Disaster Reduction in Urban Areas: Concepts Made Simple

Disaster reduction is a necessity for urban inhabitants, an obligation for local authorities and a strategic resource for development promoters

B.G. Deshpande

(reduced and edited by the editors)

The world population is growing , quicker in some parts of the world than in others. But there is no doubt that this situation will persist. In cities in particular there is an influx of populations from the surrounding areas, mostly in search of opportunities of work and better living conditions. One person out of a family of 4 or 5 is gainfully employed. The others are a mere addition to the urban population.

All this influx adds to the basic urban problems. Since open spaces in cities are limited, high-rise buildings become a necessity. Thus, shelters for people and structures for markets, schools, hospitals, etc., grow along with the population. The transport system is always strained as more people congregate in the cities.

This causes a tremendous strain in the management of cities. One has to think in terms of natural disasters which still affect almost any part of the world, and which cause tremendous hardships to the society. Each hazard has an impact on the population, both human and animal.

Floods usually follow strong rains and winds, and cause flooding of the rivers, landslides, etc. Cyclones cause similar damages. Tsunamis take coastal populations by surprise and may kill dozens of people in a matter of minutes. The landslides release debris from high altitudes to lower ones, often causing floods, pollution of water sources, etc. Volcanoes are a comparatively rare phenomenon and their locations are generally known.

Last but not least, the earthquakes. These are the most unpredictable natural calamities. They can occur almost anywhere, though they are generally confined to areas known as plate boundaries. However, in this century there has been enough evidence proving that they can materialize almost anywhere, anytime, and of any magnitude, varying from low intensities, which are usually only frightening, to very violent ones, which cause a complete devastation. The time of occurrence is important - if a high-intensity earthquake occurs during the day, when most people are out of their houses, a large segment of the population will not be hurt. But if the same earthquake happens at night, the loss of lives will be greater.

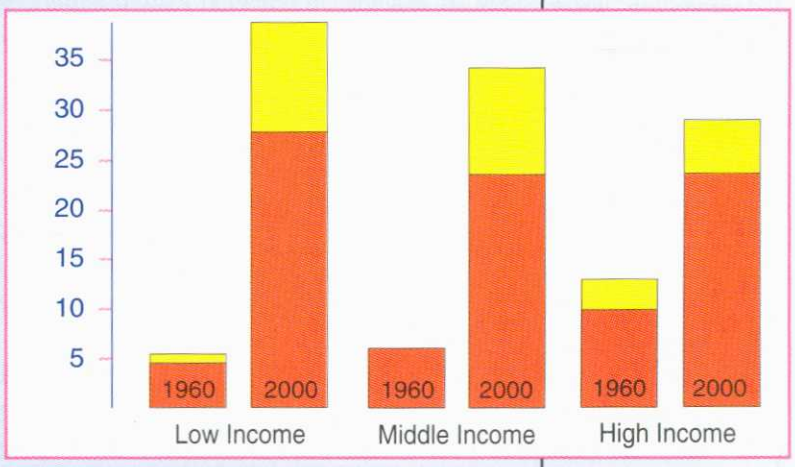
Some disasters, such as floods, cyclones, fires, etc. occur during predictable times. The only disaster the locaton, time, and intensity of which cannot be predicted, is an earthquake. Hence, it calls for a much greater care and caution.

All disasters ultimately result in destruction. And the best thing one can do in this respect is to create awareness, followed by popularization of the known methods of mitigation.

Psychological impacts of disasters are usually very severe. Some people are not able to recover from the shock. Normal urban utilities such as communicaton, electricity, water supply, drainage, etc. are dislocated. The same applies for all means of money earning possibilities for affected populations.

It is logical that bigger cities with a higher standard of living face more risks due to natural disasters. Therefore, unless some precautions are taken beforehand, there is no hope of survival or escape from the consequences of disasters.

URBAN TRENDS
Growth in the number of large cities (3-8 million inhabitants) and megacities (over 8 million inhabitants) in low, medium and high income countries
Source: Megacities: reducing vulnerability to natural disasters. The Institution of Civil Engineers, London, UK, 1995



Urban populations should be advised to insure their properties against natural calamities. Fire-fighting and ambulance services should be ready at all times. Combustible substances in people's houses or public places should be reduced to a minimum, packed properly, watched and protected from fire.

The role of women and children is as cru-