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 Improvement of Equipment of the Universities in Kabul	January 2010 – December 2010

I Project Outline

Country Name	Islamic Republic of Afghanistan	
Project Period	March 2004-May 2005	
Implementing Agency	Kabul University, University of Education	
Project Cost	Grant Limit: 416 million yen	Actual Grant Amount: 413 million yen
Main Contractors	ITOCHU Corporation / Kitano Construction Corp. (Joint Venture)	
Main Consultants	System Science Consultants Inc.	
Basic Design	"Basic Design Study Report on the Project for Improvement of Equipment of the Universities in Kabul in the Islamic Transitional State of Afghanistan," Japan International Cooperation Agency and System Science Consultants Inc., March 2004	
Related Projects (if any)	Individual Long Term Expert (Education Policy Advisor) (November 2002-2003)	
Project Background	After a civil war that lasted over 20 years, Afghanistan is promoting peace-building and reconstruction processes. In its National Development Framework, education has been identified as one of the defining issues for nation's reconstruction, and in the Rehabilitation and Development of Education in Afghanistan, the strategies to reconstruct higher education have been formulated. In this country, many higher education buildings and facilities were destroyed during the long-lasting civil wars. In addition, equipment was plundered from classrooms and laboratories resulting in a devastatingly poor educational environment. Moreover, the limited funds prevents the recruitment of qualified educators as well as the procurement of educational equipment needed for the practical and laboratory training necessary for functional curricula.	
Project Objective	To develop human resources in Afghanistan through procurement of equipment for practical and laboratory training at the Faculty of Science, the Faculty of Engineering, the Faculty of Agriculture, the Faculty of Veterinary Medicine and the Faculty of Pharmacy at Kabul University and at University of Education.	
Output[s] (Japanese Side)	1. Equipment for practical and laboratory training (related to biology, chemistry, electricity and electronic engineering, mechanical engineering, civil engineering and architectural, machining and tooling, animal husbandry and agriculture) are procured to the Faculty of Agriculture, the Faculty of Veterinary Medicine, the Faculty of Engineering, the Faculty of Science and the Faculty of Pharmacy at Kabul University. 2. Equipments for practical and laboratory training, and language laboratories are procured to the Faculty of Science, the Faculty of Sociology and the Faculty of Linguistics at University of Education.	

II Result of the Evaluation

Summary of the evaluation

While this project was targeted at eight faculties of two universities (Faculty of Agriculture, Faculty of Veterinary Medicine, Faculty of Engineering, Faculty of Science and Faculty of Pharmacy at Kabul University, and Faculty of Science, Faculty of Sociology and Faculty of Linguistics at University of Education), the questionnaire responses were collected only from the following four faculties: the Faculty of Agriculture, the Faculty of Veterinary Medicine, the Faculty of Pharmacy, and the Faculty of Science at Kabul University. Due to the limited amount of information, this evaluation was conducted only at these four responding faculties, instead of over the Project as a whole. Even at these four faculties, not all questions were answered. With the specific circumstances of Afghanistan taken into consideration, the evaluation was conducted only with the given information, without further confirmation and/or inquiries.

The Project, for this evaluation, was conducted to support the human development in higher education at the Faculties of Agriculture, Veterinary Medicine, Science and Pharmacy at Kabul University by procuring equipment for practical and laboratory training, through which practical instruction was added to the existing theory-oriented curricula, with the goal of developing highly capable professionals. This was in accordance with Afghan government policies to improve the quality of the existing educational organizations at higher education and develop qualified experts. At the same time, this was in line with Japanese government policies which recognized the significance of the education sector at the Afghanistan Reconstruction Conference. The achievement level of the laboratory hours and number of students participating in practical and laboratory training were 76 percent, as an average, in the Faculties of Veterinary Medicine and Pharmacy and 51 percent, as an average, of the Faculties of Agriculture, Veterinary Medicine, and Pharmacy, respectively. Additionally, the Faculties of Agriculture, the Veterinary Medicine, and the Pharmacy reported such indirect positive impacts as revision of practical curricula, improvements in teaching methodologies, and increased comprehension and interest toward taught subjects among the students.

Concerning equipment operation, so far most of the important equipment (*) has been used regularly by the responding faculties (Faculties of Veterinary Medicine and Pharmacy), and no malfunctioning has been reported. Three faculties (Faculties of Agriculture, Veterinary Medicine and Pharmacy), altogether having 255 sets of equipment, reported that each faculty has equipment that is not in

use. The main reasons for this are the loss of instruction manuals, the shortage of spare parts, and the unfamiliarity with new equipments. Concerning equipment maintenance and management, three of the faculties (the Faculty of Pharmacy excepted) have assigned maintenance staff, and use registry books and instruction manuals in the local language (Dari). In contrast, spare part procurement of has been challenging due to absence of agents and/or slowness processing. Not enough information was obtained for the budget, but at least at the Faculty of Agriculture there is a shortfall. Concerning faculty member capability in handling the equipment, two of the faculties (that of Veterinary Medicine and Pharmacy) out of the four reported appropriate sharing of technical knowledge on equipment use, but the opposite holds true for the other two faculties. Faculties other than the Faculty of Pharmacy claim that they are not certain of how to handle the equipment regardless of their attendance to the workshop for equipment operation. With above assessed carefully, there is an uncertainty regarding sustainability of equipment operation and maintenance.

(*) Major equipment is listed on “the Major Equipment List” in the Completion Report and is equipment with CIF values of more than 1 million yen.

In light of the above, this project, evaluating only the four limited faculties, is evaluated to be satisfactory.

<Recommendations to JICA>

More frequent use of equipment through retraining on equipment operation, and replacing lost instruction manuals is recommended.

<Recommendations to Kabul University>

Sharing of technical knowledge on equipment use, of the equipment manual, of teaching methodologies, strengthening of administering of mentioned manual among the faculty members is recommended. At the Faculty of Pharmacy, assigning staff to be in charge of equipment maintenance is desired.

1 Relevance

(1) Relevance with the Development Plan of Afghanistan

At the time of this project’s preliminary evaluation, the National Development Framework recognized education as a significant issue in national reconstruction. The Policy for the Rehabilitation and Development of Education in Afghanistan also discusses the necessity of maintenance and expansion of public educational systems, and furthermore, mentions the importance of the rehabilitation of higher education as well as of the teacher-education system. At the time of post-project evaluation, the Afghanistan National Development Strategy 2008-2013, , also placed education as a significant sector in the development of human resources that contribute to the nation’s long-term economic growth. Higher education in particular is both expected to improve the existing educational institutes and to produce the technical professionals demanded by the market economy.

(2) Relevance with the Development Needs of Afghanistan

The preliminary evaluation pointed out issues on the physical plight of higher education facilities including the destruction of building structures, electricity and water facilities, and research facilities, and plundering of equipment used for practical and laboratory training. In addition, the evaluation evidenced the extent of human resource issues including the absence of faculty from practical and laboratory training due to the civil war and their limited skill at using specialized equipment. At the present moment, the Ministry of Higher Education indicates the need to improve teaching and learning facilities and to renew of classrooms and laboratories in its National Higher Education Strategic Plan 2010-2014. The Faculty of Agriculture, the Faculty of Veterinary Medicine, the Faculty of Science and the Faculty of Pharmacy at Kabul University also reported the significance of promoting student understanding on related subjects through improvements of teaching methodologies led by improvements of equipment for practical and laboratory training.

(3) Relevance with Japan’s ODA Policy

JICA’s Country Programme for Afghanistan had yet to be elaborated at the time of the preliminary evaluation. However, at the Afghanistan Reconstruction Conference in 2002, in which Japan served as a co-chair, education was recognized as a significant aid issue for Japan. In July of the same year, the Ministry of Education, Culture, Sports, Science and Technology announced “reconstruction of higher education” as one of four major themes of its educational aid policy.

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

2 Efficiency

(1) Project Outputs

The outputs by Japan were achieved as planned.

(2) Project Period (Project Inputs)

The Project period lasted for 15 months, slightly longer (125 %) than the planned 12 months. Blockage of the road from Pakistan to Afghanistan due to very bad weather (the heaviest snow in last 20 years) consequently delayed the transportation schedule and custom processing resulting in the three-month delay of the original plan (as machinery were transported overland from Pakistan).

(3) Project Cost (Project Inputs)

The actual project cost was 413 million yen, lower (99 %) than the planned cost of 416 million yen, which was within the original plan. Appropriate competitive bidding assisted the procurement within the planned budget.

The project cost was within the planned amount. Although the project period was slightly longer than planned, it was unavoidable due to the very bad weather, which can be considered as force majeure. With the comprehensive judge of this situation, efficiency of the Project is high.

3 Effectiveness / Impact

Out of the eight targeted faculties, evaluation was conducted on the three responding faculties, (Faculty of Agriculture, Faculty of Veterinary Medicine and Faculty of Pharmacy at Kabul University) as follows:

(1) Quantitative Effects

Hours of laboratory room use achieved 76% (the average at the Faculty of Veterinary Medicine (65 %) and the Faculty of Pharmacy (96 %)) of targeted hours in 2006 (which was the target year), while the number of students participating in practical and laboratory training remained 51% of the target indicator in 2009 (the average at the Faculty of Agriculture (61 %), Faculty of Veterinary Medicine (55 %), and Faculty of Pharmacy (35 %)). No additional information or explanation was given on these results.

(2) Indirect Impacts and Other Positive/Negative Indirect Impacts

With installation of practical and laboratory training, the curricula have been modified to become more practical. Each faculty reported that with practical and laboratory training student understanding of subjects was improved (i.e. the number of proteins could be specified (Faculty of Agriculture), understanding of theory was improved (Faculty of Veterinary Medicine), etc.). At the Faculty of Pharmacy, it was noted that graduates face less problematic situations while on their duties.

At the three faculties (Faculty of Agriculture, Faculty of Veterinary Medicine and Faculty of Pharmacy at Kabul University), this project has somewhat achieved its objectives; therefore its effectiveness is fair.

4 Sustainability

Out of the eight targeted faculties, evaluations were conducted on four responding faculties (Faculties of Agriculture, of Veterinary Medicine, of Pharmacy and of Science at Kabul University) as follows:

(1) Structural Aspects of Operation Maintenance

The Faculty of Agriculture, Veterinary Medicine and Science assigns three to four persons to be in charge of this. The assigned staff either possesses bachelor's degrees or are technicians (one of them is a high school graduate). All four faculties prepare registry books for equipment, and the Faculty of Agriculture additionally has set out repair procedure. Though outside this project, at the time this project was designed, there had been 11 students from Kabul University studying to earn diplomas in Japan, and according to JICA's internal documents, they were expected to serve in practical training and equipment maintenance after they returned. Out of the 11, eight students earned their diploma and returned, but with the exception of one who teaches in the Faculty of Pharmacy, none of them participates in practical training. And none of eight students are involved in the equipment maintenance. However, there has been no report claiming that it negatively impacted the structural aspects of operation and maintenance. Therefore no significant problem is seen in the structural aspects of operation and maintenance.

(2) Technical Aspects of Operation Maintenance

The number of faculty members who use the equipment for practical and laboratory training has increased from 10 to 14 at the Faculty of Agriculture, and from 19 to 32 at the Faculty of Pharmacy. At these two faculties, more experienced faculty members teach younger ones to use the equipment, and at the Faculty of Pharmacy instruction manuals are used to assist equipment use. In contrast, at the Faculty of Agriculture 12 members participated in equipment operation workshop and all of them have remained at the university. However, some equipment remains unused because it is too new. At the Faculties of Science and of Veterinary Medicine, experienced faculty members do not always share their technical knowledge of equipment usage with younger ones. The Faculty of Veterinary Medicine leaves some new equipment unused due to unfamiliarity for its usage. At the Faculty of Science one person participated in a workshop but that person is not in the university at moment. No other information on whether or not there are problems with equipment use remained unknown in this Faculty.

In all the four faculties, most of the instruction manuals in use are in the local language (the Dari) even though some manuals have been lost (at Faculty of Agriculture and Faculty of Veterinary Medicine). None of four faculties has local agents for repairing and procuring spare parts. Procuring spare parts is challenging due to limited budgets and complicated procedures.

(3) Financial Aspects of Operation Maintenance

No practical figures have been collected on the financial aspects, except from the Faculty of Agriculture, which mentioned its budget shortfall.

(4) Current Status of Operation Maintenance

As for major equipment (equipment listed on "the Major Equipment List" in the Completion Report and equipment with CIF values more than 1 million yen), their operational and maintenance conditions are as follows: at the Faculty of Veterinary Medicine, four sets of equipment out of five, and at the Faculty of Pharmacy all the seven sets are operational and are functioning. The Faculty of Pharmacy conducts regular inspections of them. The Faculty of Science is not in possession of this major equipment, while no response was recieved from the Faculty of Agriculture.

As for the operational status of all equipment, 255 sets were provided altogether: 101 sets to the Faculty of Agriculture, 80 to the Faculty of Veterinary Medicine and 74 to the Faculty of Pharmacy (the Faculty of Science did not answer). At every faculty, there are some equipments unused. Examples of such unused equipments include spectrophotometers, blood analyzers and fluorescence microscopes, as mentioned by the Faculty of Veterinary Medicine, whereas the Faculty of Agriculture and the Faculty of Pharmacy answered only that "some equipment" are unused. Major reasons of not using are loss of instruction manuals, lack of spare parts, and unfamiliarity with new equipment.

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