

# Essay

The environment has gone beyond the tipping point

Outline:

## 1. Introduction

### Thesis statement

The environment has gone beyond the tipping point as manifested by the irreversible changes that has caused significant social, economic and health impacts. Pertinent measures need to be taken individually and collectively to counter the negative implications.

2- Decoding the topic sentence

3- Evidence of how environment has gone beyond the tipping point

a- Climate change leading to rising global temperatures and extreme weather events

case in point: Increased global temperature by  $1.1^{\circ}\text{C}$  with 2023 seeing record heatwaves (IPCC, 2022)

b- Biodiversity loss resulting from rapid extinction of species and habitat destruction

Case in point: Extinction rates 1000 times higher than natural levels (IPBES, 2019)

c- Melting glaciers causing rising sea levels and flash floods

Case in point: Major floods in Pakistan in 2022

d- Pollution and Resource depletion

Case in point: 99% of global population breathes unhealthy air, causing 7 mil premature deaths annually (WHO, 2022)

#### 4- Consequences of a Tipped Environment

##### a- Economic Impacts

i- Disruption of agriculture and crops causing famine and food insecurity

ii - Destruction to infrastructure and tourism

##### b- Social Impacts

8- Widespread displacement of communities due to rising sea levels and droughts



ii) Psychological and mental impacts

## iii - Health Impacts

i - Spread of diseases due to extremes of temperatures

ii) Rising disorders of skin, respiratory and cardiovascular system -

## iv - Political impacts

i - Conflicts between states due to scarcity of resources

ii - Blame game and real politics

## 5 - Solutions and mitigating strategies

i - International cooperation for collective efforts

ii - Renewable energy initiatives and conservation programs

iii - Public awareness for sustainable practices

iv - Investment on infrastructure resilience



and climate-smart agriculture

v - Reductions in greenhouse gas emissions and carbon pricing

## 6 - Conclusion



The Earth once viewed as a stable and resilient haven, now finds itself perched precariously on a knife's edge. Decades of relentless human activity have pushed our planet beyond its natural threshold, triggering a cascade of environmental changes that threaten to become irreversible. From the relentless climb of global temperatures to the alarming decline of biodiversity, the evidence paints a sobering picture: we have crossed the tipping point. The cursory glance on the earth's events show multifold evidence.

Firstly, the temperature has risen to significant levels with extreme weather events.

Secondly, the rapid extinction of species has led to biodiversity loss and ecosystem destructions. Moreover, the rising sea levels due to melting glaciers given another evidence of environment going beyond tipping point.

Moreover, if prompt actions are not taken



it can pose significant social, economic, political and health impacts. This can range from widespread food and water scarcity to rapid displacement of communities. Furthermore, it has potential to enhance political conflicts between states. Nevertheless, with pertinent measures in the right direction, the earth can be saved from the destruction. Firstly, there is a need for collective efforts through collaboration at regional and international levels. Secondly, the public should be educated for potential dangers so as to ensure sustainable practices. Moreover, there is a greater need to reduce carbon emission either through strict action or shifting to clean energy practices. To conclude, there are manifold manifestation of environment tipping beyond the limits with multiple environmental, social, economic and health impacts. However, with pertinent measures the situation can be improved by mitigating the negative implications.

Now shedding light on the topic sentence, one can grasp the idea behind it. The statement "the environment has gone beyond the tipping point" want to divert the attention towards the fact that earth is undergoing irreversible



changes. These changes have gone to such an extent that it is nearly impossible for human race to counter the impacts on heaven earth. The continuous rise in global temperature, degradation to ecosystems, and irreversible scarcity of resources underscores the idea mentioned in the topic sentence. This calls for prompt measures from human race to counter the menace.

Moving forward with the evidence of environment going beyond tipping point one can divert their attention to rising global temperatures. According to International Panel for climate change the temperature has raised to  $1.1^{\circ}\text{C}$  since pre-industrial time and the temperature rise of above  $1.5^{\circ}\text{C}$  will pose significant challenges for human survival. This rise in temperature can be confirmed by heatwaves and fires all around the world especially south Africa and Australia. Hence, rising global temperatures with extreme weather events underscores the idea the environment has gone beyond tipping point.

Furthermore, another critical evidence is the rapid extinction of species and



habitat destruction resulting in biodiversity loss and disruption of ecosystems. This is because the rising global temperatures has made the survival of species impossible. According to recent reports the extinction rates of species has increased 1000 times more than the natural levels. The risk of species extinction increases with every degree of warming. Climate change currently affects at least 10,967 species on the IUCN Red list of threatened species. Hence, extinction of species and biodiversity loss gives another evidence of environment going beyond tipping point.

Moreover, the melting of glaciers in the Antarctic regions along with rising sea levels gives another evidence of the event. These glaciers are melting at a rapid pace which has resulted in deficiency of fresh water reservoirs. Similarly, the rising sea levels resulting from these events has led to flash floods and drowning of coastal regions all across the world. The massive floods in Pakistan in year 2022 sheds light on the critical events taking place. These floods have led to destructions all around the world. Hence, these melting glaciers manifest that the



environment is going beyond tipping point-

If the prompt action is not taken, there are multifold consequences of tipped environment. Shedding light on the economic impacts, one can see the disruption of agricultures and climate dependent crops - These crops need optimum temperature for their growth and rising temperatures has led to their destruction along with widespread famine, droughts and food insecurities. Similarly, due to floods and extreme weather events, the infrastructure has been damaged causing billions of economic loss - This has also impacted tourism of various areas in the coastal regions. Hence, irreversible changes in environment beyond tipping point has caused multiple economic repercussions globally.

Furthermore, these events has led to multiple social implications as well. Due to rising sea levels and flooding of coastal areas, the communities are displaced - Regions like Bangladesh, parts of Florida and island nations in the Pacific are already experiencing



The impacts of sea level rise, with increased flood and risks of infrastructure damage. This has led to widespread displacement of communities along with mental health repercussions. The anxiety, depression and fear resulting from these events has further exacerbated the situation. Hence, displacement of communities along with negative impacts to mental health is another consequence of environment going beyond tipping point.

Similarly, the irreversible changes due to climate change has led to multiple health impacts. Firstly, it has led to spread of multiple infectious and fatal diseases. The rising temperatures gives optimum environment for the breeding of various harmful insects such as mosquitoes, bugs and flies. They lead to spread of various diseases such as Malaria, Leishmaniasis, Dengue and many more. Similarly, due to rising temperatures various skin, heart and respiratory diseases has increased manifold. Humans have become vulnerable to skin cancers, respiratory issues and heart problems. Hence, these health repercussions are the



consequences of earth going beyond tipping point

Furthermore, it has led to multiple conflicts between states. Due to real politics every state is thinking about their own interest rather than collaborating over countering the menace. Due to rising global temperatures, food and water scarcity, the world has become vulnerable to scarcity of resources along energy crisis. This has led to multiple wars and conflicts. The hydropolitics in South Asian region due to scarcity of fresh water is the leading example of rising political conflicts among the regions. Hence, the wars and conflicts are another consequence of earth going beyond tipping point.

Moving forward with the pertinent measures and strategies to counter the impacts of irreversible changes in the environment one need to put individual and collective effort. First there is a need for international collaboration to counter the menace. All the countries need to pledge to reduce greenhouse emission and move towards clean energy practices. There is a need for international



forum to ensure the implementation of policies by all nations equally. The Paris agreement of 2015 and COP 28 in a recent years is the leading example of collaborating effort. However, the actions are not taken strictly, that need to be ensured by global peace making organizations. Hence, international collaboration along with collective mitigating effort can help in overcoming the menace.

Similarly, there is a need for renewable energy initiatives and conservation programs both regionally and internationally. The countries need to diversify their energy mix by shifting towards clean energy practices such as thermal, wind and hydro power. Moreover, carbon pricing should be enacted so that every country should be responsible for its actions. There is a need to promote solar and wind energy requirements by enhancing technology to enhance the use of these equipments. The vision 2030 by Saudi Arabia is the leading example of countries moving towards clean energy practices. Hence, through renewable energy initiatives, nations can overcome the menace of climate change.



Furthermore, there is a need for educating public for repercussions of environment going beyond tipping point and to ensure the use of sustainable practices domestically - the public should understand the impact of their choices on the environment - By doing so they are more likely to adopt sustainable practices, support eco-friendly policies and demand responsible actions from business and governments - Education, campaigns and transparent communication are key to mobilizing a united front against climate change - Hence, with public awareness, one can stop the environment from going beyond the tipping point -

Moreover, the nation needs to invest on infrastructure and climate resilient crops - Due to flawed infrastructure i.e. housing, roads etc the nation faced significant challenges after floods leading to displacement and mental repercussions - Similarly, the government need to invest on agriculture and climate resilient crops that can grow in all temperatures along with less requirements for irrigation - There should be usage of pesticide and fertilizers to counter the diseases and increase the crops yield -



Hence, by investing on infrastructure and climate resilient crops one can counter the threats of climate change.

Consequently, it can be concluded that the irreversible changes in our earth has posed significant economic, health and social challenges. Due to human activities the temperature has been rising continuously, leading to Biodiversity loss, melting of glaciers and pollution. These events has caused multifold impacts due to economic crisis, community displacement, political conflicts and spread of lethal diseases. However, with pertinent measures the situation can be turned to better condition. Through international collaboration, collective efforts, shifting to renewable and clean energy practices, public awareness and investment on infrastructure and climate resilient crops, the human race can overcome the threats of climate change and stop the environment from going beyond tipping point. Hence, the environment has gone beyond tipping point as manifested by its economic, social, and health impacts. Pertinent measures need to be taken individually



and collectively to counter the negative implications -