# The Impacts of Climate Change on Global Economy & Sustainable Development



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# **Table of Contents**

litle	Page #
The impacts of climate change on global economy/sustainable development	
Abstract	01
Introduction:	01
The Issue:	02
Impact on economic growth and Inflation:	02
Why should developing countries in the global south care:	03
Who are the Stake- Holders?	04
Role of Education and Awareness:	06
Extension of the Climate Regime:	07
Conclusion:	08
	The impacts of climate change on global economy/sustainable development Abstract

### **Abstract:**

The risk of climate change has jeopardized global economy. Climate change is an inescapable reality that has not only disrupted the economies of the world but is also deteriorating the living standards of communities spread out across the globe. This research tends to analyze the effects of Climate change on the growth of economies and sustainable development as well as discuss the role of the Global North which has caused a significant damage to the Climate since the French revolution. This paper will also examine ways in which the Global North has always gained capital at the expense of the Global South. The Global south has been subject to floods, deforestation, locust attacks and droughts more than ever in the past decade. Moreover, since the Global south consists of mostly agricultural economies, with the climate changing so rapidly they are going through the worst conditions economically. It reviews the latest research on this topic and identifies the key areas where climate change is having maximum impact. The paper also discusses policy implications of these findings and recommends strategies for mitigating the negative effects of climate change and building resilience to its impacts.

#### 1. Introduction:

The impacts of climate change stretch far beyond environmental concerns. As our world warms, the ripple effects extend into every aspect of human society, from public health to national security. Yet, one area where the consequences of climate change are particularly pronounced and complex, is the global economy and sustainable development. The relationship between climate change, economic stability, and sustainable development is dynamic. Climate change disrupts the equilibrium of ecosystems, amplifies weather extremes, and imposes burdens on communities across the globe.

The theory of Marxism is the perfect explanation of fundamental injustice: those least responsible for causing it are often the most vulnerable to its effects. Climate change is a global problem, but its impacts are disproportionately felt more in the Global South. This is because ever since the industrial revolution, developed countries in the Global North have produced more greenhouse gases, which is the primary cause of climate change. The Global South which mostly consists of agricultural economies has borne the brunt of the resulting environmental degradation. This includes rising temperatures, extreme weather events, and ecological imbalances. The Global North controls the institutions that act on climate change and this is viewed as a dipropionate equation, as most of the harm is done by the north and the actions taken by institutions is also according to the Northern hemisphere's reality of climate. Additionally, the global north has also been involved in changing the perception of actors.

# 2. The Issue:

The issue at hand is an issue related to the "Tragedy of commons", a problem that arises when individuals act in their own self-interest and overexploit shared resources, leading to their depletion or destruction" (Hardin, 1968). In other terms, it refers to the exploitation of resources renewable or nonrenewable without caring about the future of these resources. States have shared a similar bond, where richer states have always exploited resources to enhance their wellbeing and economic growth without caring about the effect this exploitation has on poorer countries. Poorer countries do not possess the means to extract these resources, and it is said that the countries that are rich in resources are and shall remain an option on standby. According to environmentalists, it is said that humans precede nature and the need of humans is to be favored over the need of conserving the environment. Green theorists disagree and believe that humans are an equal part of nature, and for issues like climate change all ecosystems must remain in equilibrium. The main disagreement that arises among states is how these climate policies will influence their local policies. While people claim the Kyoto protocol to be a success, some may believe that it is unfair towards developing nations which are required to make the same reductions as developed countries (Anderson & Shackley, 2002). Similarly, what countries do not realize is the non-binding approach taken by the international community on matters of climate change which insinuates that the cost to heal the climate is far higher than making changes now (Stern, 2006).

# 3. Impacts on Economic Growth and Inflation:

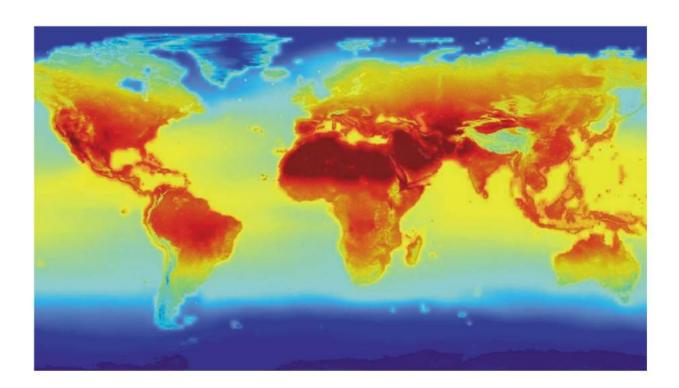
Climate change is seen adversely by the Global south as these countries are the most affected by its ramifications. Climate has devastated the agro-based economies of developing countries. For example, countries in Asia are dependent on crop yields, livestock productivity and water availability, the actions of various states have led to bigger problems for others (World Bank, 2022). Pakistan is the most prominent example as crops are destroyed every year due to flash floods, and the economy is disrupted due to food scarcity which follows.

Similarly, African nations that are climate sensitive have little to depend on for food. If their sources of income are interrupted, the levels of poverty and food security will skyrocket (UNCTAD, 2019). Ethiopia has been suffering from droughts due to climate change. This has led to a failure of crop yields and resulted in the death of livestock escalating hunger and poverty in the region.

# 4. Why Should Developing Countries in the Global South Care?

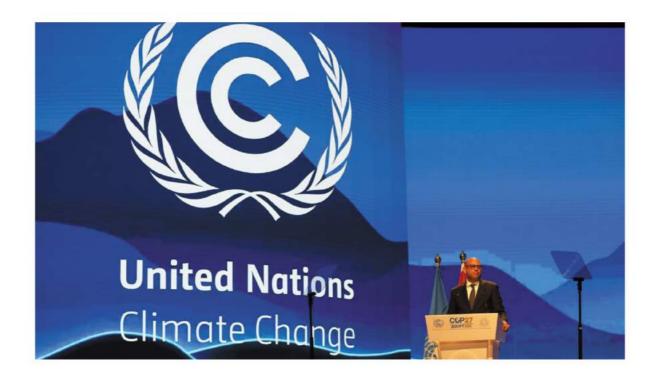
There are two perspectives on this point of view, the first one being the opportunistic perspective. In former decades, the world did not worry about climate as it was not considered a threat to national security. Global discussions on climate change have surged in the recent past and developing countries can cash in this opportunity and acquire foreign investment. This investment can help in developing a green bond economy leading to a sustainable growth, raising the quality of life for citizens. By facilitating investments in renewable energy sources, energy efficiency upgrades, and sustainable infrastructure projects, green bonds can empower developing nations to reduce their reliance on fossil fuels, improve air quality, enhance access to clean water, and strengthen food security. Overall, the green bond economy offers a win-win solution for developing countries, providing a pathway to address climate change, improve environmental quality, enhance sustainable development, and promote economic prosperity.

The second perspective is that it can be a way of controlling states. The have-nots in this situation must abide to the trends set by the ruling elites to respect the superiors' concern for the climate. Regardless of the poorer countries' miniscule contribution to climate change. This is a way of manipulation as the North gives money to the south in return for healing the climate that it itself has harmed. The North promises to work on climate change policies, but it never jeopardizes its own economy and continues to exploit natural resources at an alarming rate in order to attain power in the international arena.



## 5. Who are the Stake-Holders?

1. United Nations: The United Nations has spearheaded the campaign on Action against climate change. In 1992, the Earth summit marked the beginning of United Nations Framework Convention on Climate Change (UNFCC). Today the summit has a near-universal membership. The United Nations has always facilitated countries by providing them with a platform for dialogue that ensures cooperation among states on issues of the climate. The Kyoto protocol and Paris Agreement are examples of how the UN has worked for the facilitation of member states on the issues of Climate change. Some notable efforts are, using integrated water resource management and climate-smart agricultural practices. The Adapting to Climate Change in Africa project seeks to increase the resilience of African nations to the effects of climate change. Similarly, Scaling Up Climatic Action in Small Island Developing States (SIDS). This project helps to create and carry out plans for combating climate change, improve their ability to adapt, and advance sustainable development. For promoting sustainable growth, The Global Energy Efficiency and Renewable Energy Network (GEEREF) works to mitigate climate change and produce sustainable energy by promoting renewable energy and energy efficiency technologies in developing nations. All the efforts stated above are recognized and facilitated by the UN. Different specialized bodies of the UN including the United Nations Development Program (UNDP), United Nations Environment Program (UNEP), Global Environment Facility (GEF), one planet many futures initiative by UNESCO, Green Climate Fund (GCF) work towards eradication of the impacts of climate change.



- 2. World Wildlife Fund (WWF): The World Wildlife Fund is an important Nongovernmental organization that has civilian based associations exchanging ideas across the globe. They have addressed the issues of environment through various interactive campaigns that have changed the way in which citizens view the climate change. The change in the behavior of citizens is the reason why governments are shaping their views accordingly. According to WWF, in order to effectively combat climate change, communities and indigenous peoples must be empowered. By utilizing traditional knowledge and expertise, the organization has funded programs that allow local people to participate in efforts to mitigate and adapt to climate change. WWF has explored innovative financing mechanisms to support climate change solutions. The organization has partnered with financial institutions and investors to promote sustainable investments and support projects that address climate change.
- 3. The Global North: The global North follows the realist perspective and believes in maximization of power and resources. It is surprising how the Northern nations have been champions of promoting Climate change policies only when the issue started affecting their own people. The New York floods and the rising of temperatures across Europe has further aggravated the efforts of the North. Formerly, when countries like Africa were affected by their Industrial developments and carbon emissions, children died of malnourishment and no one bat an eye. Food security remains a problem for many developing nations in the South. The understanding of the issue at hand varies from country to country as their interests in the issues of climate are motivated by National interest for e.g. Russia is investing heavily in Tajikistan's Hydropower stations. The motive is not to reverse the damage caused to Tajikistan by the Soviet Union when they planted cotton along the Amu Darya, it is also not motivated by the desire for Green energy. Rather it is motivated by, self-interest. The hydro power station will not only supply green energy to Russia for usage by different industries but also elevate Russia's global image for being a Climate change warrior.

Moreover, the implementation of carbon pricing mechanisms, allocation of resources towards renewable energy, and endorsement of sustainable infrastructure can serve as catalysts for worldwide endeavors aimed at curbing greenhouse gas emissions and enhancing climate resilience. By 2050, the European Union aims to attain net-zero greenhouse gas emissions. The European Green Deal, which provides a comprehensive plan for sustainable growth and climate action, is one policy that has been inspired by this lofty objective.

#### 6. Role of Education and Awareness:

"Education for sustainable development (ESD) is widely acknowledged as a critical tool for addressing climate change and promoting sustainable development. ESD aims to empower individuals and communities to make informed decisions and take responsible actions to protect the environment and ensure a sustainable future for all" (UNESCO, 2014).

Education is an important part of sustainable growth. The impact of climate can be lessened through the availability of education. Education at grass root levels, leads to individuals making conscious decisions. The ban on plastic bags, was an active effort by Islamabad, Pakistan to tackle Plastic pollution and educate the population. Another perfect example is of the "Standing rock Sioux Tribe", located in North Dakota. They are protesting the construction of the Dakota access pipeline and how it threatens their water supply. This is due to awareness about the effects of Climate change on the life of an ordinary individual. Similarly, the G-20 summit held by India was a prime example of how educational awareness was a key factor that led the Indian government to make climate change a pivotal part of the summit's agenda. India is an industrial and an agricultural economy, it has made huge contributions of carbon emissions, but realizes that it comes at the cost of its own Agricultural economy slowing depleting. Farmers are being educated to not use synthetic fertilizers as they contribute to climate change adversely, and are instead recommended to use natural fertilizer.

Sustainable schools that adopt sustainable practices to create awareness are also important. They work towards conserving electricity and water that leads to adaptive practices to make a small change in improving the issue Climate Change. Sustainable schools also promote the practicality of the tragedy of the commons, how we should not waste resources that are to be equally utilized by everyone living in the country. Although governments do not tend to change their economic activities with respect to Carbon emissions, but they send teams to educate people in villages to consume less water in the household. There is an inequality in awareness, and this is the reality of our education system. This is why it is so important for sustainable schools to create sensitivity around the issue, in order to hold MNCs accountable for their actions. Staes follow principles of realism and their utmost priority is to maximize economic benefit, hence once the attitude of the population changes, so will the attitude of the state.

Greta Thunberg, a Swedish activist, in her climate movement "Fridays for future" protests in front of the Swedish legislative authorities, this motivated people to care about the climate. Once the Swedish population started supporting her, the Swedish government took account of making more climate friendlier polices. This led to Sweden being the most prominent Climate Change activist in the International Arena.

# 7. Extension of the Climate Regime:

Climate change is an issue that requires cooperation among states, due to "Jointness of supply". No country alone can work towards providing a stable climate globally. Similarly, "Non excludability of benefits", no country can protect or isolate itself against the effects of climate change. Regimes are descriptive devices that govern the norms, ideas, and cooperation among states in the matters of the climate. The effectiveness of regimes can be seen as a vital part of international politics as actors are constantly working to shape each other's behavior according to the needs of the climate. The Paris Agreement is one of the first international regimes established in the wake of the climate crisis. It is the only agreement that has global acceptance of all 196 member and nonmember states in the UN. This means that all the countries that are part of the UN have established certain norms that countries have universally agreed upon while tackling matters of climate change. With the goal of keeping global warming far below 2 degrees Celsius over pre-industrial levels and seeking to maintain it at 1.5 degrees Celsius, the Paris Agreement sets aggressive targets for cutting greenhouse gas emissions. The equitable agreement recognizes that wealthy countries have historically been the primary emitters of greenhouse gases and, as such, have a higher obligation to set the standard for emission reduction. It also has provisions to help developing nations shift to low-carbon economies and adjust to climate change (Ostrom, 1990).

The Paris Agreement has an ongoing review and update mechanism built in for long-term efficacy. By 2030, the US wants to have cut its greenhouse gas emissions by 50-52% from 2005 levels. Additionally, the US promised to provide developing nations with \$100 billion in climate finance by 2020. Similarly, by 2030, the European Union wants to cut its greenhouse gas emissions by 40%, and by 2050, it wants to cut them by 80-95% and Japan wants to cut its greenhouse gas emissions by 26% from 2013 levels. Additionally, Japan has promised to give developing nations \$10 billion in climate finance by 2020. This has set a trend for other countries to follow, so much so that developing nations are also working towards Sustainable development in the wake of the Climate crisis. China intends to reach carbon neutrality by 2060 and reach a peak in its emissions of greenhouse gases by 2030. By 2030, China aims to achieve a 20% energy mix composed of non-fossil fuels. India wants to cut its emissions intensity from greenhouse gases by 33-35% by 2030 compared to 2005 levels. By 2030, India aims to achieve a 40% energy mix composed of renewable sources. Brazil wants to cut its greenhouse gas emissions by 37%, and by 2030, it wants to cut them by 50%. 12 million hectares of degraded land will be restored by Brazil by 2030, according to their plan.

#### 8. Conclusion:

Sustainable growth is seriously threatened by climate change, which also threatens social justice, economic prosperity, and environmental stability. Wide-ranging and intricate, the effects of climate change are threatening the long-term feasibility of sustainable development objectives and impacting many facets of human existence. Rising global temperatures, harsh weather, and changing ecological patterns are causing agricultural production to be disrupted, water resources to be jeopardized, and biodiversity to be threatened (World bank, 2019). These factors are obstructing economic progress and making poverty and hunger worse. In addition to causing displacement and conflict, climate change is escalating inequality and upsetting societal cohesion.

Adopting comprehensive policies for climate change adaptation and mitigation is crucial for governments seeking to address these issues and achieve sustainable growth. Reducing greenhouse gas emissions, switching to renewable energy sources, making investments in infrastructure that is climate resilient, and encouraging sustainable land use should be the main goals of these initiatives.

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