

Climate Change: A Threat to Sustainable Economic Growth

Outline

A. Introduction

1. Emergence of industrialization
2. What is climate change?
3. Thesis statement

B. How Climate Change is a Threat to Sustainable Economic Growth?

1. Reduced agricultural yields;
 - a. 30% decline in the agricultural output of Sub-Saharan region.
2. Decline in fisheries and marine resources;
 - a. Fish stocks declined by 34% FAO (2023)
3. Threat to coastal habitats;
 - a. Investment of Mumbai, Jakarta, and Miami, in seawalls.
4. Decline in tourism industry;
 - a. Report of World Tourism Organization (2023)
5. Increase in climate refugee crisis;
 - a. Report of UNHCR (2023)
6. Disruption of global trade and supply chains;
 - a. Global supply chain cost over \$1.6 trillion annually (WEF, 2023)
7. Infrastructure damage undermining economic stability;
 - a. Report of World Bank (2023)
8. Exacerbation of global economic inequalities;
 - a. Climate-related losses are five times higher in developing countries (UNDP, 2023)

C. Challenges in Achieving Sustainable

Economic Growth Due to Climate Change

1. Lack of coherent climate policies
2. Weak evaluation systems for climate adaptation
3. Lack of funding for climate action

D. Recommendations to Mitigate the Repercussions of Climate Change

1. Implement climate resilient policies;
 - a. Kenya's Climate Smart Agriculture Policy.
2. Standardize monitoring frameworks;
 - a. The Global Adaptation Monitoring Framework by UNEP
3. Strengthen global climate financing;
 - a. The Paris Agreement's \$100 billion annual pledge should be fully realized.

E. Conclusion

Follow the coherent pattern

If you are mentioning evidence in one point try to mention them in all your arguments



The Essay

In the late 18th century, when the first steam engines sparked to life in Britain's factories, a new era began. Smokestacks rose into the sky, railroads stretched across continents, and machines transformed small towns into thriving industrial centers. The world was swept into the excitement of rapid economic growth, powered by coal and human ambitions. Yet, beneath this extraordinary progress, an unseen cost quietly accumulated. The same factories that fueled development also released massive amounts of carbon into the atmosphere, disturbed natural ecosystems, and set into motion environmental changes that would unfold over centuries. This turning point not only revolutionized economies but also laid the foundation for one of the greatest challenges known as climate change. Climate change is a phenomenon marked by long-term shifts in global temperature, weather patterns, and ecological systems driven primarily by human activities. Its effects are evident in the form of rising sea levels, unpredictable weather, melting ice caps, extreme heatwaves, and declining natural resources. What was once a distant reality concern has now become an undeniable reality shaping the future of nations and markets alike. As its consequences intensify, climate change is a threat to sustainable economic growth, because it weakens

it reduces agricultural yields, depletes marine resources, damages infrastructure, threatens coastal habitats, disrupts global trade, and weakens tourism. Each of these impacts undermines long-term development and destabilizes economic systems across the world. Thus, climate change is a threat to sustainable economic growth.

To begin with, one of the most immediate and damaging impacts of climate change is the reduction in agricultural yields, which directly threatens sustainable economic growth. Rising temperatures, unpredictable rainfall, prolonged droughts, and frequent floods disrupt crop cycles, reduce soil fertility and lead to declines in food production. Since agriculture forms the backbone of many developing countries, any disruption in this sector creates widespread economic instability. For example, in the Sub-Saharan region, agricultural output is projected to decline by nearly 30% by the middle of this century, due to prolonged droughts. A decrease of this scale weakens national revenues and limits sustainable economic growth. Thus, climate change is a threat to a sustainable economic growth as it leads to reduced agricultural yield.

Secondly, climate change is a threat to a sustainable economic growth as it has led to a severe decline in fisheries and marine resources. Rising sea temperatures, ocean acidification, and the destruction of coral reefs disrupt marine ecosystems and



reduce fish population. As a result, coastal communities that depend on fishing for income, employment and food security face substantial economic losses. The global fishing industry, which supports million of livelihoods, becomes increasingly unstable as fish stocks shrink and marine habitats deteriorate. According to the report of Food and Agriculture Organization (2023), warming oceans have contributed to more than a 34 percent decline in global fish stocks, affecting the economies of regions such as Southeast Asia and the Pacific, where fishing is a major source of revenue. This decline limits national exports and threatens long term economic stability. Hence, climate change is a threat to sustainable economic growth as it leads to a decline in fisheries and marine resources.

Thirdly, climate change is a threat to sustainable economic growth as it endangers coastal areas that serve as vital economic centers. The continuous expansion of ocean waters caused by rising global temperatures along with strong storms and frequent flooding, puts coastal cities, ports and industries at severe risk. When coastal areas are damaged, countries suffer financial losses due to reconstruction, loss of business activity and the relocation of communities. For instance, major cities such as Mumbai, Jakarta, and Miami are spending billions

on protective barriers and flood management systems to safeguard their coastal zones. These pressures divert funds away from development and weaken sustainable economic growth. Thus, climate change is a threat to sustainable economic growth as it endangers coastal areas.

Likewise, climate change is a threat to sustainable economic growth, as it contributes to a noticeable decline in the tourism industry. Many popular tourist destinations are losing their natural appeal due to extreme heat, coral reef destruction, and unpredictable weather. Since tourism is a major source of income, employment, and foreign exchange for many nations, any disruption in this sector affects national revenue and long-term economic growth. For example, according to the UNWTO World Tourism Barometer 2023, there was a decrease of 23% in international tourist arrivals due to the extreme weather conditions in the South Asian region. Therefore, climate change is a threat to sustainable economic growth as it leads to a decline in the tourism industry.

Additionally, climate change is a threat to sustainable economic growth because it increases the climate refugee crisis. As communities lose access to fertile land and reliable resources, entire populations are uprooted, placing immense pressure on national economies and social systems. According to the UNHCR Global Trends Report 2023, nearly 75 percent of forcibly



displaced people were residing in the countries that face high to very high exposure to climate-related risks, reflecting how environmental stress is becoming a major driver of human movement. Such displacement disrupts labour market, strains public service and diverts funds away from economic development. Thus, climate change is a threat to sustainable economic growth as it leads to an increase in the climate refugee crisis.

Similarly, climate change is a threat to sustainable economic growth as it causes severe disruption of global trade and supply chain. As natural systems shift and resources become less predictable, the flow of goods, materials, and components become more volatile. According to World Economic Forum Global Risks Report (2023), two-thirds of business leaders surveyed ranked extreme weather and supply chain interruption as the "top risk most likely to present a material crisis on global scale in 2024-2025". These disruptions reduce manufacturing output, increase commodity prices, and undermine industrial productivity across countries. Therefore, climate change is a threat to sustainable economic growth as it leads to disruption of global trade and supply chain.

Moreover, climate change is a threat to sustainable economic growth as it causes extensive damage to infrastructure.

undermining economic stability. Road bridges, power grids, communication networks and industrial facilities are increasingly exposed to environmental stress that weakens their structure and shortens their lifespan. When transport routes are disrupted or energy system fails, business operations slow down, supply networks are interrupted, and the cost of repairs rises sharply. According to the World Bank, between 2019 and 2024, natural hazards alone caused infrastructure damage of more than 25% of GDP to the developing nations. Thus, climate change is a threat to sustainable economic growth as it leads to continuous infrastructure damage.

Lastly, climate change is a threat to sustainable economic growth as it exacerbates global economic inequalities, widening the development gaps between nations. Wealthier countries possess stronger financial systems, advanced technology and greater institutional capacity to manage environmental stress, while developing countries struggle with limited resources and high dependence on climate sensitive sectors such as agriculture or fisheries. According to the UNDP Report (2023) climate related losses in developing countries are nearly five times greater relative to their national income compared to losses faced by advanced economies. Thus, climate change is a threat to sustainable economic growth as it intensifies global



economic inequalities.

Following this brief review of how climate change is a threat to a sustainable economic growth, the next section will explore some key challenges in achieving sustainable economic growth due to climate change.

To start with, one of the major challenges in achieving sustainable economic growth due to climate change is the lack of coherent climate policies. Many countries are unable to design long-term strategies that link environmental protection with economic planning, which leads to fragmented decisions and slow implementation. For example, Pakistan has repeatedly highlighted gaps in climate governance, where frequent institutional changes, overlapping responsibilities and limited coordination between federal and provincial departments make policy execution difficult. When policies lack clarity, stability, and long-term direction, economies cannot shift towards sustainable economic growth. Thus, the absence of coherent climate policies becomes a major barrier to achieving sustainable economic growth due to climate change.

Another challenge in achieving sustainable economic growth due to climate change is the weak evaluation system for climate adaptation. In many countries, adaptation projects are launched without proper monitoring tools, reliable data collection or follow-up assessments, which

• makes it difficult to measure progress or identify gaps. Bangladesh, for instance, despite being one of the most climate vulnerable countries, struggles with fragmented evaluation mechanisms where adaptation projects are reviewed irregularly. This results in ineffective planning and inefficient use of resources. Weak evaluation systems directly affect sustainable economic growth because governments cannot detect failures in time, adjust policies or allocate funding to areas where it is needed most needed. Therefore, inadequate monitoring and evaluation of climate adaptation becomes a major challenge in achieving sustainable economic growth.

Apart from these challenges, lack of funding for climate action is another barrier to achieving sustainable economic growth.

A significant number of developing economies do not have sufficient financial resources to invest in climate resilient infrastructure, and early warning systems. This financial gap prevents vulnerable nations from protecting key economic sectors such as agriculture, industry, and transport from climate impacts. According to OECD, developed countries collectively pledged \$100 billion annually for climate change, yet this target remained unmet for several years, creating substantial shortfall for countries that depend on international assistance to implement climate action. Thus,



Lack of funding for climate actions remains a challenge in achieving sustainable economic growth due to climate change.

The above discussion highlights the challenges to achieving sustainable economic growth due to climate change. Building upon this understanding, the discussion below will examine the recommendations to mitigate the repercussions of climate change, in order to achieve a sustainable economic growth.

Firstly, to mitigate climate change repercussions for ensuring sustainable economic growth, countries must implement strong climate resilient policies. Effective policy frameworks help governments make informed decisions, allocate resources wisely, and reduce the long term economic losses associated with climate change. A clear example is Kenya's Climate Smart Agriculture policy, which promotes drought tolerant crops, efficient irrigation, and modern farming techniques. This approach has improved agricultural productivity and enhanced national resilience. Thus, implementing climate resilient policies is one of the key recommendations to mitigate repercussions of climate change, in order to achieve sustainable economic growth.

Secondly, to mitigate the repercussions of climate change in order to achieve sustainable economic growth, economies must standardize monitoring frameworks. Standardize frameworks ensure the data collection;

reporting methods and performance indicators remain consistent across regions and sectors. The Global Adaptation Monitoring Framework introduced by the United Nations Environment Programme provides an effective model, as it helps countries assess their adaptation efforts through structured indicators and regular review. Thus, standardizing monitoring frameworks is essential to mitigate climate ~~repercussions~~ repercussions, in order to achieve sustainable economic growth.

Thirdly, to mitigate the repercussions of climate change and achieve sustainable economic growth, it is essential to strengthen global climate funding. Increased and predictable climate finances enables countries to protect key economic sectors, support vulnerable populations and implement long-term sustainability. The Paris Agreement recognised this need and committed developed countries to mobilize \$100 billion annually to support climate action in developing nations. Thus, strengthening global climate funding is ~~necess~~ necessary for achieving sustainable economic growth in the face of climate change.

To conclude, it is evident that climate change is a threat to sustainable economic growth by undermining key sectors such as agriculture, fisheries, infrastructure, trade, tourism, and global equity. The challenges of incoherent climate policies, weak evaluation systems and insufficient

sustainable

funding further limit the economic development. However, through the implementation of climate resilient policies, standardised monitoring frameworks, strengthened global climate funding and a commitment to long term adaptation strategies, countries can protect their economies and promote sustainable economic growth. Climate change is not only an environmental issue but a direct and urgent threat to sustainable economic growth, which places immense strain on national budgets, reduces productivity, increases poverty levels, and limits future opportunities for economic growth. Thus, climate change is a threat to sustainable economic growth.

Structure of your essay is

okay

Arguments are fine

But work on your articulation

to make your arguments more clear get to add strength to you arguments