

Environmental Issues

Dr. Jitendrasinh Ranjitsinh Chudasama

I/C Principal, M.S.W. College, Salal, Prantij, Sabarkantha, Gujarat (India)

1. Introduction

An introduction to global environmental issues present a comprehensive and stimulating introduction to the key environmental issues presently threatening our global environment. Offering an authoritative introduction to the key topics, a source of latest environmental information, and an innovative stimulus for debate, this is an article for all those studying or concerned with global environment issues. Major global environment issues are brought into focus. Explanation of the evolution of the earth natural system (hydrosphere, biosphere, geosphere, ecosphere) provide an essential understanding of the scientific concept, process and historical background to environmental issues. contemporary socioeconomics, cultural and political consideration are explored and important conceptual approaches such as gain hypotheses and chaos theory are introduced. human impact and management of the natural environment, and concerns for maintaining biodiversity are emphasized throughout. The rapid growing population and economic development leading to a number of environmental issues in India because of the uncontrolled growth of urbanization and industrialization, expansion and massive intensification of agriculture, and the destruction of forest. Major environmental issues are forest and agricultural degradation of land, resource depletion (water, mineral, forest, sand, rocks etc). environmental degradation, public health, loss of biodiversity, loss of resilience in ecosystem livelihood security for the poor. It is estimated that the country's population will increase to about 1.26 billion by the year 2016. The projected population indicates that India will be the first most populous country in the world and china will be ranking second in the year 2050. India having 18% of the world's total area has greatly increased the pressure on its natural resources. water shortages, soil exhaustion and erosion, deforestation. air and water pollution afflicts many areas. The condition of the environment on a worldwide issue. Air and water pollution do not recognize borders poor soil condition in one motion may reduce another country's food supply. at the same time, different regions do face different problems. one key distinction is between the environmental threats faced by developed nation. Such as the united state and western European countries, and developing nation, such as India and Mexico. most agree that this nations may have dissimilar crises, but debate remains over whether the solution to that problems are unique as well. The environmental problem faced by developed nation are largely the result of their economics strength and higher standards of living. Over consumption is cited by many observers as a cause of resource depletion in the first world.

2. Global change scenarios

A brief summary of the status of global climate change predictions provides a context for subsequent discussions. We rely primarily on the work of the inter governmental panel on climate change (IPCC). And on Maccracken et al. (1996), who combine discussions of model based predictions and pale climate records. This is a rapidly developing field. Although the detailed predictions derived from general circulation model are uncertain and subject to revision, there can be little doubt in a qualitative sense that the increased and still increasing concentrations of radioactively active gases in the atmosphere will result in significant climate change of some sort. Under the IPCC "business as usual" scenario global mean temperature are predicted to increase during the next century by about 0.3C per decade. the net increase will amount to about 10 by 2030 and 30 by 2100 land surfaces will warm faster than oceans, and high northern latitudes will warm more and faster than the global mean, especially in winter. Present confidence in regional climate change predictions is low. In the oceanic tropics, the area of most interest to this review, the predictive ability of the general circulation models is highly questionable; both between model agreement and calibration against present conditions are poor. Some models predict tropical sea surface temperature increases of 1-3C, but there is widespread debate about possible feedback mechanisms that might either stabilize values in the vicinity of 30-31C, or produce positive temperature feedbacks over the warmest part of the oceans. Although pale climatic conditions are not generally considered reliable predictors of future climate patterns, it may be relevant that during the Eemian warm period most northern hemisphere land areas were significantly warmer than at present, but tropical regions were not detectably warmer also under the IPCC business as usual scenario, global sea level rise is predicted to average about 6 cm/decade over the next century; this value compares with recently observed values of 1-2 cm/decade and with maximum sustained rates of sea level rise during the Holocene transgression in excess of 20cm/decade changes in the frequency and intensity of extreme events are probably more ecologically significant than moderate changes in the mean values of environmental factors. In addition to probable increase in high temperature events, two possible changes relevant to local coral reef environments are worthy of note. One is shift in precipitation patterns so that more of the total precipitation falls during heavy storms; the other is a possible change in the frequency, magnitude, geographic distribution of major tropical storms.

3. Global environmental major issues

One of the primary causes of environmental degradation in a country could be attributed to rapid growth of population, which adversely affects the natural resources and environment. The rising population and the environmental deterioration face the challenge of sustainable development.

The existence or the absence of favorable natural resources can facilitate or retard the process of socio-economic development. The existence or the absence of favorable natural resources can facilitate or retard the process of socio-economic development. The three basic demographic factors of births (natality), deaths (mortality) and human migration and immigration (population moving into a country produces higher population) produce changes in population size composition, distribution and these changes raise a number of important questions of cause and effect. Population growth and economic development are contributing to many serious environmental calamities in India. These include heavy pressure on land, land degradation, forests, habitat destruction and loss of biodiversity, changing consumption pattern has led to rising demand for energy. The final outcomes of this are air pollution, global warming, climate change, water scarcity and water pollution. Environmental issues in India include various natural hazards, particularly cyclones and annual monsoon floods, population growth, increasing individual consumption, industrialization, infrastructural development, poor agricultural practices, and resource mal-distribution have led to substantial human transformation of India's nature environment. An estimated 60% of cultivated land suffers from soil erosion, water logging, land salinity. It is also estimated that between 4.7 and 12 billion tons of topsoil are lost annually from soil erosion. From 1947 to 2002 average annual per capita water availability declined by almost 70% to 1,822 cubic meters, and overexploitation of ground water is problematic in the states of Haryana, Punjab, and Uttar Pradesh. Forest area covers 18.34% of India's geographic area (63700 km²). Nearly half of the country's forests cover is found in the state of Madhya Pradesh and seven states of the northeast. The latter is experiencing net forest loss forest cover is declining because of harvesting for fuel wood and the expansion of agricultural land. The trends combined with increasing industrial and motor vehicle pollution output, have led to atmospheric temperature increases, shifting precipitation patterns. And declining intervals of drought recurrence in many areas. The Indian agricultural research institution of Parvati has estimated that a 3°C rise in temperature will result in a 15 to 20% loss in annual wheat yields. Civil conflicts involving natural resources most notably forests and arable land have occurred in eastern and northeastern states.

4. Global Environmental Problems

At the dawn of the third millennium, a powerful and complex web of interactions is contributing to unprecedented global trends in environmental degradation. These forces include rapid globalization and urbanization, pervasive poverty, unsustainable consumption patterns and population growth. Often serving to compound the effects and intensity of the environmental problems described in the previous section, global environmental challenges require concerted responses on the part of the international community. Global climate change, the depletion of the ozone layer, desertification, the loss of the planet's biological diversity and the transboundary movements of hazardous wastes and chemicals are all environmental

References

1. Bisgrove R. Hadley P (2002) Gardening in the global greenhouse.
2. Cassar M (2005) Climate Change and the Historic Environment.

problems that touch every nation and adversely affect the lives and health of their populations. As with other environmental – related challenges, children are disproportionately vulnerable to and suffer most from the effects of these global trends. Moreover, all of these global environmental trends have long – term on people and societies and are either difficult or impossible to reverse over the period of one generation. Unless, effective global actions are taken early, we will end up plundering our children's heritage and future in an unprecedented way. This chapter describes five major global environmental problems and points to the potential impact on children and future generations.

5. Progress in Global Environmental Change

Since 1990 global population has grown from roughly 5.3 to 6.8 billion and sustained global economic growth, accompanied by total and per capita increases in consumption in many parts of the world, not least in Brazil, Russia, India and China. However, our world remains riven by differences in access to resources and per capita consumption both between and within countries. A review of the most highly cited papers in this journal shows significant contributions across five broad themes: the drivers and impacts of systemic and cumulative change, cross – cutting concepts such as vulnerability and resilience, approaches to management, control and policy, and different perspectives on climate change. The scientific community has clearly documented and quantified global environmental change with increasing precision and improved models to understand remain. The community has also developed tools to quantify our footprints and the effects of our lifestyles beyond our immediate surroundings (Rees, 1992; Hoekstra and Hung, 2005) and we have far greater potential to understand our interconnectedness across scales, in both biophysical and socio-economic terms, which as Rifkin (2009) suggests may cultivate increased empathy. But it is perhaps at the interface between individual and collective perceptions and action that research has challenges we change must engage further with psychological and behavioral change in its socio-economic and political context and the forms of institutions and governance that can foster new technologies and ideas of progress.

6. Environmental Issues At Global Level

- Depletion of natural resources.
- Water Pollution.
- Air Pollution.
- Ground Water Pollution.
- Toxic Chemicals & Soil Pollution.
- Ozone Layer Depletion.
- Global Warming.
- Loss of Bio-diversity.
- Extinction of wildlife and loss of Natural Habitat.
- Nuclear Wastes and radiation Issues.