

Environmental Issues and solutions for Protection and conservation

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Abstract:

Natural resources such as lakes, rivers, forests, wildlife, etc. have a pivotal role in human lifestyle but growing population of the world is increasing pressure on environment. The primary concern of the governments is to implement policies and programmes for conservation of the ecosystem, natural resources, welfare of animals and prevention of pollution etc. In this paper, we have discussed various environmental issues and we have highlighted initiatives taken by various organizations for conservation and protection of flora and fauna, forest and wildlife, and for control of pollution. There are many environmental issues in present day world. Air pollution, water pollution, garbage, and pollution of the natural environment are all challenges. Pollution remains a major challenge and opportunity for the world. Environmental issues are one of the primary causes of disease, health issues and long term livelihood impact.

Keywords:

Environment, Government Schemes, Renewable energy, Pollution, Conservation, forests.

Introduction:

The level of understanding of Earth has increased markedly in recent times through science especially with the application of the scientific method. Environmental science is now a multi-disciplinary academic study taught and researched at many universities. This is used as a basis for addressing environmental issues. Large amounts of data have been gathered and these are collated into reports, of which a common type is the State of the Environment publications. A recent major report was the Millennium Ecosystem Assessment, with input from 1200 scientists and released in 2005, which showed the high level of impact that humans are having on ecosystem services.

Major current environmental issues may include climate change, pollution, environmental degradation, and resource depletion etc.

Climate Change:

Climate change is a change in the statistical distribution of weather patterns when that change lasts for an extended period of time (i.e., decades to millions of years). Climate change may refer to a change in average weather conditions, or in the time variation of weather around longer-term average conditions (i.e., more or fewer extreme weather events). Climate change is caused by factors such as biotic processes, variations in solar radiation received by Earth, plate tectonics, and volcanic eruptions.

Certain human activities have also been identified as significant causes of recent climate change, often referred to as “global warming”. Scientists actively work to understand past and future climate by using observations and theoretical models. A climate record — extending deep into the Earth’s past — has been assembled, and continues to be built up, based on geological evidence from borehole temperature profiles, cores removed from deep accumulations of ice, floral and faunal records, glacial and periglacial processes, stable-isotope and other analyses of sediment layers, and records of past sea levels. More recent data are provided by the instrumental record. General circulation models, based on the physical sciences, are often used in theoretical approaches to match past climate data, make future projections, and link causes and effects in climate change.

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 PM₁₀ to PM_{2.5}.

Light pollution:

includes light trespass, over-illumination and astronomical interference.

Littering:

the criminal throwing of inappropriate man-made objects, unremoved, onto public and private properties.

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, MTBE, 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. (See alpha emitters and actinides in the environment.) Thermal pollution, is a temperature change in natural water bodies caused by human influence, such as use of water as coolant in a power plant. Visual pollution, which can refer to the presence of overhead power lines, motorway billboards, scarred landforms (as from strip mining), open storage of trash, municipal solid waste or space debris.

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.

Environmental issues are addressed at a regional, national or international level by government organizations. The largest international agency, set up in 1972, is the United Nations Environment Programme. The International Union for Conservation of Nature brings together 83 states, 108 government agencies, 766 Non-governmental organizations and 81 international organizations and about 10,000 experts and scientists from countries around the world. International non-governmental organizations include Greenpeace, Friends of the Earth and World Wide Fund for Nature. Governments enact environmental policy and enforce environmental law and this is done to differing degrees around the world.

The United Nations Environment Programme (UNEP) is an agency of the United Nations that coordinates its environmental activities, assisting developing countries in implementing environmentally sound policies and practices. It was founded by Maurice Strong, its first director, as a result of the United Nations Conference on the Human Environment in June 1972 and has its headquarters in the Gigiri neighborhood of Nairobi, Kenya. UNEP also has six regional offices and various country offices.

Its activities cover a wide range of issues regarding the atmosphere, marine and terrestrial ecosystems, environmental governance and green economy. It has played a significant role in developing international environmental conventions, promoting environmental science and information and illustrating the way those can be implemented in conjunction with policy, working on the development and implementation of policy with national governments, regional institutions in conjunction with environmental non-governmental organizations (NGOs). UNEP has also been active in funding and implementing environment related development projects.

UNEP has aided in the formulation of guidelines and treaties on issues such as the international trade in potentially harmful chemicals, transboundary air pollution, and contamination of international waterways.

The World Meteorological Organization and UNEP established the Intergovernmental Panel on Climate Change (IPCC) in 1988. UNEP is also one of several Implementing Agencies for the Global Environment Facility (GEF) and the Multilateral Fund for the Implementation of the Montreal Protocol, and it is also a member of the United Nations Development Group. The International Cyanide Management Code, a program of best practice for the chemical's use at gold mining operations, was developed under UNEP's aegis.

UNEP's main activities are related to:

- climate change;
- including the Territorial Approach to Climate Change (TACC);
- disasters and conflicts;
- ecosystem management;
- environmental governance;
- environment under review;
- harmful substances; and
- resource efficiency.

Notable world projects UNEP has sponsored the development of solar loan programs, with attractive return rates, to buffer the initial deployment costs and entice consumers to consider and purchase solar PV systems. The most famous example is the solar loan program sponsored by UNEP helping 100,000 people finance solar power systems in India.[7] Success in India's solar program has led to similar projects in other parts of the developing world like Tunisia, Morocco, Indonesia and Mexico. UNEP sponsors the Marshlands project in the Middle East that helps to protect the largest marshland in the Middle East. In 2001, UNEP alerted the international community to the destruction of the Marshlands when it released satellite images showing that 90 percent of the Marshlands had already been lost.

The UNEP "support for Environmental Management of the Iraqi Marshland" commenced in August 2004, in order to manage the Marshland area in an environmentally sound manner. In order to ensure full participation of global communities, UNEP works in an inclusive fashion that brings on board different societal cohorts. UNEP has a vibrant programme for young people known as Tunza. Within this program are other projects like the AEO for Youth.

Glaciers shrinking:

Glaciers are shrinking at record rates and many could disappear within decades, the U.N. Environment Programme said on March 16, 2008. The scientists measuring the health of almost 30 glaciers around the world found that ice loss reached record levels in 2006.

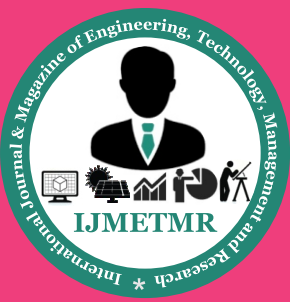
On average, the glaciers shrank by 4.9 feet in 2006, the most recent year for which data are available. The most severe loss was recorded at Norway's Breidablikkbrea glacier, which shrank 10.2 feet in 2006. Glaciers lost an average of about a foot of ice a year between 1980 and 1999. But since the turn of the millennium the average loss has increased to about 20 inches.

Electric vehicles:

At the fifth Magdeburg Environmental Forum held from 3–4 July 2008, in Magdeburg, Germany, UNEP and car manufacturer Daimler called for the establishment of infrastructure for electric vehicles.

At this international conference, 250 high-ranking representatives from ce, politics and non-government organizations discussed solutions for future road transportation under the motto of "Sustainable Mobility—the Post-2012 CO₂ Agenda" Today, the organized environmental movement is represented by a wide range of organizations sometimes called non-governmental organizations or NGOs.

These organizations exist on local national and international scales. Environmental NGOs vary widely in political views and in the amount they seek to influence the government. The environmental movement today consists of both large national groups and also many smaller local groups with local concerns.



Conclusion:

The ecosystem in which we live provides natural services for humans and all other species that are essential to our health, quality of life and survival. All of the environmental problems that exist have far-reaching implications for the health of our planet and its inhabitants. The deterioration of the environment, often referred to as environmental degradation, threatens the earth's natural resources such as our clean water supply, fossil fuels for energy and food supply. Many of these resources are nonrenewable so when they run out we will be forced to find new alternatives.

References:

1. <http://www.unocha.org/what-we-do/advocacy/thematic-campaigns/climate-change/threats-solutions>
2. Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-being: Biodiversity Synthesis. Summary for Decision-makers. pp.1-16. Washington, DC.: World Resources Institute. The full range of reports is available on the Millennium Ecosystem Assessment web site. Retrieved on: 2009-03-10
3. Jeffrey M. Diefendorf; Kurkpatrick Dorsey (2009). City, Country, Empire: Landscapes in Environmental History. University of Pittsburgh Press. pp. 44-49.
4. <http://www.yuvaengineers.com/biodiversity-informatics-vital-for-sustainable-growth/>
5. Thomas R. DeGregori (2002). Bountiful Harvest: Technology, Food Safety, and the Environment. Cato Institute. pp. p153. ISBN 1-930865-31-7.
6. Cunningham, William P.; et al. (1998). Environmental encyclopedia. Gale Research. ISBN 0-8103-9314-X.
7. Huesemann, Michael H., and Joyce A. Huesemann (2011). Technofix: Why Technology Won't Save Us or the Environment, New Society Publishers, Gabriola Island, British Columbia, Canada, ISBN 0865717044, 464 pp.
8. Neil Paul Cummins "An Evolutionary Perspective on the Relationship Between Humans and Their Surroundings: Geoengineering, the Purpose of Life & the Nature of the Universe", Cranmore Publications, 2012.