

## Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keiko Sakamoto Waseda Research Institute Corporation (WRI)	Duration of Evaluation Study
Project Name	The Project for Construction of the China-Japan Friendship Dalian Center for Human Resources Development	January 2010 – December 2010

### I Project Outline

Country Name	People's Republic of China			
Project Period	August 2004-February 2006			
Implementing Agency	Ministry of Commerce, Dalian Municipal Bureau of Science and Technology (大連市科学技術局)			
Project Cost	Grant Limit : 968 million yen	Actual Grant Amount : 967 million yen		
Main Contractors	The consortium of Taisei Corporation and Itochu Corporation			
Main Consultants	Pacific Consultants International			
Basic Design	August 2004			
Related Projects (if any)	JICA, "The Project for Business Human Resource Development" (2006-2010) (Technical Cooperation Project)			
Project Background	Designated as the only "Base of Human Capacity Development for IT Software" in China (our translation), Dalian city is expected to become the center for the IT industry. Further, facing challenges and opportunities brought on by China's entry in the WTO, emphasis is being given to human resource development (HRD) in various areas of expertise and skills; Japanese language, IT, engineering and business management, so as to facilitate expansion of Japanese investment in high-tech industries. While Japanese companies need to secure a stable source of skilled workers for their business operations in China, it has been, in practice, challenging and costly to do it alone. Under such circumstances, and considering the outlook for strengthening economic ties with Japan, the government of China and Dalian municipality initiated plans for the "China-Japan Friendship Dalian Center" and requested assistance in the form of Japanese Grant Aid for to establish such a facility and provide equipment for human resource development of above mentioned strategic areas.			
Project Objective	To construct facilities and install equipment to provide training in the Japanese language, IT, engineering, and business management, in order to contribute to growth and development of the economy of Dalian city and Liaoning province and support and facilitate business of Japanese branch offices.			
Output[s] (Japanese Side)	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;">                     1. Construction of facilities: the China-Japan Friendship Dalian Center (5 story-rooftop, ground floor area: 2,320 m<sup>2</sup>, footprint: 4,856 m<sup>2</sup>)                      Administration Office (5 rooms), Education Information Center, Internet Center, Computer Server room, Meeting Room, Office for Japanese experts (10 rooms), Hall, Seminar Room (10 rooms), Interview Room (4 rooms), Computer Room (3 rooms), Demonstration Room (3 rooms), Student Room, Library, Lecturer's Lounge, Student Lounge                 </td> <td style="width: 50%; border: none; vertical-align: top;">                     2. Provision of equipment                      Language laboratory equipment, LDC projector, DVD player, Screen, Server, PC, PC desk &amp; chair, AV Equipment, Meeting room table, Vehicle, etc.                 </td> </tr> </table>		1. Construction of facilities: the China-Japan Friendship Dalian Center (5 story-rooftop, ground floor area: 2,320 m <sup>2</sup> , footprint: 4,856 m <sup>2</sup> ) Administration Office (5 rooms), Education Information Center, Internet Center, Computer Server room, Meeting Room, Office for Japanese experts (10 rooms), Hall, Seminar Room (10 rooms), Interview Room (4 rooms), Computer Room (3 rooms), Demonstration Room (3 rooms), Student Room, Library, Lecturer's Lounge, Student Lounge	2. Provision of equipment Language laboratory equipment, LDC projector, DVD player, Screen, Server, PC, PC desk & chair, AV Equipment, Meeting room table, Vehicle, etc.
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### II Result of the Evaluation

Summary of the evaluation
<p>This project was intended to provide facilities and equipment to Dalian city, which has had strong ties with Japan, in order to contribute to advancement of Chinese who are working at Japanese companies or Chinese companies having business alliances with Japanese counterparts, or strongly interested in working at such companies. The relevance of this HRD plan is highly evaluated in terms of the policy and needs of Chinese government and Japan's ODA policy. Regarding the efficiency, it has been carried out consistent with the initial plan, based on bilateral collaboration. Also, effectiveness of the project is noteworthy as the degree of attainment of targets set in the initial plan is fairly high. However, as there is some concern regarding operation and maintenance in terms of current personnel arrangement and financial aspects, there is room for improvement in terms of sustainability.</p> <p>In light of the above, this project is evaluated to be highly satisfactory.</p>
<Recommendations>
<p>As a recommendation to JICA, it would be beneficial to ensure effective implementation of the plan for management of the project itself by including instruction in business management for personnel of the counterpart entity active in this project but having little business experience. This project is a case in point, as some Japanese experts of the relevant technical cooperation project have given advice and support to managers of the Center who have little experience of business management.</p> <p>As a recommendation to the implementing agency, mention must be made of issues related to financial aspects to ensure sustainability of operation and maintenance. From the viewpoint of strengthening the financial basis of the project, it is deemed to be indispensable to secure an independent source of funding. At least in the short term, it is essential to implement various measures for future progress proposed by the JICA technical cooperation project, such as expansion of the teaching staff and of training programs.</p>

<Constraints of this evaluation study>

At the time of project planning, the target year was 2010. Since, this ex-post evaluation was carried out during 2010, the actual numbers which we can obtain are those of 2009. Therefore it is impossible to compare the actual numbers to the target numbers and judge an exact degree of attainment.

## 1 Relevance

### (1) Relevance to the Development Plan of China

At the time of project planning, in light of "reform and door-opening policies", the government of China was actively engaged in inviting foreign capital investment as a means to realize economic growth by. In 2003, the general assembly of the Communist Party Central Committee endorsed "Regional Development of Northeastern Region" as having a high priority, particularly in regard to a redevelopment plan to replace obsolete heavy industry in northeastern region of China. As such, it was thought that state enterprise reform should be promoted with the aid of foreign capital, particularly from Japanese companies. Dalian city in Liaoning province where the implementation site of this project is located was designated as the "international model city of software industry" by China's Ministry of Science and Technology; one of software industry bases (of a total of 12 bases around China), and the "national base of IT software human capacity development" by the National Development and Reform Commission. The city was strongly expected to be the center of IT industry. Specifically, targeting human capacity development for skilled workers with Japanese language ability and expertise was considered vital to facilitate expansion of investment and trade with Japan in Dalian city and Northeastern region.

Throughout the implementation to the completion of the project, various policy acts related to invitation of foreign investment and human capacity development on software as well as service outsourcing have been issued. These policy comprise "关于促进东北老工业基地进一步扩大对外开放的实施意见" (国务院令: 2005年), "大连市进一步促进软件和服务外包产业发展的若干规定" (大连市人民政府令: 2008年), "大连市信息技术人才职业教育培训机构认定办法" (大连市情报产业局: 2008年), et cetera. Thus, this project is consistent with policy of China.

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

At the time of project planning, economic ties between Dalian city and Japan were very strong. In 2003, the number of Japanese companies operating in Dalian city reached about 2500. The volume of trade with Japan, both imports and exports, accounted for about 40% of the total volume of trade of the city. And since 2000, Japan has been the top country in terms of execution of direct investment, in terms of money invested. Dalian city aimed at further expanding investment from Japan, in order to achieve economic growth of the city and Liaoning province. There was, however, a serious shortage of skilled workers with those qualities necessary to be fully engaged in Japanese companies, notably Japanese language ability, IT, engineering, and business management. It was evident in mismatch in local labor market that while there were about 50,000 job openings annually, only 34,000 people applied.

At the time of ex-post evaluation, the economic ties between Dalian city and Japan were still strong. Figures show that the total volume of trade is steadily increasing at least until 2008. As is evident from the above-mentioned policy acts, Dalian city has strengthened human capacity development in the areas of information technology. Therefore, the project matched the development needs of China.

### (3) Relevance to Japan's ODA Policy

In regard to Japan's development assistance program for China, a policy document released in October 2001 emphasized activity to "assist reform and door-opening", "deepen mutual understanding" and "support private sector activities." Thus, this project was consistent with Japanese policy. In the meantime, within the subject of future direction of Japan's economic cooperation to China, behind the backdrop of the recent booming economy in China, it is seen as an urgent matter to make the transition in terms of financial arrangement, particularly for the areas where government of China and/or Chinese private sector should take measures to facilitate their own funding. Considering current Chinese economic situation, it is desirable to review the Japan's ODA assistance for the area in point.

This project has been highly relevant with China's development plan, development needs, as well as Japan's ODA policy, and therefore its relevance is high.

## 2 Efficiency

### (1) Project Outputs

The output on the Japanese side was executed according to the plan as specified at the signing of E/N. There was, however, one numeral difference between the final equipment list and the list of basic design study report. At the time of planning, what described as "speaker: 4 systems" was actually "8 items" in the list.

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

The plan period of the project was 19 months, and the project was accomplished as planned (100%). According to the consultant engaged for the project, there was a concern that in China, the complicated process of building permit applications and the examination process would take a long time. For this reason, it was the work of the contractor to make the project arrangements, with support of the consultant. From the early stage of the project, they tried to get much assistance from JICA Beijing office and China's Ministry of Commerce. As a result, they could smoothly handle and complete the required procedures.

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

The initial project cost was planned at 968 million yen but actual cost was 967 million yen. So the project was completed as planned (99.9%). According to the consultant engaged for the project, the difference was caused by appreciation of the yen (In March 2004 1RMB=13.06 yen, in August 2004, 1RMB=13.21yen), a unit price drop of rebar prices, and discounts of airfares.

Both project period and project cost were essentially as planned or within the plan, and therefore the efficiency of the project is high.

### 3 Effectiveness / Impact

#### (1) Quantitative Effects

At the time of project planning, the anticipated target number was taken as corresponding to three respective annual totals of (1) seminars (48 classes), (2) attendees who had completed courses (3,900 persons) and (3) persons who had attended seminars (14,000 persons), as of the target year of 2010. Data from the implementing agency indicates the actual numbers in 2009 as (1) 114 courses, (2) 3,882 persons (99.5% achievement rate), and (3) 3,430 persons (24.5% achievement rate). Regarding (1) the number of seminars, there is a discrepancy in the unit of the "classes" and "courses", so caution is necessary in comparison. But judging from (2) the number of students, we can conclude that the target was almost achieved. On the other hand, regarding (3) the number of persons who had attended seminars, the target has not been reached. However, since 2006, the number has been increasing (year-on-year increase of 36% in 2008, 27% in 2009). Thus, it is expected to rise over time.

Regarding the facilities of the China-Japan Friendship Dalian Center, it has been used as planned except for "office of the China-Japan Cultural Exchange Association", formerly planned as a "business management demonstration room", and the name "Japanese corporate information room" has been changed to "office of public relations". Regarding major equipment provided by the project, according to the implementing agency, except for minor repair of one air conditioner, all equipment is being fully utilized without a problem.

#### (2) Impacts (Impacts on the Natural Environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The response obtained from the implementing agency indicates that the project facilities are contributing not only to Japanese companies, but also to Chinese state enterprises as shown in increase in the number of educational activities carried out by such enterprises such as the national railway company. Further, the facilities are considered to be playing a positive role in support of employee training and formation of educational environment for Chinese state enterprises. The center serves as a venue for China-Japan cultural exchange and deepening relations between local and Japanese companies, by being used for various purposes such as IT club conferences, social gatherings of companies, tea ceremonies, flower arrangements, and musical concerts. Thus, it was confirmed that the facilities are serving their intended purpose of deepening mutual understanding of the two countries as mentioned in Japan's ODA policy statement.

In addition, the site was originally used for a playground, so that it was free of issues such as relocation of inhabitants and land acquisition. Also from the viewpoint of promoting barrier-free society, it was made to have barrier-free facilities such as restrooms and elevators. It has been informed to us that there have been no issues might cause negative impacts.

This project has largely achieved its objectives, and therefore its effectiveness is high.

### 4 Sustainability

#### (1) Structural Aspects of Operation Maintenance

Structural arrangements for this project have undergone no change since the plan was made; the Center is an independent corporation as a non-profit public educational institute whose oversight authority is the Dalian municipal bureau of science and technology. On the other hand, the governing structure was supposed to be a council organized so as to have members who were representative of relevant institutions, and a director of the Center was supposed to be appointed by the same Dalian municipal bureau. But this has been changed after the basic design study was done. Currently, management of the Center is the responsibility of Dalian Jiaotong University and the President of Dalian Jiaotong University serves as a director of the Center. We have not confirmed the institutional framework of the decision making process regarding operation policies of the Center. According to the report of a relevant technical cooperation project, Dalian Jiaotong University's stance on how the center should be utilized may well be described as a double-edged sword.

In addition, according to the implementing agency, it was reported that 13 staff members and 10 lecturers are engaged at the Center in 2010. Up until 2009, the number of staffs had increased. However, it is not known exactly why but there is some concern that from 2010, the number of personnel is on the decline (this according to implementing agency information).

#### (2) Technical Aspects of Operation Maintenance

Response to the questionnaire shows that there has not been any occurrence of a major problem at the technical level in connection with operation and maintenance of the Center. However, regarding operation of training courses, mention was made that they face challenges in terms of the design of courses and securing Japanese expertise (management consultations for business executives) to meet the needs of the business sector in the ever-changing economic environment. It is particularly hard to define the needs themselves when the types of business coming to Dalian city are changing.

In addition, according to the final report of the technical cooperation project, some Japanese experts have given advice to business management of the Center and have supported activities such as designing training courses, public relations, and project planning and management. There is some concern about capability of management of operations of the Center.

#### (3) Financial Aspects of Operation Maintenance

There is a considerable discrepancy between the financial plan at the time of project planning and the actual balance. For example, the planned price of tuition had been 1,500RMB, but the actual price was 396RMB. And planned income from accommodation charges had been 3,114,000 RMB but this has generated no income at all. According to the projection in the basic design, the project was supposed to turn profitable in 2008. It was, however, running at a loss since inception. In 2009, the deficit amounted to 30,000RMB. Of total income of 2.53 million RMB, tuition was 1.42 million RMB, payment by Dalian city 1 million RMB, and miscellaneous income 110,000 RMB. Dalian municipality provided 40% of the total income in 2009. According to the response from the Center, while it is trying hard to enlarge the scope of training programs in order to secure income, the Center still needs financial assistance from many funding sources. Thus, the financial sustainability may well depend on financial assistance from Dalian municipality.

#### (4) Current Status of Operation Maintenance

The response from the implementing agency indicated that although there are several items of equipment out of repair and not used for the intended purpose (they are planning to repair one air conditioner), it can be said that major items of equipment obtained through this project were being fully utilized. Regarding operation and management of training programs, they are trying to promote activities of the Center through a specially designed website in order to revitalize relationships with local businesses.

In addition, the technical cooperation project at the Center ended in February 2010. According to the final report, there are some recommendations for the Center and JICA's future assistance; it is desirable for the Center to face challenges by making the most of the results achieved up to now. In the report, the Center is described as being in the process of achieving independence, but it is thought that some time will be needed to evaluate the capacity of the counterpart acquired through the technical cooperation project.

Some problems have been observed in terms of structural and financial aspects, and therefore sustainability of the project effects is fair.

## 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>
<Recommendation for JICA>
<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.





## Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Junko Noguchi Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Up-gradation of Plastic Technology Centre	January 2010 – December 2010

### I Project Outline

Country Name	Islamic Republic of Pakistan	
Project Period	June 2004-March 2006	
Implementing Agency	Plastic Technology Center (PTC)	
Project Cost	Grant Limit: 804 million yen	Actual Grant Amount: 804 million yen
Main Contractors	Mitsubishi Corporation	
Main Consultants	UNICO International Corporation	
Basic Design	"Basic Design Study on the Project for the Up Gradation of Plastics Technology Center in the Islamic Republic of Pakistan," UNICO International Corporation, March 2004	
Related Projects (if any)	1. JICA, Expert (advisor on SME policies) (2003-) 2. JICA, Senior volunteer	
Project Background	Established in 1988, PTC has served as the sole public institution in the field of plastics processing sector in the country. It provides technological guidance, product tests, and information about technologies to small and medium-sized enterprises, and also offers various educational and training courses. However, a preliminary survey found that the center was not satisfying requests from small and medium-sized firms sufficiently.	
Project Objective	To construct workshop facilities and procure necessary equipment for training and testing in order to upgrade the function of PTC's technological know-how and to expand employment opportunities for the graduates.	
Output[s] (Japanese Side)	1. Procurement of the training equipment, testing equipment, and general supplementary equipment 2. Construction of the workshop facilities 3. Training on market survey and quality control (Soft Component)	

### II Result of the Evaluation

#### Summary of the evaluation

This Project aimed to upgrade the functions of training and technical consultation of the Plastic Technology Center (PTC), and the necessary equipment was procured and the facility was constructed as planned. However, the training needs from the enterprises decreased after the Project was completed due to the recent economic crisis, and therefore, much fewer training courses have been implemented than planned. PTC, on the other hand, has adequate system and skills for operation and maintenance of the procured equipment and its financial status is sound. In short, the equipment was procured efficiently and has been well maintained, but the decreasing training demand has made the Project less relevant and effective.

In light of the above, this project is evaluated to be unsatisfactory.

#### <Recommendation to PTC>

It is necessary to reassess the needs of pre-service and in-service training in the plastic industry, and, based on the assessment result, to make all kinds of efforts so as to increase applicants for the training courses. For example, seek the possibility of lowering the fee if it is regarded as expensive, while it is covered by the increasing income from the tuition fees from the bachelor course. If the training needs exist outside the existing curriculum, it is necessary to revise the course curriculum to the extent that the instructors can handle the equipment at PTC.

#### <Recommendation to JICA>

In projects where the training is delivered with procured equipment, it is indispensable to verify the training needs and affordability to the clients with middle and long term forecasts, as well as to verify the validity of the equipment for the training. It is necessary to investigate and have a common understanding with the implementing agency regarding the potentiality of the target sector, including the facility investment and employmen, in the near future.

## 1 Relevance

### (1) Relevance to the Development Plan of Pakistan

Industrial development is one of the priority issues described in the "Ten-year Perspective Development Plan 2001-2010," in which, human resource development and development of small and medium-sized enterprises (SMEs) are regarded as important strategies. Also, this plan describes the necessity of providing institutions for technical support including PTC, and of strengthening vocational training.

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

According to the "Poverty Reduction Strategies Paper" prepared in 2002, one-third of the national population was under the poverty line, and the unemployment rate was about 10%. Because the plastic industry provides necessary parts for water pipes, domestic products and many other machinery products, it has played an important role in Pakistan's industrial development, and it was hoped to generate more employment opportunities. Till the present, the plastic industry has been developing, and the SMEs need to upgrade their employees' skills and receive technical support and the latest information. On the other hand, due to the recent economic crisis, training needs and affordability from the SMEs side have been decreasing.

### (3) Relevance to Japan's ODA Policy

Based on the survey on economic cooperation made by the Japanese government in 1996 and on the subsequent discussions, improvement of the economic infrastructure is one of the priority areas for assistance to Pakistan. The "Country Assistance Program for the Islamic Republic of Pakistan" prepared in 2005 pointed out that the manufacturing industry needs to generate more employment, and technical and vocational education is regarded as a priority issue in the secondary level.

This project was partly irrelevant to the country's development needs at the time of ex-post evaluation; therefore, its relevance is fair.

## 2 Efficiency

### (1) Project Outputs

Outputs were generated as planned, except the following two. First, there was a small change in specification of the construction and procurement. The reasons for this are that (i) a few things were not accepted by the Pakistani authorities regarding the facility to be built and so an instruction order for change was given, (ii) the Project purchased cheaper equipment to prevent the influence of the rise of oil price, and (iii) some hadn't been procured by the Project as PTC bore the cost. Secondly, technical training on marketing provided only lectures, not practical exercises due to a delay of the related equipment.

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

It took 19 months to complete the Project, as planned. All the Project activities were implemented as scheduled except the above two.

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

The actual cost was 804 million yen as planned.

Both project period and project cost were within the plan; therefore, efficiency of the project is high.

## 3 Effectiveness / Impact

### (1) Quantitative Effects

PTC has provided training and technical support with the procured equipment which satisfied the client. However, the number of the implemented courses is much less than was targeted. In 2009, 0-20 trainees participated in the 3-month basic course and the following 6 short term courses (plastic materials, extruders, injection molding, thermoforming, blow molding, testing equipment), though the target was 60 trainees for each course. The following 4 courses weren't conducted because there were no applicants (extruders, thermoforming, blow molding, testing equipment). As a reason for this situation, PTC says that "due to the recent economic depression, the market demand and new investment in manufacturing enterprises have decreased, so the training needs were much smaller than expected." The same is explained in the report "Pakistan Economic Survey 2009-10," which says that the manufacturing sector has been stuck since 2005 in terms of business investment and employment. Thus, it is assumed that the training needs of the enterprises have been limited since the time of delivery of the equipment.

In this Project, technical training was delivered to the PTC staff on marketing, but they haven't appreciated this training much, saying that a "more practical approach was necessary," "it should have included onsite-visits to other major industries," and "it was not very useful for the current work." It is also possible to estimate that the training wasn't based on the curriculum which matched the market and clients' needs, and therefore there were few applicants.

Regarding the commissioned examinations on the products, PTC conducted 106 examinations in 2009, compared to the target figure 400. As reasons for this result, PTC says that the demand from the enterprises has decreased, and also that PTC doesn't have all necessary equipment to satisfy the needs.

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

As a result of the utilization of the equipment, PTC has strengthened the sections of plastic exams and processing. The graduates from the training courses can find jobs easily. Also PTC says that the client enterprises have come to generate products of better quality and that the import of plastic produces has increased; however, it is difficult to verify whether these are the direct results of the Project.

This project has achieved its objectives at a limited level; therefore, its effectiveness is low.

#### 4 Sustainability

##### (1) Structural Aspects of Operation Maintenance

PTC has 5 departments (Testing, Technology, Academics, Administration and Accounts) under the General Manager. The staff in charge of training are from the department of Technology. The teaching staff in charge of lectures and practical exercises conducts regular maintenance of the procured equipment.

##### (2) Technical Aspects of Operation Maintenance

At the time of the Basic Design Study in 2004, PTC already had sufficient skills for operation and maintenance of the equipment. Till now, more than 80% of the staff who received technical training at the delivery of the equipment remain at PTC, and the necessary training is given to the newly hired staff. After the Project, PTC revised the material for training courses for more effective use.

##### (3) Financial Aspects of Operation Maintenance

PTC had received financing from NFC to cover the deficit balance until 2003, but after 2004, PTC has a surplus. This is mainly because the income as course fees (of B. E. Polymer) has been increasing. At present the budget is sufficient for regular operation and maintenance of the procured equipment, but it doesn't cover the purchase of spare parts (Fortunately, right now PTC doesn't need to buy them). At the time of the Basic Design Study, a major concern was losing the financing from NFC if it is privatized. But actually, NFC is still publicly owned, and more than that, PTC has sound financial management.

##### (4) Current Status of Operation Maintenance

Among the major procured equipment, an extruder is under repair, but the rest is regularly inspected and functioning without problems, as of June 2010.

The Project hasn't generated effects as expected, but no major problems have been observed in the operation and maintenance system; therefore, sustainability of the project effect is high.



### Simplified Ex-Post Evaluation for Grant Aid Project

Evaluator, Affiliation	Keiko Asato Foundation for Advanced Studies on International Development	Duration of Evaluation Study
Project Name	The Project for Enhancement of Educational Facilities at Allama Iqbal Open University in the Islamic Republic of Pakistan	January 2010 – December 2010

#### I Project Outline

Country Name	Islamic Republic of Pakistan	
Project Period	March 2005-March 2006	
Implementing Agency	Allama Iqbal Open University	
Project Cost	Grant Limit: 795 million yen	Actual Grant Amount: 697 million yen
Main Contractors	(Procurement only) Lot 1: Mitsubishi Corporation Lot 2: Iwatani Corporation	
Main Consultants	OPC Corporation	
Basic Design	"Basic Design Study Report on the Project for the Enhancement of Educational Facilities at Allama Iqbal Open University in the Islamic Republic of Pakistan", Japan International Cooperation Agency, January 2005	
Related Projects (if any)	"The Project for Procurement of Equipment for Allama Iqbal Open University (1996)"	
Project Background	Literacy rates and enrollment rates in Pakistan are comparatively low, and for inhabitants of rural areas as well as for females they are even lower. As for teachers, their numbers are far behind what is necessary to sustain an educational basis. Due to this situation, expanding educational opportunities, educating teachers and reducing regional as well as gender inequality have been urgent issues. The Allama Iqbal Open University (hereinafter referred to as AIOU) had been a core organization providing educational programs via TV and radio, as well as running regional campuses and regional learning centers throughout the country. With their existing equipment, however, AIOU had been experiencing difficulties meeting the educational needs of the growing number of students.	
Project Objective	To procure and install equipment necessary to produce: educational TV and Radio programs; and to produce teaching materials in order for AIOU to expand and fulfill its educational programs.	
Output[s] (Japanese Side)	1. To procure and install equipment: for the production of educational programs; for the development of teaching materials; for printing; and for audiovisual equipment at AIOU. 2. To conduct technical training for the members of the Print Production Unit.	

#### II Result of the Evaluation

Summary of the evaluation
<p>This project's ultimate goal was to provide educational programs to the people in the rural areas of the Republic of Pakistan (in the form of improved TV and radio programs, multimedia equipment, and printed materials for distance learning produced by AIOU) to address the obvious inequalities in terms of educational opportunities caused by gender, region and/or economic factors. For this purpose, this project procured the following: equipment for the production of educational program to the Institute of Educational Technology (hereinafter referred to as IET) of AIOU, equipment for the development of teaching materials to the Multimedia Electronic Courseware Design Centre (hereinafter referred to as MECDC), equipment for printing to the Print Production Unit (hereinafter referred to as PPU), audiovisual equipment to regional campuses and regional centers (hereinafter referred to as regional bases). In addition, the Project was consequently expected to contribute to the strengthening of teacher-education courses and to the improvement in educational opportunities for those with limited accesses to education.</p> <p>Distance learning in this target country was effective in reducing inequalities in educational opportunities caused by regional and gender issues, as such, the cooperation through this project was highly relevant. Procured equipment was properly used and maintained, resulting in an increased access to education for a greater number of people who previously had had limited educational opportunities, including: women, rural area inhabitants, and employed adults. In addition, teacher-education courses at the regional bases became popular which further strengthened teacher education.</p> <p>In light of the above, this project is evaluated to be highly satisfactory.</p> <p>&lt;Recommendations&gt; None</p>

## 1 Relevance

### (1) Relevance with the Development Plan of Pakistan.

The "Ten-Year Perspective Development Plan (2001-2011)", which was in effect from the time of the project's planning through to the time of the post-project evaluation, stated "Poverty Reduction and Human Development" as one of four significant areas. This plan indicates strengthening "Education and Training" as a necessary approach to achieve poverty reduction and human development.

### (2) Relevance with the Development Needs of Pakistan.

At the time of project planning, low rates of literacy and enrollment, a high primary education dropout rate, gender inequality, large numbers of uncertified teachers and regional inequalities between the urban and rural areas, were considered the issues to address in the education sector. At present, according to the "Education for All – National Plan of Action 2001-2015" elaborated by the Ministry of Education of Pakistan, an increase of the literacy rate, improvement of teachers' quality, reduction of educational inequality, adult education, and improvement of teachers' quality are still mentioned as urgent issues in the national policy. Furthermore, the implementing agencies of this project (IET, MECDC and regional bases of AIOU), reported that since Pakistan is a spacious country, distance learning is an effective methodology to reduce inequalities of educational opportunities (due to regional and social (gender and economic) factors).

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

According to the Country Assistant Programme for Pakistan (2005), at the time of this project's planning, Japan's important cooperation areas are: 1) Cross-sectional Issues (Gender, Environment and Governance), 2) Human Security and Human Development, 3) Balanced Development of Regional Communities and Economics, and 4) Sound Development of Market Economy. This project is in accordance with cooperation areas 1), 2) and 3).

In light of the above, this project has been highly relevant with Pakistan's development plan and development needs, as well as with Japan's ODA policy; therefore, its relevance is high.

## 2 Efficiency

### (1) Project Outputs

The outputs of the Japanese side were achieved as planned. Technical training for PPU members was also conducted as planned.

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

The project period took 13 months, as planned (100 %).

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

The actual project cost was 697 million yen, which was lower than the planned cost of 795 million yen (88 %). The project cost was maintained within the planned budget with the help of an appropriate competitive bidding process and due to the fact that the service for the repair and maintenance applied to the domestic commodities were not applied to the international ones.

In light of the above, both the project period and the project cost were within the plan; therefore, efficiency of the Project is high.

## 3 Effectiveness / Impact

### (1) Quantitative Effects

The targeted number of participants (which was 2,000) registered for distance-learning courses to be achieved by the target year of 2010/11 had been already achieved by the year 2007/08 (which was 2,785). The number of diplomas issued yearly for teacher-education courses, which was 110,156 in the latest year of 2007/08, achieved 85 % of the goal of 130,000 (for 2010/11). A steady increase at this rate is a realistic target to reach. The number of open courses for distance learning, which had been 1,138 courses at the time of planning (2004), had become 1,200 in 2007/08. With this transition, it is unclear if the goal of 1,500 courses by the year 2010/11 is achievable. Training PPU staff members on printing techniques was conducted as planned. While 2.1 million copies of textbook printing were planned in the year 2010/11, 720,000 copies of textbooks and 41.37 million supplementary materials were produced in 2008/09. AIOU reported that the production of printing materials is satisfactory in terms of printing quality as well as the sharpness of paper holding, binding, and cutting. Delivery times have also been reduced so that material is delivered by the beginning of the courses.

### (2) Impacts

The number of broadcasting programs produced for Pakistan Television (PTV) increased from 215 programs in 2003/04 to 547 programs in 2008/09, and 957 sets of CD teaching materials were produced in 2008/09, which were not produced at all at the time of project planning. (In contrast, production is decreasing in terms of the number of radio programs, videos and cassette tape programs). Transitions in the number of male and female participants, in total, registered to the courses are as follows: 724,253 male participants and 801,890 female participants in 2003/04 increased to 1,286,494 male participants (177 % of the number in 2003/04) and 1,499,156 female participants (187 % of the number in 2003/04), suggesting a larger impact of this project on females than on males. At the regional bases, as a result of this project, increased learning opportunities are observed among women, employees, people with fewer educational opportunities in the past (due to a limited access to facilities and/or their financial condition), and senior citizens. Some of the popular programs include language (English), education, business administration, and teacher-education courses. Each regional base reports that distance learning is beneficial for reducing the regional inequality of educational opportunities.

In light of the above, this project has largely achieved its objectives, therefore its effectiveness is high.

**(1) Structural Aspects of Operation Maintenance**

IET was planning to increase the number of its staff members to 70 along with procurement of equipment. Though currently there are only 53 staffs, tasks are adequately executed by assigning multiple tasks to each person. IET reports its plan to increase its members to 70 by the year 2010/11. At the time of the project's planning, a lack of satisfactory communication between staff members of IET and university faculty members was noted, but currently the faculty members and IET producers regularly hold meetings, strengthening their partnership: the university staff chooses the TV programs' themes, whereas the IET staff produce the programs. The number of MECDC staff members, (30 at the time of project planning) was reduced to 9. This was as a result of government restructuring, which transferred the supervising office of MECDC, from the Department of Science and Technology to the Department of Higher Education, resulting in a reduced budget insufficient for maintaining a satisfactory number of staff. As expected, this reportedly reduced capabilities to produce teaching materials. However, now, in addition to the newly produced material, already existing teaching materials are also used to meet the demands of the increasing number of registered participants. The PPU has 45 staff members, exceeding the planned number of 44, having few structural problems. For the regional bases, their equipment are general-purpose audiovisual equipment (such as TV sets and DVD players), therefore assignment of specialized personnel was not expected in the original plan. However, 21 out of 25 regional bases assign 1 to 4 personnel on this.

In light of the above, though some uncertainties on the structural aspects of the MECDC exist, AIOU, in general, does not have any major structural problem.

**(2) Technical Aspects of Operation Maintenance**

The IET, MECDC, and PPU set the technical requirements at the time of recruitment according to assigned positions, and hire only those who meet these requirements. Each section provides technical training for the specific position to ensure new staff can smoothly get accustomed to their work. After recruitment, no specialized skill maintenance training is done, but skills are maintained through on-the-job training. Each section effectively uses equipment manuals whenever necessary. When issues outside the scope of the manuals arise, staff members share their experience and knowledge, and/or collect information from the Internet in order to resolve the issues. Additionally, all the major members of the PPU who participated in technical training conducted by this project are still present. Equipments procured at regional bases do not require special skills, and manuals are generally used for their operation.

In light of the above (from reports of the implementing agencies), it can be concluded that issues on technical aspects are a matter of marginal importance at every section.

**(3) Financial Aspects of Operation Maintenance**

The IET budget at the time of 2007/08 was 2.88 times that of 2003/04 (from 258,000 Pakistan Rupees (hereinafter referred to as Rs) to 744,000 Rs). PPU budget, from 2004/05 to 2007/08, is not stable, but the average budget during this period was 916,000 Rs, which increased from 147,000 Rs in 2004/05, and the annual budget at PPU since 2005/06 is higher than that of 2004/05. At both IET and PPU, the purchase and provision of consumables and spare parts, and repairing malfunctioning equipment are done properly. Though actual figures on budgets were not collected from the MECDC and regional bases accordingly, same as IET and PPU, MECDC reported that purchase and provision of consumables and spare parts, and repairing malfunctioning equipment are done properly. Regional bases have not needed to purchase consumables or spare parts, and therefore are not now experiencing financial limitations. Overall, there have been no practical problems with regards to financial aspects.

**(4) Current Status of Operation Maintenance**

At IET and PPU, major equipment are currently all functioning, (at IET, 16 out of 16 pieces of equipment, and at PPU, 31 out of 31 pieces of equipment), and they are daily inspected. There have been some malfunctioning equipment, but each time they have been repaired and made operational again. Maintenance of equipment is done at each section by personnel who actually use the equipment, and protocols to respond to malfunctioning equipment was also established. Inventory of consumables and spare parts are regularly administered, and insufficient items are replenished when necessary. Although a manufacturers' designated agency does not exist, local agencies are capable of providing necessary services. MECDC reported on the operation status of five out of the eight major pieces of equipment stating that they are all still in use. Although MECDC does not regularly conduct inspections, they have established protocols to respond to malfunctioning equipment and the equipment that had problems was repaired and at present is in use. Conditions for consumables and spare parts, and agencies are the same as those of the IET and PPU. As for the regional bases, at 22 out of 25 regional bases, all equipment is in use and has not malfunctioned. No problems related to the purchase of consumables and spare parts, inventory management, and functions of agencies were reported, because they have not experienced such issues. However, at two regional bases, a TV set and TV antennae are out of order. They were delivered for repair, only to learn that local agencies were incapable of repairing them and they remain non-operational.

In light of the above, minor problems have been observed in terms of structural aspects of operation maintenance, but a certain level of activity is still secured, and therefore sustainability of the Project is high.





## 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 Construction of Multipurpose Cyclone Shelters (Phase V)	January 2010 – December 2010

### I Project Outline

Country Name	People's Republic of Bangladesh	
Project Period	November 2003-December 2006	
Implementing Agency	Local Government Engineering Department, Ministry of Local Government and Rural Development and Co-operatives (LGED/MLG&RD)	
Project Cost	Grant Limit: 645 million yen	Actual Grant Amount: 634.7 million yen
Main Contractors	Shimizu Corporation	
Main Consultants	Japan Engineering Consultants Co., Ltd.	
Basic Design	March-August 2003	
Related Projects (if any)	1. "The construction of multipurpose cyclone shelters" (Phase I-IV), Grant Aid (Japan) 2. "Multipurpose Cyclone Shelter Project" (World Bank and UNDP) There are a number of other projects to construct shelters with assistance from such development partners as EU, IFAD, Saudi Arabia, IDP, PEC, ADB, KfW, the Netherlands, and NGOs including BRAC, BDRCS, and Caritas.	
Project Background	Some 80% of the national land of Bangladesh lies less than 9 meters above sea level and has been greatly affected by cyclones both financially and socially, which makes flood control the utmost issue for the country. After the cyclone of 1991 that caused tremendous damage, the Bangladeshi government, with support from the World Bank and the UNDP, drew up a master plan to construct 2,500 multipurpose cyclone shelters and initiated the construction in cooperation with various development partners.	
Project Objective	To enable an increased number of people to evacuate and also improve the educational environment in primary schools by constructing 20 multipurpose cyclone shelters in the high-risk districts of Chittagong, Cox's Bazar and Noakhali.	
Output[s] (Japanese Side)	1. Construction of two-storied multipurpose cyclone shelters	2. Construction and procurement of auxiliary facilities such as water supply facilities, toilets and other school facilities.

### II Result of the Evaluation

#### Summary of the evaluation

The Project aimed to increase access of the people to evacuation facilities in case of cyclones by constructing multipurpose cyclone shelters in high-risk areas. It also contributes to the improvement of the educational environment in primary schools by making use of the buildings as schools at normal times. Therefore, the Project addressed the needs of Bangladesh. In addition, the Project was highly relevant to the Japanese government's policy of human security. Owing to its high relevance, it has delivered not only expected effects but indirect impacts. Furthermore, the Project has established a participatory system for routine operation and maintenance (O&M) in which, for example, residents bear the costs, and thereby ensured sustainability of the project effects.

In light of the above, this project is evaluated to be highly satisfactory.

#### <Recommendations to the Department of Primary Education (DPE)>

The O&M costs have turned out to be higher than initially estimated due to the increase in the number of school children. Therefore DPE is expected to cover the shortfall as well as monitor O&M of the facilities on a regular basis.

At the same time, in order to tackle the issue, the increase in the number of teachers in the short run and that of schools in the long run, should be taken into consideration.

## 1 Relevance

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

The Project was adopted and executed under the "Multipurpose Cyclone Shelter Programme" developed by the Bangladesh Government in 1993. The 5<sup>th</sup> Five-Year Plan (1997-2002) and the Interim Poverty Reduction Strategy Paper (I-PRSP) of 2003 both identified disaster management as one of the priority issues and recognized the need for development of social infrastructure such as cyclone shelters in high-risk areas. The construction of multipurpose shelters as a disaster management means continues to be given a priority as shown in the 2009 National Strategy for Accelerated Poverty Reduction II. It also serves to the improvement of primary education, which was and is still a focus issue in the above development plans of the Bangladesh Government.

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

Some 90% of the national land of Bangladesh lies in a delta, which leaves the country prone to natural disasters such as cyclones. However, 25 % of the population lives in 19 coastal districts particularly vulnerable to cyclone damage, and more damage caused by floods due to the effects of climate change is expected in the future. Measures to reduce disaster damage are high in demand. At the same time, the construction of schools with good facilities, which contributes to improvement of the educational environment, also serves the country's efforts to enhance primary education.

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

Disaster control is one of the four priority areas in Japan's Country Assistance Program for Bangladesh developed in March 2003. The Program also aims to improve the educational environment with the main emphasis placed on improvement of basic education. Disaster control was also given special attention in light of Japan's human security policy on ODA since the poor are greatly affected by natural disasters.

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 construction of 20 multipurpose shelters and the procurement of auxiliary facilities were executed as planned. The whole facility is being used effectively and properly. The Project implementation was efficient as can be seen for example in the selection of an arsenic filter unit that is less expensive and easy to maintain, after examining 9 different types of units.

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

There were delays in land acquisition, removal of deteriorated school buildings and construction of access roads to the shelters, all of which were supposed to be undertaken by the Bangladeshi Government before the start of shelter construction. The delays however did not affect the construction schedule and the actual Project duration was 20 months, which turned out exactly as planned.

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

The total cost of the Project was 634.7 million yen, which is lower than planned (98.4% of the estimated cost of 645 million yen).

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

## 3 Effectiveness / Impact

### (1) Quantitative Effects

Expected effects of the Project have been observed. 20 cyclone shelters constructed under the Project accommodated 38,655 people, more than the originally assumed number of 37,156, when Cyclone SIDR struck the country in 2007. That contributed to helping the country to minimize possible damage. The effectiveness of the Project in terms of improving the educational environment was also high. The target number of 41 pupils per classroom was achieved at the time of the Project completion. It was reported that a safe environment at the schools for pupils as well as teachers was secured with a reduced level of congestion in classrooms and improvement of such facilities as toilets, water supply facilities and blackboards. However, it was observed at the time of the ex-post evaluation that congestion in classrooms at some of the schools deteriorated by 150 to 200%, which is attributable to the population growth, the government's policy to encourage school enrollment, and the fact that the constructed schools with better facilities than other schools have attracted more pupils. The government has taken some measures to reduce the congestion, such as the use of old classrooms and the introduction of a double shift system at schools. Though it has not had a serious impact on the achievement of the project objective, it has been reported that the increase in water consumption and the shortage of teachers have had some negative consequences, and therefore there is a concern that those issues could hamper the sustained improvement of the educational environment.

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

The constructed shelters have been used for such occasions as meetings, weddings and funerals, thereby contributing to promotion of community activities.

The constructed shelters have fulfilled a role to save lives and contributed to improving the educational environment, while they have produced an indirect effect of promoting community activities. Taking these into consideration, this project has somewhat achieved its objectives, therefore its effectiveness is fair.

#### 4 Sustainability

##### (1) Structural Aspects of Operation Maintenance

The routine maintenance of the buildings and auxiliary facilities such as toilets, wells, desks and blackboards are taken care of by the School Management Committee (SMC) and overseen by the DPE at the Upazila level. The arrangements for maintenance have been made as assumed in the plan and the division of responsibilities among those concerned is clear. There is no change in the operational arrangements at a time of disaster too, assuming the Disaster Management Committee at the Upazila level procure food and medicines. There is an established system of information distribution on evacuation, with volunteers to pass on warnings in place.

##### (2) Technical Aspects of Operation Maintenance

There are no technical difficulties on the side of schools as well as the SMC with routine O&M. The School is supposed to make a request to the LGED through the SMC when highly technical repairs are required. LGED has skills and profound experience in the construction and rehabilitation of multipurpose cyclone shelters, including those shelters built under Phases I to IV of this Project.

##### (3) Financial Aspects of Operation Maintenance

Small maintenance expenses have been covered by the maintenance budget of each school, which is distributed by the DPE. The SMC has managed to pay shortfalls, if any, out of resources collected from or donated by residents, and therefore there have been no serious problems to cover maintenance expenses. Though LGED has not yet made an initially planned budget allocation for routine maintenance to each school, it has secured the budget for regular monitoring of shelters and painting of exterior walls. In the case of extensive rehabilitation, which is not required yet, it is assumed that the LGED will execute it with DPE's finance.

##### (4) Current Status of Operation Maintenance

The buildings and auxiliary facilities had been well-maintained when the ex-post evaluation was carried out. It was confirmed that there was improvement with issues of improper use of toilets and administration of keys, both of which had been pointed out in the study conducted after the Project completion.

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

