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Social Issue in India: Impact of global Warming and Climate Change on Indian Agriculture

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Introduction:

The human beings are closely related to natural system and socio economic system. Natural eco system contains forests, river basins, sea level and socio-economic systems contain agriculture, fisheries, irrigation and various development projects. Climate change is now affecting every country. It is disrupting national Economies and affecting lives, costing people, communities and countries. The lacks of resources, technology and finances in developing countries such as India have limited capacity to develop and implement strategies to reduce their vulnerability in climate change. One of the major challenges facing humankind is to provide an equitable standard of living for present and future generations, adequate food, water, energy, safe shelter and a healthy environment. But, global environmental issues such as land degradation, loss of biodiversity, stratospheric ozone depletion along with human-induced climate change, threatens our ability to meet the basic human needs.

People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea level, and more extreme weather events. The poorest and most vulnerable people are being affected the most climate changes may affect our ability to expand the food production as required to feed the public. Climate change could thus have far reaching effects on the patterns of trade among nation, development and food security.

Climate change and Global warming

Climate change or global warming is an increase in global average temperatures that will have a largely negative effect on ecosystems across the world. Climate change affects the balance of natural eco-systems. Climate change will, in many parts of the world, adversely affect socio-economic sectors, including water resources, agriculture, forestry, fisheries and human settlements, ecological systems and human health, especially in developing countries like India due to their vulnerability. Climate change is not only a major global environmental problem, but it is also an issue of great concern to a developing country like India. Global warming is the average temperature of Earth has increases since 1950 until now the temperature continuing increasing. Global warming can also refers to climate change that causes an increase in the average of temperature. However global warming are causes by natural events and human that are believed to be contribute to increase in average temperatures. Global warming is a rise in the surface temperature of the earth that has changed various life forms on the earth. Global warming or global temperatures means temperature have risen (0.60C in the last century), with the last decade being the warmest on record.

Agricultural productivity can be affected by climate change in two ways: first, indirectly, through changes in soil, distribution and frequency of infestation by pests, insects, diseases, and second directly, due to changes in temperature, precipitation CO₂ levels .discriminating water shortage conditions, combined with thermal stress, could adversely affect productivity in India . One of the major areas that will be impacted by climate change in its extremity in the near future is South Asia, and in south Asia especially India mainly because of its diverse environment. Climate change is expected to have a serious impact in this region as the country is rapidly exhausting its natural resources thereby destroying its

environment mostly due to urbanization, uncontrolled industries creating high level pollution. There is an increased possibility of climate extremes, such as the timing of onset of monsoon and intensities and frequencies of droughts and floods. The projected hazards of the fact of climate change include diseased crop yields, the disappearance of glaciers, extreme weather conditions like floods, droughts and storms, increased coastal flooding and species extinctions. A warmer climate is also expected to slow down the poverty reduction rate. The climate change will affect everyone's lives in the region, but the poor and farmer will be the most affected as they are the once largely dependent on rain-based agriculture and have no or negligible resources to sustain their livelihood.

Causes of Global Warming

There are two major cause of global warming they are natural and human influences

Natural Causes of Global Warming

- 1) The climate has continuously changing for centuries. The global warming happens because the natural rotation of the sun that changes the intensity of sunlight and moving closer to the earth.
- 2) Greenhouse gases are carbon monoxide and sulfur dioxide it trap the solar heats rays and prevent it from escaping from the surface of the earth. This has cause the temperature of the earth increase.
- 3) Methane is also a greenhouse gas. Methane is more effective in trapping heat in the atmosphere that carbon dioxide by 20 times. Usually methane gas can release from many areas. For instance, it can be from cattle, landfill, natural gas, petroleum systems, coal mining, mobile explosion, or industrial waste process and such as many things.

Human Influences on Global Warming

- 1) Human influence has been a very serious issue now because human (expect of sum countries and countrymen) do not take care of the earth. Human that cause global warming are more than natural causes global warming.
- 2) The earth has been changing for many years until now it is still changing because of modern that is so called modern lifestyle of human.
- 3) Human activities include industrial production, burning fossil fuel, water, air, soil and sound pollution. Industrial have been using fossil fuels for power machines. Everything that we use is involved in fossil fuel.
- 4) Another issue is mining. During the process of mining, the methane will trap below the earth.
- 5) Deforestation is a human influence because human have been cutting down trees to produce papers, wood, build houses, furniture or more. If human continuing deforestation, carbon dioxide will concentrate in the atmosphere because trees can absorb carbon dioxide from atmosphere.
- 6) Human also release carbon dioxide when breathe. Therefore the amounts of millions of people breath have release carbon dioxide to the atmosphere.

The Effect of Global Warming

India experienced one of its driest two-year periods in 2016-2018 that affected almost the entire country. Temperatures went past 51 degrees centigrade during the month of May in the state of Rajasthan and Maharashtra. From the other side water levels in India's reservoirs were at their lowest in almost a decade as per the Central Water Commission.

The worst affected region in the country due to severe drought was Marathwada, and then Vidarbregion of Maharashtra. For thelast five years this region witnessed a continuous depletion of water, indebtedness and an irregular climatic pattern have affected the region's agriculture, which is primarily rain-fed. No. of minimal availability of water in dams. Over the period of last three-four years, agriculture in Maharashtra has been hit by extreme weather events like, hailstorms, heat wave, frost and erratic rains.

Moreover, the heat wave in India during 2013-2018 caused the reduction of agricultural production. An increase of one degree in temperature during the flowering stage of various crops in that same year also led to a huge loss to the farmers in Marathwada and Vidarbha. The recent drought which saw an increased number of deaths, the brunt of it will be borne by the poor, the weak and the underprivileged.

The rich, the powerful sections of society have most often been the reasons for the disasters and the underprivileged have been the victims of it. Big business or companies, which contribute to large-scale pollution of air and water, escape with the mere 'corporate social liability' clauses. They hardly have any means to approach the courts and seek justice. The laws have not been stringent enough to bring the justice. The authorities will not be prosecuted for dereliction of duties. Cases, which do manage to reach the Apex Court by means of Public Interest Litigations, only manage to bring about a small change in averting future crisis. Where the state fails and judiciary sits silent over the pressing issues of vital importance like climate change, there will be anarchy and desperate people end up committing suicides like the farmers in Maharashtra. India has been facing various issues as a result of climate change but we have not learnt any lessons from our past mistakes.

Conclusion

Signals of climatic change are already visible. Global Warming has caused many problems for humans. Global climate change is going to affect major crops in India. Hence, more attention has to be paid to other resources and technologies viz. soil, irrigation water, nutrients, crops and their management practices, to sustain the productivity and to ensure food and environmental security to the country. It also affects the economics of the country. However, we need to reduce global warming by using less gasoline, recycle and human should help to reduce global warming instead of making the earth temperature increased. Our generation should start taking care of the earth because in the next generation they will suffer if we do not do reduce global warming. Therefore, global warming is a serious issue now. We need to understand the effect of climate change that will affect us when we have our business and we can start saving the earth. Save earth save environment save life.

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