

Capacity Building for Reconstruction of Earthquake-Affected Areas of Pakistan

(Bagh and Muzaffarabad)

NSET Information Kit | 016 | 2011



BACKGROUND

The earthquake (7.6, Magnitude) that jolted northern Pakistan on October 8, 2005 caused death of over 73,000 people and injured another 83,000. It also rendered more than 3.3 million people homeless. The direct economic losses were estimated at over US\$5 billion.

The earthquake caused major damages in Pakistan's northern regions, including areas in Azad Jammu and Kashmir. The worst damages occurred in scattered rural settlements spread across large distances. The massive destruction reiterated the fact that the destruction due to earthquake is mainly because of the poor construction practices and the lack of awareness and preparedness. The damages clearly showed the need on propagating earthquake-resistant construction technology. The catastrophe could have been avoided if the knowledge available on earthquake-resistant construction had been imparted to the stakeholders of the building construction (engineers, architects, technician, builders, craftsman, and self-builder) and the knowledge implemented. In this context, realizing that unless the building construction stakeholders are equipped with the knowledge on earthquake-resistant construction, the unsafe abode will still continue to be constructed, and similar catastrophe would continue in days to come, the project Capacity Building for Reconstruction of Earthquake-Affected Areas of Pakistan (Bagh and Muzaffarabad) was implemented under the United Nations Development Programme (UNDP) Pakistan during November 2005-March 2006. Through this project NSET provided technical assistance that included demonstrating "people-centered, cost-effective, environment-friendly transitional shelters and to prepare a housing strategy incorporating earthquake-resistant techniques in permanent reconstruction" while ensuring sustainable livelihoods and habitats for earthquake-affected communities.

The key outputs of the technical support are capacity building, support to affected rural communities for emergency shelter construction and confidence building of communities through training and demonstration projects.

OBJECTIVES

The main objective was to provide technical assistance sought to transfer knowledge on earthquake resistant construction to builders and the industry and assisting in confidence-building processes by taking these techniques to rural communities.

The specific objectives were:

- Training construction industry stakeholders on earthquake-resistant techniques of building new houses and on safe repair and retrofitting of damaged buildings.
- Shake Table demonstration for earthquake awareness and construction of model buildings for demonstration, awareness and technology transfer.



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ACTIVITIES

The demonstration component covered building two model houses and two Shake Table demonstrations. The training was conducted in two tiers. First NSET resource persons conducted end-user training on earthquake-resistant construction for engineers and technicians. Trainees with potentials of serving as trainers were identified and given a follow up Training of Trainers (TOT). Subsequently, the local trainers were given the responsibility of conducting classes under the guidance, supervision and facilitation of NSET instructors. Out of 90 graduates of the TOT, seven were involved in training in rural areas and others continued training activities at their organizations.

OUTPUTS

The scale of damage called for a massive intervention in terms of capacity building and training against popular expectations for immediate relief, rather than know-how on earthquake-resistant reconstruction. Therefore, much of the time was spent in confidence-building and reassuring people on the need of safe-reconstruction. Despite the apparent mismatch between the people's expectations and services NSET offered, the project received full acceptance and was able to attain all training targets.

Towards the end of the project, a Nepalese team of senior government officials visited the earthquake affected area in Pakistan and participated in various events and activities related to capacity building for safer construction conducted by NSET. The visit provided a great learning opportunity to the delegates. The visit was managed by NSET with its own financial resources.

LESSONS LEARNED

The key lesson from the project was the realization of the need to integrate earthquake mitigation and preparedness measures even during the relief and early recovery phases. The combination of relief and recovery with earthquake mitigation and preparedness programs not only had the obvious long-term benefits but also assisted in preparing people for the aftershocks – which also resulted in significant damages.

