National Disasters in Sri Lanka

In Sri Lanka, floods, landslides, cyclones, droughts, coastal erosion are the main causes for Natural Disasters. These natural disasters have caused loss of life and enormous damage and destruction to property. In addition to these natural disasters, the country is also faced with human-made disasters as a result of deforestation, indiscriminately mining of coral, sand gem and industrial hazards and road accidents besides civil conflicts and occasional political violence in the recent past.

Floods are more of a common occurrence in Sri Lanka than the other natural disasters. The water resources map of 1959 identified 103 river basins out of which about 10 rivers are considered as major. Among these major rivers Kelani, Kalu, Nilwala, Gin, Walawe and Mahaweli are vulnerable to floods. Heavy rainfall and rain off the large volume of water from the catchment areas of rivers, deforestation, improper land use and the absence of scientific soil conservation practices and unplanned urbanisation could be identified as the major factors for floods in Sri Lanka.

Heavy rains and geological changes in the hill country accentuated by the indiscriminate clearance of steep slopes in the mountainous areas have increased the occurrences of frequent landslides especially during the last two decades in the mountain slopes of the central and south western regions of the island.

Every year, in certain areas of the country, people experience droughts of short duration, which are only of local significance that occur once in every 3 to 4 years. Severe droughts of national significance occur after a considerable period of time, which is 10 years or so. Due to the drought, people in the dry zone areas have been affected severely creating severe hardships to their livelihood. Sri Lanka has been affected mostly by cyclone activity occurring in the Bay of Bengal. The Eastern, Northern and North Central regions are the cyclone prone areas of Sri Lanka.

Although cyclones do not occur frequently in Sri Lanka, these are not totally outside the range of disasters. Sri Lanka has a coastline of 1585 km. More than half of the total population live in villages, towns and cities of the coastal areas. It is estimated that over

50-55 percent of the shore line is subjected to and threatened by coastal erosion. The most critically affected areas are those between Kalpitiya in the Northwest and Matara in the south.

Disaster Reduction in Sri Lanka

Sri Lanka is rich in ancient culture. The hydraulic civilization found in the dry zone by ancient Sinhalese Kings, display evidence of remarkable human effort taken to mitigate the drought hazard. The major features of this civilizations were the construction of an intricate system of reservoirs for storing water for agriculture. The ancient community who lived in vulnerable areas to disasters had developed their own mechanisms to reduce risk and vulnerability particularly to flood and drought.

There are two approaches to flood risk reduction. One is to take water away from the people and the other is to take people away from water. The first method is also known as the structural approach: this is adopted along the basins of Kelani, Gin, and Nilwala rivers as a measure to control inundation and the consequent damages. The other approach is the non-structural approach where timely flood warning is given to the people to move out of the area before the breach of floods. This method was practiced to some extent in the lower Kelani Ganga and Kalu Ganga basins during the severe flood and landslide of May 2003.

It may not be possible to prevent the occurrence of drought altogether. Nevertheless, there are possibilities to make adjustments for droughts and mitigate likely high risk. In this regard, first and foremost, awareness programmes are conducted by the National Disaster Management Centre to cope up with the impact of the drought.

The landslides hazard mitigation project executed under UNDP/UNCHS assistance launched a special study to analyse the existing disaster management institutional mechanisms. The zonation-mapping programme also covered five districts out of 09 districts which are vulnerable to landslide and conducted awareness programmes to reduce risk and vulnerability.

The first authoritative communication of a forest policy was made in 1929. In 1951 the forest policy was redefined. In 1980, this policy was further amended to include emphasis on preservation of the environment, the need for peoples participation and for social forestry.

The Constitution of Sri Lanka in 1978 recognised and addressed the need for environmental protection and management to be regarded as a fundamental right, obligation and responsibility of the state and the people.

The National Environment Act was enacted in 1980 leading to the establishment of the Central Environmental Authority in 1981. The CEA remains the statutory focal point for the environment and the model agency for the coordination and implementation of environmental matters. The NEA of 1980, which came into being in 1981, was amended in 1988 to introduce licensing procedures and give legislative backing to environmental impact assessment procedure for developmental activities. Several new public institutions came into being in order to deal with specific environmental issues.

A special Cabinet sub-committee was formulated to study for improvement and strengthening of Disaster Management activities in Sri Lanka on a proposal made by the UNDP. On the recommendation of this Committee, the National Disaster Management Centre was established in July 1996 under the purview of the Ministry of Social Welfare. A National Disaster Management Bill was prepared and submitted to Parliament to obtain legal power. The UNDP has granted financial and technical assistance for strengthening the Disaster Management capacity in Sri Lanka. The same assistance was provided to NDMC to draft the Sri Lanka Disaster Management Plan suggested by ADPC.

In 1997, the project called Sri Lanka Multi Hazard Disaster Mitigation Project, was commissioned and implemented by the Centre for Housing Planning and Building in collaboration with National Building Research Organisation (NBRO) and the Urban Development Authority (UDA). This project has three components: demonstration of

methodology for risk reduction in a selected demonstration citing information networking and training.

The Human Disaster Management Unit was formed in 2001 under the Presidential Secretariat to prepare preparedness measures to overcome risk on human-made disaster.

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