GLOBAL PLANNERS NETWORK CONGRESS 2008

CALL FOR PRESENTATIONS COVER SHEET

Presentation Type: Short Practice Paper

Conference Theme: Climate Change/Disasters

Title of Paper: EARTHQUAKE DISASTER AND PLANNING FOR SCHOOL SAFETY: A Case Study of Azad Jammun and Kashmir, Pakistan

Author: Prof. Dr. S. Shabih-ul-Hassan Zaidi

Organization Affiliation: Dean, Faculty of Architecture and Planning, University of Engineering and Technology, Lahore, Pakistan

BIOGRAPHY

Professor Zaidi is currently serving as a Tenured Professor and Dean of the Faculty of Architecture and Planning at the University of Engineering and Technology, Lahore, Pakistan. He completed his Ph.D. degree in Urban and Regional Planning from the University of Birmingham, U.K. in 1990. He obtained his M.Sc. degree in Human Settlements Planning from AIT, Bangkok in 1982 and B.Sc. degree in City and Regional Planning in 1975 from UET, Lahore, Pakistan. He was awarded the Best University Teacher Award by the Higher Education Commission of Pakistan in 2002. Prof. Zaidi, has more than 40 research publications published in the national and international journals and proceedings of the conferences.
EARTHQUAKE DISASTER AND PLANNING FOR SCHOOL SAFETY: A Case Study of Azad Jammun and Kashmir, Pakistan

Prof. Dr. S. Shabih-ul-Hassan Zaidi
Dean, Faculty of Architecture and Planning,
University of Engineering and Technology, Lahore.
Email: shabih52@hotmail.com

ABSTRACT

The Earthquake of 2005 in Azad Jammun and Kashmir (AJK) and Northern Areas of Pakistan, had caused a large number of casualties of the school children. Around 8000 schools out of a total of 9000 were destroyed and 18,000 school children lost their lives. This was mainly because of the construction of school buildings which were not seismic resistant and the bad location of schools at sites such as land-sliding areas. Rapid urbanization and the pressure of population growth had consumed all the safe areas in the cities and the local governments were forced to develop schools at un-suitable location which were identified as highly dangerous areas in the seismic maps produced after the earthquake. More over, economic compulsions had forced the local authorities to build schools using rubble stone masonry. School children are the most valuable asset and the schools play an ever increasingly important role in the life of communities throughout the world. Schools are centers of learning and locations of community activities. Unfortunately, schools are also places of unnecessary vulnerabilities when located in areas of high seismic activity. In national disaster risk management plans, however, schools had not been given adequate attention, and poor disaster management had left them isolated, inaccessible in times of disaster and away from relief and rescue efforts.

Today, safety of schools is even more desired, since they are exposed to natural disasters such as earthquakes, floods, fire, heavy rains etc.; environmental hazards, such as air pollution, noise pollution, water pollution etc.; and traffic hazards such as traffic jams, accidents, and traffic related pollutions. In order to safeguard school children from the above mentioned hazards, we need to plan our schools in such a way that they become
safe heavens for children and they do not fall prey to these hazards. In this connection, the location, standard of construction, space standards and accessibility to the schools are the important issues to be considered while planning for safe schools. This paper, by taking the example of earthquake affected Azad Jammun and Kashmir (AJK), Pakistan, portrays the lessons learnt from the earthquake disaster and attempts to present some recommendations for ensuring safety of schools through proper Town Planning.

Earthquake is an unpredictable natural disaster, but the loss of innocent lives of the school children and property is mainly caused by man-made buildings which are non resilient to the earthquake shocks. This loss can be avoided if the Government, NGOs, and the communities join hands in planning, financing, and construction of earthquake resistant buildings according to a universal building code, particularly for schools.

**KEY WORDS:** Rapid Urbanization, Earthquake disaster, School Safety, Seismic Resistant Buildings, Planning for Safe School Environment, Building Code.