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Socio-Economic Impact of Climate Change

Ruchi Devi[1]
[1]Research Scholar, JSH(PG) College, Amroha, MJP Rohilkhand University Bareilly

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Abstract

Climate change have multidimensional effect that are dangerous for the existence of the Green Planet. Temperature is increasing day by day due to both natural and the anthropogenic factors and it is projected that the rise in natural disasters will worsen the scenario. Change in climate has drastic and significant impact on Environment, economy, agriculture and the society. India ranks 7th in this year´s CCPI, up one spot from the previous CCPI and remaining among the highest performers.

India receives a high ranking in the GHG Emissions and Energy Use categories, but a medium in Climate Policy and Renewable Energy, as in the previous year. While India is the world's most populous country, it has relatively low per capita emissions. Our data shows that in the per capita GHG category, the country is on track to meet a benchmark of well below 2°C. While it shows a slightly positive trend in the share of renewable energy, this trend is advancing too slowly.

Keywords- Socio- Environment, Economic Impact, Climate Change, Green Planet

Introduction

Climate change refers to long-term shifts in temperatures weather patterns. Such shifts in temperature can be natural, due to change in the sun's activity or large volcanic eruption. But since the 1800s human activities have been the main driver of climate change primarily due to the burning of fossil fuels like coal, oil and gases. The average temperature of earth's surface is about 1.2 degree Celsius warmer than it was in the late 1800s (before the industrial revolution) at any time in the last 10000 years. The last decade 2011 to 2012 was the warmest on record and each of the last four decades has been warmer than any previous decade since 1850. Many people think climate change means mainly warmer temperature but temperature rise is only the beginning of the story because the earth mainly system where everything is connected, change in one area can influence change in all others. Today, it is largely agreed that few countries will be able to escape the adverse effects of climate change, even though the impact of climate change on economies, or the benefits from adaptation, there are not likely to be homogeneous across economies and sectors. Studies providing evidence of the nonlinear concave effect of climate change on economic growth have suggested that additional global warming, while stimulating growth in cooler areas, will reduce growth in hotter regions.

Climate change with it socio-economic and political dimensions has a emerged as a critical issue globally. It is affecting various aspects of society and economy. India, as one of the words most populous country and a rapidly developing nation is not exempted from its impacts. Let's explore the Socio-economics aspect of climate change.

Impacts on livelihood and economic sectors:

Climate change can have significant impacts on livelihood a d economic sectors.

- Change in temperature and precipitation patterns can affect agriculture, forestry, fisheries, and other primary industries.
- Extreme weather events can damage infrastructure, disrupt supply chains and lead to economic losses.
- Vulnerable population, particularly these dependent on natural resources are often disproportionately affected.

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- There is evidence that marine and coastal systems are experiencing increased stress from climate and other factors. Rising sea levels are expected to lead to increased coastal erosion and water levels. They may be damage to mangroves, salt marshes and coral reefs.
- Human health, security, livelihoods and poverty will be increasingly affected by extreme climate events. Mortality and morbidity especially for vulnerable groups is expected to increase due to heatwaves. The risk of diarrhoea diseases, dengue fever and Malaria is expected via the increased risk of floods and droughts.the

Over the past months there have been several stories about how extreme weather events have disrupted normal life in India. The Global climate risk index 2021 had ranked India 7 in the list of most affected countries in terms of exposure and vulnerability to climate risk events.

Economic impact of climate change - Climate change can adversely affect both supply side and the demand side of the economy.

Reduce agriculture output- Climate change affecting the crops negatively day by day. As extreme weather events become more common and more intense, floods and droughts can destroy crops and eliminate Food Supply, while disrupting agriculture activities and rendering workers jobless. With more cost to the farmers, some will no longer find it financially feasible to form: i.e. some farmers may choose to permanently leave drought affected areas. Agriculture employees the majority of the population in most low-income countries and increased cost can result in worker layoffs or pay cuts. Other farmers will respond by raising their food prices a cost that is directly passed on the consumers and affect the affordability of food. some farmers do not sell their produce but instead feed a family or community, without that food, people will not have enough to eat. This result in decrease production increase food prices and potential starvation in parts of the word. The agriculture industry in India 52% of their employment and the Canadian Prairies supply 51% of Canadian agriculture any change in the production of food crop from the areas could have profound effects on the economy.

Infrastructure Due to climate change infrastructure is at risk. “Rising in sea level can potential loss of value of assets in the trillions of dollars probably anywhere from two to five trillion dollars by the end of the century,” said Heal. “That’s loss from damage to housing, damage to airports on the costs, damage to docks, the railway line that runs up and down the East cost all of which is within a few feet of sea level. If you take a global perspective this is repeated around the world.” Much of this infrastructure will likely need to repaired or replaced.

Human health and productivity If temperature rise 4.5degree centigrade by 2090 more people will die in the world. The annual losses associated with extreme temperature related deaths alone are projected to be $ 140 billion increasing warmth and precipitation will also add to the risk of waterborne and foodborne disease and allergies, and proliferation of insects that spread disease like zika, dengue. Extreme weather and climate related natural disasters can also cause of mental health issues. The most vulnerable population, such as the elderly, children, low income communities will be most affected by these health impacts.

Tourism From major cities to critical ecosystems, many iconic tourism destinations are already the negative impacts of Climate Change. As popular tourist destination become too hot to bear, peak seasons could shift, and coastal or mountain retreats could become more appealing to travellers. Extreme heat is also damaging Earth’s Natural wonders that attract tourist and travellers. Half of Australia's great Barrier Reef's corals have

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disappeared since 1995 due to climate change and many of Asia's beaches and coral reefs have been seriously damaged. Damage includes significant Coral beaches in Indonesia, the Philippines, the Thailand.

Climate change within a human life span and society

- Recognition of global climate change as an environment issue has drawn attention to the climatic impact of human activities. Regardless of their location on the planet, all humans experience climate change within their lifetimes. The most familiar and predictable phenomena are the seasonal cycles to which people adjust their clothing, outdoor activities, thermostats and Agriculture practices. However no two summers or winters are exactly alike in the same place; some are warmer, wetter or Stormier than others. This interannual variation in climate is partly responsible for year to year variation in fuel prices, crop yields, road maintenance budget, and wildlife hazard. Single precipitation driving flood can cause economic damage. Such as flood in Bihar; almost every year floods severely damages property, both movable and immovable, destroys standing crops and food grains and badly cripples the infrastructure in Bihar. The loss of life and limbs caused due to flood events cannot be compensated. However in monetary values, it cost several crores every years. The flood brings untold miseries to the people as they have to leave their damage houses and spent a long time and relief camps, raised platforms or in temporary shelters. Government has to allocate huge amount for rehabilitation, and relocation of people which requires diversion of capital required for maintaining production.
- Children face food shortage due to climate change which leads to weakness, health issues low focus in studies. In lack of nutritious meal children are more likely to have a future filled with uncertainty and personal challenges. Hunger affects focus of youth which distract them from the tasks at hand.
- Climate changes deeply intertwined with Global patterns of inequality. The poorest and most vulnerable peoples bear the brunt of Climate Change impact yet contribute the least to the crisis. As the impact of Climate Change mount, millions of vulnerable people face disproportionate challenges in terms of extreme events, health effect, food, water and livelihood security, migration and forced displacement, loss of cultural identity and other related risks.
- No climate change related deaths are reported and households ranked livestock loss as a less important risk along with loss of livelihood, although it is found that household members migrate to overcome the loss of their income and savings after the flood and drought.

Conclusion - Today climate is changing across our planet and the maximum change is due to human activities. The distinct alteration in every element of the of the climate system: wearing of land and sea surface, increasing in ocean heat content, retreat of land and sea ice, sea level rise and water extreme. Certain region become wetter while other dryer. In a recent report it is seen that the Antarctic Peninsula has been “greening” in response to climate change it found that the area of plant cover across the Peninsula increased from less than 1 sq km in 1986 to almost 12 square kilometre by 2021. Satellite imagery also confirm that the widespread greening trend, across the only accelerating. Increasing climate change can loss special species. Fossil fuels-coal, oil and gas are by far the largest contributor to global climate change. As greenhouse gas emissions blanket the earth, they trap the sun’s heat. This lead to global warming and climate change.

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