

Natural Disasters in Our Time

"The General Assembly has called on all those who can contribute to disaster mitigation to participate in a global effort to act: each in his own sector and all in a coherent forward-looking programme to reduce vulnerability. The wisdom and foresight which produced the Decade must now lead to concrete initiatives and actions designed to bring early results."

*Javier Pérez de Cuéllar
Secretary-General of the United Nations*

Few people prepare for disasters, preferring to relegate the possibility – and in many cases, the probability – of disasters to the back of their minds. Yet no one is immune from disasters. Even in the latter half of the 20th century, single disasters have killed a great many people. During the years 1946-70, 59 typhoons battered Japan, often taking direct paths over the most populous areas. The casualties were staggering: 13 745 dead, 576 378 houses destroyed, a further 4 479 665 houses flooded.

Between 1960 and 1989, according to the WHO Collaborating Centre for Research on the Epidemiology of Disasters in Brussels, natural catastrophes in China affected an astonishing 233 million people, killing 727 849 and injuring 425 162. The Tangshan earthquake in China on 27 July 1976 alone killed 242 000 people.

There have been numerous cataclysmic events like the Tangshan earthquake during the last 30 years. One of the worst disasters of the 20th Century, the cyclone that devastated Bangladesh

in 1970, caused incredible destruction. Its force, and the resulting famine and disease it caused, is estimated by some observers to have taken one million lives.

In 1987, over 23 million people, from Asia to the Americas were affected by disasters. 1988 and 1989 did not fare better. According to the Red Cross, 80 million people in southern China were affected by typhoons, floods and landslides in 1989.

In the same year, a single country – Malawi – suffered from five different disasters: cyclones, floods, an earthquake, a drought and a mealy bug infestation that destroyed the crops of 200 000 farmers. The 300 000 victims of these natural disasters joined the 800 000 refugees that have migrated to Malawi since 1986 to escape the conflict in Mozambique.

1990 was also a devastating year. An estimated 40 000 lives were lost and 500 000 people were made homeless by the earthquake in the Islamic Republic of Iran. Torrential rains followed by violent storms affected 20 000 000 people in the Hunan province of China. Drought again affected millions in Africa.

There is every reason to believe that disasters will be with us during the International Decade for Natural Disaster Reduction. War and the degradation of the environment, combined with the overcrowding of cities and the overflow of those populations into high-risk areas, makes the task at hand increasingly difficult.

Difficult or not, disaster reduction is now a human imperative. Further delay will be rewarded only with more death and destruction. We must therefore seize every opportunity to reduce the impact of disasters. Our lives depend on it.



High winds batter homes on a Caribbean island.

Man-Made Disasters

Natural disasters have usually had a human component. It can be argued that a natural disaster in an unpopulated region represents a phenomenon rather than a tragedy. It is when human populations move into vulnerable areas, or themselves create conditions of vulnerability, that natural disasters become human tragedies.

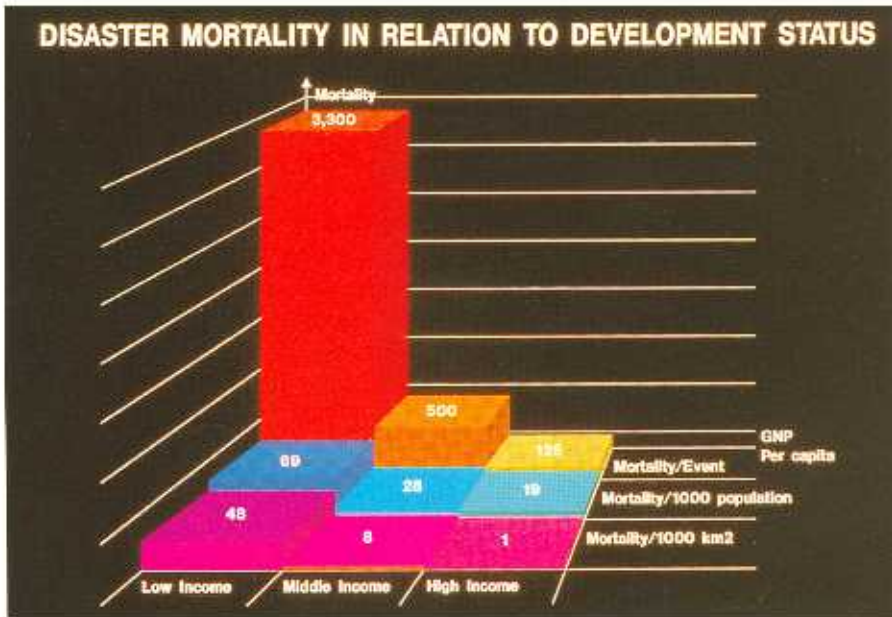
Poverty and population pressures have pushed people onto increasingly unsafe ground: hillsides prone to landslides, undefended coastal plains and islands, river water sheds, areas of great seismic risk. According to the United States Overseas Development Council, six out of every 10 of the world's poor are being pushed by agricultural modernization and high population growth into marginal lands that are more vulnerable to disasters.

Few have a choice in where they live. Many are driven by slow man-made calamities such as overpopulation, economic inequalities, personal and national debt burdens, and civil war.

Disasters and the Environment

There are numerous ways that humans, by their own acts or negligence, create disasters, or add to the suffering caused by "slow-onset" natural disasters.

The chemical disaster at Bhopal, India, was particularly devastating to those most vulnerable - the poor. The full impact of the explosion at the Chernobyl nuclear power plant and the resulting release of radioactivity are just now being fully assessed. According to a Soviet trade union organization, 4 million people in the vicinity of Chernobyl live in areas contaminated by radioactive substances. The Supreme Soviet of the Ukraine has declared the entire republic an ecological disaster area.



Chemical or nuclear disasters are not the only ways that we burden our environment. The degradation of the environment by the burning of fossil fuels is already a calamity, and we are now seeing the relationship between so-called "slow-onset" disasters and sudden impact disasters.

Deforestation poses a great hazard. From Nepal to the Amazon, it threatens not only individual communities but the entire world. While clear-cutting and slash-and-burn agriculture eats up vast parts of our forests, the search for firewood leads to the loss of the ground cover that prevents landslides and soil erosion.

Global warming and rising sea levels may represent cataclysms in the making. Increased desertification combined with population pressures will increase the incidence of drought and famine, and rising seas could submerge entire countries.

Water scarcity is an acute problem for over 40% of the world's population. 1.2 thousand million people are without safe water.

Add to the safe water supply problems a staggering sanitation problem: over 1.7 thousand million people in the developing world have no sanitation facilities.

Water pollution clearly compounds health problems. Water-borne diseases such as cholera, gastroenteritis, malaria and other infectious diseases carried by mosquitos and other organisms breed in stagnant ponds in many countries. The consequences are terrible: an estimated 10 000 children die of diarrhoea each day.

These formidable barriers to health are only compounded by the onslaught of disasters, which take an already precarious situation and place more stress on it. Preventive measures, such as immunization, go a long way towards shielding the most vulnerable, not only from everyday hazards, but also the added stress of disasters.

What Everyone Should Know about Disasters

Pär Stenbäck, Secretary General, League of Red Cross and Red Crescent Societies, Geneva



Pär Stenbäck

One of the most important things to know about disasters is that the very individuals and communities who are most vulnerable to life's daily emergencies are also those most severely affected by both sudden impact emergencies, such as floods and earthquakes, and slow-onset disasters such as famines.

We also need to understand that disaster preparedness, response, rehabilitation and development are all inter-related. We need to help decrease people's vulnerability and strengthen their capacity to respond to events that undermine their physical, mental and social well-being.

Having said that, we also need to rid ourselves of the idea that disaster-affected communities are apathetic and helpless. The people in these communities are usually the first to respond, particularly in the early stages. Com-

munities who are affected by disasters show an enormous amount of resilience and ingenuity in dealing with the aftermath of disasters.

We need to pay much more attention to ways of strengthening this resiliency. At the same time, we need to put more energy into primary health care and other development programs that decrease people's vulnerability. In this context, primary health care could be considered disaster preparedness.

We should also be starting, from the word go, to think about the rehabilitation phase. The problems caused by disasters do not disappear when the television cameras and journalists move to the next disaster. In fact, it is precisely when media attention is diverted that the problems begin in earnest. We need to impress on donors and relief organizations that responding to disasters is not an end in itself, but the beginning of the phase of rehabilitation and recovery.

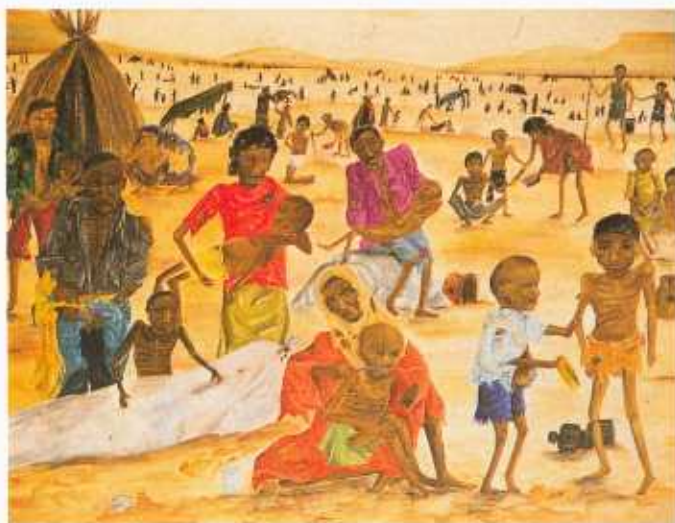
Finally, we need to have the courage of our convictions and accept the fact that sometimes doing nothing is the most appropriate response in the first few days. It needs to be constantly emphasized that before responding to disasters we must first understand what the likely problems will be, and, secondly, we must make adequate assessments before we act. It's simply not good enough just to "do anything." We need to channel people's very genuine desire to help into areas that genuinely need help.



Members of this Mexico City community began rescue efforts immediately following the earthquake of 1985.

How Children Perceive Disasters

Children are the group most vulnerable to disasters. The World Health Organization and the International Children's Art Museum in Oslo, Norway, have initiated a Global Art Competition to find out how children perceive disasters.



"Famine", Loh Lee Ku, 16 yrs, Malaysia



"Chernobyl", Julia Agova, 10 yrs, USSR

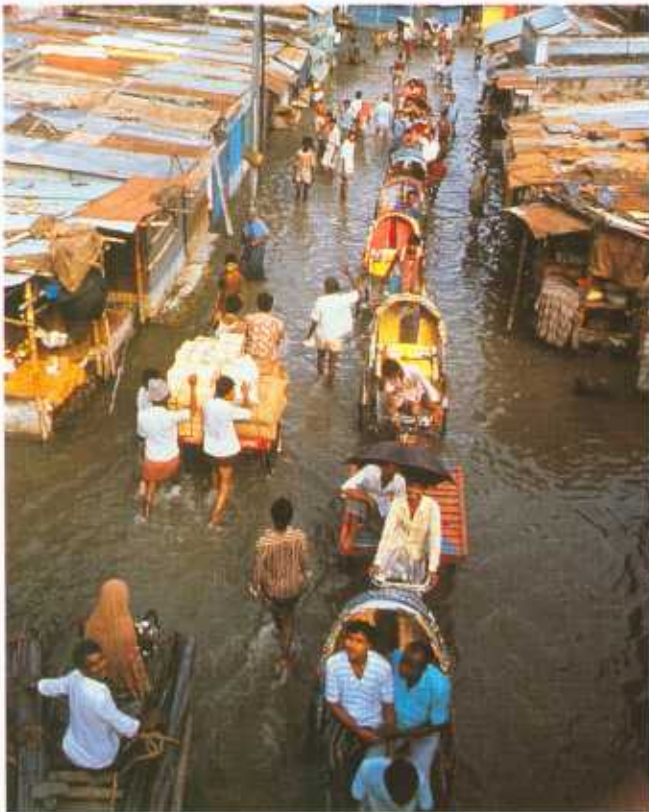


Untitled, Mark Pogasyan, 10 yrs, USSR



Untitled, Shahinaj Begum, 10 yrs, Bangladesh

Disasters and Response



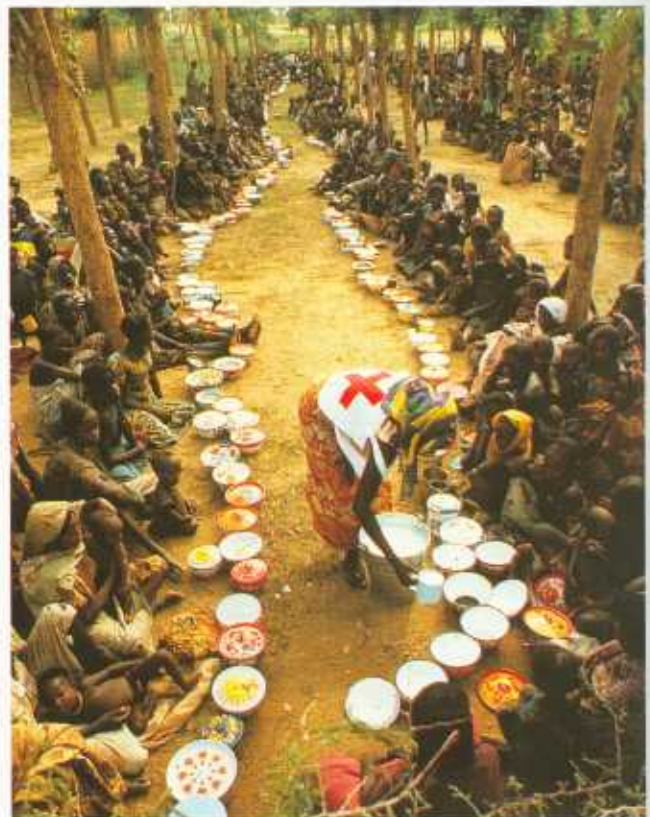
Flooding in Bangladesh.



Flood shelter built in Bangladesh.



Trucks transporting food to areas of famine in Ethiopia.



Feeding station in the Sahel.



Collapsed building after Mexico City earthquake, 1985.



Reconstruction begins for new earthquake-resistant buildings.



A camp in the Jordanian desert housing refugees fleeing the Iraq-Kuwait war, 1990



Laboratory equipment in a refugee camp in Pakistan allows a health worker to monitor and diagnose diseases.