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### Impact of climate change on agriculture

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#### Abstract

Climate change is a global problem that is having a huge impact on human society and other factors climate change and Agriculture are interrelated processes, both of which take place on a global scale, with the adverse effects of climate change affecting Agriculture both directly and indirectly. This is due to erratic rainfall, rising sea level, bad weather, adverse effects on Agricultural crops etc. DVE to climate change.

**Keywords:** climate change, global warming, rainfall, agriculture, impact, atmosphere, earth

#### Introduction

Climate change refers to changes beyond the average atmospheric condition that are caused both by natural factors such as the orbit of Earth revolution volcanic activities and crystal moment and by artificial factors such as the increase in the concentration of greenhouse gases and aerosol climate change by global warming which refers to the average increase in global temperature has become a mega train that will lead to significant Global changes in the future

Concerning its impacts the United Nation intergovernmental panel on climate change presented considerable scientific evidences in its fourth report on climate change any they have become clearly recognized worldwide agriculture production is carried out through the selection of crops suitable for the climate of a specific region and application of proper farming methods there for agriculture is a climate dependent biodiversity with notable regional characteristics regional characteristics refers to the ecosystem

Characteristics determined by the climate of a region climate change disturb the agricultural ecosystem resulting in the changes in agricultural climate elements such as temperature precipitation and sunlight while further influencing are arable livestock and hydrology sectors

#### Scope of Climate Change

Climate change affect the agricultural ecosystem giving rise to lights and taste and causing population moment and change in Biodiversity in the livestock sector climate change brings about biological changes in the areas such as fertilization and breathing and also appeared the growing pattern pastures climate change affect the hydrology including underground water level water temperature river flow and water quality of place and marshes by impacting precipitation evaporation and soil moisture content as illustrated above climate change has a wide range of impacts on the rural economy including agricultural productivity reserve values of the farmhouse old and asset values and it also affect is IIT agricultural infrastructure through the change in water sources available for agriculture

#### Impact on Indian agriculture major

Impacts of Climate Change on Indian agriculture this study assessed the change impacts on land productivity for Major food and non food grain crops in India the major impacts is related to land productivity decreases with an increase in annual average temperature in most of the cross the adverse impact of Climate Change on agricultural production indicates food security threat to small and marginal farmers households and adversely affected due to climatic fluctuations results show that our eyes is temperature would reduce agricultural productivity and horses sensitivity of Indian agriculture to climate change

According to reports from various organization it is understood that the agricultural impacts of Climate Change in India or uncertain the total average impact may be positive or negative depending on the climate impacts also very both quantitative and qualitative the by crop level of agronomic management region and season as to the seasonal impacts the rugby agricultural in Central and southern India will be more risky but more senior your show that climate change will have an overall positive impact on not significantly on India's agriculture until 2015 by the year 2018 main temperature increased very large the Indian agriculture will suffer the most

Other causal effect other causal factors the agricultural sector is a driving force in the gas emissions and land use effects thought to cause climate change in addition to be a significant user of land and consumer of fossil fuel agriculture contributes directly to Greenhouse gas emission through practices such as Rice production and raising of livestock according to the intergovernmental panel on climate change the three main causes of the increase in greenhouse gases observed over the past 250 years have been fossil fuels land use and Agriculture land use agriculture contributes to Greenhouse gas increases through land use in four main hue number 102 releases linked to deforestation second Methane religious from enteric fermentation in cattle 3rd Methane releases from rice

cultivation 4 nitrous oxide releases from multilizer application together these agricultural processes comprise 54% of Methane emission roughly 80% of nitrous oxide emission and Virtually all carbon dioxide emission tied to land use deforestation also 88 regional carbon reuptake which can result in increased concentration of Co2 the dominant Greenhouse gas

Fertilizer production the greenhouse gases carbon dioxide Methane and nitrous oxide are produced during the manufacture of Nitrogen fertilizers can be combined into an equivalent amount of carbon dioxide that figure for the United Kingdom is over to kilograms of carbon dioxide equivalent for each kilogram of Ammonium Nitrate livestock live stock and leaves stock related activities such as deforestation and increasingly feel in intensive farming practices are responsible for 18% of human made greenhouse gas initial worldwide livestock production up to 70% of all and used for agriculture or soil of the land surface of the earth the way life stock is great also decide the entirety of the land in the future not cultivating racing can lead to on healthy soil and its function of livestock farm appeared the habitats of local animals and had led to a drop in population of many local spaces from being displaced

Soil erosion large scale farming can cause large amount of soil erosion causing between 25 and 40% of soil to reach water sources with carrying the pesticides and fertilizers used by farmers effect of soil erosion on the loss of your style that it has led to increased pollution and sedimentation in streams and rivers clogging the waterways and causing declines in fish and other species and degraded lands are also often less able to hold onto water which can worsen flood in soil erosion is a natural as any other type of erosion but human activities have greatly accelerated

### Conclusion

Climate change is a major crisis facing the entire world this must be faced by altogether there is no alternative but to stop human encroachment on nature climate change is already affecting agriculture with effects unevenly e distributed across the world

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