Human impact on the environment essay sample

Environment, Pollution



The natural environment encompasses all living and non-living things occurring naturally on earth or some region thereof. It is an environment that encompasses the interaction of all living species. Environment literally means surrounding and everything that affect an organism during its lifetime is collectively known as its environment. In another words "Environment is sum total of water, air and land interrelationships among themselves and also with the human being, other living organisms and property". It includes all the physical and biological surrounding and their interactions.

Environmental studies provide an approach towards understanding the environment of our planet and the impact of human life upon the environment. Thus environment is actually global in nature, it is a multidisciplinary subject including physics, geology, geography, history, economics, physiology, biotechnology, remote sensing, geophysics, soil science and hydrology etc.

Environment And Humans

Human beings are an integral part of their environment and the environment impacts on all aspects of human life, including human rights. The 1972

United Nations Conference on the Human Environment formally recognized the interrelation of environment and human rights, affirming that 'man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself'. 1 Environmental rights belong to the so-called category of third generation or collective rights. These are rights that affect whole societies or groups of people rather than just individuals, and include those such as the right to peace, to sustainable development, to communication or to share in the

common heritage of humankind. Collective rights, such as the right to a healthy environment, acknowledge that human rights exist not only for individuals in a political and social system but for all people united as fellow beings in interdependent systems that transcend nation states. For example, global warming affects all living things, regardless of what country they are in. Just as each individual must respect the intrinsic value of fellow human beings, he or she must also respect the value of all fellow beings: animals, plants and the ecosystems in which we all exist.

The environment impacts on people's human rights both positively and negatively. It plays an essential role in ensuring human life, providing the raw materials for our food, industry and development. However, environmental hazards, such as excess radiation or contaminated drinking water, can also threaten the fundamental right to life. People exposed to pollution of the soil, air or food and water supplies may be subject to human rights violations as well as bad health, genetic damage, loss of livelihood and even death. Many fundamental human rights have significant environmental dimensions: the right to health, to safe and healthy working conditions, to adequate housing and food, to work and to an adequate standard of living. Environment mean neighborhood & surrounding conditions, influences, or forces, by which living forms are influenced and modified in their growth and development. Without neighborhood we are incomplete. All things & Life have there surrounding locality (Environments) in the universe.

Here we discuss the environment, commonly known as the natural environment, which always in human interaction between culture and nature

in the natural world. It totally depends on our understanding of how humans have been affected on natural environment in the past and what results. To learn the relationships between humans and the surrounding world, we must try to understand how the interaction between these two works. In the broadest sense knowledge of environments may be defined as social practices, technological and physical arrangements future to facilitate work in partnership, decision making, inference or discovery, depending on the premises and goals. Various historians had touched on environmental themes throughout history, but it was not recognized as a specific field. The modern environmental history becomes known in the late 1960s and early 1970s in union with the rise of environmentalism as a social movement. Climate is often measured a part of environmental history, and surely shares many areas of study.

The period 1962 to 1970 observed slow grinding down in the popularity of the word "conservation," as man by himself replaced trees and wildlife as the threatened class. Overpopulation and industrialization trapped mankind in weakening environment. The damage was threatening to the very survival of man. Environmentalism gained strength as a movement dedicated to ending- and if possible-reversing this decline in the human environment. Every living species of animals or plants influences its environment and in turn gets affected from it. The magnitude of influence done by plants and animals is limited to a certain extent due to natural barriers, further they cannot modify their environment. But man is an exception, he can modify his environment to satisfy his needs. From the start of human civilization, man started interfering with the environment. He devastated forests for wood,

bringing land for cultivation and to have soil which has eroded by natural processes. He killed animals, the gentle ones for food and fierce ones for safety. He polluted water, air and soil by chemical garbage from their houses and factories.

However all these activities did not affect the environment in a serious way for a long time, because population was not so high and nature's self cleansing and purifying ability keep the environment undeteriorated. After the scientific and industrial revolution in the past, man started to affect his environment in a more serious way. Man's effort to control the nature, leads imbalance in the ecosystem. Large crowded cities, huge industrial installations every year, more and more comfort requirements all these leads to what is called environmental pollution. Primitive man used natural resources to satisfy his basic needs of air, water, food and shelter. These natural and unprocessed resources were readily available in the biosphere, and residues produced by there use were generally compatible with, or easily assimilated by the environment. But as the acquired needs of man increases, it increases the complexity of resource production chain, and mass and complexity of the pollutants generated. All the above mention activities of man raised problems like ecological imbalance, environmental degradation, disruption of earth's natural ecosystems, depletion of protective ozone layer, global warming and sick environment.

Problems to environment

Climate change

Climate change is a significant and lasting change in the statistical distribution of weather patterns over periods ranging from decades to millions of years. It may be a change in average weather conditions, or in the distribution of weather around the average conditions (i. e., more or fewer extreme weather events). Climate change is caused by factors that include oceanic processes (such as oceanic circulation), variations in solar radiation received by Earth, plate tectonics and volcanic eruptions, and humaninduced alterations of the natural world; these latter effects are currently causing global warming, and "climate change" is often used to describe human-specific impacts. Climate change is a long-term shift in the statistics of the weather (including its averages). For example, it could show up as a change in climate normals (expected average values for temperature and precipitation) for a given place and time of year, from one decade to the next. Climate change affects the Earth's water supply in a large number of ways.

It is predicted that the mean global temperature will rise in the coming years due to a number of forces affecting the climate, the amount of atmospheric CO2 will rise, and both of these will influence water resources; evaporation depends strongly on temperature and moisture availability, which can ultimately affect the amount of water available to replenish groundwater supplies. Certain naturally occurring gases, such as carbon dioxide (CO2) and water vapor (H2O), trap heat in the atmosphere causing a greenhouse effect. Burning of fossil fuels, like oil, coal, and natural gas is adding CO2 to the atmosphere. The current level is the highest in the past 650, 000 years. The Fourth Assessment Report of the Intergovernmental Panel on Climate

Change concludes, "that most of the observed increase in the globally averaged temperature since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

Environmental Degradation

Environmental degradation is the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable. Environmental degradation is one of the Ten Threats officially cautioned by the High Level Threat Panel of the United Nations. Environmental degradation is of many types. When natural habitats are destroyed or natural resources are depleted, environment is degraded.

One major component of environmental degradation is the depletion of the resource of fresh water on Earth. Approximately only 2. 5% of all of the water on Earth is fresh water, with the rest being salt water. 69% of the fresh water is frozen in ice caps located on Antarctica and Greenland, so only 30% of the 2. 5% of fresh water is available for consumption. Fresh water is an exceptionally important resource, since life on Earth is ultimately dependent on it. Water transports nutrients and chemicals within the biosphere to all forms of life, sustains both plants and animals, and molds the surface of the Earth with transportation and deposition of materials. Agriculture is dependent on available soil moisture, which is directly affected by climate dynamics, with precipitation being the input in this system and various processes being the output, such as evapotranspiration, surface runoff,

drainage, and percolation into groundwater. Changes in climate, especially the changes in precipitation and evapotranspiration predicted by climate models, will directly affect soil moisture, surface runoff, and groundwater recharge.

Land Degradation

Land degradation is a process in which the value of the biophysical environment is affected by one or more combination of human-induced processes acting upon the land. also environmental degradation is the gradual destruction or reduction of the quality and quantity of human activities animals activities or natural means example water causes soil erosion, wind, etc. It is viewed as any change or disturbance to the land perceived to be deleterious or undesirable. Natural hazards are excluded as a cause, however human activities can indirectly affect phenomena such as floods and bush fires. This is considered to be an important topic of the 21st century due to the implications land degradation has upon agronomic productivity, the environment, and its effects on food security. It is estimated that up to 40% of the world's agricultural land is seriously degraded. Land degradation is a global problem, largely related to agricultural use. The major causes include: * Land clearance, such as clear cutting and deforestation * Agricultural depletion of soil nutrients through poor farming practices * Livestock including overgrazing and over drafting

- * Inappropriate irrigation and over drafting
- * Urban sprawl and commercial development
- * Soil contamination

Pollution

Pollution is the introduction of contaminants into the natural environment that cause adverse change. Pollution can take the form of chemical substances or energy, such as noise, heat or light. Pollutants, the components of pollution, can be either foreign substances/energies or naturally occurring contaminants. Pollution is often classed as point source or nonpoint source pollution. The major forms of pollution are listed below along with the particular contaminant relevant to each of them: * Air pollution:- the release of chemicals and particulates into the atmosphere. Common gaseous pollutants include carbon monoxide, sulfur dioxide, chlorofluorocarbons (CFCs) and nitrogen oxides produced by industry and motor vehicles. Photochemical ozone and smog are created as nitrogen oxides and hydrocarbons react to sunlight. Particulate matter, or fine dust is characterized by their micrometre size.

- * Noise pollution:- which encompasses roadway noise, aircraft noise, industrial noise as well as high-intensity sonar.
- * Soil contamination occurs when chemicals are released by spill or underground leakage. Among the most significant soil contaminants are hydrocarbons, heavy metals, herbicides, pesticides and chlorinated hydrocarbons.
- * Radioactive contamination, resulting from 20th century activities in atomic physics, such as nuclear power generation and nuclear weapons research, manufacture and deployment.

* Water pollution, by the discharge of wastewater from commercial and industrial waste (intentionally or through spills) into surface waters; discharges of untreated domestic sewage, and chemical contaminants, such as chlorine, from treated sewage; release of waste and contaminants into surface runoff flowing to surface waters (including urban runoff and agricultural runoff, which may contain chemical fertilizers and pesticides); waste disposal and leaching into groundwater; eutrophication and littering.

Measures

Sustainable development

Sustainable development (SD) refers to a mode of human development in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come. Sustainable development ties together concern for the carrying capacity of natural systems with the social challenges faced by humanity. Sustainable development is development which meets the needs of the present without compromising the ability of future generations to meet their own needs "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." the above definition contains within it two key concepts:

* the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and * the idea of limitations imposed by the state of technology and social organization on the

environment's ability to meet present and future needs.[7] Sustainable Development (SD) implies economic growth together with the protection of environmental quality, each reinforcing the other. Sustainable Development, thus, is maintaining a balance between the human need to improve lifestyles and feeling of well-being on one hand, and preserving natural resources and ecosystems, on which we and future generations depends

Pollution control

Pollution control is a term used in environmental management. It means the control of emissions and effluents into air, water or soil. Without pollution control, the waste products from consumption, heating, agriculture, mining, manufacturing, transportation and other human activities, whether they accumulate or disperse, will degrade the environment. In the hierarchy of controls, pollution prevention and waste minimization are more desirable than pollution control. In the field of land development, low impact development is a similar technique for the prevention of urban runoff. Pollution can be controlled by following the practices like recycling, reusing, reducing, mitigating, preventing, etc. For checking pollution, more and more parks should be created in order to make the environment healthy and clean. Factories should find place at long distance from the dwellings. Rivers are to be protected from dirty water and filth. Vehicles are to be checked from emitting smoke. They should be fitted with silencers to reduce noise. They should be fitted with silencers to reduce noise. Drinking water should be drawn from greater depth and put in clean and well covered pots. Vanamahotsava programme should be a continuous process. Ways and

means are to be adopted to check soil erosion. Special cleanliness drives should be undertaken at regular intervals in the cities. Milk dairies are to be established at the outskirt of the city. No factory should be allowed to work in and around the localities.

Need for Public Awareness

With the ever increasing development by modern man, large scale degradation of natural resources have been occurred, the public has to be educated about the fact that if we are degrading our environment we are actually harming ourselves. To encourage meaningful public participation and environment, it is necessary to create awareness about environment pollution and related adverse effects. The United Nations conference on Environment and Development held in Rio-de-Janeiro, followed by Earth summit on sustainable Development have high-lighted the key issues of global environmental concern and have attracted the general public towards the deteriorating environment. Any Government at its own level can't achieve the goal of environment conservation, until the public has a participatory role in it. Public participatory role is possible only when the public is awared about the ecological and environmental issues. In short, if we want to manage on planet earth, we would have to make the entire population, environmentally educated. The objectives of environmental awareness should be: (a) Improving the quality of environment. (b) Creating an awareness among people on environmental problems and conservation. (c) Creating such an atmosphere as people find themselves fit enough to

participate in decision making process of environmental development programmes

Reduce, Reuse, Recycle approach

The waste hierarchy is a classification of waste management options in order of their environmental impact, such as: reduction, reuse, recycling and recovery. The Rs are categories at the top of our disposal options. They include a variety of initiatives for disposing of discards. Generally, options lowest on the list are least desirable. Reduce - to buy less and use less. Incorporates common sense ideas like turning off the lights, rain barrels, and taking shorter showers, but also plays a part in composting/grasscycling (transportation energy is reduced), low-flow toilets, and programmable thermostats. Includes the terms Re-think, Precycle, Carpool, Efficient, and Environmental Footprint. Reuse – elements of the discarded item are used again. Initiatives include waste exchange, hand-me-downs, garage sales, quilting, travel mugs, and composting (nutrients). Includes the terms laundry, repair, regift, and upcycle. Recycle - discards are separated into materials that may be incorporated into new products. This is different from Reuse in that energy is used to change the physical properties of the material. Initiatives include Composting, Beverage Container Deposits and buying products with a high content of post-consumer material.

The 3R's of reduce, reuse and recycle have been considered to be a base of environmental awareness and a way of promoting ecological balance through conscious behaviour and choices. It is generally accepted that these

patterns of behaviour and consumer choices will lead to savings in materials and energy which will benefit the environment.

Environment Protection Act, 1986

An Act to provide for the protection and improvement of environment and formatters connected therewith. Whereas the decisions were taken at the United Nations Conference on the Human Environment held at Stockholm in June, 1972, in which India participated, to take appropriate steps for the protection and improvement of human environment. The Environment (Protection) Act 1986 was introduced after the Bhopal gas tragedy during Rajiv Gandhi was the Prime Minister of our country. Measures by Central Government

- * Power of entry and inspection (sec-10).
- * Establishment of environmental laboratories (sec-12).
- * Preventing emissions in excess of standards (sec-7).
- * Report of analysis (sec-14).
- * Procedure for handling hazardous substance (sec-8).
- * Power to take sample and procedure (sec-11).
- * Appointment of government analyst (sec-13).
- * Penalty (sec-15).
- * Duties of persons creating environmental pollution (sec-9).

Case study

Environmental Issues in Pakistan.

High growing population rate, ignorance, Industrialization, agriculture declining, problems are increasing and covered large size and all aspects of our life, which needs authoritative expert's attention to be solved. There are problems like Air Pollution, Drinking water pollution, Global warming, Hazardous Waste, Ozone Depletion and many others, which makes the list endless. As globalization covers its way across the world these problems no longer remain local problems but become international issues. There are many causes of these problems, some of which are created by man and can also be controlled by man. So here we would closed our discuss some of these environmental problems in Pakistan. Uncontrolled high population growths and poor natural resource management over many has a negative impact on Pakistan's environment.

Agriculture and other sectors will dry up as natural resources exhaust themselves, caused by ongoing deforestation. Like other developing countries Pakistan facing fast growing, wide ranging & complex environmental problems include natural hazards and disasters, power and electricity crisis, urban and industrial growth, factory and vehicle emissions have degraded air quality, polluted water supplies, waste disposal and costal & marine pollution are some of the few prominent environmental challenges faced by Pakistan. Life is drawing more and more towards misery as the citizens remain deprived of the fundamentals of life. Pertaining to environmental problems we have a large list of never-ending issues, which are effecting the development and economy of the country. Lack of planning, non serious attitude & failure of economic policies, continually brought Pakistan to environmental collapse. All over the world countries are facing

one or the other problem related to environment, but Pakistan has become a hub all these unfortunately. The struggle to save the global environment is in one way much more difficult than the struggle to vanguish Hitler, for this time the war is with ourselves. We are the enemy, just as we have only ourselves as allies.

Efforts in Pakistan

Pakistan Environmental Protection Agency is an attached department of the Ministry of Environment and responsible to implement the Pakistan Environmental Protection Act, 1997 in the country. Pakistan Environmental Protection Agency also provides all kind of technical assistance to the Ministry of Environment for formulation of environment policy and programmed. Building on the Pakistan Environmental Protection Ordinance of 1983, the NCSR stipulated three goals for the country's Pakistan set three goals for the country's environmental protection efforts: 1. Conservation of natural resources

- 2. Promotion of sustainable development
- 3. Improve & manage of resources efficiency.

In addition, in 1993 Pakistan applied National Environmental Quality Standards (NEQS) (Revised in 1999) to municipal and liquid industrial effluents and industrial gaseous emissions, motor vehicle exhaust, and noise. But when new revised environmental regulations were implemented in 1999, only 3% of industries were able to pass the test for compliance. A lack of funding is evident in Pakistan's environmental protection efforts. The World Bank's pilot programs are designed according to the objectives and

strategies of Pakistan's National Conservation Strategy. However, Pakistan's previous environmental record is poor, and the country has not been able to back up its commitment to environmental protection with action. It is clear that Pakistan will need to place greater emphasis on environmental protection in order to stem the country's environmental degradation and safeguard citizens' health. The objective of the event was to develop forest resources through international competition. This activity will achieve the national objective of increasing forest and will also raise awareness among masses besides creating a soft image of the country in the world.

World Record of Maximum Plantation in a Single Day

In view of global significance of mangrove forests, particularly in the context of the Tsunami of 2005, the GWR event was held in the Mangrove areas on the coastal islands of Sindh, which are presently devoid of vegetation. The specific site of the event was at Katti Bander in Thatta district, some 150 KM in the South East of Karachi. This is in accordance with present Government's resolve to rehabilitate Mangrove forests of Sindh by all means, in partnership with Sindh Forest Department, international and national NGOs and private sector. During this event the Pakistan broke the earlier record of planting 447, 874 trees by India in June, 2009. It's a great victory but its dependent on continues & regular care of that trees in the future till they becomes on self grown.

Conclusion

The effect that waste has on our natural environment and ultimately on the quality of our life has been made public in worldwide debates. The problems related to waste have many dimensions. In economically challenged communities, the scope and magnitude of the problem may often exceed the capacity that local authorities have to effectively resolve issues of waste collection and disposal, in addition to other difficult city managerial tasks. Bearing in mind the complexity of nature and cities, the ecological conditions of urban areas are viewed as the necessary measures for environmental protection and recovery. Land, water, vegetation and other living organisms fill cities and interact with people. In consequence their protection and care reflect upon the quality of human life. To effectively protect nature in cities it is also necessary to consider factors be- yond air, land and water.

For instance, energy issues, characteristics of infra- structure, social and cultural patterns, as well as waste management are features that affect the balance of cities. The idea that waste management can be integrated as an element that pro- motes the welfare of life and improves the ecological conditions of urban settlements lies firstly in recognizing the endemic nature of the waste to be handled. Secondly, ensuring effective waste collection coverage leads to the reduction of air, noise and soil pollution. Thirdly, social approaches such as knowledge transfer have shown to be effective in encouraging sustainable household habits, which help improve recycling and the reduction of gas emission in landfills and waste dump sites. Lastly, creating enduring partnerships of collaboration between parties contributes to continuity in waste management practices and avoids palliative improvements. This leads to sustainability in the system humankind has

established for living and the preservation of the environment in which it exists.