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*C*DITORIAL

NATURAL DISASTERS AND OUR CONCERN



witnessed in our country a large number of such natural disasters in between the last two decades of the 19th century and during the ongoing 21st century.

The subcontinent of India is greatly prone to a variety of natural disasters because of the characteristic geoclimatic conditions. In general, out of 35 states and union territories of the country, 27 of them are disasterprone. For examples, about 58.6% of the landmass is susceptible to earthquakes of moderate to very high intensity; over 40 million hectares of land are prone

duty to protect our earth and its environment from all kinds of disasters both natural and man-made. Natural disasters are severely terrifying and devastating events of nature with alarming intensity causing widespread suffering and casualties. We have

Our mother earth is the

most unique creation of the

Universe. It is our sacred

Due to unprecedented growth of human population at an alarming rate we face acute resource depletion and critical environmental hazards. As a result, the ecological life support systems are getting jeopardized. The enhanced greenhouse effects causing global warming and leading to the sea level rise due to thermal expansion of water and melting of glaciers and ice sheets are also adding much to some natural calamities.

In course of urbanization as well as industrialization, because of population explosion humans often interfere severely with the natural ecosystems and the environmental processes of the earth without considering the pros and cons of their undue activities. As a matter of consequence, unpredictable natural calamities and catastrophies in the form of cyclones, floods, earthquakes, droughts, landslides, forest fires, etc. occur frequently causing numerous loss of lives and properties, human suffering, damage to buildings, roads, and degradation of environment. Due to unprecedented growth of human population at an alarming rate we face acute resource depletion and critical environmental hazards. As a result, the ecological life support systems are getting jeopardized. The enhanced

greenhouse effects causing global warming and leading to the sea level rise due to thermal expansion of water and melting of glaciers and ice sheets are also adding much to some natural calamities.

India has its extended coastal line on either sides of the peninsula of the main land. This vast coast line is vulnerable to some tropical cyclones almost every year, arising from both the Bay of Bengal and the Arabian Sea. Each of these cyclones

to floods and river erosion; 68% of the cultivable area is vulnerable to drought, and hilly areas, particularly, in Northern Himalayan belt are at risk from landslides and avalanches.

claims a death toll of more than 5000 lives on an average. As and when we look behind following chronology, we visualize and remember the horrible experience of a number of natural disasters that unfortunately happened in India. For examples, our heart-rending feelings and poignant attention are drawn to victims and survivors of the Orissa Super Cyclone (1999), Bhuj Earthquake (2001), the Tsunami (2004), the Earthquake in Kashmir (2005), Heavy Rainfall in Mumbai (2006), Bihar Kosi River Flood (2008), the Super Cyclone Aila (2009), the August cloudburst in Leh (2010), the Sikkim Earthquake (2011), and the unprecedented flash floods and cloudbursts (2013) in Garhwal, parts of Kumaon and Nepal, and Kinnaur region of Himachal Pradesh. Looking at the mighty river Damodar, which is known as the "Sorrow of Bengal" because of its flood ravages in entire Damodar Valley, particularly in lower region, we face severe devastation and acute distress. It is our experience that the hydrological regime of the river Damodar causes flood hazards almost in every year in its lower course. Considering the records of the last 100 years the lower Damodar area of West Bengal were vulnerable to more than 20 serious devastating floods

causing huge casualties, the associated diseases and livelihood disruption.

To mention some of our dreadful experiences, we recall the terrible and devastating scenarios witnessed by the massive earthquake occurred on 26th January, 2001 in Bhuj in western Gujarat at the 7.9 Richter scale which lasted for about two minutes on the India's fifty first Republic Day. Near about 20,086 people died, But we can train ourselves, we can equip ourselves with essential knowledge of environment, geoclimate, and scientific infrastructures so that we may plan and act promptly to reduce the intensity of natural disasters. We should follow the principle and procedure of sustainable use of all natural and nature-derived resources.

more than 20,000 heads of livestock had perished. Around 300,000 houses have collapsed and approximately one million houses had suffered partial damage and destruction.

The super cyclone Aila, which was a 250 to 350 km wide brutal and virulent wind speeds, had hit the East of India and Bangladesh on May 25, 2009, and affected an estimated 6.8 million people with casualties of about 138 individuals and loss of innumerable animals and vegetations. Most of the districts in West Bengal were affected by this cyclone. The situation was most terrible in South 24 Parganas and North 24 Parganas districts including the Sundarban area. Thousands of hectares of fertile agricultural land adjoining the mangrove forests

turned into a vast waste land. Remarkably, the mangrove vegetation of Sunderbans acts as barrier in reducing the intensity of the turbulent cyclones, arising from the Bay of Bengal.

The devastating floods which occurred in Uttarakhand in 2013 brought endless sufferings, distress and misfortune in the lives of people who were perished, or missing or homeless. During the period, more than fifty thousand pilgrims were stranded. The government authorities took up the immediate rescue and relief work with the help of Armed Forces. In Uttaranchal which is synonymous with tourism, many man-made factors like construction of hotels, commercial shops, buildings, heavy roads continued in unplanned way to enrich the tourist facilities. The indiscriminate tree felling to create space for human interest is one more factor towards the causes of outbreak of this disaster, although the main cause was the heavy rain fall

leading to the breach of water body in north of Kedarnath.

It is evident from some of the above scenarios related to natural disasters that man is, in fact, helpless, but we may become conscious about their virulent features, adopt measures for abatement of sufferings by effective planning both at national and regional levels. The Government of India enacted Disaster Management Act on 26th

December, 2005 at national level under which there is National Disaster Management Authority (NDMA) with the chairmanship of the Prime minister. Similarly we have disaster management authorities at state and district levels for effective management, prevention, mitigation and providing immediate response to various disasters. During the last several decades, our country has taken up commendable initiatives in disaster management by reviewing and changing the existing policy matters. Despite significant technological advances and need-based planning, we cannot stop natural disasters but we can train ourselves, we can equip ourselves with essential knowledge of environment, geoclimate, and scientific infrastructures so that we may plan and act promptly to reduce the intensity of natural disasters. We should follow the principle and procedure of sustainable use of all natural and naturederived resources. In this context, we should remember and follow the significance of the important statement made by Mahatma Gandhi – "Earth provides enough to satisfy every man's need, but not every man's greed". Let us pray to god for a disaster-free world for the years to come.

We have just entered a new year and as such wish you all Happy, Prosperous and Disaster-free New Year 2015.

N. D. Paria

STOP PRESS !

The Editorial Board condemns the ghastly attack in the editorial office of the French magazine *Charlie Hebdo* and mourns the death of fellow journalists.