

AFFECT OF GLOBALIZATION ON CLIMATE CHANGE AND FOOD PRODUCTION : A GEOGRAPHICAL STUDY

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Abstract:

Climate change ensues due to Global Warming causing decreases in agricultural production. It possibly began with development which was followed by a fast growth of fossil petroleum ingesting. This question has drawn international attention since the 1970 and it has been extensively recognized by scientists that the Greenhouse gas formations are the reason of global warming. Global warming and climate change can effect agriculture in a variety of ways. This paper means to deliberate about the causes and impact of Global warming on agriculture area.

Key Word: Global Warming , Agricultural, Climate change, Crop produce.

Introduction:

The impact of Global Warming can affect Agriculture production and food security. The research hence looks into how adaptation can take place along with alleviation and how these steps can integrate into the overall development methods and program. It is the fact that agriculture still offers a livelihood for the most of the people particularly the underprivileged throughout the world. 15% population lives in India out of the world population. Agriculture performs a vital role in the comprehensive economic and social progress of India. The most approaching weather changes in present time is the increase in the atmospheric temperature due to increased level of Greenhouse gases Carbon -dioxide, methane nitrous -oxide and chlorofluorocarbons. There is a wonderful growth in the temperature of earth surface and sea water. During 1951 to 2005 the normal temperature of the earth was 0.74° to 1.33° Fahrenheit, do climate change.

Agricultural facilities add to around 20% of the yearly rise in anthropogenic greenhouse gas issue. Agricultural sector adds to global warming through carbon-dioxide, methane, sulphur-dioxide, nitrous-oxide and chlorofluorocarbon [cfcs]. The growing attentions of those dangerous or Green House gases, there is much nervousness about future variations in our weather and direct or indirect influence on farming.

Objective :

1½ To determine the variation of crop Production.

2½ To calculate the changing in Ecosystem.

3½ To determine the Climatic effects on food Production.

Evidence of climate change

The most convincing climate change evidence scientists have of climate change is long term data connecting atmospheric CO2 levels and global temperature, sea level, the area of ice, the relic record and the distribution of types.

This data, which goes back billions of years, shows a robust correlation between CO2 levels and temperature. Recent data shows a trend of increasing temperature and growing CO2 levels start in the early 19th century. Because all parts of the global climate are connected, scientists have been able to generate models of how changes produced by heating should work their way through the whole system and appear in different areas, for example, sea level, intemperate weather, the movement of fish species in the ocean.

Testing whether or not forecast alterations have occurred is an important way to confirm important theory. This can be done in two ways. First, it is imaginable to load a model with important data and request. How well does this model forecast what we know happened. A second way to test is to use the model to forecast upcoming changes and then to see if emerging reality turns. It is possible to way the rapid departure of glaciers and observe the summer melting of the Polar Ice Cap. Sea levels are rising evidently, the temperature of the world’s oceans is clearly rising and consequently many fish type are moving to follow waters that are the right temperature for them. Relating these changes to the timing of rises in CO2 levels and temperature suggests relationship. In specific occurrences, for example, CO2 levels, temperature and ocean pH, the chemical progresses are noticeable showing finished fundamental connection.

Visual Effects of Climate Change Evidence

Melting Glaciers



Rising Sea Levels

Flooding



Worsening Droughts



Changing in ecosystems

As the world warms, whole biomes will transfer. Before increasing temperatures at the equator consume lacking such main crops as rice north into once cooler areas, many fish types have migrated long distances to stay in waters that are the proper temperature for them.

In once colder waters, this may increase fishermen's catches; in warmer waters, it may eliminate fishing; in many places, such as on the East Coast of the US, it will need fishermen to go further near feast angling lands. Farmers in temperate regions are conclusion drier environments hard for crops such as slop and wheat, and once main rising regions are now weak. Some areas may see complete ecological transformation. In California and on the East Coast, for example, climate change impacts and warming will soon fundamentally change the forests; in Europe, hundreds of plants species will disappear and hundreds more will move thousands of miles.

How climate affects :

Climate change can distressed farming in several ways. Outside a definite range of temperature, warming inclines to decrease crops because crop speed through their progress, creating a reduced amount of grain in the procedure. The greater temperature, also restrict the aptitude of plants to get and use humidity. Evaporation from the soil hastens when temperature increase and plants growth transpiration. That is dropping wetness from their leaves. Because worldwide warming is perhaps to increase rainfall, the net influence of advanced temperatures on water availability is a competition between better evapotranspiration and greater precipitation. Usually, that race is accomplished by increased evapotranspiration.

Finally the climatic change could upset agricultural in numerous manners:

- Production, in terms of number and standard of crops.
- Agricultural practices, through variations of water consumption [Irrigation] and agricultural. Contributions such as herbicides, pesticides and fertilizers.
- Environmental effects, in specific in relation of frequency and intensity of soil. Drainage, soil erosion, reduction of crop change.
- Rural space, over the loss and gain of cultivated land, land conjecture, land renunciation, and hydraulic amenities.

Adaptation, organisms can develop more or less competitive, as well as humans may develop urgency to develop more competitive, organisms, such as flood resistant or salt resistant varieties of rice.

The big misgivings to find, particularly because there is lack of information on countless particular, local regions and contain the uncertainties on greatness of climate change, the impacts of technological changes on efficiency, global food demands, and the several capabilities of variation.

Most of the agronomists believe that, agricultural production will be regularly affected by the harshness and place of climate change, not so much measured trends in climate. If change is measured, there may be adequate time for biota adjustment. Rapid climate change, however, could harm agricultural in many countries, especially those that are already suffering from rather poor soil and climate conditions, because there is less time for optimum natural selection and change.

India and Global Warming affects:

In India different produce are developed by varied farming means in fifteen Agro-climate regions these farming crops are intensely affected by global warming that take to climate variations. It is fact that Indian agriculture is based on rainwater for irrigation. Indian agriculture regularly go through that, certain area of is scarcity disposed to and the other sectors are inclined to inundating initial part of many parts in India, have been fighting with drought and simultaneously, agrarian soil is drenched with inundations. In such a nation, the impact of Global Warming will be hazardous as weather change is supposed to influence on agrarian output and changing crop system. As a developing country India is poorly prepared to face Global Warming which exaggerated such dangerous weather change. The lassitude in government technology will turn it harder to deal with this question. The issue will be more critical and it is understandable from the point that, if the normal temperature is a by one degree Celsius it takes to augmented melting of the glaciers of Himalaya.

Climate change and Food Production:

One of the maximum attractive impacts of increasing temperatures is touched in World agriculture, though these effects are touched very differently in the largely temperate developed world and in the more tropical developing world. Different crops grow best at quite exact temperatures and when those temperatures change, their production changes meaningfully. In North America, for example, growing temperatures may decrease corn and wheat productivity in the US mid-west, but increase production and production north of the border in Canada. The productivity of rice, the main food of more than one third of the world's population, failures 10% with each 1^o C growth in temperature. Previous climate persuaded problems have been balance by major advances in rice technology and always larger applications of fertilizer; prospects are that in Thailand, the world's largest exporter of rice, though, upcoming increases in temperatures may decrease production 25% by 2050. At the equal period, global population models suggest that developed world will add 3 billion people by 2050 and that developing world food producers must dual main food crop production by then just to uphold present levels of food ingesting.

Climatic inconsistency and occurrence of dangerous actions are key doubts for the Indian subcontinents. In India, the study of recurring and yearly outside air temperatures has uncovered a important warming leaning of 0.57^o Cen. per hundred years. The warming is seen to be principally added by the post-monsoon and winter seasons. The monsoon temperatures do not display a important leaning in any main area of the nation. Like warming leaning has also remained understood in Pakistan, Nepal, Srilanka, and Bangladesh. The rainwater differences in India take remained typically chance over a Century, with no systematic difference obvious in

summer monsoon season. But, parts of rising propensity in the episodic rain take continued implicit through the West Cost, North Andhra Pradesh and Northwest India and those of decreasing tendency done East Madhya Pradesh, Orissa and Northeast India during changed years.

Conclusion:

The climate change, as observed through inclinations of temperature increase and increased CO₂ attention, is matter of primary concern. The various studies for measuring its impact on Farming area has increased .Crop progress models have been revised and assessed for many significant crops of this area under different climate variation conditions. But most of the result occur to be area exact and with fixed deductions. Accuracy in evaluating the extent of the climate change on higher spatial and temporal determination scale is the key requirement for exact assessments of the influence. Indian farming is probable to experience damages because of heat, unreliable weather, and declined irrigation availability. Adaptations policies can help minimize negative influences. This requires research, funding, and policy support.

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