



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



---

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume:** 10    **Issue:** VIII    **Month of publication:** August 2022

**DOI:** <https://doi.org/10.22214/ijraset.2022.46376>

[www.ijraset.com](http://www.ijraset.com)

Call:  08813907089

E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)

# Global and Local Environmental Issues

Premlata Yadav

Assistant Professor, Mayfair degree college Moradabad

**Abstract:** *The environmental issues have assumed states of global problems mobilizing to the civil society organization, media sector and government around the world from the last two decade. Among global environmental changes, Climate change as proceed to be structuring the debate in recent years, characteristic as one of the main charges of the global society. 'Global Environmental Issues' is a phrase that refers to the effect on the climate of human actions, in particular the on fire of fossil fuels (coal, oil and gas) and large-scale deforestation, which cause emissions to the atmosphere of large amounts of 'greenhouse gases', of which the most important is carbon dioxide.*

*Such gases take up infrared radiation emitted by the Earth's surface and act as blankets over the surface keeping it warmer than it would otherwise be. Connected with this warming are changes of climate. The basic science of the 'greenhouse effect' that leads to the warming is well implicit. More detailed understanding relies on numerical models of the climate that integrate the basic dynamical and physical equations describing the complete climate system. Many of the likely characteristics of the resulting changes in climate (such as more frequent heat waves, increases in rainfall, increase in frequency and intensity of many extreme climate events) can be identified. Substantial uncertainties remain in knowledge of some of the feedbacks within the climate system (that affect the overall magnitude of change) and in much of the detail of likely regional change. Because of its negative impacts on human communities (including for instance substantial sea-level rise) and on ecosystems, global warming is the most important environmental problem the world faces. Adaptation to the inevitable impacts and mitigation to reduce their magnitude are both necessary. International action is being taken by the world's scientific and political communities. Because of the need for urgent action, the greatest challenge is to move rapidly to much increased energy efficiency and to non-fossil fuel energy sources. This paper presents the first broad based research on the impact of Climate change on historic buildings, buried archaeology, parks and Gardens research coincided with the publication of the climate change scenarios and other studies assessing regional climate change and the impact on nature conservation and gardens.*

**Keywords:** *Environmental issues; Greenhouse effect; Crisis*

## I. INTRODUCTION

An Introduction to Global Environmental Issues presents 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 environmental issues. Major global environmental issues are brought into focus. Explanations of the evolution of the earth's natural systems (hydrosphere, biosphere, geosphere, ecosphere) provide an essential understanding of the scientific concepts, processes and historical background to environmental issues. Human impact and management of the natural environment, and concerns for maintaining biodiversity are emphasized throughout. The rapid growing population and economic development is 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 forests. 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 ecosystems, livelihood security for the poor. It is estimated that the country's population will increase to about 1.35 billion by the year 2018. 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 population on 2.4% of 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 is a worldwide issue. The environmental problems faced by developed nations are largely the result of their economic strength and higher standards of living. Overconsumption is cited by many observers as a cause of resource depletion in the First World. Americans, and to a lesser extent western Europeans, Japanese, and other residents of developed nations, are more likely to own one or more cars, purchase more food and clothes than subsistence levels require, and use considerable amounts of electricity. Americans consume a disproportionate amount of the planet's resources. The United States is home to 5% of the world's population but uses 25% of its resources.

Overall, the developed world has 23% of Earth's population but consumes two-thirds of the resources. Environmentalists contend that this high level of consumption will ultimately lead to the depletion of the planet's resources, resulting in adverse consequences for human populations. Developed nations have reduced their rate of population growth, so overpopulation is not as great a problem as it was previously considered to be; however, because of the high level of consumption, each new person in a developed nation will use three times as much water and ten times as much energy as a child born in a developing country. The environmental crises faced by developing nations are the result of poverty. For example, Third World countries often lack the resources and sanitation facilities to provide the public with clean water. Tropical deforestation, caused by the slash-and-burn techniques of poor farmers, is another dilemma. The global warming agreement reached in Kyoto, Japan, in December 1997 exempted developing nations such as China, India, and Mexico from requirements to reduce their emissions. But according to the United Nations, countries exempted from the agreement will create 76% of total greenhouse gas emissions over the next 50 years. If the environment truly is a worldwide issue, then the solutions may also be universal. However, international agreement on environmental issues is often difficult to achieve because countries are not at equivalent stages of social and economic development. As noted earlier, the Kyoto global warming agreement reveals the difficulty of finding universal solutions to environmental problems. Developing nations would not consider even voluntary participation in emission reduction, arguing that such measures would impede their efforts to improve their economies and industries. Even within developed nations, the response to the treaty has varied. In June 1998, the European Union reached an agreement that will reduce their greenhouse gas emissions by 8%. However, many people in the United States have more negative attitudes toward the agreement; they assert that achieving the reduced emission levels could hurt the nation's economy.

#### A. *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 Intergovernmental Panel on Climate Change (78), and on MacCracken et al. (106), who combine discussions of model-based predictions and paleoclimate records. This is a rapidly developing field. Although the detailed predictions derived from general circulation models are uncertain and subject to revision, there can be little doubt in a qualitative sense that the increased and still-increasing concentrations of radiatively active gases in the atmosphere will result in significant climate change of some sort.

#### B. *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 uprising population and the environmental deterioration face the challenge of sustainable development. 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 natural environment. An estimated 60% of cultivated land suffers from soil erosion, water logging, and 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 groundwater is problematic in the states of Haryana, Punjab, and Uttar Pradesh. Forest area covers 18.34% of India's geographic area (637000 km<sup>2</sup>). Nearly half of the country's forest cover is found in the state of Madhya Pradesh (20.7%) and the seven states of the northeast (25.7%); the latter is experiencing net forest loss. Forest cover is declining because of harvesting for fuel wood and the expansion of agricultural land. These 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 Institute of Parvati has estimated that a 3°C rise in temperature will result in a 15 to 20% loss in annual wheat yields.

#### C. *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, deforestation, the loss of the planet's biological diversity and the trans boundary movements of hazardous wastes and chemicals are all environmental problems that touch every nation and adversely affect the lives and health of their populations.



As with other environment-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 effects on people and societies and are either difficult or impossible to reverse over the period of one generation.

#### *D. 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.

#### *E. Environmental Issues at Global Level*

- 1) Depletion of natural resources
- 2) Water pollution
- 3) Air pollution
- 4) Ground water pollution
- 5) Toxic chemicals & soil pollution
- 6) Ozone layer depletion
- 7) Global warming
- 8) Loss of bio-diversity
- 9) Extinction of wildlife and loss of natural habitat
- 10) Nuclear wastes and radiation issues

Global environmental issues list if asked what are the global environmental issues that the planet faces today, most people out there wouldn't be able to go beyond global warming and energy crisis. These people are not aware of the fact that there are several other issues of global concern, each of which is equally hazardous. More importantly, all these issues are related with each other by some or the other way, and hence, tackling them one by one has just become difficult.

## **II. CLIMATE CHANGE**

Climate change has become more than obvious over the past decade, with nine years of the decade making it to the list of hottest years the planet has ever witnessed. The rise in temperature has also ensured that the equations on the planet have gone for a toss. Some of the most obvious signs of this include irregularities in weather, frequent storms, melting glaciers, rising levels of sea etc. Going by the prevailing conditions, it is not difficult to anticipate that the planet is heading for a dramatic climate change, some wherein, near, future.

## **III. LAND DEGRADATION**

Land pollution, owing to human activities, and desertification, due to loss of vegetation has left the surface of the planet unsuitable for human use. Land degradation can be attributed to the fact that we have become too laid-back in terms preservation of the nature. Improper soil use, haphazard waste disposal, large-scale deforestation and other such human activities harmful for nature are on the rise, something which is invariably taking a toll on our natural surroundings.

The analysis based on the land degradation data reported in the Desertification and Land Degradation Atlas of India (ISRO, 2016) reveals that 96.40 Mha. area of the country is undergoing a process of land degradation (29.32 percent of the total geographic area of the country) during 2011-13, while during 2003-05 the area undergoing process of land degradation was 94.53 Mha (28.76 percent of the total geographic area of the country). Thus there is an increase of 1.87 Mha areas

15 undergoing a process of land degradation (constituting 0.57 percent of the total geographic area of the country) during the time frame 2003-05 and 2011-13. Forest land recorded more degradation than any other land ecosystems in all regions of the country. On the other hand, cropland has shown improvement in north, south and northeast regions of the country over the two periods. In the case of high-level degradation forest, vegetation and cropland biomes 7,333,276 ha during the 2003-05 time frame and 7,303,470 degraded in the 2011-13 period out of 327,525,500 ha in India. During 2003-05 to 2011-13 time frames the total land degradation in main three categories is 29,806 ha. ISRO (2016) reports land use change during 2003-2005 and 2011-2013 time periods.

Status of land is reported under the categories, forest, agriculture, grassland, Grassland / Grazing land, Land with scrub, Barren, Rocky area, Dune / Sandy area, Glacial, Periglacial and other land use. The data also documents different processes, such as vegetation degradation, salinity, water logging, mass movement, frost heaving, manmade and many other ways, leading to land degradation. Vegetation and grassland degradation are documented across the country. Bihar, Gujarat, Odisha, Telangana, Karnataka and Maharashtra are affected more by water erosion. The problem of wind erosion is widely affecting Rajasthan. The process of Salinity/alkalinity problem is seen across the country mostly in agricultural dominated states. Water logging problem is mostly affecting states with major irrigation projects. During eight years period (i.e., 2003-05 to 2011-13) forest land has been changed/degraded across the country except in Odisha. The bulk of forest land conversion into agricultural land is the main reason for forest land degradation. The agricultural land cover is increased in many states from 2003-05 to 2011-2013 period. States like Uttar Pradesh, Odisha, Madhya Pradesh, Telangana, Assam, and Meghalaya's agricultural land has been improved the land fertility due to land use change.

16 As a country in India 797,576 ha of forest, 248,330 ha of grassland, and 64,431 ha of cropland has been degraded over 8 years period (see Table 1 for details). To calculate the annual degradation from 2003-05 to 2011-13 is divided by 8 years.

**Table 1: Annual Land Use Cover Change: 2003-05 to 2011-13 (in ha)**

State	Forest	Grassland	Cropland
Andhra Pradesh	258	-2797	11245
Arunachal Pradesh	11759	895	0
Assam	127625	21793	-7001
Bihar	-13565	1018	44989
Chhattisgarh	2188	-5141	16179
Goa	5870	0	-1
Gujarat	69175	-13495	81221
Haryana	897	2227	5127
Himachal Pradesh	94872	113477	33787
Jammu and Kashmir	10179	62891	31468
Jharkhand	71876	-2920	-476
Karnataka	10341	-3008	-15946
Kerala	8879	97	-917
Madhya Pradesh	2175	12099	-259
Maharashtra	840	-8796	438172
Manipur	3205	-2309	0
Meghalaya	20963	-96	-5230
Mizoram	84731	464	675
Nagaland	129036	11428	0
Odisha	-7576	-26	-33143
Punjab	8027	8944	9102
Rajasthan	10039	-2404	-123036
Sikkim	2963	-2849	0
Tamil Nadu	16960	189	0
Telangana	2481	131	-92989
Tripura	106495	4822	-2633
Uttar Pradesh	8642	-2020	-360266
Uttarakhand	7290	53716	0
West Bengal	951	0	34363
<b>Total</b>	<b>797576</b>	<b>248330</b>	<b>64431</b>

Source: Extracted and compiled from India Space Research Organization (ISRO), 2016.

- 1) *Overpopulation*: Yet another major global environmental issue is overpopulation. As the population of world continues to soar at an alarming rate, the pressure on the resources of the planet is increasing. These problems associated with overpopulation range from food and water crisis to lack of space for natural burial. Overpopulation also results in various other demographic hazards. Incessant population growth will not just result in depletion of natural resources, but will also put more pressure on the economy. After all sustaining a huge population requires quite a mammoth effort for a nation, as far as finance is concerned.
- 2) *Pollution*: This is perhaps the most obvious, yet most ignored global environmental issue in this list of environmental problems. The term 'population' in itself has several other aspects, prominent ones among which include air pollution, water pollution and land pollution. On one hand air pollution can be attributed to the large amount of carbon dioxide pumped into the atmosphere by industries and vehicles, water pollution and land pollution is caused as a result of waste disposal from factories, oil-carrying vessels etc. Basically, mankind is to be blamed for this issue as our activities tend to hamper the environment at an alarming rate. If this trend continues, we will be very soon left without any fresh air to breathe, and clean water to drink.

3) *Waste Management*: As population increases, human activities increase, which eventually increases the amount of waste produced. This waste doesn't just include those harmful gases let out in the atmosphere or toxic waste released in water bodies, but also includes nuclear waste, e-waste, medical waste (Abhijit Naik) and even the waste from our homes. With limited area available on the planet, and most of it being inhabited by us, we are left with no space to dispose this waste. The rate at which this waste is produced is far more than the rate at which it is being treated, and these just results in piling up of waste, which eventually pollutes the environment. The contribution of informal sector in recovering and recycling materials, and subsequently saving GHG emissions from the waste sector is considerably high. A 2009 report on the Climate Impact of the Informal Waste Sector in India by Chintan Environment Research and Action Group, a New Delhi based NGO, estimated that scientific management of waste in Delhi alone saves around 962 kilotonne of carbon dioxide equivalent emissions each year.<sup>19</sup> Their calculation was based on only paper, plastic, metal and glass recovery, using material specific emission factors programmed in the US EPA's Waste Reduction Model (WARM20). However, thereport's authors note that the figures used in calculation are quite conservative and the actual rate of recycling could be much higher, and WARM is therefore likely to underestimate the contribution of the informal sector. In all the major cities of India, waste pickers and kabadiwalas together prevent at least 15 per cent of municipal solid waste from going into landfill sites, which would have otherwise cost the Municipal Corporations a large sum in managing (Sharholly 2007). SWaCH Cooperative's waste pickers in Pune recycled over 50 kilotonne of waste in 2016, directly contributing towards GHG reduction by saving 130 kilotonne of carbon dioxide equivalent emissions. This is equivalent to avoiding consumption of 55,000 kilolitre of fuel or carbon dioxide sequestered by 3.3 million plants grown for ten years. Further the paper-waste sent by SWaCH's waste-pickers for recycling, saved around 350,000 35-foot tall trees from getting cut (SWaCH Pune, 2016, based on WARM; accounting for various types of waste generated in the city). Going forward, the city communities and the municipal authorities and elected councilors must all come together to revamp solid waste management with the objective of not only

19 Cooling Agents, Chintan 2009  
20 <https://www.epa.gov/warm>

26 improving public health conditions, but also recovering resources and making the cities more resilient by mitigating the risks associated with human-induced global warming.

#### IV. CLIMATE CHANGE

It is now widely recognized that global warming over the past 50 years is largely due to human activities that have released greenhouse gases into the atmosphere. The most recent assessment report by the Intergovernmental Panel on Climate Change (IPCC) concludes that the global average surface temperature has increased by about 0.6°C during the 20th century. The seemingly small rise of mean temperature is already showing adverse effects. One of the consequences has been a rise in the global average sea level another effect has been more frequent and intensified droughts in recent decades in parts of Asia and Africa. Additionally, in most mid and high latitudes of the Northern Hemisphere continents, precipitation has increased by 0.5 to 1.0 per cent per decade in the 20th century. The world's emissions of greenhouse gases, notably carbon dioxide, continue to increase. The most recent estimates are that atmospheric concentrations of the greenhouse gas carbon dioxide (CO<sub>2</sub>) will double or triple pre-industrial levels by the end of this century. As a result, global surface temperature is expected to increase by 1.4 to 5.8 degrees Celsius from 1990 to 2100 The repercussions of climate change will disproportionately affect those who are least able to adapt - the poor and the most vulnerable sections of society, including children. For example, scientists project that this level of warming could, among other things:

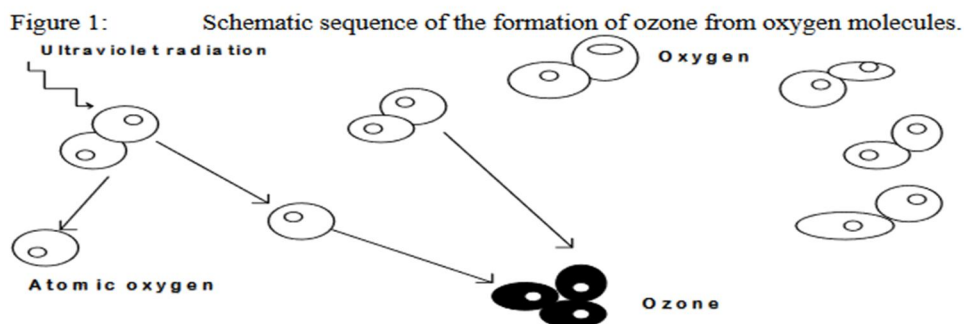
- Greatly exacerbate the range, frequency and intensity of natural disasters, from flooding, to droughts, to torrential rains, ice-storms, tornadoes and hurricanes;
- Cause sea levels to rise by between nine and 80 centimeters by 2100 due to the expansion of warming waters and the melting of polar icecaps and other glaciers, which in turn may produce deadly flooding in many low-lying areas and small island States, displacing millions from their homes;
- Increase the number of environmental refugees resulting from weather-related disasters;
- Augment the risk of disease migration and disease out-breaks; and
- Render large areas of the world "uninsurable" due to the magnitude of property damage from disasters.

It is widely recognized that climate change, by altering local weather patterns and by disturbing life-supporting natural systems and processes, has significant implications for human health. While the range of health effects is diverse, often unpredictable in magnitude, and sometimes slow to emerge, children remain among the most vulnerable to these threats. Higher temperatures, heavier rainfall, and changes in climate variability would encourage vectors of some infectious diseases (such as malaria, schistosomiasis, dengue fever, yellow fever and encephalitis) to multiply and expand into new geographical regions, intensifying the already overwhelming threats to children from such diseases. There is also evidence that El Niño - a vast natural climatic phenomenon that can bring intense floods and droughts in many parts of the globe - is becoming more frequent as a result of global warming and could further aggravate health problems in many parts of the world.

Excessive flooding is, for example, a prime cause of cholera and other water-borne and food-borne infections to which children are particularly susceptible. While heavy rains will become more frequent, there will also be more periods of drought and increased spreading of the deserts. Scientists predict that a lack of rain, warmer temperatures and increases in evaporation could have severe implications in terms of water availability and food security, reducing crop yields in Africa, further compromising child nutrition. There are also numerous health effects, both in terms of disease and injury, associated with extreme weather events, such as heat waves, storms and floods. Extreme weather events can exacerbate health issues such as asthma and respiratory problems due to worsening air pollution, precisely those diseases that most significantly burden children.

## V. OZONE LAYER DEPLETION

Ozone in the atmosphere's upper layer, the stratosphere, protects humans, animals and plants from the damaging effects of UV-B radiation from the sun. Without it, all life on earth would cease to exist. However, the use of chlorofluorocarbons (CFCs) and other Ozone-Depleting Substances (ODS) are slowly eating away at the stratospheric ozone layer, creating a major potential health hazard. While the concentrations of ODS in the lower atmosphere peaked in about 1994 and is now slowly declining due to worldwide efforts to phase out the use of CFCs and other damaging substances, significant health threats relating to ozone depletion persist. Formation of Ozone In the stratosphere ozone is produced as a result of the dissociation of oxygen molecule by the intense UV component of the sunshine. The single oxygen atom (O) combines with other oxygen molecule (O<sub>2</sub>) to form ozone (O<sub>3</sub>) as shown in figure 1.



Past (and current) emissions of ODS result in increases of ultra-violet radiation reaching the Earth's surface which can pose several health effects:

- Increase of melanoma and non-melanoma skin cancers;
- Cause or acceleration of eye cataracts development;
- Reduce effectiveness of the immune system;
- Impact on nutrition (e.g. reduced plant yield);
- Damage to ocean ecosystems and reduced fish yield (by killing microbial organisms in the ocean).

Skin cancer is the most worrisome health impact of ozone depletion. Overexposure to the sun's harmful Ultra-Violet (UV) light may damage children's skin. Recent studies indicate that excessive sunburns experienced by children 10 to 15 years of age increase by threefold the chance of developing malignant melanoma, the most deadly kind of skin cancer, later in life. In Europe, evaluations of ultraviolet-related skin cancers suggest that, despite the decline in ODS concentrations, skin cancer incidences will not begin to fall until about 2060. The international response to this issue is embodied in the Convention for the Protection of the Ozone Layer, which was concluded in Vienna in 1985. The Vienna Convention set an important precedent because nations for the first time agreed in principle to tackle a global environmental problem before its effects were felt. The Convention's 1987 Montreal Protocol on Substances that Deplete the Ozone Layer has been remarkably successful. Production of the most damaging ozone-depleting substances was eliminated, except for a few critical uses, by 1996 in developed countries and should be phased out by 2010 in developing countries. Thanks to these measures, it is currently estimated the CFC concentration in the ozone layer is expected to recover to pre-1980 levels by the year 2050.

## VI. LOSS OF BIODIVERSITY

In addition, the loss of biodiversity obstructs the discovery of new medicines to treat various diseases. Another emerging modern health concern is bio safety and the effects of advances in and increased use of biotechnology to genetically modify foods. Public concern about the health and ecological risks of foods made with biotechnology has intensified in Europe and has spread rapidly to other parts of the world, including the United States. Proponents contend that biotechnology could help feed the developing world, cut costs, and reduce the need for pesticides.



## VII. GLOBAL WARMING

Global warming is the unusually rapid increase in Earth’s average surface temperature over the past century primarily due to the greenhouse gases released by people burning fossil fuels. Archaeological sites and some buildings have survived at least two periods of global warming and intervening cold periods with international scientific evidence mounting and the reliability of future climate predictions increasing. Heritage commissioned research to gather evidence on climate change as a possible cause of environmental instability of cultural heritage and to inform present and future planning.

### A. Roles of WWF to Protect from Global Warming WWF-

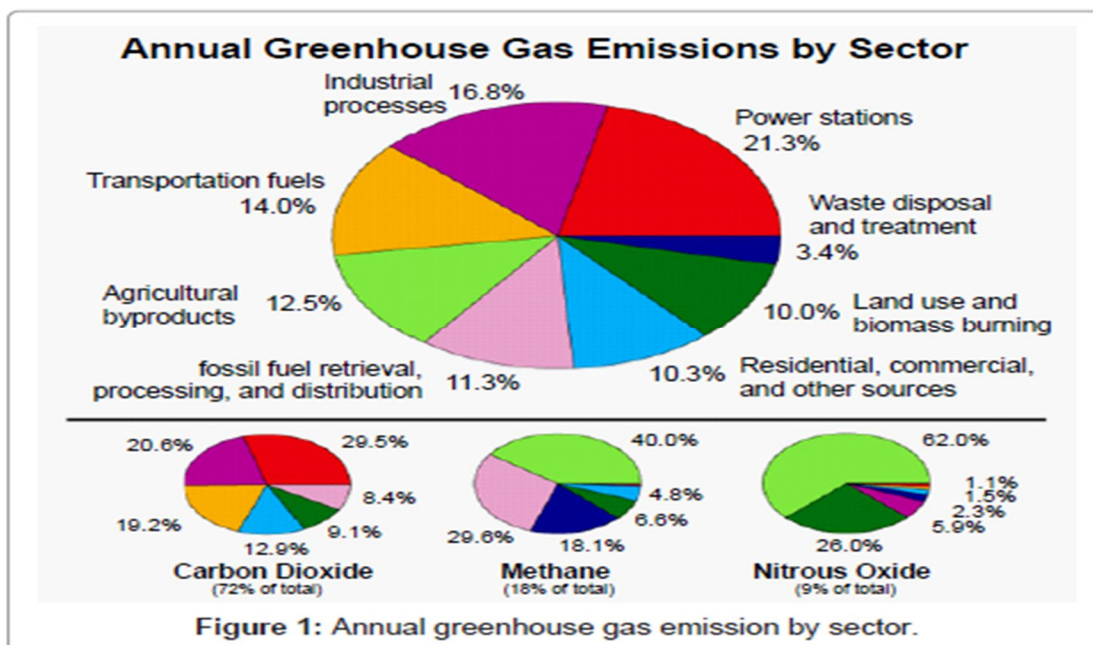
India is one of the largest conservation organizations engaged in wildlife and nature conservation in the country. A part of WWF International, the organization has made its presence felt through a sustained effort not only towards nature and wildlife conservation, but sensitizing people by creating awareness through capacity building and environ-legal activism. A challenging, constructive, science-based organization WWF addresses issues like the survival of species and habitats, climate change and environmental education.

### B. Some Facts and Figures about Global Warming

According to the report of WTO International Organization 2007 the following things are take place in the world and affecting the natural disaster. The biggest ice cap in the arctic region, the ward hunt ice shelf broke into Fragments as a result of global warming, reported NASA. More average shoreline in Fiji receding by half a foot every year. Adelie penguin populations in Antarctica reduce in size by 33%. 20- 30% of the world’s reefs wiped out. The above mentioned facts are the tip of the iceberg as far as disastrous effects of global warming.

### C. Effects of Global Warming in India

Elevated carbon dioxide emissions from industries, factories,



Vehicles etc. have contributed to the greenhouse effect, causing warmer weather that lasted long after the atmospheric shroud of dust and aerosols had cleared [7]. Further climatic changes 20 million years ago, long after India had crashed into the Laurasian landmass, were severe enough to cause the extinction of many endemic Indian forms. The formation of the Himalayas resulted in blockage of frigid Central Asian air, preventing it from reaching India; this made its climate significantly warmer and more tropical in character than it would otherwise have been [9].



Several effects of global warming, including steady sea level rise, increased cyclonic activity, and changes in ambient temperature and precipitation patterns, have affected or are projected to affect India. Ongoing sea level rises have submerged several low-lying islands in the Sundarbans, displacing thousands of people. Temperature rises on the Tibetan Plateau, which are causing Himalayan glaciers to retreat [4]. The present rate of global warming could mean that many plants and animals currently living at lower elevations or at lower latitudes will progressively migrate to higher elevations and latitudes. Hence, in the long term, it may be expected that some of our currently important agricultural species will no longer be able to grow at their present lower latitudinal and lower elevation limits if the global temperate warms.

### VIII. TEMPERATURE

Every year rapidly increase the temperature from the global warming and climate change. As the result natural calamities like Tsunami, Soil erosion, Ice glaciers melting in Himalayas and other things.

### IX. CONCLUSION

Global climate change is causing these areas to experience an increasingly sparse and erratic rainfall pattern and a lengthened dry season, affecting the livelihoods of thousands of villagers; some areas are also facing water shortages. People are becoming aware of sick of global warming, so they cultivate more and more trees, planting mangrove forest by the sites of the coastal areas and reduce the usage of plastic. They have sowed more than 12 million seeds & half a million of plants. Planting trees balances carbon emissions and pollution. There are organizations that will help you offset your carbon footprint. The deforestation comes in a close second in causes for global warming. There is still much that is unknown about the potential health effects of global climate change. The various phenomena that can be said to contribute to the rubric include stratospheric ozone depletion, global warming, acid aerosol formation, desertification, and deforestation. At the current time, these phenomena are being investigated separately, yet the case can and should be made that these things are happening concurrently and there are many instances where interactions are possible as well as likely. Thus, a more global view is required, particularly with regard to the science, but also with regard to policy. These phenomena are not occurring independently, and to analyze them and try to develop responses to them as though they were seems an exercise designed to fall short of the optimum solution. Although it is sometimes helpful to divide a problem into components in order to analyze what contributions are made by the various pieces, at some point the analyst has to reassemble the parts and look for the sum of the effects. This has not yet been done in the public health arena regarding global climate change, and there is very little evidence that it is being done in other important areas such as agriculture and natural resources. At last, global warming can be dealt with only through international agreement. The context is one of game theory, and the stressing need is to design incentive systems for global cooperation. The Montreal protocol on ozone may be an ineffective guide to the prospects for a greenhouse agreement. The most urgent need is to develop appropriate policy instruments and compensatory mechanisms for the best results. The growing recognition that greenhouse gas reductions are not the only option we have to slow and ultimately reverse global warming. Restoring and expanding global forests can also cool the planet.

### X. ACKNOWLEDGMENT

The researchers were: Professor May Cassar and Dr Robyn Pender (conservators); Professor Bill Bordass, Professor Tadj Oreszczyn and Professor Philip Steadman (building physicists); Jane Corcoran and Taryn Nixon (archaeologists); and Professor Lord Julian Hunt (climate modeller). Southeast England sites: Audley End House and gardens, Dunwich medieval town, Flag Fen Bronze Age wetlands site, Languard Fort 19th century fortification and Sutton Hoo barrow site. Northwest England sites: Beeston Castle ruins and grounds, Birdoss Wald (Hadrian's Wall), Birkenhead Park, Brough Castle ruin, Broughton Castle ruin, Chester Castle medieval tower, Chester Roman Amphitheatre, Furness Abbey ruins, Lanercost Priory ruin, Poltross Burn (Hadrian's Wall), Stott Park Bobbin Mill industrial complex and Walton Old Rectory 13th century complex.

### REFERENCES

- [1] Bisgrove R, Hadley P (2002) Gardening in the global greenhouse: the impacts of climate change on gardens in the UK. UKCIP, Oxford, UK.
- [2] Cassar M (2005) Climate Change and the Historic Environment. Centre for Sustainable Heritage, University College London, London, UK.
- [3] Cranfield S (2001) UK: United Kingdom Climate Impacts Programme, Department of the Environment, Food and Rural Affairs and United Kingdom Water Industries Research.
- [4] Harrabin R (2007) How climate change hits India's poor. BBC News.
- [5] Holman I, Loveland PJ, Nicholls RJ, Shackley S, Berry PM, et al. (2001) REGIS - Regional climate change impact and response studies in East Anglia and in North West England (RegIS). DEFRA, UK Climate Impacts Programme, UK.



- [6] Hulme M, Jenkins GJ, Lu X, Turnpenny JR, Mitchell TD, et al. (2002) Climate change scenarios for the United Kingdom: the UKCIP02 Scientific Report. Open Grey: 119.
- [7] Karanth KP (2006) Out-of-India Gondwanan origin of some tropical Asian biota. Current Science WWF International Organization 6: 1-4.
- [8] McCarthy JJ, Canziani OF, Leary NA, Dokken DJ, White KS, et al. (2001) A Report on Working Group II: Intergovernmental Panel on Climate Change. Summary for Policymakers, IPCC: 1-18.
- [9] Epstein PR (2002) Is Global Warming Harmful to Health? South American Magazine.
- [10] National Aeronautics and Space Administration, Goddard Institute for Space Studies (2005) Air Pollution as Climate Forcing. Goddard Space Flight Center.
- [11] [http://upload.wikimedia.org/wikipedia/commons/e/e0/Greenhouse\\_Gas\\_by\\_Sector.png](http://upload.wikimedia.org/wikipedia/commons/e/e0/Greenhouse_Gas_by_Sector.png)



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)