

## Climate change and environment

In this number of *Vidurava*, an initiative has been taken to create a broad-spectrum awareness on the distressing features of Climate Change, caused largely by the anthropogenic release of what are commonly referred to as Greenhouse Gases (GHG).

Greenhouse gases comprising largely carbon dioxide, halocarbons, methane and nitrous oxide, accumulate in the atmosphere, disturbing the natural balance between incident solar radiation and energy re-radiated from the earth. This man-made destructive force is predicted to change the climate well into the future and impose stresses on human and natural systems.

Historically, the great revival of art, literature and culture that marked the Renaissance during the 14-16 centuries, which subsequently fuelled the industrial and scientific revolutions, set in motion the degradation processes on the life-supporting elements of the environment. It is significant but disheartening to realize that developmental strategies leading to capital growth, technology development, exploitation of natural resources, and the luxury consumption of energy of a small consortium of countries lying within the narrow geographical boundaries of Western Europe could cause the global ambient atmospheric carbon dioxide concentration to rise from 280 parts per million (by volume) in the 17<sup>th</sup> century to 390 ppm (by volume) in the mid 20<sup>th</sup> century. As a result of this process ambient atmospheric temperatures rose by 0.6 percent every 100 years, while the sea level rose by 16 cm during the same period, largely caused by mass melting of the polar ice caps. According to reports of the Intergovernmental Panel on Climate Change, Arctic ice has thinned by 42 percent, while 27 percent of the World's coral reefs are known to have been lost during the last century, suggesting that some of the world's life supporting ecological systems are under threat.

According to recent scientific evidence, competition for natural resources due to intensified globalization and privatization, has caused many critical ecosystems to face destruction. In this context, the consensual principle that "Polluter Pays and the Victim Recompensed", finds no relevance, because Nature makes no distinction between North/South, or East/West, or developed and less developed, or for that matter even between the Polluter and the Victim in the dispensation of its reprisal.

Nevertheless it is still not too late to make amends both at national and global levels to contain, if not to minimize the process of environmental degradation, and consequently of actions leading to climate change. Although cost effective approaches to mitigate impacts of climate change have been extensively discussed, unless a Global consensus on mitigation responses is forthcoming, the prospect of ensuring a healthy living natural environment for future generations is like to remain bleak.

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