

## PERSPECTIVE FOR NATURAL DISASTER REDUCTION IN INDIA

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### 1. Overview of disaster incidence:

1.1 A natural disaster is an event of nature, which causes sudden disruption to the normal life of a society and causes damage to property and lives, to such an extent, that normal social and economic mechanisms, available to the society, are inadequate to restore normalcy. Viewed in this manner, a host of natural phenomena constitutes disasters to a society, whether they are related to an occurrence in a micro environment or not. In macro terms, the disasters, which cause widespread damage and disruption in India, are drought, flood, cyclone and earthquakes. India faces a substantial number of disasters occurring in the Asia Pacific region, which itself accounts for nearly 60% of natural disasters occurring in the World. It would be pertinent to take a brief look at the Indian susceptibility.

1.2.1 **Drought** : The country has a geographical area of 329.3 million hectares of which, the arable area constitutes about 140 million hectares. The distribution of the sown area under various ranges of rainfall is as under:

- (a) 33% - Low Rainfall Region 750 mm
- (b) 35% - Medium Rainfall Region -1125 mm

- (c) 24% - High Rainfall Region 125-2000 mm
- (d) 8% - Very High Rainfall 2000 mm Region

Because of the erratic behaviour of the rainfall, even the medium rainfall region is vulnerable to drought conditions. Consequently, 68% of the sown area is drought-prone.

1.2.1 **Flood** : An area of 40 million hectares in the country is prone to floods. The area affected annually, on an average, is 8 million hectares, which had risen to as much as 18.6 million hectares in a single year. On an average, the area of crops affected annually is 3.7 million hectares which rises to 10 million hectares in the worst affected year. The average annual direct damage is about Rs. 6268.5 million, which had risen to over Rs 40592.6 million in a single year. In fact, the statistics of damage from 1953 to 1985 indicate that the total damage suffered by the country during this period is over Rs. 2,06,860 million. Deforestation in the catchments, inappropriate land use and degraded lands, inadequate capacity of drainage channels to carry the peak flow and extensive human occupation of the flood-prone plains aggravate the damage caused by floods.