

Impact of climate change on economy

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ABSTRACT

Climate change has always been a topic of concern not only for one nation but for the whole world. It is the topic which is discussed wildly. As the world is rapidly developing, climate change is on the opposite track. Climate change and global warming not only affects the health of the nation but also the wealth. Economy and climate change are deeply related. The main object of the paper is to investigate the relation between economy and climate change. The researchers also explore the impact of this on the economy. The paper is based on secondary data which is collected from magazines, newspapers and journals available on the internet.

Key words- Climate Change, Economy

INTRODUCTION

There exists a strong chain between climate change and Economy. Climate change is the mother of all the extreme situations that occur in the world as the world is wholly dependent on climate. Due to the development of countries all over the world the growth of the nation is at its peak but the climate is deeply affected by this development. Climate change is mainly alarmed by the emission of GreenHouse Gas effects (GHGs) and global warming that is the rise in temperature of earth. William Nordhaus, among the first to examine the economic aspects of reducing carbon emissions, warned that our current response to global warming is probably inadequate (Nordhaus, 2016)¹. Economic consequences can be related to climate change as the policies decided by the government influence climate. These policies should be synchronized with the changing climate. With rooted industrialization in developed nations the changes are self-evident. Policy makers in the central government should be aware and sensitive regarding the decision making. It not only affects the physical world but also the biological world. There are many organizations and foundations working for the betterment of climate change. As they say change is inevitable but this change should not harm and destroy the future. One aspect of

climate change can be connected to sustainability development, it can be defined as fulfilling current needs without compromising the ability of future generations to meet their own needs. To achieve a healthy world we need ethical and empowering policies, thus the United Nations acknowledges that policies need to be formed and some goals are to be set, thus emerging Sustainable development Goals (SDG). These 17 SDGs of the United Nations are the agenda that need to be achieved till 2030 and are to be adopted by all UN members. SDG was set up in 2015. Another prominent agreement to save climate and reduce global warming is the Paris agreement. The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century². In today's world we can say that economic activities have reached that level where it can fluctuate the planet and its biological mix. Economic activities are the driving force and one of the central reasons for change in biodiversity and climate. After the second world war industrialization took its pace. Energy used for production is obtained from burning of fossil fuels that can lead to gas emission.

Impact of climate change on various sectors of economy

There are several sectors where the impact of climate change can be deeply observed. These sectors show drastic change with relation to climate change. Although studies proved that most of the adverse change occurring in the climate is due to human activities and policies, a quid pro quo is being followed. Climate change can be warm/ hot temperature, rise in sea level, change in atmospheric conditions which can affect human health, productivity and finally income. Following

sectors are discussed where major contribution of climate change is observed.

1. Agriculture - Agriculture is that sector which is most vulnerable for climate change. Extreme changes in global temperature have made the productivity level of agriculture extremely low. As we step into the 21st century the impact of climate change on agriculture is growing. Agriculture centredly depends on weather, climate, soil etc. due to reduction in productivity in agriculture the impact can be observed in international trade as well as on the GDP of the country. From the last four decades individuals are now shifting from the primary sector to the service or manufacturing sector.
2. Tourism - the various effects of climate change can be observed such as ice melting, sea level rising, deterioration and extension of species etc. all this sector has a major impact on the tourism sector. Due to reduction in natural resources like coral reefs and ice caps the tourists are less interested. Therefore the policies of tourism are changing due to climate change.
3. Construction - A greater risk is associated with commerce and construction activity. There is a direct link between these two. Construction or commerce activities can be directly affected through high expenses, availability of labour, delay due to natural disaster. Here the economy is greatly affected.
4. Fishing - Fishery sector is considered one of the largest sectors in the economy. But due to marine pollution, increase in plastic use, heavy industrial toxic material in the sea the impact is also observed on the fishes. The aqua culture is totally destroyed by such man made activity due to this the sector is on its downward path.

Objectives

1. To understand the impact of climate change
2. To understand the relation between climate change economy
3. To study the impact of economic policy on climate change

Review of literature

- A research was conducted by 'Franck Lecocq, ZmarakShalizi b' with the title 'How Might Climate Change Affect Economic Growth in Developing Countries? A Review of the Growth Literature with a Climate Lens' the research is purely based on existing literature that is the secondary data. The authors consider successively the Cass-Koopmans

growth model and three major strands of the subsequent literature on growth: with multiple sectors, with rigidities, and with increasing returns. The researcher concludes that the growth literature rarely addresses climate change per se, some issues discussed in the growth literature are directly relevant for climate change analysis³

- A research was conducted by Paul Alagidede George Adu, Prince BoakyeFrimpong' with the titled named 'The effect of climate change on economic growth: evidence from Sub-Saharan Africa' t The main objective of the research paper was to show the relationship between real GDP per capita on one hand and temperature on the other is intrinsically nonlinear. The researcher used the data on two climate variables: temperature and precipitation, and employing panel cointegration econometric technique of the long- and short-run effects of climate change on growth⁴

Research Methodology

The research is based on existing literature. The researcher collected the secondary data from magazines, newspapers, journals. Most of the statistical data was available on the internet.

CONCLUSION

Climate change will always have an impact on economic activities, despite this from the information about climate and global change in economy we can say that human activities need some level of restriction as more the activities affecting the climate more is the economic damage which will wreck the economy. Due to this the cost of inflation will rise extremely where the economies could not be able to sustain. With the basic available information and evidence the suggestion is that we should act sooner and be quick with mitigation policies which will protect the climate as well as human activities. The decision taken by the government should be expeditious. The epicenter of these policies should be protection of climate without compromising economic activities. The world needs clear and strong policies for investment and finance, as these two sectors will be majorly affected by climate change.

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