

# Climate Change and economic development: The need for inclusive and sustainable growth

## 1. Introduction:

## 2. Importance of addressing climate change and economic development together:

## 3. Impacts of climate change on economic development:

3(a) Rising natural disasters lead to property and infrastructure damage that reduce economic development

[2022 floods in Pakistan, Tsunamis, Indonesia (2018)]

3(b) Changing weather patterns reduce agricultural yields, labor productivity and overall economic growth.

[Asia development Bank, Report 2024]

3(c) Altering distribution of natural resources, impacting tourism and recreation.

[Deosai National Park, Pakistan]

3(d) Intensifying smog, heat stress and other climatic variation cause health diseases, resulting health cost and low economic development.

[2024 smog episode in Pakistan,  
The Economic Times (2024) reports about indian heat wave]

4 The urgent need for inclusive and sustainable growth in context of climate change and economic development:

4(a) Aligning economic development goal with SDGs framework is crucial for achieving sustainable growth.

[Kenya's SDGs Implementation]

4(b) Transitioning to low-carbon economy is needed for promoting sustainable growth.

[Bangladesh's Climate Resilience Program]

4(c) Building climate resilience and adaptation is vital for ensuring inclusive and sustainable growth in face of climate change.

[Climate Resilience and adaptation : A Global Perspective" by the World Bank (2024)]

4(d) Investing in green infrastructure is critical for supporting sustainable growth

and reducing greenhouse gas emissions.

[Green Infrastructure Investment: A Review of the Evidence by the Organization for Economic Co-operation and Development (2023)]

4(e) Promoting sustainable agriculture practices is necessary for ensuring food security and agricultural yield.

[Rwanda's Sustainable Agriculture Program]

4(f) Strengthening disaster risk reduction and management capacities for reducing the impacts of climate-related disasters on economic development.

[Japan Risk Reduction Techniques]

5 Conclusion:

## The Essay

Climate change has become a more debatable and discuss issue of 21st century. It acts as a tool in destroying the economy of developing countries. This devastating scenario urge the need of sustainable growth. As the former secretary general, Ban Ki Moon rightly said, "Climate change is no longer a distant threat, it is today reality. We must act to reduce greenhouse gas emission and move to low carbon economy. While promoting sustainable growth and development. This shows that climate change has many negative implication on economy. Rising natural disasters and changing weather pattern lead to economic loss and mitigate economic development. Similar to this, economic growth also reduce by changing distribution of natural resource and increasing climatic variation like smog, heatwaves. These disastrous situation urge the need of inclusive and sustainable development by promoting SDGs goal and low-carbon economy. In addition to this, there is need of building climatic resilience and adaptation and investment

in green infrastructure development for inclusive growth. Sustainable agriculture practice and disaster risk reduction and management can play a big role in encouraging inclusive and sustainable growth. In short, Climate change has many negative implications on economic development. This urges a need to promote sustainable development and inclusive growth to combat with changing climate.

Natural disasters are increasing day by day cause infrastructure damage and property loss. Natural disasters are floods, hurricanes, Tsunami, and earthquakes have negative impacts on economic development. As these not only disturb ongoing projects but also damage buildings. Moreover, it cause disruption of transport networks, power grid, water system and communication lines. These destruction of infrastructure disrupts economic activity in several ways. Damaged transport networks hinder the movement of goods and service. Similarly, power outages, a common consequence of storms and heatwaves impede daily life activities.

For instance 2022 floods in Pakistan had significant economic impacts as it damage to infrastructure. The floods destroyed over 1.7 million houses, 13,000 schools and 2,000 healthcare facilities.

This highlighted the vulnerability of Pakistan's economy to climate-related disasters. In addition infrastructure damage is directly relate to property damage which disrupt overall economic growth.

From the above discussion, it is proved that natural disasters have negative impacts on economy as it damage infrastructure and property loss.

Labour productivity and agricultural yield are reduced because of changed climatic pattern. Changing climatic pattern like <sup>changing</sup> precipitation pattern, rising temperature and intensifying heatwave caused reduction in agricultural productivity. As farmers are not ready for unpredictable weather pattern, their plans to increase productivity is ~~not~~ fail. Moreover, grow<sup>ing</sup> season pattern is changed because of climatic variation reduce the agricultural yield. For example, a study by Asian Development Bank found that heatwaves in East Asia and the Pacific in 2024 resulted in significant economic losses. Agriculture production

has decline 2.5% in a year. This shows that climatic variation slow down the economic growth. Moreover, labour productive also reduce because of heat related illness. These <sup>for</sup> climatic variation not only reduce agricultural productivity but also labours productivity.

Tourism and recreation activities also affected because altering of natural resources. Various climatic variation cause melting of glaciers, altering weather pattern, rising temperature and others. These changes become a reason behind altering of natural resources. That effects many activities. As melting of glaciers affect the outdoors activities like skiing, hiking etc. Moreover, rising temperature, changing precipitation increased frequency of weather events. Sea-level rise and coastal erosion are threatening the existence of many beaches. In addition, rising temperature affect the habitat of many species. To illustrate this points consider the example of Deosai National Park, Pakistan. Rising temperature have caused changed in Park's ecosystem, affecting the habitat of the Himalayan

brown bear. This has impacted tourism with visitors no longer able to spot the bear. This illustrates the impact of climate change on economy. As in 2023, the decline in tourism resulted in 20% decline in revenue for local businesses. To conclude, climatic variation altered natural resource which effect tourism and recreational activities.

Health diseases because of smog and heatwaves cause health cost that reduce economic growth. Smog, a toxic mixture of pollutants increased cardiovascular and others respiratory disease. According to World Health organization (WHO), air pollution alone is responsible for an estimated 7 million premature death worldwide each year. Moreover, heatwave also have devastating impact on human health. Heat stress, heat stroke, dehydration and increased mortality are major disease of caused by heatwaves. This lead to economic cost that ultimately impact economic development. For instance, a study by Harvard School of public Health found that the economic costs of air pollution in the United States are estimated to be over \$130 billion annually.



This shows health diseases are directly related to economic costs. To summarise, changing climatic patterns cause smog, heatwaves that create many health issues that affect economic development.

The above paragraphs are about the impact of climate change on the economy.

~~Below~~ Following paragraphs explain the urgent need of inclusive and sustainable growth in the context of climate change and economic development.

Sustainable development can be achieved by aligning SDGs with economic development goals. Sustainable <sup>development</sup> goal comprised 17 goals and 169 targets that promote sustainable growth. It can be ensured that the economic development goals are inclusive and everyone can get benefit from it. Moreover, it considers environment sustainability during planning of economic development goals. Environment degradation can be reduced and sustainability can be achieved. Similarly, by promoting sustainable consumption and production patterns, economic development can be made more environmentally

primarily, reducing waste and pollution. For instance, Kenya's sustainable development implementation has driven economic growth while reducing poverty and inequality. Moreover, the government's vision 2030 plan prioritizes sustainable development, with initiatives like renewable energy, sustainable agricultural growth and eco-tourism. These efforts have attracted investments, created jobs and increased GDP.

From above case study, it is proved that sustainable development goals can be fruitful for economic developments.

Low carbon economy can play a significant role to achieve sustainable growth and inclusive economic development. As transition to low carbon reduce the greenhouse gas emission, resultantly, slow down the rate of climate change. When the rate of climate change reduce, it will reduce the economic cost because of climatic variation.

Moreover, a low carbon economy can promote sustainable growth by creating new job opportunities, stimulating innovation and attracting investment in clean technologies. These argument can be well explained by

Bangladesh's Climate Resilience Program that is a commendable initiative aimed at promoting climate-resilient developments and a low-carbon economy. Its investing in climate resilience reduce the economic costs associated with climate-related disasters and damage to infrastructure. Therefore, sustainable and inclusive economic development can be achieved by transitioning to low carbon economy.

Sustainable growth and inclusive economic development can be achieved by building climate resilience and adaptation. It can reduce the economic cost caused by natural disasters. Climate resilience and adaptation achieve through early warning system, preparedness and building resilience infrastructure. These adaptation help to mitigate the impacts of climate-change disasters. In addition, policies, laws and project can also play a critical role to achieve inclusive economic development. Laws, policies and projects ensure that any initiative related to economy must adopt climate resilience methods and others.

adaptation. For instance Japan has a comprehensive framework of laws and policies to enhance disaster resilience and adaptation. One of these is "Act on promotion of disaster prevention and mitigation measure" that promote disaster prevention and mitigation measure.<sup>11</sup> This include the development of disaster-resilient infrastructure. Such laws can help to mitigate risk and loss related to disasters. Inshort, Building climate resilience strategy and adaptation can be to achieve sustainable development.

In the summary, economic development is reduced because of climatic variation. This necessiate the immediate action to achieve inclusive and sustriable growth to combat with climate change. Because economic development is effected by climate change. As economy cost increase due to natural disasters and changing weather pattern. Similarly, tourism industry also affected because of ecosystem disturbance. Health cost slow down economic growth which occur due to smog and heatwaves. These implication urge a need ofor inclusive and sustriable growth strategies. In this regard, SDGs framework and Low carbon economy can help to achieve

this goal. Similarly, building climate resilience and adaptation strategy reduce risk and economic loss. Inclusive and sustainable development in agriculture and environment can be achieved by green infrastructure and sustainable agriculture practices. ~~Therefore~~ These are some measures that can help in achieving sustainable development and growth. As "Robert Swan" rightly said that sustainable development is the pathway to the future we want for all. It offer a framework to generate economic growth, achieve social justice and exercise sustainable environmental practices.