

Climate Change: A Non-traditional Threat to Human Security

Authors

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Abstract

Climatic Change is considered a non-traditional threat to the global community, and it has a negative impact on human psychology and future generations. This idea has attracted global attention, as a real existing threat, and they must contribute to solving the problem on a practical basis. Some industrial states took it as a theoretical problem and did not pay attention to greenhouse gases and global warming. In this research, the author has focused the discussion on a few questions such as; what is the cause of global warming? Is global warming due to human activities? How much does it cost to resolve the problem? What measures must be taken to stop global warming? It came in studies that man-made activities are the main enhancers of global warming. The immediate cause of global warming is the smoke from industries, vehicles, aircraft, and different explosive tests and experiments. Earth is a unique and dynamic planet capable of inhabiting and facilitating life forms. In the Universe, only the planet Earth sustains water and Oxygen for the metabolic activities of the organisms. Climatic change is a real threat to the global community, and it must be resolved by proper planning and implementing policies. Now, if we want to reduce the severe impacts of climate change. This study suggests reducing global carbon emissions. The international community must take speedy judicious and pragmatic actions to de-carbonize the global world. Global society must shift from carbon fuel to renewable or inexhaustible energy resources like wind and cosmos energy; electrify motors; and optimize energy efficiency in constructions, machines, and industries. Grow more trees to purify nature and get fresh Oxygen for lifelong activities.

Key Words: *Climate Change, Non-Traditional Threat, Global Warming, Global Society.*

Introduction

The connection between human beings and the milieu is a million years old. The environment provides land water, and vegetation for the human being to live on Earth. Humans get the necessities such as food, water, and shelter from the environment. With time, man

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progressed and not only modernized himself but modernized the land where he lived. The process of modernization has had a devastating impact on the environment, as it created the problems of global warming, pollution, waterlogging, and salinity, and depleted the Ozone layer. Global warming is a long-time threat to humanity. (Korhonen. J, 2008)(Azam. S, 2021). Climate has been affected by different problems such as overpopulation and much more. Overpopulation is itself the mother of problems. Overpopulation leads to a rise in demand for more food, water, housing, energy, transportation, health care, and other facilities. As many populations increased many resources were consumed by the population. As many natural resources are used it causes scarcity of resources. As a matter of course, the public demand of supply, and consumption will increase. However, the time is near, till scarcity turns into a dilemma, and then the dilemma will have a tendency to transmute into a conflict. For example, cutting of trees and forests to make straight roads, housing societies, and the wood used in construction and furniture. It is becoming the cause of deforestation, the deforestation becoming cause lack of fresh air, global warming, lack of production of ozone gas, depletion of the ozone layer, and increase in atmospheric temperature. All this is caused by Overpopulation causes the degradation of the climate. One problem becoming the cause of causes, such as the change in atmospheric temperature can cause different germs production. During the summer the flies and mosquitos production increased. Different kinds of germs are produced due to temperature change which leads to a disaster like COVID-19 and psychological problems. Nonetheless, finally, everything has a worse impact on the climate. (Azam.S,2021).

Former UNDP Administrator Gus Speth argued that the “highest environmental problems are due to the selfishness, greed, and apathy,” of a human being. (Speth. J.G,2014). The global civil society and government bodies are struggling to raise the environmental campaign and spread awareness on the global level. International financial institutions are investing in a sustainable environment. Research studies displayed that different organizations such as (UNO), and the Environmental Protection Agency (EPA) are working to achieve the sustainable goals SDGs of development for the sustainable environment it will cost \$116-142 trillion between 2020 and 2030 to accomplish the SDGs. Financial institutions allocated about 85% amount, it's about the world's more than \$400 trillion of liquid, while 15% is held directly by nation-states. Thus the UNO Member Countries are not only accountable for delivering the monetary funds to achieve the SDGs, but the financial institutions and individuals are also responsible for attaining the SDGs. (Sachs, J. D., & McArthur. J, W. 2005). (The millennium-project 2021). (Houghton. J, 2009) The global climate is affected by overpopulation because manmade activities are the cause of GHG emissions. The production and emission are linked with the human population due to industries and transportation. Today's human population is about 7.9 billion, and in the future, the human population will rise by about 2 billion by 2050, and the international economy is estimated to triple in the same period. The CO2 production due to transportation will increase by 16% by 2050. For the biosphere to achieve net-zero greenhouse emissions by 2050, it is assessed to cost an additional \$3.5 trillion. (The millennium-project 2021).

According to the research reports of NASA Goddard Institute for Space Studies (GISS), since 1880 the worldwide temperature has increased by at least 1.1° Celsius (1.9°

Fahrenheit). Sea levels are rising at 3.4 millimetres per year, and ocean acidity will increase 100–150% by the end of this century. For years, climatologists and ecologists have been informing the world that if CO₂ (carbon dioxide) levels hit 450 ppm, then it will be impossible to control the catastrophic effects of global warming, such as extreme weather, drought, flood, and severe global heating. PPM stands for, Parts per million (PPM) is a unit of measurement used when expressing a very dilute concentration level of pollutants in the air, water, and other fluids. Due to global warming, the glaciers are melting in the Antarctic and Arctic regions. The sea level is rising every year, and it submerged the land area of many countries. Such as Maldives and Bangladesh. In 2050, Bangladesh may lose 11% of its land due to a 50 cm rise in sea level, affecting an estimated 15 million people living in its low-lying coastal region. (Wuebbles, D. J., Fahey, D. W., & Hibbard, K. A., 2017). While the governments and public of different states are not taking global warming as a serious threat to their survival. The rise of CO₂ (carbon dioxide), 450 ppm, and global warming are serious threats to humans. The concentration of CO₂ in the atmosphere equivalent of 450 ppm is acceptable for the political governments, while the 450 ppm is a fatal threat to life on Earth. It is the threshold step of the concentration of CO₂ in the atmosphere. Many climatologists and governments agree that 350 ppm is the “safe” level of carbon dioxide. From the time, when human civilization began, the atmosphere contained about 275 ppm of carbon dioxide. Today the CO₂ worst impacts can be recorded at 410 ppm. So 450 ppm is not favourable for the climate and life on the Earth. It raises questions for the global world to think and act. How would 450 be sustainable? Why would 450 be sustainable? So how to reduce global warming and production of GHG. (Kellstedt, P. M., Zahran, S., & Vedlitz, A., 2008).

It needs to comprehend that the Earth does not hold unlimited resources; environmental sustainability is a top economic, social, and political priority. According to the scientific journal *Science and Technology*, 14 scientists concluded that human has crossed the level related to environmental pollutants including plastics. In 2022, a global team of researchers evaluated the impact of synthetic substances and other ‘novel entities’ on the stability of the Earth system. Since 1950 the production of different chemicals and plastic products increased and caused pollution. According to the coauthor Patricia Villarubia-Gómez, the production of plastic substances increased by 79 % between 2000 and 2015, and it will increase more by 2050. (Wright, S. L., & Kelly, F. J, 2017). (The millennium-project 2021). According to the coauthor Bethanie Carney Almroth, every year new variety of pollutants are entering and appearing in the atmosphere and it is above the capability of governments to assess global and regional risks of the pollutants. There are about 350,000 different types of industrial factory-made chemicals on the global market. Such as plastics, pesticides, industrial chemicals, chemicals in consumer products, antibiotics, and other pharmaceuticals. These are exclusively novel entities, created by man with largely unknown effects on the Earth system. (The Millennium Project, 2021). Different man-made activities such as substances and plastics have bad effects on planetary health, from mining, fracking, and drilling to extract raw materials to production and waste management. (Wright, S. L., & Kelly, F. J, 2017). Some of these contaminants can be found worldwide, from the Arctic to Antarctica, and are extremely persistent. We have devastating evidence of negative impacts on Earth systems, including biodiversity and biogeochemical

cycles, says Carney Almroth. The Arctic region and Ocean are polluted due to the economic activities, industrial development, and military activities in the region. All this is becoming the cause of an influx of pollutants in the form of chemicals. The same man's activities have affected the natural life of the Antarctica region. The manufactured chemicals are detected from the snowfalls over Antarctica and some chemicals and plastic particles or debris are detected from the bodies of animals, such as seals, penguins, and whales. (Bargagli, R, 2008). (Poland, J. S., Riddle, M. J., & Zeeb, B. A., 2003).

Awareness of Climate change can be enforceable at the local, country, regional, and global levels. The threat to climate and global warming is a nontraditional security threat. But it will endanger human security in different directions and it will raise food, water, and shelter insecurity. The unbearable heat and floods will shatter the peace of mind and can cause physical and psychological problems. Awareness of climate change and protection of climate must be spread practically. So the public and the industrial states realized that climatic change is a serious threat to the human generation. The pledges can be enforced through boycotts, sanctions, and other means. Presently USA, China, and other states are holding conferences on the reduction of carbon emissions. Humans are using Earth's resources without any realization. Our Earth system is a closed system which means it's not gaining or losing matter. It always has a constant matter. It means nothing is coming from the outside system and nothing is going out from it. Everything is happening cyclically on Earth. There is a limit of everything such as the limit of CO₂, 450 ppm. Excess use of resources, and burning of fuel all cause trouble to the balance of the ecosystem of the Earth. (Lewsey, C., Cid, G., & Kruse, E. 2004).

Background of the Climatic Change

Researchers assumed that the temperature change came in 100 Million years ago; the average global temperature of the Earth has ascended and descended several times. Some experts believe that these changes occur naturally on the Earth and bring changes to the biosphere. While climatic change is caused by industrial and human activities. (Savin, S. M, 1977). According to the research reports of NASA Goddard Institute for Space Studies (GISS), since 1880 the worldwide temperature has increased by at least 1.1° Celsius (1.9° Fahrenheit). (Li, Z., & Liu, Y, 2022, July). Sea levels are rising at 3.4 millimetres per year, and ocean acidity will increase 100–150% by the end of this century. For years, climatologists and ecologists have been informing the world that if CO₂ levels hit 450 ppm, then it will be impossible to control the catastrophic effects of global warming, such as extreme weather, drought, flood, and severe global heating. PPM stands for, Parts per million (PPM) is a unit of measurement used when expressing a very dilute concentration level of pollutants in the air, water, and other fluids. Due to global warming, the glaciers are melting in the Antarctic and Arctic regions. The sea level is rising every year, and it submerged the land area of many countries. Such as Maldives and Bangladesh. In 2050, Bangladesh may lose 11% of its land due to a 50 cm rise in sea level, affecting an estimated 15 million people living in its low-lying coastal region. (Wuebbles, D. J., Fahey, D. W., & Hibbard, K. A., 2017).

In the 21st century, cars and aeroplanes are the main sources of transport. Transportation is also a major cause of global warming. Different research shows that air transport is also enhancing global warming. According to 1992 research, aviation caused 3.5% of the total global warming. The corresponding share for emissions of carbon dioxide was 2.4%. As a comparison, passenger cars were responsible for about 10% of global emissions of carbon dioxide from fossil fuels in 1990. (Åkerman, J. 2005). In the research, different researchers did research on global warming and climate change and risk assessments of global warming and climate change. In the research, it came in the observation that the public, authorities, and even scientists no one takes global warming as a serious threat and personal problem. This is the one reason that global warming is increasing in the world because everyone thinks it's others' problem and it's due to others. However, it's a real existing threat to everyone and it is a direct personnel matter if the people think about it. (Kellstedt, P. M., Zahran, S., & Vedlitz, A,2008).

Former UNDP Administrator Gus Speth argued that the “highest environmental problems are due to the selfishness, greed, and apathy,” of a human being. The global civil society and government bodies are struggling to raise the environmental campaign and spread awareness on the global level. International financial institutions are investing in a sustainable environment. Research studies displayed that different organizations such as the United Nations Organizations (UNO), and the Environmental Protection Agency (EPA) are operating to achieve the sustainable goals SDGs of development for the sustainable environment, it will cost \$116-142 trillion between 2020 and 2030 to attain the SDGs. The millennium-project (2021). Financial institutions allocated about 85% amount, it's about the world's more than \$400 trillion of liquid, while 15% is held directly by nation-states. Thus only the UN Member countries are not responsible for imparting the financial investments to gain the SDGs, but the financial institutions and individuals are also equally responsible for achieving the SDGs on their ends. Sachs, J. D., & McArthur, J. W. (2005). The millennium-project (2021).

The Millennium Project arranges research studies for future research to develop thinking about the future on national and global issues such as climatic change. Make a record of intellectual thinking through a variety of publications. It spreads information through electronic media and books. Further, it provides information and training to the public by expert researchers. The objective is to provide knowledge about expected future risks such as global warming, the economy, terrorism, etc. The research reports explain the Millennium Development Goals. The Millennium Project is a network of professionals that provides quick and easy access to international knowledge. The research is based on Consistent surveys to gain data, about global challenges and provide solutions. (Cuhls, K, 2008). The global climate is affected by overpopulation because manmade activities are the cause of GHG emissions. The production and emission are linked with the human population. Since today's the human population is 7.9 billion world population. In the future, the human population will rise by about 2 billion by 2050, and the global economy is expected to triple during the same period. The transport CO2 production will increase by 16% by 2050, which is an alarming situation for the world. To achieve net-zero greenhouse emissions by 2050, the additional calculated cost will be \$3.5 trillion. (The millennium-project 2021).

In this research, the author explained the global warming problems and the expected impact of global climate changes, such as high temperatures, ascending sea levels, and potentially intense extreme weather events such as hurricanes and tropical storms. Low-lying states in the Caribbean are especially vulnerable to these effects. It is a significant risk to public safety and natural resources. (Lewsey, C., Cid, G., & Kruse, E, 2004). Microplastics and chemicals released from the factories are toxic to human health, plants, and marine life. Chemicals used in the manufacturing of plastic things are the cause of different diseases such as cancer. Their presence in food destined for human consumption and in air samples has been reported. Thus, microplastic exposure via diet or inhalation could affect human health. Plastic debris is found in the stomachs of marine animals and birds. This research paper discusses and assesses the potential human health impacts of microplastics, particle toxicity, chemical, and microbial contaminants was critically examined. Wright, S. L., & Kelly, F. J. (2017).

In the last 50 years, the Antarctic land has been affected by research activities and tourism. The terrestrial and marine coastal ecosystems are affected by fuel combustion, accidental oil spills, waste incineration, and sewage. However, the chemicals, plastic, and metals pollutants found in air, snow, mosses, lichens, and marine organisms revealed that most tenacious pollutants in the Antarctic environment are transferred from other continents in the Southern Hemisphere. Cadmium Cd and Mercury-Hg are found in several aquatic organisms. Bargagli, R. (2008).

Climate Change Impact on Human Psychology

The climatic change has a worse impact on human localities, and it causes high heat waves, anxiety, storms, floods, etc. The harsh, unwelcoming climatic changes lead to different health issues such as Post-traumatic stress disorder (PTSD). Climate change is a serious threat to human psychological health, due to the destruction of houses because of floods, lack of food, and clean water, and lack of peaceful shelter. The climatic impact is appearing in the forms of cyclones, tornadoes, famines, fires, deforestation, and desertification. (Marazziti, D., Cianconi, P., Mucci, F., Foresi, L., Chiarantini, I., & Della Vecchia, A., 2021). This is all impacting the mental health of the public. Humans are dependent on the earth, for peaceful settlement, security, oxygen, and production of food. There is no other planet that provides settlement, security, oxygen, food, and water. Nowadays, globally humans are facing climatic change without understanding why it's happening. What is the remedy for this global problem? How did humans prevent themselves from climatic change? (Williamson, J. B., Jaffee, M. S., & Jorge, R. E., 2021).

Many research reports and government and non-government reports reveal that climate change is a global health crisis and it's a nontraditional threat to human survival. Millions of people are facing mental health problems due to extreme weather conditions. Mental illness due to social economic determinants and insecurity. The victims face trouble due to the loss of jobs, anger, frustration, and fights due to high heart anxiety. Some people are hospitalized due to the effect of a high heat wave. In America, about 12 million people are living with traumatic issues. In 2018 in Gilgit-Baltistan's Ghizer district, a flood destroyed thirty houses, one school, and

productive agricultural land, about one thousand people migrated to other villages. People faced terrible problems due to floods in Florida and Texas. (Davies. R, 2023). Floods destroyed the cities in Iran, Ukraine, Angola, Tanzania, the Philippines, and Burundi. (Ratter, B. M., Petzold, J., & Sinane, K, 2016). In 2022 the rains and floods destroyed the domestic, social, and economic life of the people of Pakistan. Crops were destroyed, especially the cotton crop. In Bangladesh, the highest mortality rate is due to floods, and the high victim of PTSD. Nahar, N., Blomstedt, Y., Wu, B., Kandarina, I., Trisnantoro, L., & Kinsman, J. (2014).

Individuals who are facing and experienced traumatic problems due to the Climatic change can be treated by doctors at hospitals. In the global world, most people are the victims of climatic change and global warming; but the indigene's communities and unprivileged members of societies are specifically the victims of climatic change because it's difficult for them to get the proper medications and nursing at the hospital due to poverty and unprivileged circumstances. The climatic problem can be resolved by highlighting the issue, pragmatic research with solutions to the problems, and counselling PTSD victims, in case of serious problems the patients can be carried to the hospital to get the medication and doctor treatment.

Cause and Effect of the Climatic Change

The real cause of climate change is manmade activities, due to which global temperature increased. Different research reports provided evidence that annual temperature increased every year in the universe. The main causes of climate change and global warming the industries' smoke, vehicles, aircraft smoke and different test of explosions are the cause of global warming. From 1880 to 1980, every tenth year, the temperature increased, averaging 0.07 degrees Celsius (0.13 degrees Fahrenheit). Since 1981, the temperature increase doubled due to industrialization. However, for the last 40 years, the global annual temperature has risen by 0.18 degrees Celsius, or 0.32 degrees Fahrenheit, per decade. (Moberg, A., Jones, P. D., Barriendos, M., Bergström, H., Camuffo, D., Cocheo, C. ... & Verhoeve, T, 2000). Earth is a dynamic planet, and climatic changes are occurring in order and sequence in an auto system of the universe, but human activities have intervened in that system. Due to this, various issues are emerging in the world, such as global warming, floods, drought, heating, earthquakes, etc.

Earth is the third planet from the Sun, and in the entire universe, life is only found on Earth. In the Universe, only the Earth's planet sustains the water. About 71% of Earth's surface is made up of the ocean, dwarfing Earth's polar ice, lakes, and rivers. Total land surface area: 29.2%. About 29.2% of Earth's surface is land consisting of continents and islands. The remaining 70.8% is covered with water, both freshwater and saltwater bodies. Global warming is a real threat to the global community, and it must be resolved by proper planning and policy implementation. (Houghton, J.2009) All over the world, floods destroyed the residential areas of citizens, however, Pakistan was the most affected country in the world. The floods continued with the rains in mid-June 2022 and continued till October 2022. The total economic losses were about \$15.2 billion, and the amount needed for the rehabilitation and reconstruction is about \$16.3 billion. Climate change has severely affected the agriculture, livestock, and communication sector in Pakistan. Sindh is the most flood-affected province than Baluchistan

and KPK. Flood affected 33 million people and 1730 lost their lives. Many people suffered due to different diseases because they were unable to get clean food, water, and shelter. (WB 28 October 2022).

In the USA, both states, Florida and Texas were badly affected by the rain and floods. The US Government announced the state of emergency in both states. (Davies. R, 2023). Floods destroyed the cities in Iran, Ukraine, Angola, Tanzania, the Philippines, and Burundi. Millions of houses were destroyed in the rain, many people were displaced due to rain and floods. (Davies. R, 2023) around the people are suffering due to rains and floods. The reason was climatic change and global warming. Humans still have time to take care of Mother Earth and stop intervening in nature. If humans do not understand this nontraditional threat, then it's a natural approach that nature adjusts itself. It will cause destruction such as high heat waves, rains, floods, production of different varieties of germs, and cause various diseases such as COVID-19. (Ratter, B. M., Petzold, J., & Sinane, K, 2016). (Azam.S, 2021). Now if we want to reduce the severe impacts of climate change, then humans have to reduce global carbon emissions by as much as 40 per cent by 2030. The international community must take immediate prudent, and pragmatic steps to decarbonize the global world. Global society must shift from carbon fuel to renewable energy sources like wind and solar energy; to electrify our cars and trucks; and maximize energy efficiency in our buildings, appliances, and industries. (Houghton, J, 2009)

Climate Change and Human Activities

Climate change demonstrates shifts in the average global temperature on the Earth in ten to twenty years. It is not a new phenomenon, it is occurring for a billion years and causing change on the Earth. Scientists believe that the 2 Million years, the average global temperature of the Earth has risen and fallen several times. Some scientists believe that these changes occur naturally on the Earth and bring changes to the biosphere. (Savin, S. M, 1977). However, the Earth's ecosystem is disturbed by manmade activities such as deforestation, drilling, mining, construction on the ground, and deep underground construction. If the Earth's temperature rises and falls naturally, it adjusts itself naturally. While human activities are destabilizing the natural system of the Earth. During the 100 years, the average global temperature of the Earth has risen due to human activities especially due to deforestation and industrialization.

Scientists believe that global warming is enhanced due to the irresponsible behaviour of humans. As industrialization began, it brought modernization and economic development to the world, but it has exacerbated the natural ecosystem of the earth. (Savin, S. M, 1977). (Donoghue, J. F. 2011). They established new industries and constructed roads. The global society developed and modernized due to the fast progress in science, and technology. Global economic activities increased because of industrialization in the world, but it destroyed the ecosystem. Today, global warming is a nontraditional dangerous threat. It is as dangerous as a nuclear explosion because both are threats to the human and both are destroying millions of people in a few minutes. Now, it is at the end of the human decision; how to protect the environment? How

did they prepare policies to face global warming? Since the survival of humans is at stake. On one hand, they cut down trees burned wood, coal and produced CO₂, and enhanced global warming. Plants are the natural source of Oxygen and a natural source to manufacture the Ozone layer.

Scientists believe that the excessive release of Carbon dioxide by the burning of fossil fuels i.e. coal, natural gas, and petroleum, is the main cause of pollution and global warming. The release of toxic gasses from factories and vehicles is the cause of the addition of greenhouse gasses GHG to the atmosphere. According to the NASA Report 2010, this is the reason for raising the average surface global temperature 0.6 to 0.9 degrees Celsius (1.1 to 1.6° F) between 1906 and 2005. (Hardee, K, 2014). It is expected that global temperature will double in the next 50 years. Temperature is certain to go up further. Despite ups and downs from year to year, the global average surface temperature is rising gradually. The amount of carbon dioxide in the atmosphere is good for the ecosystem and natural life of the Earth. If carbon dioxide and other gases remain in a specific favourable concentration. The dry clean air contains 78.08% nitrogen, 20.95% oxygen, 0.93% argon, 0.04% carbon dioxide, and small amounts of other gases. (Skoglund. T, 2023). The Earth gets its energy from the solar system in the form of Sunlight. The surface of Earth absorbs some heat and heat up, and some reflect into the atmosphere. The greenhouse gasses stop the reflected heat. The reflected heat and gasses contain water vapour, carbon dioxide, methane, and nitrogen oxide.

Carbon dioxide plays an important role in the atmosphere. If the carbon dioxide concentration is reduced in the atmosphere, it will reduce the temperature on the Earth. The Earth would cool down to the extent that life activities would be in danger. The growth of plants and animals will reduce in unfavourable conditions. Plants and animals need a favourable temperature to grow. While in the concentration of carbon dioxide in the atmosphere, it will absorb heat and prevent it from leaving the Earth's atmosphere. According to global scientific research, carbon dioxide and other gasses' quantity reached 400 ppm. (Monastersky. R, 2013). Now it is a real nontraditional threat to the global world if the carbon dioxides will reach 600 ppm by the end of the 21 century. Many people will die due to climatic change. Global warming is not a secret but it is an open secret for everyone to take care of the climate. (Bierwirth, P. N, 2018).

In the future, human life will be difficult on Earth because the temperature will rise to 2.5 degrees Celsius. According to Climatologists, 300 to 350 ppm concentration of CO₂ is safe for the environment. Today the level of CO₂ is 400 ppm, which is an extreme level of CO₂ in the atmosphere. The level of CO₂ is increasing day by day, and the threat to the biosphere is increasing with time. (Monastersky. R, 2013). Today all the states are interested in different kinds of experiments such production of Microbes, nuclear tests, etc. The scientists are doing experiments in their areas, as well they are going to the Antarctica and Arctic region for the experiments. They are polluting the natural environment of Antarctica and the Arctic region. On one side the environment is polluted, while on the other hand, it is the cause of global warming. Another problem that will be more serious in the future, is different kinds of experiments in space that are becoming the cause of space debris or space warming. It may enhance space

pollution and global heating in space. Today human activities are continuing in the troposphere, stratosphere, mesosphere, and thermosphere. Azam.S (2021).

Animals, birds, and humans are migrating in search of food, water, and shelter to protect themselves from enemies. Nowadays, Animals and birds are migrating due to the extreme weather conditions in their local habitats. The main reason is global warming due to which they are migrating to the safe heavens. (Moore, T. T.,2011). (Azam.S,2021). Plants, animals, and humans need a suitable temperature for growth and living on Earth. Global warming directly affects the whole ecosystem of the world. Our world already facing different kinds of threats. Global warming can increase heat, drought, and insect outbreaks, germination of new kinds of microbes, dangerous effects on wildlife and forests, decreased agricultural harvests, deteriorated water supplies, and health issues due to high heat waves. So there is a need to stop global warming by all means. (Azam.S,2021).

Conclusion

Global Climate change is a real existing problem, and it poses a threat to biodiversity on the Earth. The ecosystem of plants and animal species is at high risk due to the climatic change and high heat of global warming. The Earth is a dynamic biosphere and it has been constantly under the impact of climatic change due to toxic gasses of industries and other man-made activities such as deforestation, mining, drilling, construction on the ground surface and underground, deep construction, etc. It is polluting the air, water, and natural resources. Internal changes under the ground due to the volcanic eruptions and movement of tectonic plates bring change to the surface of Earth. Earthquakes caused extensive damage to life, property, landslides, and deformation of landforms. Earthquake shocks are dangerous for the biosphere, but Earthquakes happen two to three weeks a year. While Global warming is a consistent long-term problem. Global warming has a devastating effect on the global climate. However, some areas of the world are more affected due to the high heat of the atmosphere. The high heat of global warming makes the environment intolerable for the people. Different countries are facing various but relevant climatic and environmental problems. For example high heat causes drought in some areas of Afghanistan, including Pakistan, Africa, and some Asian countries. High heat increases the process of evaporation and dries the land and vegetation. The life of people of Asia and Africa is miserable due to the high heat in summer. Global warming affects the biosphere in different ways such as the outbreak of different kinds of microbes such as COVID-19, the outbreak of insects, the melting of glaciers and floods, reduce the flow of rivers or drying up rivers, the decline of rains or heavy rains, destruction of wildlife and forests, reduce agricultural yields, health life effects in rural and urban areas, migration of humans and animals to the safe and protected areas.

All this shows a fatal threat to the habitat of animals and humans. A man should not destabilize nature because if a man does not care the nature, then nature struggles to readjust itself like an equilibrium system. However, if nature adjusts itself it will be unfavourable and unbearable for human survival. For example, if atmosphere heat increases, it will disturb the seasonal timings of rain and crop production, the human body will not adjust to temperature and

they will die due to heatstroke. Many factors cause global warming but the main cause is overpopulation, and the toxic smoke of industries, vehicles, and aircraft. The emission of CO₂ and other gasses into the atmosphere is the main cause of global warming. The production and emission of GHG are linked with the human population and human activities. Today's human population is 7.9 billion and in the future, it is expected it will increase more in future by 2050, and the global economy is expected to triple during the same period. The transport CO₂ production will increase by 16% by 2050. To attain net-zero greenhouse emissions by 2050, the estimated cost is about \$3.5 trillion. The suitable level of CO₂ is between 300 and 350 ppm. While the level of CO₂ is increasing day by day. The glaciers are melting in the Antarctic, Arctic, and other regions due to global warming. The sea level is rising every year and submerging the land area of many countries. Such as Maldives and Bangladesh. In 2050, Bangladesh may lose 11% of its land due to a 50 cm rise in sea level, affecting an estimated 15 million people living in its low-lying coastal region. There is only one way left for humans to think seriously and control global warming. It is a practical problem and it needs an accomplishable solution. This is the responsibility of an individual, community, and the government to control global warming and take care of the ecosystem. Industrialists make a plan to control the toxic smoke and recycle the smoke and chemicals before releasing them into the atmosphere. Everyone must take the initiative not to enhance CO₂ in nature. It is a serious threat to the human generation and civilization. So now is the time to solve this problem prudently with proper planning and policy implementation with effective environmental rules and laws.

Recommendations

This is the responsibility of the public and all democratic political governments to make environment-friendly policies. There is a need to adopt modern ecological policies and provide advanced training and education to the public, industrialists, and government bodies. Which enhances global understanding of the protection of the environment. Such as enhancing plantations, spreading awareness of global climatic change, and environment-friendly policies. There is a need to discourage different anti-environment policies and experiments in different regions such as Antarctica and the Arctic region. Stop such experiments in space that are becoming the cause of global warming.

- Grow more trees to produce more oxygen for the breathing of organisms and a healthy and fresh environment.
- With the reaction of Ultraviolet (*UV light*), the Oxygen molecule will convert into O₃ Ozone gas. In this way, the ozone layer will improve and stop the ultraviolet radiation on the Earth.
- There must be strict policies for the establishment of industries. Only those industrialists get permission who have recycling plants must promise to recycle the gasses and chemicals, before releasing them into the atmosphere.
- Control the human population through population welfare programs and awareness campaigns.

- spread awareness of global climate change through education and awareness campaign
- Today, this subject is taught in educational institutions, but it must be taught in a better and more effective way. So the students emerged as a force to enhance develop and protect the environment
- Introduce low-carbon or no-carbon fuel for transportation.
- Introduce cheaper transport services, so the public avoids personal cars and uses public transport. It will reduce carbon emissions in the environment.
- Stop explosive experiments and nuclear tests in space and different regions such as Antarctica and the Arctic region.
- Stop such activities which are the cause of space pollution in space and enhance GHG greenhouse gases.
- Global society must move from carbon fuel to renewable energy resources like wind and solar energy; to electrify our vehicles; and maximize energy efficiency in our buildings, appliances, and industries.
- Make new effective laws and rules to protect the global ecosystem

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