiaries was not obtained from the implementing agency. Moreover, the government has been conducting routine immunization in some of the target areas in addition to the campaign, as a result the sole effectiveness of the Project could not be confirmed.

Meanwhile, 40% of vaccines took one year and three months to complete post-procurement quality control testing because of by the poor capacity and environment at the national laboratory. Therefore, those delayed vaccines only were utilized after 2006, not during

the planned campaign in 2005. However, the efficacy of those vaccines was not affected since they were valid for three years.

(2) Impacts (Impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

After the Project, the Government of Pakistan developed a new plan to conduct a similar immunization campaign in another 48 HRAs. This was a part of impacts after confirming the effectiveness of the Project. Furthermore, the immunization against other infectious diseases was conducted at the same time as the Project, which complemented the effectiveness of immunization activities. In addition to conventional vaccinators including doctors, nurses and vaccinators, the Ministry of Health decided to add performing vaccinations to the function of Lady Health Workers (LHW) to strengthen the immunization system. Up to now, 21,000 LHW who were trained as vaccinators with the assistance of GAVI and UNICEF. In the meanwhile, the Government of Pakistan is trying to establish a routine immunization system for reproductive aged women in rather than conducting immunization campaigns in order to stable the infectious rate. However, in some remote areas where the communities for social and traditional reasons are not cooperating with immunizations, the routine immunization coverage rate is not satisfactory. This includes such cases that women are not allowed to get injection from male vaccinators and women cannot go out while husbands are away.

This Project has largely achieved its objectives; therefore, its effectiveness is high.

#### 4 Sustainability

(1) Structural Aspects of Operation Maintenance

The current number of counterparts in the National Institute of Health (NIH), which is the responsible agency for immunization in Pakistan, is almost same as during the project period. It was reported that a sufficient staffing is secured in NIH. The number of vaccinators in Pakistan increased by 1,000 from 2005 and was 9,000 in 2009 because of the assistance from GAVI and UNICEF. This number is not enough to conduct routine immunization across the whole country; however, the immunization system has been strengthened by training LHWs to be a vaccinators since 2009.

(2) Technical Aspects of Operation Maintenance

The main issues in the technical aspects of immunization are largely vaccination storage and vaccinators skills. Vaccine storage and transport at both central and local level are maintained by the staff qualified at WHO standard. JICA has initiated further in-country training to build staff capacity in vaccine stock management and transport. WHO is also supporting the same field. Technical training for vaccinators have been conducted periodically with assistance from GAVI and UNICEF in order to maintain technical skill levels and consolidate the immunization system. So far, 42 courses for vaccinators and 1,626 trainers of training (TOT) were conducted and 1,119 vaccinators and 52,566 trainers participated respectively. Follow-up training for vaccinators and their supervisors have been also conducted. As a result, the technical aspect for sustainability has been ensured.

(3) Financial Aspects of Operation Maintenance

The procured project equipment is consumed, so that there are no maintenance expenses incurred. The EPI budget is on the increase yearly from PKR 200 million (2003/04) at the time of the project termination to PKR 1,500 million (2008/09). The expenditure in 2008/09 was PKR 1,437 million. Therefore, the balance between revenue and expenditure was kept and sound financing has been achieved. In addition, as for EPI activities it ensures financial autonomy since only 2% is depending on the external sources including UNICEF and WHO.

(4) Current Status of Operation Maintenance

All of the procured equipment was spent for the immunization.

No major problems have been observed in the operation and maintenance system; therefore, sustainability of the Project effect is high.