

**Restricted**  
**570/PAK/1001**  
**Final Report**

**PAKISTAN**

**Rehabilitation of the Education System in**  
**Earthquake-affected Areas**  
**of**  
**Pakistan Administered Azad Jammu and Kashmir**

**Final Report**

**Serial No.: FMR/UNESCO-ISLAMABAD/11/232**



United Nations  
Educational, Scientific and  
Cultural Organization

Organisation  
des Nations Unies  
pour l'éducation,  
la science et la culture

**Implemented in cooperation with**  
**The Zayed Bin Sultan Al Nahayan Charitable**  
**and Humanitarian Foundation, Abu Dhabi**

**April 2011**



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Rehabilitation of the Education System in  
Earthquake-affected Areas of Pakistan Administered Azad Jammu  
and Kashmir

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## Brief Presentation of the Project

Project Codes:	570-PAK-1001 41-2446-0066-ISB
Country/Region:	Pakistan, South Asia
Total Project Budget:	USD 1,211,209.00 (Zayed Bin Foundation) USD 47,000.00 (UNESCO RDF)
Funding Sources:	The Zayed Bin Sultan Al Nahayan Charitable and Humanitarian Foundation UNESCO
Dates of Initiation and Completion:	June 2008 – 30 April 2011
Implementing Sector/Field Office:	Education/UNESCO Islamabad
Project Manager:	Vickram Chhetri

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## ACRONYMS

DAE	Diploma of Associate Engineer
DEE	Directorate of Education Extension
DoE	Department of Education
DPI	Directorate of Public Instructions (Secondary)
DRM	Disaster Risk Management
ERP	Earthquake Response Programme
GoPAK	Government of Pakistan Administered Azad Jammu and Kashmir
ICT	Information and Communication Technology
NAVTEC	National Vocational and Technical Education Commission
PAK	Pakistan-Administered State of Azad Jammu and Kashmir
SMC	School Management Committee
TEVTA	Technical Education and Vocational Training Authority
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNICEF	United Nations Children Fund

## EXECUTIVE SUMMARY

Rehabilitation of the Education System in Earthquake-affected Areas of Pakistan-Administered State of Azad Jammu and Kashmir, 570-PAK-1001 started in June 2008 as a follow-up to Earthquake Response Programme of United Nations Educational Scientific and Cultural Organization (UNESCO). The project was funded by the Zayed Bin Sultan Al Nahayan Charitable and Humanitarian Foundation, United Arab Emirates. The Foundation's contribution was supplemented by linking activities of UNESCO Regional Development Fund 41-2446-0066-ISB.

The project focused on three key areas: providing better and safer teaching and learning environments in earthquake-affected middle and secondary schools, strengthening the Technical and Vocational Education and Training system, and improving teacher training policy and practices of the Department of Education, Government of Pakistan-Administered State of Azad Jammu and Kashmir. The primary beneficiaries of the project were middle and secondary school students, head teachers, school management committees and technical and vocational education and training planners and managers. The Directorate of Education Extension, Directorate of Public Instruction-Secondary, Technical Education and Vocational Training Authority and National Vocational and Technical Education Commission were secondary beneficiaries. The secondary beneficiaries group also include other provinces as the skills standards and curricula and school furniture specifications related work are useful for them as well.

The project: a) reconstructed three middle and secondary schools exceeding the planned enrolment targets by 71%, b) achieved all but outputs related to training of 50 youth/adults in technical and vocational education and training (TVET) and guidance and placement system; c) developed School Management Committee (SMC) policy for secondary schools that has been notified by the Governemnt of Pakistan Administered State of Azad Jammu and Kahsmir; d) developed competency standards and curricula on masonry and building carpentry with seismically safe construction skills; d) delivered head teacher, SMC and TVET planners and managers training and e) teacher in-service strategy and plan of action which has been notified by the the Government of Pakistan Administered State of Azad Jammu and Kahsmir. In addition, the project responded to the expressed need for Information and Communication Technology.

The project fully achieved two (out of three) specific objectives such as a) provision of a safer and better teaching and learning environment to 3 selected middle and secondary schools affected by the earthquake; and b) strengthening of teacher training policy and practices. The 3<sup>rd</sup> specific objective to strengthen TEVT system with a focus on standardised construction skills training to youth and adults has been mostly achieved as the output related to training of youths/adults and a sub-output related to guidance and placement centres could not be achieved. On the other hand the project achieved other outputs/results described below. The training in construction skills is being followed up under the One UN Disaster Risk Management Joint Programme.

In addition, the project provided school furnitures and lab equipments, completed diagnostic study of technical stream in secondary schools in Pakistan Administered State of Azad Jammu and Kashmir, strengthened women's skills training, built capacity for implementation of Information and Communicaiton Technology in education, facilitated integration of seismic safety course in diploma course, and completed the remainig construction work of



Earthquake Response Programme. Some of these activities were carried out, either in part or in full, from the Regional Development Fund.

The technical documents, Annex III, produced and the work facilitated by the project are quite significant in that they are applicable not only to all districts of Pakistan Administered State of Azad Jammu and Kashmir but also to the provinces and areas of Pakistan. For example, facilitation of work related to inclusion of seismic contents in diploma curricula and regional study on technical vocation education at secondary level.

Key lessons learnt are: a) need for longer term engagement for capacity enhancement, b) in spite of delay close collaboration with government created ownership, need to consider other options for infrastructure development work in future, and project flexibility to the needs produced additional but highly relevant outputs. Some of the major recommendations include: a) longer term support for implementation of policy, strategies and plans for sustainability of project outputs and results under One UN Joint Programmes, b) government allocation of school maintenance budget to maximize the life-span of the buildings, and c) UNESCO to capitalize on goodwill and trust built with the Government of Pakistan Administered State of Azad Jammu and Kashmir.

Some of the problems faced by the project are: a) increase in construction cost, b) limited human resource and financial capacity of government departments, c) lengthy site selection and contracting procedures; d) frequent transfers and busy schedules of government officials, d) non-availability of masonry and carpentry training institutions in project areas, and e) unavailability of national and international experts.

The potential for sustainability is good as evidenced by government's commitment to the SMC policy, in-service teacher training policy and the skill development policy, however financing them is an issue due to the unique status of Pakistan Administered State of Azad Jammu and Kashmir and the fact that the one line budget is accorded and released by the federal government over which the Government of Pakistan Administered State of Azad Jammu and Kashmir has no authority. However, a number of project outputs/results are being followed up under One UN Joint Programmes for greater impact and sustainability.

The project utilized USD1,198,053.35 out of the total contribution of USD1,211,209.00 achieving delivery rate of 98.92%. The rate for UNESCO Regional Development Fund was 93% of USD47,500.00.

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## BACKGROUND

### Development Problems

The earthquake of 8 October 2005 caused the deaths of more than 18,000 school children and 900 teachers in the Khyber Pakhtunkhwa (formerly North-West Frontier Province) and Pakistan-Administered State of Azad Jammu and Kashmir (PAK). The civil servants responsible for the planning and management of the education system also suffered the loss of relatives, colleagues, homes and offices. In the five most affected districts of North-West Frontier Province (NWFP), 3,517 out of 7,577 schools and colleges (46%) were destroyed or severely damaged. The equivalent figures for the three most affected districts of PAK are 3,680 out of 3,845 schools and colleges (96%).

In view of large scale damage to the education system and the need to continue the support for reconstruction of education system, which was under-funded, a follow up project titled 570-PAK-1001: Rehabilitation of the Education System in Earthquake-affected Areas of PAK was designed and implemented. The project was funded by The Zayed Bin Sultan Al Nahayan Charitable and Humanitarian Foundation, United Arab Emirates as part of a four-year Agreement of Cooperation between the Foundation and UNESCO.

Whilst the response to the relief, recovery and reconstruction of education sector is relatively well funded, important sub-sectors namely middle and secondary school education, technical and vocational education and teacher training. Moreover, there was (and still is) urgent need for reconstructing damaged school buildings especially for middle and secondary schools. The Mid Decade Assessment Report 2007 of the Government of Pakistan Administered State of Azad Jammu and Kashmir (GoPAK) stated that there are 1,493 schools in tents and 795 in open spaces. Given the large scale of the devastation, complete reconstruction of the schools requires resources and time. Lack of safe and conducive learning environment in such areas has resulted in decline in school attendance rate.

With large scale reconstruction work being undertaken by the government and non-governmental organisations, a major challenge being faced is the lack of a skilled work force. Most construction workers have acquired skills on the job. The problem is compounded by the absence of skills standards as the trainings, which are already in short-supply, are not based on appropriate standards or a certification system.

Competent head teachers and teachers are the key agents of change at the school and community level for recovery and reconstruction of the education system, as well as for attaining Millennium Development Goal and Education for All goals. However, many of them do not possess even the most basic leadership, human resource planning, and management skills essential for the improvement of the teaching and learning environment. Faced with the enormous challenges in a dramatically changed environment, support to build the capacity of head teachers and teachers is critical for reconstruction of education system.

One of the key factors affecting student learning achievement in Pakistan is that the teachers do not have the required level of command over the subject matter they are required to teach. In PAK, most of the teachers have not had pre-service and in-service training, training course contents are not up-to-date and the schools lack facilities for practical demonstrations/classes.

The teacher training policy and practices of the PAK were already weak before the earthquake, and as such, was in need of support.

Community participation in education is a must for the education system to become effective. This crucial element of the education system has been weak because SMC formation has not been systematic, representative and transparent, thus many schools lack a functioning SMC. Moreover, the roles and potentials of SMCs are not well understood by SMC members, parents, teachers and the community in general.

## Objectives of the Project

The overall objective of the project is to support the Government of Pakistan to rebuild the education system by improving access to, and quality of various educational services. Specific objectives of the project are as follows:

1. To provide safer and better teaching and learning environment to selected middle and secondary schools affected by the earthquake;
2. To strengthen the TVET system with a focus on standardized construction skills training for youth and adults; and
3. To strengthen teacher training policy and practices.

## RESULTS PRODUCED & PROBLEMS ENCOUNTERED

### Results Produced

**Result 1: Permanent classrooms for middle and high school grades (Grades 6 to 10) of 4 earthquake-damaged schools constructed benefitting 250 female and 300 male students.**

#### **4 middle and secondary schools reactivated and operational:**

The total target in terms of number of schools was affected by the sharp increase in the cost of construction in 2009 - consumer price index which was quoted at 7.60% in 2008 (the year the project was designed) rose to an unprecedented 20.30% in 2009<sup>1</sup>. Therefore, instead of 4 schools, only 3 were constructed. With balance money, one three room building block for Information and Communication Technology (ICT) Lab, Library and Science Lab was built at Government Boys High



Photo 1: Government Girls High School Sharian

<sup>1</sup> [http://www.indexmundi.com/pakistan/inflation\\_rate\\_\(consumer\\_prices\).html](http://www.indexmundi.com/pakistan/inflation_rate_(consumer_prices).html)

School Noorpur Nakran<sup>2</sup> in pursuant to the recommendation of Diagnostic Study of ICT in Schools in PAK. However, in terms of beneficiary target there was no reduction; in fact the actual enrolment has far exceeded as shown in the table below.

### Student enrolment increased by 10 per cent:

The project target was to benefit 501 existing students, comprising 313 girls and 188 boys, and to increase the enrolment up to 550 (10% increase) as a result of improvement in the building facilities. During the life of the building at least 7,500 (150 students per year x 50 years with periodic repair and maintenance) new students are expected to benefit. The project has met the target even with three schools and one ICT Lab, Library and Science Lab Block at GBHS Noorpur Nakran. Currently in three schools, Khila, Gunchattar and Sharian, the total number of students enrolled is 548: 157 boys and 391 girls and GBHS Noorpur Nakran has 297 students who will benefit from the ICT, Library and Science Lab Block. Two schools, namely Gunchattar and Khilla still have space for enrolment of 15 and 80 students respectively. In the next enrolment season April/May 2011, these schools will be in full capacity as quite a few parents were waiting for completion of the school buildings to enrol their children.

Table 1: Student Enrolment Target and Actual

S.N.	Name of School	Total Project Target		Actual Beneficiaries		Remarks
		Male	Female	Male	Female	
1.	Government Boys High School Gunchattar	313	188	160	25	Can enroll 15 more students.
2.	Government Girls Middle School Khilla			10	70	Can enroll 80 more students.
3.	Government Girls High School Sharian			0	294	-
4.	Government Boys High School Noorpur Nakran			256	41	ICT, Library and Science Lab beneficiaries.
	<b>Total</b>	<b>313</b>	<b>188</b>	<b>426</b>	<b>430</b>	
	<b>Grand Total</b>	<b>501</b>		<b>856</b>		
	<b>Percentage Increase</b>			<b>71%</b>		<b>More than target</b>

Project ensured holistic solution by developing collaboration with United Nations Children Fund (UNICEF) for complete solution to the school children as the scope of project covered middle and secondary classes only. In view of primary level children's needs and Pakistan being one of the pilot countries for One UN Programme, UNICEF constructed the primary wings for the three schools using the light-gauge steel structure technology used by UNESCO.



Photo 2: ICT, Library and Science Lab at GBHS Noorpur Nakran

<sup>2</sup> This school was funded from Earthquake Response Programme (490GLO1500 and 545PAK1001) but did not have the ICT Lab, Library and Science Lab rooms.

**Construction standards meet seismic and disability requirements:**

Construction standards fully met seismic requirements as light gauge steel structure were designed and built for seismic zone. The designs were reviewed and approved by National Engineering Services Pakistan (Pvt.) Limited, which is the government consulting agency responsible to examine the design standards.

As for disability access, ramps are built for latrines and schools passages. Due to the small size of the available land and steep slopes, creation of such ramps for every block has not been possible at GBHS Gunchattar. The access to the school for children with special need remains a problem because of mountainous terrain with no proper access road to the schools.

***Additional Output related to infrastructure development:***

**Provision of Maths and Science Kits and School Furniture:**

Five sets each of Middle School Science Kit and Mathematics Kits and 3 sets each of Physics, Chemistry and Biology Kits for classes IX-X for the project schools were delivered to the project schools and GBHS Noorpur Nakran and GCMHS Moolia. The last two schools were constructed by UNESCO under Earthquake Response Programme (ERP) and included as beneficiaries of this input on their request and the need to improve classroom teaching and learning. These inputs facilitated improving teaching and learning of science and maths in the four high schools and 1 middle school. The list of materials provided is in Annex IV.



Photo 3: The Prime Minister of State of Azad Jammu and Kashmir and The Ambassador of United Arab Emirates inspecting science laboratory at GBHS Gunchattar during handover of 3 schools

The project designed and made school furniture as per the specifications developed by carrying out an anthropometric survey in the project schools and cluster schools. All three schools were provided with the required furniture (see Annex IV) as per Earthquake Reconstruction and Rehabilitation Authority’s request to provide complete solution. The cost of these inputs in addition to the cost budgeted for reconstruction of building.

**Anthropometric Survey of Students:**

With an aim to set standards and also to collect requisite information for designing appropriate classroom furniture for the three schools, anthropometric survey, which is student body measurement survey, in the project and cluster schools was carried out (see Annex III Document 1). The survey covered six schools, including project supported schools. Designs and specifications of classroom furniture were developed (see Annex III Document 2) on the basis of the study findings. Although the sample size is not representative of PAK schools, the methodology has strong demonstration value for



Photo 4: Anthropometric study: GBHS Gunchattar

nationwide application. This study is significant considering the fact that until recently the size and the design of school furniture were being determined without following a normative guideline.

The delivery of output related school reconstruction and operation was delayed because of the following reasons:

- a. Selection of sites which had to be done in consultation and consensus with the GoPAK and Earthquake Reconstruction and Rehabilitation Authority.
- b. Contracting procedures took longer than expected including time-consuming negotiations with the contractor on rebate.
- c. Approval of designs took longer than anticipated because the contractor did not comply with the design requirements.
- d. Contractual non-compliance and poor management of the construction work by the contractors.

## **Result 2: Head teachers training programme and modules for effective school management and administration developed.**

### **Developed head teachers training programme and module:**

Before developing the training programme and modules, in June and July 2009 the existing roles and responsibilities of middle and secondary school head teachers were reviewed and their generic training needs were identified, through interview of head teachers of Muzaffarabad and Neelum districts, and discussion with educational managers in Muzaffarabad. General management, financial management, monitoring and evaluation, planning, building relations with communities, communication, conflict resolution, and classroom teaching were identified as the areas needing training. The available training materials developed by other agencies was reviewed and a generic draft training module focussing on head teachers leadership and management skills was developed in partnership with Directorate of Education Extension (DEE).

In order to increase the applicability of the material in areas that were not affected by earthquake, a workshop was conducted at Mirpur on 23 July 2009 involving head teachers and DEOs of Mirpur, Kotli and Bhimber Districts to review their training needs as well as the draft training module. The findings and recommendations were fed into the draft training module and finalized for pilot testing.

### **Trained 20 middle and secondary school head teachers:**

A two-week training of head teachers was held from 24 August to 5 September 2009 in Muzaffarabad. Head teachers from 20 middle and secondary schools (3 project schools, 2 ERP schools, and rest are cluster schools) were trained. In addition one Assistant Education Officer from Muzaffarabad also participated. Subject specialists of DEE were involved in the training as resource persons to increase their capacity and also to be able to use the manual for future training without project support.

### **Revised the module and institutionalized it as one of the core training materials of DEE:**

Using the feedback from the course participants and the facilitators, the training module was updated and the final version (see Annex III Document 3) provided to DEE for future use by them and other organizations.

**Visible improvement in administration and management of 50% of the schools led by the trained head teachers:**

In the months of May and June 2010, a post training follow-up study (see Annex II Document 4) was conducted in partnership with DEE, to assess the level of changes in the head teachers' practices after their 2009 training in school leadership and management. The study targeted 10 head teachers of 10 middle and secondary schools, including all 5 UNESCO supported schools – 3 under current project 2 under ERP. The key findings of the study recorded:

- i. Enhanced understanding of head teachers of community linkages, school health and hygiene, staff development, school management, and leadership.
- ii. Average understanding of planning, monitoring, evaluation, reflective practice, environmental education and school management, resource mobilisation.
- iii. In head teachers' opinion, training contributed to important behavioural changes such as participatory decision making, supportive attitude on academic matters, and 60% of head teachers had initiated staff development activities in their schools using in-house expertise for training in pedagogy. Three schools had introduced subject/grade logbook to record the classroom teaching details. In addition, some head teachers have initiated school infrastructure improvement work.

The study highlighted the need for a follow-up training programme, head teachers absence from school, lack of commitment as crucial variables for greater success of the intervention.

**Result 3:10 middle and secondary schools' SMCs acquired capacity to develop and improve school effectiveness and accountability.**

**Reviewed status of SMCs and facilitated their re/establishment in a transparent and representational way:**

In June-July 2009 a study was carried out on the processes of formation and parents' participation in SMCs at middle and secondary project schools and cluster schools with an aim to feed the findings to the SMC Policy formulation and to the SMC Training Manual development work. The scope of the study was extended to some non-earthquake affected districts to ensure wider acceptance of the SMC related work being carried out by the project. The study, covering thirty-three schools of Muzaffarabad, Bagh and Mirpur districts, provides a clear picture of SMC process: formation, performance, and involvement of parents



Photo 5: SMC Mobilization work being done by project staff

on the ground. It identified a number of issues in formation, procedure and standardized structures and highlighted non-existence of SMC policy at secondary schools, another factor affecting their performance.

As there was no policy for SMC formation and operation, the project approached Department of Education (DoE) emphasizing the need for such a policy. In response, the Secretary Education (Schools) constituted an experts group to interact with UNESCO expert for policy formulation. In the process, it was

found that SMCs at the primary and middle schools were formed under government's administrative directive without a policy framework. Therefore, the scope of the policy was broadened with the assistance of the experts group. Policy for SMC for middle and secondary schools was submitted to the DoE in September 2009. It has been approved and notified on 26 May 2010 (see Annex III Document 5). Frequent changes of senior officials in DoE delayed the approval and notification.

**Reviewed/improvised existing SMC training module:**

Through a consultative process with key actors and review of existing materials/researches as well as on the basis of a field study on SMC formation and parents' participation, SMC training module was developed for use by the Education Department. The module was pilot tested in a 6-day long Master Trainers Training in September 2009. It was revised in February 2010 taking account of findings of school monitoring visits which highlighted the need to enhance the understanding about: SMC formation process, the roles and responsibilities of the members, organizational skills, and records keeping skills. The manual was further refined in February 2010 for training. After the first round of training of SMCs in February 2010 it was further refined and submitted to DEE. DEE has taken initiative to translate the manual in to Urdu. The training module is in Annex III Document 6.

**Developed 20 Master Trainers for roll-out of SMC training by the first 6 months of the project.**

In September 2009 a 6-day long training was organized to 25 trainees, including 9 female, to become SMC Master Trainer. The training, held in collaboration with DEE, was successfully completed by 21 trainees and became Master Trainers.

**Trained 100 executive board members of 10 SMCs, 10 head teachers and 90 teachers by the first 12 months of the project:**

In 2010, 130 members, including 29 female from 20 SMCs were trained on SMC functions, school development plans, gender in education and resource mobilization. The project target of 120 was exceeded by 10 (8%). An independent evaluation (see Annex V) carried out in October 2010 reported that the training had helped SMC member in understanding their roles and responsibilities better.

*Table 2: Training of SMC Members*

S.N.	Workshop Venues	Date	Male	Female	Total
1.	Government Boys High School Gunchattar	24-26 Feb. 2010	18	3	21
2.	Government Girls High School Maina Bandi	24-26 Feb. 2010	15	6	21
3.	Government Middle School Chattian	4-6 Mar. 2010	23	4	27
4.	Government Girls High School Komikot	4-6 Mar. 2010	9	12	21
5.	Government Boys High School Miani Bandi, Muzaffarabad PAK	27-29 Apr. 2010	18	2	20
6.	Government Boys Centennial Model High School Moolia, Abbottabad, Khyber Pakhtunkhwa Province	28-30 Apr. 2010	18	2	20
<b>TOTAL:</b>			<b>101</b>	<b>29</b>	<b>130</b>



As a result of the training, SMCs of all three schools, constructed under this project, and two other schools, constructed under ERP, actively participated in and supported school reconstruction work. At some schools, they have started taking initiative on their own without external support. For example, at Noorpur Nakran community members are actively engaged in construction of school playground using their own resources. A need for longer duration follow up work was highlighted by the independent evaluator of the project.

**Result 4: Technical Education and Vocational Training Authority (TEVTA) has skills development policy, strategies, plans, and skills standards for 2 priority construction skills.**

**Skills development policy, strategies, and plans for PAK TEVTA in place:**

A Skills Development Policy, Strategy and Action Plan (see Annex III Document 7) for PAK TEVTA was developed. The development process involved study of relevant documents of the Government of Pakistan such as the Skills Strategy, the Draft Education Policy, the Poverty Reduction Strategy Paper and the PAK Skills Development and Employment System. Direct consultation with key stakeholders at their location was carried out in Islamabad, Lahore, Muzaffarabad and Mirpur. Reports of UNESCO consultants under previous project were also taken into consideration. Fifteen priority issues were identified from which strategies and action plans were developed and presented to stakeholders in August 2009 in Muzaffarabad and the document was finalised by incorporating their feedbacks.

**Framework/strategies for private sector participation, linkages between institution-community and guidance and placement centres developed:**

A Round Table Meeting with national level participation from all provinces and PAK for Promoting Industry-Institution Linkages held in April 2010. Four papers on the theme were presented and discussed to draw recommendations for promotion of industry-institution linkages. The recommendations are applicable to all TVET organisations across Pakistan. The roundtable proceedings are in Annex III Document 8.

A sub-output related to Formulation of Policy, Procedures and Plans for establishment of Guidance and Placement Centres at PAK TEVTA was not achieved. A budgetary constraint resulting from increase in the construction cost did not allow implementation of activities for production of this output.

**Skills standards and certification system for masonry and carpentry trades including revision/ development of training curricula:**

The skills standards in two trades: a) Building Carpentry and b) Masonry (including brick, block and stone) have been developed (see Annex III Document 9 and 10) in a participatory manner involving various stakeholders. These are the first ever competency based training standards prepared for construction sector in Pakistan. The standards were submitted in September 2010 to National Vocational and Technical Education Commission (NAVTEC) for endorsement of Industry Advisory Group. The standards development process involved partnership/collaboration with PAK TEVTA, NAVTEC and UNHABITAT and user groups such as masons, carpenters, contractors, engineers. For seismic safety aspects of the

standards, technical inputs of National Society for Earthquake Technology-Nepal were obtained.

As the standards are awaiting endorsement of Industry Advisory Group, the work on certification system could not be commenced. UNESCO is pursuing development of the Certification System for the two trades under the One UN Disaster Risk Management (DRM) Joint Programme.

The project also developed detailed curricula for Building Carpentry and Masonry (including brick, block and stone) trades which are essential for design of training programme. They were developed in tandem with the skills standards development work. These curricula are first ever competency standards based curricula in Pakistan. Curricula development involved active partnership/collaboration with PAK TEVTA, NAVTEC, UNHABITAT, and user groups such as masons, carpenters, contractors, engineers. For seismic safety aspects of the curricula, technical inputs of National Society for Earthquake Technology-Nepal were obtained. The curricula are in Annex III Document 11 and 12.

**Result 5: 50 youths and adults would have benefited from standard construction related technical education and training.**

**TEVTA strategy for promotion of TVET as a decent and appropriate career choice in place:**

The Skills Development Policy, Strategy and Action Plan for PAK TEVTA, reported above, addresses among others the issues surrounding promotion of TVET. In addition, with an aim to provide specific focus on the need to promote TVET as a decent and appropriate career choice, the project included ‘Popularization of TVET as a Decent Education and Career Option’ as one of the two themes of the Round Table Meeting held in April 2010. Three papers on the theme were presented and discussed to formulate recommendations for popularization of TVET. The recommendations (see Annex III Document 8) are applicable to all TVET organisations across Pakistan.

**Training arranged for instructors/ trainers of selected TEVT institutions:**

Strengthened competencies of 20 TVET planners, mid level managers and heads of institutions from 6 districts in a five-day training covering: Basic principles of management, Enterprise culture, Industry and community links; Research and presentation skills; and Project planning. The training was organized in Muzaffarabad from 26 to 30 October 2010. The training material used in the training was developed further into Training Module for TVET Planners and Institution Managers (see Annex III Document 13). The final training material contains the following seven modules. Each module can be delivered as a standalone module depending upon the training needs and duration:



Photo 6: Training on Management and Development of TVET

- a. Module 1: Planning of TVET and TVET Institutions

- b. Module 2: Strategic Management of TVET and TVET Institution
- c. Module 3: Quality Assurance Management of TVET and TVET Institutions
- d. Module 4: Competency Assurance Management System for Enterprises and TVET Institutions
- e. Module 5: Maintenance Management of TVET Institutions
- f. Module 6: Management Information System and Knowledge Management - for TVET and TVET Institutions
- g. Module 7: Monitoring and Evaluation of TVET and TVET Institutions

**Most essential equipment support to the construction skills training institutions:**

The plan was to use the existing training facilities with minimum investment for training of youths in masonry and building carpentry skills. PAK TEVTA informed that there are no training centres for masonry skills. As for carpentry skills training centres, one is in Neelum District which is about 3 hours drive from capital with poor access road and other is being reconstructed in Lamnjan. As an alternative option, PAK TVETA suggested Skill Development Centre Kahori, established with the support of ILO, in Muzaffarabad District as a potential training centre for masonry and carpentry trades. As the centre lacks workshop buildings for carpentry and masonry training, relatively high investment in construction of the buildings was needed. As the need for construction of training facility was not foreseen in the project design and surplus funds were not available facility could not be built.

In view that PAK TEVTA is constrained by limited financial resources for implementation and sustainability of training programmes, the NAVTEC was taken on board from the very beginning for their support for training. It was agreed at the meeting held on 25 March 2009 that PAK TEVTA will follow up with NAVTEC once the skill standards and training materials for both carpentry and masonry are finalized.

However, the training facility creation and training have been planned under the One UN Education Joint Programme Component 4 and One UN DRM Joint Programme Component One.

List of training equipment for masonry and building carpentry skills training was developed and included in the respective Skills Standards and Curricula.

***Additional outputs related to strengthening of TVET system:***

**Diagnostic study of technical stream in secondary schools completed for strengthening of technical education:**

A diagnostic study of the technical stream in 30 secondary schools offering technical and commerce subject was completed on 30 September 2008 by a team of two TVET experts, one national and one international. The study identified teacher training needs and other reforms necessary to increase the relevance and effectiveness of the technical stream, as well as to sensitize the key decision makers on importance of technical and vocational education. The report is attached as Annex III Document 14.

The results of the study were presented in a seminar on 29 September 2008, attended by senior managers of including Education Secretary (schools) and the Director of Public Instruction Secondary Schools, Agro-Technical Teacher Training Centre faculty, heads of secondary Schools and teachers of technical subjects, and Director Technical, TEVTA.

The mission presented the report also to the Director General, NAVTEC to highlight the gaps in educational policy, the importance of NAVTEC engagement in this issue as well as review of NAVTEC's skills strategy.

The process of development of an Action Plan based on findings and recommendations of Diagnostic Study on Technical and Vocational Education in Secondary Schools has been initiated and an Experts Committee constituted by DoE in February 2010. Continued support and follow will be provided under the One UN Education Joint Programme.

**Strengthened women's skills training:**

In response to the request for additional equipment and furniture support for Industrial Training Schools for Women project provided a set of equipment and furniture (see Annex IV). The support enabled the Schools at Bagh and Hajeera to implement women's skills training. These two Schools were reconstructed by UNESCO under ERP and completed under technical supervision provided by this project. The support will benefit 60 women seeking one-year certificate and another 60 seeking two-year diploma courses over a period of 5 years at least (equipment life).

**Some of the Key Findings**

Ninety percent of schools do not have workshops and 73% of schools have either inadequate or no equipment. Almost 90% of schools do not have funds for recurring training costs and teachers badly need training. Generally, new textbooks are not available to teachers and students.

There is a lack of awareness among Head Teachers and Teachers about objectives of vocational courses at school level.

Mostly, students of Humanities Group study technical subjects and many of them (62%) use their skills at home.



Photo 7: Dress Making Training at Hajeera Women's Industrial

**Strengthening of other need based technical and operational capacity of PAK TEVTA:**

On the request of the PAK TEVTA additional technical support was provided to facilitate implementation of the recommendations from various UNESCO supported interventions. The work resulted in: a) contribution to improvement in existing student assessment system through training of 8 TVET teachers and TEVTA officials on techniques of setting test papers, b) improved monitoring and evaluation capacity by providing on-the-job training to the Assistant Director Monitoring and Evaluation, c) proposal of a cost effective institution/cluster based teachers training model for training in pedagogy, and d) guidelines for optimal utilization of available equipment, selection of training equipment, maintenance of general record about the condition and repair of equipment.

**Result 6: Teacher training policy and practices updated to strengthen the quality of teacher training.**

- Revised teacher training policy and practices, budget and institutional arrangements within 12 months of the project.
- DoE implementing the revised policy and practices

**Revised teacher training policy and practices, budget and institutional arrangements in place:**

An internal follow-up study was undertaken in September 2008 to document the effectiveness and appropriateness of training teachers and education managers programmes conducted under ERP during 2006 - 2008, and to identify facilitating and hindering factors during the implementation process. The exercise was carried out in coordination with the Education Departments of PAK and Khyber Pakhtunkhwa Province. The study, see Annex III Document 15, provided recommendations for further improvement of training programmes in PAK. Key recommendations of the study included: restructuring the training programme for senior managers, improving the teacher and education manager training curriculum, conducting a thorough training needs assessment before trainings, including the professional development of master trainers, arranging content-based training programmes for teachers, including head teachers in the teacher training programmes and developing a proper monitoring and follow-up mechanism to support educational planners, managers, and teachers.

For development of Teacher Education Policy and In-service Teacher Training Strategy in PAK, several consultative meetings with stakeholders were held and details of various past and present training programmes were obtained. This helped to prepare ‘Situation Analysis: Teacher Education and Professional Development in State of Azad Jammu and Kashmir’ as background document for in-service teacher training strategy. The situation report, Annex III Document 16, presents:

- a. overview of the education sector with a focus on teachers,
- b. the management and institutional mechanisms of teacher education,
- c. prevailing pre-service and in-service teacher training system,
- d. governance issues in the sector and
- e. policy gaps with regard to teacher education and professional development presented.

On the basis of the situation report and by organizing stakeholders’ workshop the project was to assist the government in development of education policy specific to PAK. As the government decided to follow Pakistan Government’s National Education Policy, the project assistance was adjusted to meet another critical need of the government in the area of in-service teacher education and training. Accordingly, an In-Service Teacher Education Strategy and Plan of Action, PAK 2010-2015 was developed, discussed and submitted for GoPAK endorsement and notification. The Strategy and Plan of Action (see Annex III Document 17), have been notified by the government on 21 February 2011 which is a strong indication of the government commitment to improve in-service teacher education.

**DoE implementing the revised policy and practices:**

The Department is now implementing the policy which was notified in February 2011. The policy implementation has financial implications hence UNESCO is exploring possibility of supporting the implementation of the action plan from One UN Education Joint Programme.

***Additional outputs related to application of teacher training policy and practice:*****DEE office and training facility strengthened:**

DEE office building cum training centre built under ERP was in need of additional furniture for office, teacher training and resource centre. Project assisted by meeting those needs. This

enabled the DEE to smoothly implement training programmes in their own facility. The list of furniture support is in Annex IV.

**GoPAK capacity developed for undertaking ICT in Education to improve teaching and learning:**

In response to Government of PAK request for project assistance for strengthening of ICT facilities at schools, a diagnostic study (see Annex III Document 18) was carried out in September 2009 to assess the situation. The study was done by a team of two experts led by UNESCO ICT Unit Chief of Bangkok Office. The study highlighted four key areas for intervention, namely policy and planning, improved equipment, curriculum and text books, and teachers training. A specific recommendation of the study is to develop ICT Centres of Excellence at the schools being reconstructed by UNESCO. Accordingly, an ICT Teacher Training cum Student Learning Centre was established by UNESCO in Government Girls High School Nalochi under the Government of Japan funding (490-GLO-1500).

An agreement has been reached between DEE and Girls High School Nalochi for joint use of the ICT Teacher Training cum Student Learning Centre as well as the management and cost sharing arrangements. DEE will use the Centre for teacher training in ICT. The Centre has been handed over to the school as the custodian and also as one of the co-user.

The GoPAK formed a Taskforce comprising members from Directorate of Curriculum Research and Development, IT Board, Educational Management Information System Unit of DoE, TEVTA and State Earthquake Reconstruction and Rehabilitation Unit to follow up on the recommendations of the study. The Taskforce developed a proposal for establishment of an ICT Directorate instead at a total cost of Rs. 71.674 million (USD 843,000 approx.) and submitted to project in 2010 for funding. Project responded by suggesting establishment of a small ICT integration unit within the Education Department as recommended in the diagnostic study and also because UNESCO is not a funding agency. To facilitate formulation of achievable plan for ICT as recommended in the study, project supported GoPAK in developing a clear and shared vision, mission and plan of action for implementation of ICT in education in the schools in PAK.



Photo 8: Presentation of Diagnostic Study of ICT in Schools to Secretary Education and other officials

The principle of Agro-Technical Teacher Training Centre, Mr. Muhammad Khurshid, who is also a member of the Expert Group on ICT in Education, was sent to the 4th Deans Forum on ICT in Education in Bangkok from 29 to 30 June 2009. This exposure has brought an added value to the project work on ICT in Education and created opportunity for networking with neighbouring countries in the Asia-Pacific Region.

For training of ICT Teacher Trainers and Teachers, project initiated partnership arrangement between with Intel. Signing of a Letter of Understanding with Intel has been on hold. At first a long delay was caused due to the legal and procedural requirements of UNESCO and Intel. Later the change in staff at Intel has put this matter on hold. However, this has not

prevented collaboration between the two agencies as Intel has delivered 15 sets of computer for ICT Teacher Training and Student Learning Centre Nalochi.

In June 2010 the project in collaboration with the DEE carried out a baseline survey (See Annex III Document 19) of teachers for introduction of ICT in education in the school clusters surrounding five schools receiving infrastructure development support from this project and ERP to assess the perceptions of teachers on using ICT skills as a means of teaching and learning as well as their level of ICT skills. The findings and recommendations point to a critical need for ICT training of teachers and will be used in developing ICT teacher training module in future.

### **Other Achievements:**

Several other results, which were not planned in the project design, have emerged from the project due to the momentum created and pro-activeness of the project:

#### **Facilitated integration of seismic safety at diploma level:**

Integration of seismic resistant design and construction components in Diploma of Associate Engineer (DAE)-Civil curricula funded by UNESCO from its regular budget through development of an Action Plan including integration strategies, course outline, as well as training material and timelines for integration. Further work on the course is being carried out under the One UN DRM Joint Programme Component 1.



Photo 9: Consultation visit of Dr. Regan Potangaroa to Govt. Polytechnic Institute, Rawalakot

#### **Facilitated regional study on technical vocational education:**

The project provided technical and managerial staff time to facilitate country study on TVE at Secondary Level commissioned to the National Institute of Science and Technical Education (NISTE), Ministry of Education, Islamabad by the UNESCO Regional Office, Asia and Pacific Regional Bureau for Education, Bangkok. The major findings have been incorporated in the regional report compiled by the UNESCO Regional Office. Further work on the study will be undertaken to publish as a Pakistan Country Report on TVE at Secondary Level for National Roundtable on TVET in Pakistan.

#### **Facilitated completion of construction work of ERP:**

The project helped in completing the remaining construction work at two high schools and two Industrial Training Schools for Women by providing technical support and supervision. The construction work was part of ERP, predecessor to this project. The work completion was delayed by the contractor.

## Problems Encountered

The following major problems were faced during the project implementation phase:

1. **Construction cost escalation:** Increase in the construction material prices affected the number of schools that could be rebuilt. In addition, it affected production of an output related to development guidance and placement system at PAK TEVTA.
2. **Frequent transfers and busy schedule of government personnel:** Even with a long standing relationship of UNESCO with GoPAK, transfers mean building a new relationship with the next person incharge, time spent in briefing, and waiting for her/him to settle down. This has happened several times during the project. This coupled with their busy schedules has slowed the progress
3. **Capacity Issues:** Limited capacity of government departments to provide leadership to multiple organizations involved in reconstruction/rehabilitation activities and to coordinate all efforts have resulted in delays in securing agreements on project activities such as site selection and selection of schools.
4. **Security situation:** The unstable and unpredictable security situation in Islamabad and PAK with UN restrictions on expatriates and on mobility resulted in limited staff presence in Islamabad office and periodic restrictions on field movement of field based staff has adversely affected the pace of implementation.
5. **Non availability of training institutions with appropriate facility for training:** This has particularly affected attainment of target for training of 50 youths/adults in masonry and carpentry as this constraint meant construction of a building for training, requiring large investment in development of training facility.
6. **Financial constraints in DEE and TEVTA:** Both PAK TEVTA and DEE are faced with financial limitations, hence slow implementation. Moreover, for TVET reform like any other reform in education, a longer term project engagement is necessary to ensure full effectiveness and sustainability of the project interventions.
7. **Non availability of technical experts:** Finding competent local and international TVET and education experts due to short supply has delayed implementation of a number of interventions. The problem has been compounded because of reluctance of some foreign nationals to come to Pakistan because of security concerns.
8. **Project duration:** A number of changes introduced by the project are about reforms in education and training system. In the course of the implementation it became evident that longer duration project period is required for the project to follow up and for the government to take action.

Despite all of the above constraints, the project has not only achieved the planned results but has also generated some unplanned results, stated in preceding sections.

## OBJECTIVES ACHIEVED OR TO BE ACHIEVED IN THE NEAR FUTURE

### Status of attainment of project objectives:

The project met the overall objective to support the Government of Pakistan in its efforts to rebuild the education system by improving access to and quality of education. It was achieved by increasing the number of trained headmasters, the number of active SMCs and the number of schools having safe and appropriate teaching and learning spaces. In addition, training modules for head teachers and SMCs, and TVET skills development policy and skills



standards for 2 trades were developed. These outputs were in line with the indicators set in the project document, though not planned in project design.

In addition, by providing maths and science equipment, classroom and teachers office furniture, conducting analytical reviews of technical stream and use ICT in schools, supporting ICT Teaching Training and Student Learning Centre, and building rooms for ICT Labs at two high schools the project contributed to build back the education system better than before.

**1. To provide safer and better teaching and learning environment to selected middle and secondary schools affected by the earthquake.**

**Achieved:**

Indicators of achievement and status:

- ☞ *Project supported schools have safe and appropriate classrooms for middle and secondary grades:* Three fully equipped and seismically safe middle and high school buildings and one ICT Lab, Library and Science Lab Block in another school constructed immediately benefitting 856 children. In the long run, over 7,500 children will benefit. In addition, project ensured construction of primary blocks with UNICEF support. Immediate beneficiary target exceeded by 71%.
- ☞ *Head teachers of project supported schools have been trained:* Standard training module developed for use by DEE. In total 20 middle and secondary school head teachers, including 3 project schools, and 1 Assistant Education Officer trained in leadership and management. Other head teachers are from cluster schools. Target exceeded by 5%.
- ☞ *Administration and management of 75% of project supported middle and secondary schools have improved:* All three project supported schools (100%) have made changes in administration and management. A post training study found that 60% of schools have initiated a number of activities. Target exceeded by 25%.
- ☞ *75% of School Management Committees have become active:* As a result of training, SMCs in all three new schools and 2 ERP schools actively participated in and supported school reconstruction work. At some schools, they have started taking initiative on their own. Most importantly, as a result of project work official SMC policy is now in place. Target exceeded by 25% and also covered ERP schools.

**2. To strengthen the TVET system with a focus on standardized construction skills training for youth and adults.**

**Mostly achieved:**

Indicators of achievement and status:

- ☞ *TEVT policies, strategies and plans in place:* Skills Development Policy, Strategy and Action Plan for PAK TEVTA in place.
- ☞ *2 skills standards and certification system developed and being implemented:* First ever Masonry (Brick, Block and Stone) and Building Carpentry Trades Standards for construction sector prepared. Certification system will be developed under One UN Joint Programmes as the standards. Planned target met.
- ☞ *Training modules on selected skills in place and being implemented:* Detailed curricula for two skills standards developed. Their implementation could not take place as training facilities were lacking and endorsement is delayed. Follow up and implementation is included in One UN Joint Programme.

☞ *Framework for private sector participation in place and operational:* Concrete recommendations, applicable also to Pakistan, for industry-institution linkages developed. PAK TEVTA in the process of implementing some of them.  
*Selected TEVT institutions (government or non-government) are running standard construction courses and 50 youth and adults acquired standard construction skills:* Due to lack of training facilities for masonry and carpentry trades these two indicators were not achieved.

### 3. To strengthen teacher training policy and practices.

#### **Achieved:**

#### Indicators of achievement and status:

☞ *Revised and up-to-date teacher training policy and practices in place:* In-service teacher education strategy and plan of action prepared with project support has been notified by PAK Government.

### **National level application of project outputs:**

A number of outputs/results of the project also impact positively the areas of PAK which are not affected by 2005 earthquake because of upstream nature of the work. Most significantly, some of the outputs are relevant and applicable either because of their methodology which has demonstration value or the product itself have nation wide effect. The following will illustrate.

S.N.	Output	Application
1.	Anthropometric survey and school furniture specifications	Methodology highly applicable for other districts of PAK and also for Pakistan
2.	Head Teachers Leadership and Management Training Module	Applicable also for Pakistan with some modifications.
3.	Skills Development Policy, Strategy and Plan of Action of PAK TEVTA	Exemplary value for other TEVTAs as it is desirable that each province of Pakistan develops unique policy, strategy and plan of action taking their specific needs and opportunities in to consideration.
4.	Recommendations of National Round-table Meeting of TVET Promotion and Industry-Institution Linkages	Valid and applicable also for Pakistan.
5.	Competency standards and curricula for masonry and building carpentry trades.	They were developed as national standards hence applicable to all provinces and PAK.
6.	Training manual for TVET Planners and Institution Managers.	Valid and applicable also for Pakistan
7.	Diagnostic study of technical stream and ICT in education	Since the situation is similar in provinces of Pakistan, the study serves as a valuable reference document for education policy makers and planners.
8.	In service teacher education strategy and plan of action	An important reference material for many provinces, which are experiencing similar situation in in-service teacher education and training.

## LESSONS LEARNT

Following are the key lessons learnt during the life of the project.

1. In project design, additional emphasis needs to be placed on capacity enhancement of the government counterparts by working gradually, preferably at their pace to produce the outputs. This calls for more flexible and longer duration project intervention.
2. Long term engagement for strengthening of TVET is required in view of the fact the PAK TEVTA is relatively new set up and needs capacity building to provide effective leadership for development of TVET. UNESCO is already including some interventions under One UN Education and One UN DRM Programmes but inadequate funding for the Programmes remains a major challenge.
3. Although close collaboration with the government has meant some delays in the delivery, the importance in terms of sustainability has made the delays acceptable. Without the collaboration development of SMC policy, in-service teacher training strategy and skills development policy would not have been feasible
4. About 10% of budget should be left uncommitted to activities to cater to price escalations.
5. Timely completion of school infrastructure development in earthquake affected areas was a major challenge to the project due to the lack of commitment of contractors to the agreed timeline. Whilst this problem is faced by almost all agencies, including government, involved in infrastructure development work in PAK, UNESCO needs to reconsider its comparative advantage and available options for implementation of infrastructure work in future.
6. By being flexible to the needs of the government, the project was able to make produce a number of outputs/results which were not foreseen at the time of project design.

## BUDGET AND EXPENDITURE

The financial status as of the time of compilation of the report is as follows:

Funding Source	Contribution	Revenue from Interest	Total Income	Expenditure	Total Available	Implementation Rate %
	USD	USD	USD	USD	USD	
ZBF	1,199,925.00	11,284.00	1,211,209.00	1,198,053.35	13,155.65	98.92
<b>Total:</b>	<b>1,199,925.00</b>	<b>11,284.00</b>	<b>1,211,209.00</b>	<b>1,198,053.35</b>	<b>13,155.65</b>	<b>98.92</b>

USD 44,330.00 (93.33%) was utilized from UNESCO Regional Development Fund (41-2446-0066-ISB) out of USD 47,500.00.

A total amount of USD 11,284.00 was accrued as interest during the project period and invested in programme components as per the memorandum of agreement signed between the donor and UNESCO. With this increase, the revised total project contribution is USD 1,211,209.00. The total expenditure out of the total contribution is USD 1,198,053.35 (98.92%).

Certified financial statement of the project is attached in Annex VII.

## RECOMMENDATIONS

1. A longer term (at least 5 years) initiative that assists GoPAK in implementation by ensuring stronger partnership (including financing) with the government stakeholder should be explored under the ambit of One UN Education Joint Programme. In particular, work to facilitate implementation of the policies, strategies, action plans, SMC strengthening and curricula developed under the project should be supported to enhance effectiveness and sustainability.
2. In the next revision, by DEE, of Head Teachers Leadership and Management training material, thematic areas such as alliance building, partnership building, resource mobilisation and innovative thinking regarding low-cost and no-cost initiatives should be added.
3. In school construction component, the emphasis should be on outsourcing physical construction work, either whole or in part depending upon the typology of construction, to communities for greater ownership and sustainability. Moreover, the approach of engaging private contractors for school construction work required serious review in view of inordinate delays caused by most contractors engaged in reconstruction work.
4. DoE should allocate sufficient school maintenance budget to the schools for proper maintenance and upkeep of the premises to maximise their life-span.
5. UNESCO's continued support for reconstruction of education system damaged by the earthquake has earned trust and confidence from GoPAK. This should be capitalised to bring about further changes in the education and training.
6. UNESCO should use and further develop training manuals, standards and curricula developed under this project for use in other project settings.

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EXB/570/PAK/1001  
Final Report  
FMR/UNESCO-ISLAMABAD/11/232  
*30 March 2011*  
©UNESCO, 2011  
Printed in Pakistan