Challenges and Opportunities of Post-Disaster Shelter Reconstruction: The Asian Context

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Introduction

Asia is the most disaster-prone continent and low-income communities in many countries are highly vulnerable to the impact of hazards. In this paper post-disaster shelter reconstruction projects by humanitarian and community development organisations in several Asian countries including Vietnam, Bangladesh and Indonesia will be discussed, based on the author's experience. Utilising case studies, some of the key challenges as well as opportunities inherent in post-disaster shelter reconstruction in Asia are highlighted. Principally, these case studies represent situations that are typical in many parts of Asia particularly affected by disasters and where socio-economic conditions play a key role in shaping the nature of reconstruction programs.

The project in Vietnam was supported by the Asian Disaster Preparedness Center (ADPC) after Typhoon Xangsane caused devastation in Da Nang. On behalf of ADPC the author was involved in conducting consultative workshops with professionals and communities, training of local builders and advising on shelter reconstruction projects. Local expectations of the type of shelter to be provided through the reconstruction program differed from what the intervening agency was prepared to provide. Also, disaster risk reduction aspects were found to be of less importance than cultural perceptions and status needs. A compromise was eventually achieved, but questions remain whether the type of shelter provided met local needs and if it had potential for local replication.

After the extensive 2004 Flood in Bangladesh, the author was responsible as Shelter Specialist to develop and manage a large reconstruction project for the United Nations Development Programme UNDP) through which more than 16,000 houses were built in various flood-affected parts of the country. Together with capacity building of NGO staff and local communities, some key technical innovations were applied with flexibility for improvisation and adaptation to local circumstances. However, despite some successes, there were challenges at the levels of both implementing organisations and beneficiary communities. Nonetheless, three years after project completion, it was found that some of the key ideas of the projects are being replicated and the shelters built had fulfilled the main criteria on which they were developed.

Indonesia is one country in Asia that has been among those most affected by disasters in recent years. As Shelter Expert of a team conducting an evaluation of disaster risk reduction mainstreaming in projects supported by the European Commission Humanitarian Aid Office (ECHO) in Yogyakarta after the 2006 earthquake, the author found examples of effective transitional shelter strategies. However, despite the support of UNOCHA/IFRC-led Shelter Cluster, the government's permanent shelter reconstruction program had less than desirable results. Also based on Indonesia, in a research project by the author and his colleagues at the University of Melbourne on the sustainability of post-tsunami reconstruction projects in Aceh it was found through a life cycle assessment that traditional houses scored better at ecological rating and had less environmental impact in terms of greenhouse gas emissions.

Fig. 1. A transitional shelter (left) and permanent shelter (right) in Yogyakarta, Indonesia

These different reconstruction projects in Asia indicate that tremendous challenges remain in matching them to the needs and aspirations of communities as well as implementing agencies both in terms of quantity and quality. Various questions arise: Do the projects manage to reduce future disaster risk and offer opportunities for mainstreaming into policy and practice? Or is risk re-created so that resource deployment is recurrent and communities remain dependent on such external assistance? How are challenges that arise in the course of project implementation addressed? How sustainable are the houses built in such projects? In this paper, questions such as these are addressed on the basis of findings of current research and practical experiences.

References

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Author's Biography

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Iftekhar had been teaching at the Bangladesh University of Engineering & Technology (BUET) during 1992-2004. Additionally, he has worked extensively as consultant on building and disaster related projects for several international agencies including the United Nations Development Programme (UNDP), Asian Coalition for Housing Rights (ACHR), International Telecommunications Union (ITU), European Commission Humanitarian Assistance office (ECHO) and Bill Gates Foundation, as well as running his private architectural practice. His work had been nominated for the Aga Khan Award for Architecture 2004.

Iftekhar designed the curriculum and worked as coordinator of the Postgraduate Programs in Disaster Management at BRAC University, Bangladesh, which began in 2005. He joined the Asian Disaster Preparedness Center (ADPC) in 2006 and was responsible for managing the PROMISE (Program for Hydro-Meteorological Disaster Mitigation in Secondary Cities in Asia) country projects in Bangladesh, Pakistan, Philippines, Sri Lanka and Vietnam. He also assisted in ADPC's regional and national training courses, particularly the Community-Based Disaster Risk Management (CBDRM) course.

Iftekhar has worked in several other countries including Germany, India, UK and USA. Presently he is working at the University of Melbourne and RMIT University, Australia on research on safer housing options for low-income Asian communities and climate change adaptation, and teaching design, urbanization and disaster management in developing countries.

Iftekhar completed his doctorate from Oxford Brookes University, UK and Master of Science from the Massachusetts Institute of Technology (MIT), USA. He graduated in architecture from the Indian Institute of Technology (IIT), India. He is a member of the Institute of Architects, Bangladesh and has several publications and books to his credit.