

IMPACT OF GLOBAL WARMING AND ITS EFFECTS ON CLIMATE CHANGE

Dr. Deepak Meshram
Ex. Deputy Registrar, KKSU.
Ramtek

ABSTRACT

In this paper an attempt is made to understand the global warming what causes the Global warming on our planet and its adverse effects on mankind all over the world is discussed and how global warming endangered the species, increases diseases increases pollution which is very dangerous for the survival of human society all over the world and how it affects the climate change all over the world and the effects of climate change adversely affects the life of human beings as well as wildlife species to cope up of this the remedial measures have been discussed in this paper government can control the environmental balance and preserve the natural resources by way of Implementing the regulations and undertaking the policies & programme to ensure the safeguard of natural resources for the wellbeing of future generations & society at large even at the time of accelerating of economic progress by way of Industrialization advance farming in the country. Govt. should safeguard the natural resources by way of pollution control, environmental balance; plantation of more trees adopting the green products by society and creating awareness among the peoples about ill effects of climate change which endangered the environmental balance of our country by way of population control & safeguarding the natural resources will ensure the wellbeing of future generations in our country.

Introduction

To understand global warming is the rise in world temperature of our planet due to rapid Industrialisation and infrastructural development & deforestation process the world the earth gets hotter due to this the natural climate of earth changes is called as global warming the causes of it is increased of greenhouse gases such as burning of fuels and deforestation this impacted on melting of Ice and Sea Level is rising is the great concern for humanbeing all over the world, Global warming is definitely caused by increasing level of CO₂. In recent years there has been a subtle increase in greenhouse gases which has resulted in an increase in thickness of atmosphere due to a relatively thicker atmosphere more reflected rays are entrapped in atmosphere which has increased the overall temperature of earth.

Causes of Global Warming :

- 1) The Primary man made cause of Global warming is the burning of Fossil Fuels, we are taking energy stored over hundred;s of millions of years in the form of coal gas, and oil and releasing it suddenly. The CO₂ released during the process contributes the most to global warming.

- 2) Power plants – Fourty percentage of Carbon dioxide emmission stem from Electricity production 93% of electric Industry emission resulted from burning coal, medical waste & garbage also accounts for two – third of mercury emmission.
- 3) Thirty three percentage emmission causes from the transportation of people and goods.
- 4) Agriculture : Agriculture farming releases huge levels of methane and carbon dioxide in to the atmosphere, farming contributes fourty percentage of the methane and twenty percent of the carbon dioxide.
- 5) Deforestation : Because of deforestation the wooden material is used as building material for making paper & fuel increases global warming due to the release of CO₂ during the deforestation and reduction of CO₂ that forest possess.
- 6) Fertilizers : By the use of nitrogen-rich fertilizers increases the amount of heat of agricultural land. Nitrogen oxide can trap up to 300 times more heat than CO₂.
- 7) Oil Burning : Oil burning from oil drilling industries causes the release of CO₂ in to the atmosphere.
- 8) Natural Gas drilling : Natural Gas drilling causes air pollution the hydraulic fracturing techniques, Used to extract natural Gas from shale deposits pollutes groundwater sources as well.
- 9) Garbage : Garbage releases the methane & nitrous oxide gases 18% methane Gas in the atmosphere comes from garbage.
- 10) Volcanic Eruption : When volcanic eruption takes place it releases CO₂ this eruption causes global cooling as ash in the air reflects greater amount of solar energy.

Effects of Global Warming :

- 1) The effect of Global warming to recently caused natural events by claiming how the number of hurricanes increased in America with 3rd Largest hurricane katrina hitting florida in 2004 how Japan and other nations in pacific are increasing records for typhoons, floods & droughts have increased worldwide due to global warming, water from ocean as well as moisture from soil is absorbed at much larger rate resulting to heavy rainfall in some regions. Like in Mumbai in July 2000.
- 2) The Largest lakes like Chad of Africa have dried up in the last few decades to almost nothing how global warming is evaporating moisture and water anywhere possible.
- 3) In north pole greenland and antarcatica where ice is in abundance it is melting due to global warming when sunray's are reflected on ice only Few rays are absorbed by the ice yet ice is melting at alarming rate, because sunrays are absorbed by ocean water surrounding the gigantic lands of ice and with an increase in temperature of oceans the heat transfer rates to surrounding icelands are increased which helps in melting of Ice. eg. The peak of Antarcatica is melted in Just 35 day's the water reached bedrock of ice and spilt in to parts resulting in shattering of ice which supported melting of Ice.

- 4) Global warming imposes a threat on various species. It has disturbed migration cycle of some birds, tropic regions and high altitudes are now becoming a new breeding ground for mosquitos as now with increasing temperatures they can reach higher altitudes due to which malaria is expanding worldwide and many species have already become endangered some we might never see again. The population all over the world is increasing if it is not controlled then manmade activities will continue to increase resulting in an increase in pollution worldwide overexploitation of Limited resources is the biggest problem to increase the CO₂ Levels.

Effects of Climate change :

Climate change destabilizes the earth temperature and its far reaching effects on human being and the environment due to the global warming the temperature of the earth changes due to the increase of greenhouse gases which has the significant impact on human & environment scientifically it is not possible to assess weather of earth with current climate change but it can be statistically proven that global warming will increase the possibility of extreme weather condition.

The effect of man-made climate change includes :

- 1) Rise in maximum temperature all over the world.
- 2) Rise in minimum temperature all over the world.
- 3) Rise in Ocean temperature.
- 4) Increase in heavy Rainfall.
- 5) Effect on shrinking Glaciers.
- 6) The effect of climate change on human being and environment includes an increase in hunger and water crisis specially in developing countries health risk through rising of air temperature & heatwaves.
- 7) Economic impact of dealing with secondary damage related to climate change.
- 8) Biodiversity is lost due to limited adaptability and adaptability speed for Flora and Fauna.
- 9) Dry Area would become drier and monsoon would lead to more severe flooding & landslips.
- 10) Cyclones wind velocities would increase and high velocity winds would become more frequent would claim a large number of human lives and causing material damage.
- 11) The world Health organisation predicts that crop yields will be down by 30% in Central Asia by the middle of 21st Century due to climate change.

Carbon Trading :

Carbon trading is the part of International emission trading norms. The companies or countries that emit less carbon under the KYOTO protocol the countries have to reduce carbondioxide & Green House gas emission. This is a business opportunity for developing countries. Developed nations have to cut their carbondioxide and Green House emission so they can switch over to cleaner fuels & technologies or buy

permits from companies or countries not using their full quota of emission. The Kyoto protocol will allow countries that have emission unit to sell the excess capacity to countries that are over their targets. This is called carbon trading because CO₂ is the most widely produced greenhouse gas and emission of other green gas and emission of other green house gases will be recorded and counted in terms of their carbondioxide equivalents.

The countries will get credit for reducing green house gases total by Implementation of forest with the help of doing projects with developed nations, credit earn by this way may be sold in the emission market (Carbon Market) India has gained the considerable share in the carbon trading market & companies have gain in huge profits. But at the same time carbon trading as a monetary unit still lacks global acceptance and suffers huge market volatility.

Strategies to be adapted to control climate change :

There is an urgent need to take initiative by government for environmental protection in our country by all stakeholder to safeguard our environment for future generations. Indian universities can play lead role in creating awareness by way of including it in carriculum of the students.

- Indian universities could start a course on climate change, Carbon Trading & Green House environment.
- CSIR and other Research Institutes should jointly undertake the projects and do research on climate change science to remove uncertainties involved in climate change science.
- Government should support the research projects on climate change and its impact on Infections diseases, Agriculture, and on Socio-economic group.
- Government should frame regulation and create awarness about use of Green products to safeguard the consequences of climate change among the rural and urban population in our country.
- Government should strengthen the Environmental protection policies, National science programme & Green School Programmes.
- India's wind energy sector should be made competative with developed nations of world.
- Promotion of renewable energy & nuclear energy can create greenness in our country.
- By way of planting trees more by voluntary organisations /government would be more useful because single tree will absorb one tonne of carbon dioxide during its lifetime.

The above discuss strategies are more important for environmental protection in our country and government should regulate all the measures in systematic way to ensure the environmental balance in our country.

Conclusion :

Global warming is the rise in temperature of our planet because of rapid Industrialisation all over the world due to adaption of new technologies and for achieving economic progress by countries the natural assets of our planets are neglected and damaged like deforestation by us which increases the Greenhouse gases. There is need to generate awareness and consensus among developed and developing nations to mitigate green house gases. For Environmental balance in the world. If we fail to control global warming it could be resulted in to climate change which endangered the species, we have to preserve the endangered species, care of incurable diseases, population control, pollution control etc. climate change is environmental issue that will increasingly affect our future due to this everything changes from natural habitats of wildlife to the culture & sustainability of region. It is our duty to protect the natural resources and Environmental balance for the future generations even we initiate the Economic activity, industrialization, adopting new technologies for doing Agriculture we must ensure the environmental balance for the safeguard of future generation.

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