

Topic:

Reforestation as a Global Urgency

Outline

A. Introduction:

1. Industrial revolution and Climate Change
2. Global implications of Climate Change
3. Thesis Statement

B. Role of Reforestation in Combating Climate Change

1. Forests act as Carbon Sink
2. Biodiversity Conservation
3. Soil conservation and prevention of desertification
4. Regulates water cycle and ground water recharge
5. Maintains healthy environment for well-being.

Case Study: Pakistan's Billion Tree Tsunami

6. Act as a shield to disasters e.g. Floods, Avalanche

C. Reforestation as a Global Urgency

1. Weak global Climate Commitment by two major emitters

2. Limited options for developing countries
3. Failures of COP's delivering binding emission cuts
4. Can meet Sustainable Development Goals (SDGs) number 13 and 15
5. Promotes eco-tourism
6. Reduces Air-borne diseases
7. Reduces climate induced migration and food insecurity

D. ^{Global} Challenges to ↑ Reforestation

1. Illegal logging and weak enforcement mechanisms
2. Monoculture Plantations drive
3. Land use conflict and Urban Expansion
4. Inadequate climate financing

E. Way Forward to Reforestation

1. Community-led afforestation
2. Indigenous species plantation
3. Strong maintaining mechanism
4. International climate financing

F. Conclusion

3

Essay

Industrial revolution has played a crucial role in climate change. It laid the foundation of the menace which is lethal to the overall ecosystem of the earth. Industrial revolution started in mid-eighteenth century. Although it gifted the earth dwellers with many facilities, yet it gave birth to existential threat called climate change. Climate change is the shift in earth temperature which in return changes the natural ecosystem of the earth atmosphere. After the industrial revolution, a vast number of industries established which produces a massive amount of harmful gasses to the atmosphere. These gasses are emitted from industrial sectors, transport sectors and other anthropogenic activities. These gasses includes greenhouse gasses like Carbon dioxide, methane and sulphur dioxide. These greenhouse gasses alters the chemical composition of the earth atmosphere. Further, it reacts with other natural gasses present in the atmosphere leading to climate change. It affects every aspect of life ranging from severe

Climate weathers to loss of bio-diversity and human well-being.

Climate change has no physical boundaries, so, any anthropogenic activity in one country imbalance the ecosystem in another country.

To reduce such global impacts of climate change, global collective action is a pre-requisite. Reforestation, however, is the only feasible and cost-effective way. Forests act as carbon sink ^{absorbs} ^{gases,} prevent the biodiversity loss and desertification by providing regulating hydrological cycle and provides a healthy environment for well-being.

As climate change imbalances the natural system of the whole earth, reforestation on the global level is imperative to confront this threat.

To begin with, forests acts as a carbon sink. It absorbs harmful gasses from the earth atmosphere.

According to an estimate, tropical forest alone store 250 billion tons of carbon. In case of deforestation, such huge amount of gasses are released to the earth, thereby, imbalances the natural ecosystem on the earth planet. **Between**

2010 and 2020, world net forest loss was 4.7M hectares per year

sharing the continued pressure on forestation on global level, thereby acting as a blanket to harmful gasses.

Also, forests preserves biodiversity. Preservation of biodiversity is the practice of protecting, restoring and managing a variety of living organisms like plants, animals and other species.

According to UN report, forests are the home to 80% of terrestrial biodiversity. Moreover, according to World Economic Forum (WEF) report, deforestation is responsible for 60% of species extinctions. To sum up, the given figures shows the urgent need of reforestation to conserve ~~the~~ and to restore the biodiversity loss.

To add further to this, reforestation also prevent desertification and soil conservation. Desertification is the result of deforestation and over-grazing. Moreover, it is characterized by the deterioration and damage of fertile land - arid or semi-arid leading to less productivity and soil erosion. However, if proper steps is taken; reforestation

6

can restore the damaged land and convert it to a fertile land.

Furthermore, reforestation is regulates water cycle and recharge the ground water. Trees are the natural sponge. In addition, trees increases the ~~sunoff~~ chances of rain, thereby absorbing the water through roots upto the leaves, ~~and~~ releasing them into the nature through evapotranspiration. This evapotranspiration results in the humidity in the air. Thus leads to rain and regulates the hydrological cycle by recharging the underground water.

After all, healthy life of human-beings and other organisms is only possible ^{through} by reforestation. Cutting-off the trees releases more carbon dioxide, ~~and~~ methane and sulphur dioxide. Other harmful gasses are also released ~~by~~ to the environment by human activities. These gasses are lethal to the human well-being. Moreover, respiratory and air-borne diseases are the outcomes of these harmful gasses. It robs the generations of its right to safety.

7
Thus, it can be said that reforestation provides a healthy life for all the organisms including human-beings.

Another way, trees also acts a shield to disasters. Disasters like floods and avalanches flow freely where there is no barriers to them. Thus causing a huge damage to lives and infrastructure of a place. However, if more trees are there, it would provide a natural barriers to such damages thereby protecting and preventing the lives of many at the planet. Thus, it can be assumed that disasters and their impacts can be reduced through planting trees.

Reforestation truly combats the climate change, the upcoming paragraphs will discuss the urgency of reforestation at the global level.

To begin with, global commitment is necessary to combat the global issues like climate change and reforestation. Countries like US and China are the major leaders of the world. When major powers leads the world. Whenever, there is major powers, they put

Pressure on the other developed countries to stay committed.

Because they have a say in global affairs and they are influential. However, the

the withdrawal of President Trump of the U.S from the Paris agreement shows weak global commitment. Paris

agreement is a global climate agreement to reduce the greenhouse gases. However, the withdrawal of Trump from such global commitment shows weak global commitment.

Along with this, developing countries are the victims of climate change more than developed countries. Every year "Conference of parties" (COP) takes place to ensure the funds and development of different countries of the COP.

However, the recent COP 30 failure shows that it is unable to cut the binding emissions of greenhouse and other harmful gases. COPs responsibility is to ensure the funds for developing countries. However, recent COP was unable to ensure the climate funds. So, in such condition,

9

developing countries have only one option left and it is reforestation. Reforestation is the cost-effective and feasible method to reduce and thus, eliminate such gases. Thus, developing countries can ensure their reduction of climate issues through reforestation without compromising their development activities.

Moreover, reforestation can provide the opportunity for countries to meet sustainable development goal (SDG) number 13 and 15. The mentioned SDGs are related to the goals of reducing climate change impacts without compromising the development infrastructure. Reforestation ensures such development activities at global level without compromising their development funds in their home-country. So, one can say that reforestation ensures the healthy environment to meet SDG no. 13 and 15.

Further, reforestation also promotes eco-tourism and reduces the air-borne diseases. Providing the opportunity for increasing

and boosting the economy, through eco-tourism, it also reduces the chances of air-borne diseases like . Thus, reforestation also adds to the global Gross Domestic Product (GDP) without harming the human health and other organisms.

Also, it reduces the climate induced migration and food insecurity. Migration takes place because of less opportunities for earning. People migrates from rural areas to urban or from developing countries to developed. Hence, compromising the development activities and exacerbating the climate issues by deforestation. Moreover, it leads to food insecurity. However, reforestation reverse the problem mentioned. It provides various opportunities for handsome earning without compromising the food security and prevent the unnecessary migration.

Urgency of reforestation can be deduced from above paragraphs. The following paragraphs will provides the challenges to reforestation.

Firstly, illegal logging and weak enforcement mechanism provides the challenges like this.

The land is not rich in minerals required for plants. Moreover, if there is such land, it faces weak enforcement procedure. Further, the community does not know the minerals rich areas for plantation. This ~~proo~~ becomes the challenge for healthy plantation.

Secondly, monoculture plantation is another challenge. Monoculture plantation involves only one plant cultivation. It limits the different requirement of species and other organisms. Further, it leads to specie extinction. Hence, monoculture plantation is the second issue which compromise the healthy environment.

Urban expansion and inadequate climate financing becomes the other issue. ~~Migration~~ Increased migration to urban areas ~~a~~ becomes the hurdle in developmental activities and adds fire to the climate issues through many ways by transportation and deforestation. Moreover, lack

of enough financing for climate change issues becomes the barrier in the way of healthy environment by limiting the different activities.

Urban expansion along with lack of adequate financing becomes the major challenge to provide enough financing for reforestation.

The coming paragraphs will provides the way forwards for such above issues discussed in different paragraphs.

~~Weak~~ ^{enjoy} Community-led afforestation has the potential to reduce illegal logging and weak enforcement. Community-led afforestation means to involve the community of that specific areas and make them committed to not preserve the forests at any cost. Communities can play a major role in preserving the forests and reduces the impacts of climate change.

Adding more, indigenous species plantation reduces the chances and options of species extinction. It also becomes

for different organisms and absorbs harmful gases. Thus ensures the healthy living on the planet.

To conclude, reforestation is a global imperative.

From acting as a carbon-sponge to absorb harmful gases to soil conservation, desertification and regulating water cycle, it maintains the healthy environment. It also becomes a shield to disasters like floods, GWFs and avalanches and minimize the effects of such disasters. However, global commitment is of imperative. Major powers which are emitting massive amount of greenhouse gasses, can play an important role in reducing such impacts by reinforcing the need on reforestation.

Reforestation is the only cost-effective and feasible method.

It is in the approach of both developed and developing countries. Without compromising any developmental activities and with adequate financing, reforestation plays

a crucial role in many ways. In essence, community-led afforestation, strong maintaining mechanisms and international climate financing, reforestation is of global need.
