# UG\_4TH SEMESTER\_GEOGRAPHY\_GENERIC PAPER\_GEO-GE-O3-TH- Environmental Geography

## **Topic: Human Environmental Relationship- Historical Progression**

Name of the Guest Teacher: Somrita Sinha

Department of Geography

#### 1. Meaning of Environment:

• To define environment is as difficult as defining life. In general terms it refers to all the external conditions in winch an organisms lives.

- Literally the very word 'Environment' comes from a French word 'Environner' which means 'to surround 'or 'to encircle'. Thus die word environment is used to describe everything that surrounds the organism, air, soil, water, climate, food supply and a myriad of their external conditions including the things created by man. Etymologists frequently conclude that in English usage at least, environment is the total of the things or circumstances around or organism including humans though environs is limited to the "surrounding neighbourhood of a specific place, the neighbourhood or vicinity."
- In simple word, Environment is the 'Surroundings of the Self.' It is the totality of the biotic and a-biotic factors. According to the Encyclopaedia Britanica (1994) "Environment is the complex of physical, chemical and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival." So in reference to man, the environment has two broad components viz. physical or natural environment and social environment of human race which is a by-product of economic, social, and political interactions.
- According to the International Encyclopaedia of the Social and Behavioural Science (2001) "Environment
  is the total external conditions and influences affecting the life and fortunes of organisms, affecting the
  parameters of life."
- The environment is thus the aggregate of all the conditions that support living things. In turn, living things, including humans, are all interactive parts of the environment. The environment consists of both natural and human-made systems. The natural environment includes the biosystem that supports all living things. The built environment is the human-made system, which is supported by the natural environment The state of (he natural environment ultimately determines the quality and survival of life on Earth.

#### 2. Approaches to the study of man-environment relationship:

The study of relationships between man and environment has always been a focal theme of environmental science and facets of man-environment relationship changed through time with the development of human society and the dimension of environment As the man become social, economic and technological, he broadened his environment by creating his own environment through his design and skill to have provision for better food, shelter, access and comfort The man environment relationships, thus, can be perceived and evaluated in a variety of ways and approaches as followings:

#### A. Deterministic Approach:

This approach is based on the basic tenet of 'earth made man' and pays more attention on the complete control of physical environment on man and his activities. In fact, according to deterministic perspectives of man-environment relationships, man is subordinate to natural environment as all aspects of human life viz.physical (health and comfort), social, economic,

political, ethical and aesthetic etc. not only depend but are dominantly controlled by physical environment

## B. Teleological Approach:

Teleological Approach is based on religious faith of man being superior to nature and all other creatures. This school emanated from the teaching of Judeo-Christian religious tradition which preached that 'man is superior to all creatures and everything is created for his use and enjoyment'. This ideology of man- environment / nature relationship fostered the man to exploit natural resources and to subdue nature without considering the after effects of reckless and uncontrolled plundering of natural resources.

## C. Possibilistic Approach:

Possibilistic Approach to the study of man-environment relationships emerged through the criticism of environment determinism and overtone of teleological approach. Right from the very inception of the school of environmental determinism there was dissenting voice raised by those who believed that 'no doubt physical environment influences man and his activities but there is ample scope for man to change the environment so much so that it becomes suitable for man and his society.' Possibilists were quite aware that man cannot fully tame the nature and is not always victorious. Possibilists replaced more deterministic terms 'control' by 'influence' and 'influence' by more moderate terms 'response' or 'adjustment'.

## D. Economic Deterministic Approach:

This approach is based on the basic ideology of Man's mastery over environment and continued economic and industrial expansion through the application of modem technologies. The basic thesis of the growth (affluence) school is that because economic growth is required for political, social and economic stability, the 'quality of environment' normally assumes lower priority in formulating planning proposals and in long - term planning because the deterioration of the environment is generally protracted and socially less oblique than a deterioration in the economy.

It may be pointed out that this extreme concept of economic determinism led to rapacious exploitation of natural resources in the western developed countries and thus created most of the environmental and ecological problems of global dimension.

#### E. Ecological Approach:

Ecological Approach to the study of man-environmental relationships is based on the basic principle of ecology which is the study of mutual interactions between organisms and physical environment on the one hand and interactions among the organisms on the other hand in a given ecosystem. Thus, man is considered as an integral part of nature/environment. It is obvious that the relationship between man and environment is two directional as the environment affects and influences man and in turn man also influences and modifies the environment. This type of mutual interactions and relationship between man and environment is symbiotic in character.

### 2.Man's interaction with Environment through ages:

- The history of mankind has revealed that the present configuration of human life is determined and affected by social as well as natural environment International Encyclopaedia of the Social and Behavioural Science (2001) defines environment as the total external conditions and influences affecting the life and fortune of organisms, effectively the 'parameters of life'.
- 'According to the biophilia hypothesis, the human species evolved in the company of other life forms, and we continue to rely physically, emotionally, intellectually on the quality and richness of our affiliations with natural diversity' (Saunders 2003).
- Healthy and diverse natural environment is necessary pre-condition for human lives of satisfaction and fulfilment (Kellert and Wilson 1993). So, it is the technology of man which has drastically changed the man-environment relationship from prehistoric period to the present most advanced industrial period. In fact, 'the industrial and scientific revolutions'

have led to rapid changes in our environment, but all technology, from the most primitive to the most advanced, causes some changes in the environment.

- As asserted by Gardner & Stem, (1996) the underlying cause of the depletion of natural resources in a large-scale social dilemma is the unrestricted access to natural resources either renewable or non-renewable that people have, such as electricity, water, oil, clean air, etc. Though there is a traditional debate between conservationist and non-conservationist, still people in general are highly concerned with the quality of the environment (Gagnon Thompson & Barton, 1994; Manzo, & Weinstein, 1987; Mohai, 1985; Prester, Rohrmann, & Schellhammer, 1987).
- In spite of this general concern, people greatly differ in the level of their environmental involvement and in the amount of time and energy they are willing to invest in behaviours aimed at conserving or improving the quality of the environment. A comparatively recent study on motivation towards the environment suggests that these behaviours are not necessarily equal in terms of their perceived level of difficulty (Green-Demers, Pelletier, & Menard, 1997).
- Many environmental problems have the structure of a social dilemma, namely a conflict between private interests and the interests of the collective at large (Dawes, 1980). Sachs (1993) mentioned how individual affinity to consumerism contradicts with concept of social solidarity of global citizenship.
- Posch (1993) has stated that 'the effects and side-effects of human activity become less and less predictable', and 'any judgement about environmental damage is based on value assumptions'. Johnston (1989) has noted: Understanding the nature of environment problems and how they might be solved requires much more than a scientific appreciation of environmental processes. It demands an understanding of how societies work and how collective action within those societies is both organized and constrained.
- Maha Haidar Makki et.al. (2003) categorically mentioned uninformed environmental decisions and behaviours could be very costly at the ecological, economic, and social levels. The human systems are divided into socio-political activities (decision making, institutional organization, culture and values); and to physical activities (demography, consumption, production). This model provides at least a very general framework for cross-disciplinary discussions.
  - Three basic dimensions of the role of humans can be differentiated (Clark, 1988):
- I. The interactions between human and environmental systems (the sources of global changes, the consequences of these changes).
- II. The choices that individuals, governments and organizations make in efforts to manage interaction (public perceptions, options, values).
- III. The underlying elements of social structure or culture that shape these interactions and choices.
- According to the report prepared by IPCC (2007), the human influences on the issue of climate change may have-
- i. very likely contributed to sea level rise during the latter half of the 20th century
- ii. likely contributed to changes in wind patterns, affecting extra-tropical storm tracks and temperature patterns
- iii. likely increased temperatures of extreme hot nights, cold nights and cold days
- iv. more likely than not increased risk of heat waves, area affected by drought since the 1970s and frequency of heavy precipitation events. IPCC-2007

At this juncture where in one hand, we are accelerating the exploitation of nature indiscriminately on the other, people have felt the need of eco-friendly development which is further manifested through different sphere of life. O'Riordan (1992), basing his classification on European perspectives on the way in which the environment might be managed, identified three main positions:

- Dry green, reflecting the prevalent scientific prediction within an 'enlightened' market economy;
- Shallow green, reflecting 'eco-auditing' in which production, marketing and consumption would be adjusted to a more 'ethically acceptable' environmental philosophy; and
- Deep green, reflecting a more sustainable approach to the planet as an entity, through emphases such as more 'self-reliant communities' (what might be called communalism) and a greater emphasis on 'global co-existence' and 'green rights' (what might be called Gaianism).

Only an environmentally literate society will be able to adequately and constructively participate in the on-going discussions and reflection. The present generation of students, and likely several successive generations, will inherit the Earth's environmental problems and be faced with addressing them, as they are problems that cannot be solved in one generation as suggested by Catherine Gautier and Stacy Rebich (2005). Therefore, humanity needs a new relationship with nature, a healthier bond between the 'Self and the 'Surroundings', a new set of cultural values and a 'paradigmatic shift' in the global vision of earth-man relationship. Development of healthy personal and social attitudes in learners will go a long way towards environmental sustenance, building a vigilant society, and promoting sustainable development, as well as maintaining a standard of health, hygiene and sanitation (NCERT-2003).

One indicator of environmentalism is environmental citizenship, which refers to support and acceptance of public policies that may require material sacrifice in order to reach environmental goals (Stem, Dietz, Abel, Guagnano & Kalof, 1999). A strong sense of environmental citizenship may help people to overcome potential barriers to environmentally benign behaviour. However, when a specific behaviour is received as easy to perform there is less need for a strong environmental citizenship to motivate a behavioural change (Chris von Borgstede and Anders Biel, 2002).

Thus if we look at the historical progression of man- environment relationships it become clear that purely natural relationship between 'physical primitive man' and natural environment during prehistoric period has changed to hostile relationship between 'technological man' and the environment at present This substantial change and shift in the nature and magnitude of man's interactions with the natural environment has given birth to numerous environmental problems of serious consequences because the changes effected by man in the environment have become adjustable by the in-built self-regulatory mechanism of the natural environmental system / ecosystem.