

# Climate Change: Causes and way forward

## Outline

### 1- Introduction

- a) Attention Grabber
- b) General Statement
- c) Thesis Statement

"The world is facing climate change mainly because of human act like Deforestation, Burning of fossil fuels, Over Population. To fix this problem world must act quickly by changing greener ways of living and help each other protect the planet"

### 2- Causes of Climate change

#### 2.1 Over Population

- a) Comparison of last two census of Pakistan
- b) Report of Pakistan Beavro of Statistics

## 2.2 - Burning of fossil fuel

- a) Global CO<sub>2</sub> emission
- b) Pakistan energy sectors

## 2.3 - Deforestation

- a) 5% of deforestation contribute in 0.41% of GDP
- b) 46-58 thousand square miles land lost due to deforestation
- c) Deforestation contribute in 10% of global warming

## 2.4 - Agriculture

- a) According to FAO data
- b) Agriculture contribute 13% in global warming

## 2.5 - Enhancing quantity of Green house Gases

## 3 - Ways forward

### 3.1 - Reforestation

- a) Billion Tree Tsunami
- b) Miyawaki Method

### 3.2 Nuclear declaration of climate change

a) steps of American Administration

### 3.3- Renewable energy

3.4- enhancing use of organic fertilizers

### 4- Conclusion

## The Essay

On 11 January 2011 torrential down-pours in Brazil in mountainous region Rio de Janeiro unleash catastrophic floods and landslides that kills at least 916 people. This day of misfortune remind the phenomenon of climate change. It is unknown in the last century but now a hot discussion because it threatening the survival of mankind by sudden floods Earthquakes long-term seasons of winter and summer that causes climate change. The world is facing serious climate change mainly due to human activities like deforestation burning of fossil fuels and over-population. To fix this problem world must act quickly by changing the greener ways of living and help each other protect the Planet.

Before discussing the causes of climate change. It is important to know the meaning of climate change. Climate change is long-term change in average weather. We come to define the local, regional and global conditions. Climate change is not just about the rising temperature of world but also about heavy rainfalls or below average rainfalls. Climate change is mainly due to the human activities. But after seeing the devastating impacts of climate change world is keenly interested in reversing its effects.

To start with Overpopulation it is the issue of life and death on world and main cause of climate change. In the last century people

were not aware of climate change because quantity of resources was quite higher than need. But now world population is increased unprecedented or number of consumers are more than the quantities of resources. Taking the example of Pakistan its population is nearly 220 million according to recent census that was 16 million in last year 16 percent increase in population. According to the report of Pakistan Bureau of Statistics the population is increasing 2.4 percent annually. The population of world expected to be 9 billion in 2050. Increased population need greater number of resources to live in the world that is main cause of climate change.

Burning of fossil fuels is another cause of climate change when we burn coal, oil and natural gas large amount of  $\text{CO}_2$  is released into the atmosphere. This intensifies the greenhouse effect trapping more heat in the atmosphere.

In 2024 emission of  $\text{CO}_2$  gas globally reached a record 37.4 billion tons. On more local side

Taking the example of Pakistan Pakistan energy sectors are heavily dependent on private energy sectors cause 40% of  $\text{CO}_2$  emission just because of energy sectors by burning coal, oil and natural gas. These figures show how climate change are caused by global or national levels.

Forests are the lungs of World required in large quantities to fulfill the requirements of population. But forest clearing projects are widely spread not just in developing but in developed countries also. During Covid-19 Lockdown all sectors are closed except construction they use large quantity of wood. 10% of global warming is because of deforestation. 46-58 thousand miles square land lost due to deforestation every year.

Agriculture is another main cause of climate change. According to the FAO data agri-food emission approximately 16.2 billion tons of CO<sub>2</sub> equivalent in 2022.

Within the agrifood system activities within farm gate like crop and livestock production contribute 48% of total agrifood CO<sub>2</sub> emission. In a broader way agriculture combined with forestry and land use cause 13% to 21% of climate change.

Although the curse of climate change caused chunk of damage to earth yet world is taking steps to curb it.

Proliferation of forest is most powerful factor to reduce the impacts of climate change. As trees are cut to fulfill the needs of growing population.

but on the other hand there is dire need of reforestation. And all world leaders are keen interested in this regard. For instance in Pakistan the government of Pakistan has started a campaign to plant 1 billion trees in their five year tenure under the umbrella of Billion tree tsunami. In the same way a Japanese botanist introduced a technique called "Miyawaki method" more plants can grow on small area but ten times faster than the normal one.

There is a need of universal declaration to restrict the causes of climate change. A lot of councils are failed

in their goal due to vested interests of world leader. But now American Administration has decided to again join the Paris agreement. According to this agreement all nations are restrict to emit CO<sub>2</sub> in specific limit. But only 175 countries are part of this agreement. Some countries have not ratified this agreement and continue to become a cause of climate change.

To address the harmful effects of burning of fossil fuels one of the effective solution is to investing in renewable energy resources like wind hydro and geothermal power. They produce electricity

without emitting greenhouse gases. Another key step is to promote electrifying vehicles and improving the transportation system that can reduce the use of oil. And government should cut the financial support to these energy sectors that burn fossil fuels.

Last but not the least minimize the use of synthetic fertilizers. In most countries like Pakistan agriculture is the main source of income of inhabitants. They usually use synthetic fertilizers insecticides or pesticides. They should use organic fertilizers that can be manufactured from animal waste or remains of plants. They should focus on

organic farming and adopt the habit of using organic fertilizers

In a nutshell we know that climate change is because of human activities. If world work as a unit can curb the Covid-19 that take a lot of lives in a day then why cannot this. The mitigation of climate change is difficult but not impossible. If we can take the important steps as mentioned above we can control the impacts of climate change.