



THE GLOBAL POLITICS OF CLIMATE CHANGE: ANALYSING THE ROLE OF UN IN STIMULATING ENVIRONMENT SECURITY

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Abstract

This article provides a critical outlook on climate change politics and the United Nations role in reducing emissions. Climate change and environmental security are the major concerns for the international community in the 21st century. The gigantic industrialization, power plants, burning of fossil fuels, and deforestation in the globalized era resulted in a massive release of greenhouse gas emissions. Climate change interrupted the economies of the least developed countries and caused global warming, air pollution, floods, migration, and water crisis. Even though the developed countries contributing more to environmental degradation and climate change, the poorest and vulnerable people from the underdeveloped countries are being affected the most. The colonial and capitalist policies of the Western-rich countries exploited natural resources from the developing countries through globalization, privatization and industrialization process. The international community including the United Nations Organization (UNO) is not very successful in adopting major environmental protection measures until the end of the Cold War in 1991. However, the United Nations Environment Programme (UNEP), Intergovernmental Panel for Climate Change (IPCC), United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol, and Paris Agreement are very significant initiatives adopted by the international community. Based on the above conventions, the UN has given historical responsibility to the industrialized and developing countries for reducing their greenhouse gas emissions. Nevertheless, most of the developed countries were unsuccessful in achieving emissions targets and blamed developing countries as more responsible for climate change. The statement of the former US President Donald Trump on withdrawal from the Paris Agreement on climate change raised numerous questions on the commitment of developed countries for environment protection and security. The primary objective of this article is to explain the role of the UN in promoting environmental security for the international community. It also analyses climate change politics between developed and developing countries.

Keywords: *Climate Change, Global Warming, Environment, Floods, Migration, Kyoto Protocol, Paris Agreement, and United Nations.*

Introduction

In the 21st century, climate change and environmental issues are a major concern for the international community. Climate change is the drastic change in global or regional climate patterns that is due to increasing greenhouse gases into the earth atmosphere. These emissions of greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluoric carbons, per fluorocarbons and sulphur hexafluoride are the cause for the rise in earth's temperature as well as sea level. The gigantic industrialization, power plants, burning of fossil fuels, and deforestation in the globalized era resulted in a massive release of greenhouse gas emissions. Climate change is not only an environmental concern but also emerged as a gigantic developmental challenge at a global level that is economic impacts particularly on the poor and make it a major governance issue. The UN recognised climate change as



one of the major concerns of the international society. It is important to understand the concept of climate change to realise its impact on the global community. In general terms “*climate change is a long-term shift in the climate of specific location, region or planet*” (Adhikari et. all: 2011). According to the United Nations Framework on Climate Change “*climate change means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods*” (UNFCCC: 1992). According to Intergovernmental Panel on Climate Change, “*Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity*” (EEA Report: 2012). In the view of European Environment Agency, “*climate change is an increase in temperature, change in perception and decrease in ice and snow which occur globally*” (EEA Report: 2012). According to EPA “*Climate change refers to any significant change in the measures of climate lasting for an extended period. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer*” (EPA: 2016). BBC defined “*climate change as a pattern of change affecting global or regional climate, as measured by yardsticks such as average temperature and rainfall, or an alteration in frequency of extreme weather conditions*” (BBC: 2014). In Muhammad Ishaq-ur Rahman words, “*climate change denotes to long-term change in the statistical distribution of weather patterns (e.g. temperature, precipitation etc.) over decades to millions of years. The climate on earth has changed on all time scales even since long before human activity could have played a role in its transformation*” (Rahman: 2012). However, whether it is due to natural variability or human activities it has a massive impact on human health and the extinction of birds and animals. It has also influenced foreign policy and economic development. The climate change issue that has strengthened the class system at the international level, the exploitation of developing countries – who are blamed by developed countries that "developing countries are responsible for the climate change issue". Though the developed countries have failed to achieve the target for reduction of greenhouse gases and the statement of withdrawal of developed countries from the Paris agreement affects the developing and under-developed countries.

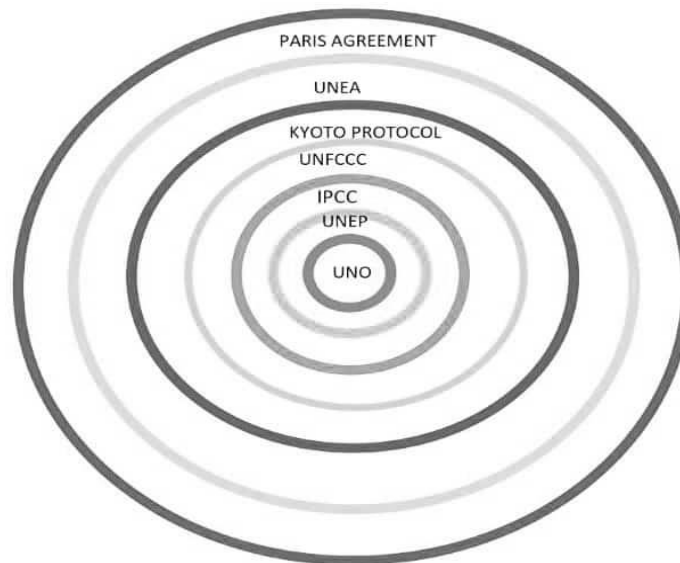
Climate Change and UNO

In the initial phase of the formation of the United Nations, environment degradation was not a major security threat to nation-states. Therefore, even the word environment was not mentioned in the Charter of the United Nations. Military security, economic cooperation, and the establishment of peace were given priority under the Charter. However, the emergence of environmental threats such as the release of gas emissions, soil erosion, overfishing, water and air pollution forced international and regional organizations to focus on environmental protection, sea disputes, human rights violations, terrorism, migration and climate change in the present world order.

Even though the UN was established in 1945, the first step towards environment security was the 1972 UN conference on the Human Environment in Stockholm at the global level, which led to the creation of the United Nations Environment Programme (UNEP). The second major initiative was the 1992 UN Conference on Environment and Development (UNCED) popularly known as Rio or Earth Summit, which led to the formation of the UN Commission on Sustainable Development (CSD). The main objective of this convention is to prevent dangerous human interference in the climate system.



Image: Major UN Initiatives to Control Climate Change



Source: Data Collected by Author's from UN Official Website

The *United Nations Environment Programme (UNEP)* was created in 1972 under the framework of the UN to coordinate environment policies. It is the leading global authority that sets the agenda to implement and promote environmental protection in the world. The main objective of UNEP is to develop international environmental instruments and strengthening institutions for environmental security. It encourages countries to adopt policies to control environmental degradation at the bilateral and multilateral levels. The *Intergovernmental Panel for Climate Change (IPCC)* was established under UNEP in 1988 for providing assessment and information, promote research and submit reports on climate change (UNEP: 2021).

The *United Nations Framework Convention on Climate Change (UNFCCC)* was adopted in 1992 as an international multilateral treaty for mitigating climate change. The UNFCCC was an action for the reduction of greenhouse gases especially carbon dioxide emission, due to human activities. In the view of protecting the environment the convention classified member states into three categories as Annex-I (Industrialized countries), Annex-II (Developed Countries) and Annex-III (Least developed countries). The convention imposed more responsibility on industrialized and developed countries to reduce gas emissions and to transfer renewable energy technology to developing countries. Parties included in Annex I to the Convention (developed countries and those in transition to a market economy) undertook a non-binding commitment to reduce their anthropogenic GHG emissions to 1990 levels by the year 2000 (UNFCCC: 1992).

The *Kyoto Protocol* is a UNFCCC initiative to reduce greenhouse gases adopted in 1997 and came into force in 2005 (UN Climate Change: 2021). Under the Kyoto Protocol, developed countries must determine how to reduce the disparity between their binding targets and actual reductions, whereas developing countries have no such direct binding targets (Chien-Ho Wang, Ming-Hui Ko and Wan-Jiun Chen: 2019; IIR: 2017). But non annex countries have to participate in a clean development mechanism. The main objective of the Kyoto Protocol is "to achieve stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic (human-induced) interference



with the climate system". The Kyoto protocol's first commitment was from 2008 to 2012. But on 8th December Doha amendment to the Kyoto protocol was adopted, which includes a new commitment for annexe-i parties from 2013 to 2020 (UN Climate Change: 2021).

The *United Nations Environment Assembly (UNEA)* is the global level decision-making body on climate change with the universal representation of 193 member states. It is playing a significant role in adopting regional and global level policies to reduce the impact of climate change. It also acts as a governing body of the United Nations Environment Programme (UNEP). The Assembly meets biannually to review the implementation of climate change policies (UNEA: 2021).

The *Paris Agreement* is an international agreement initiated in 2015 to counter climate change at the global level. The agreement replaced the Kyoto Protocol and aimed to keep the global temperature below 2 degrees Celsius. The agreement aims at the deeper commitment from all the countries, both developed and developing countries (NRDC: 2017 and UN Climate Action: 2021).

The objectives of the Paris agreement mentioned in article 2 are as follows:

- Enhancing the implementation of the Convention
- Strengthen the global response to the threat of climate change
- Strengthen sustainable development and efforts to eradicate poverty
- Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change
- Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production
- Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development (UN Climate Action: 2021).

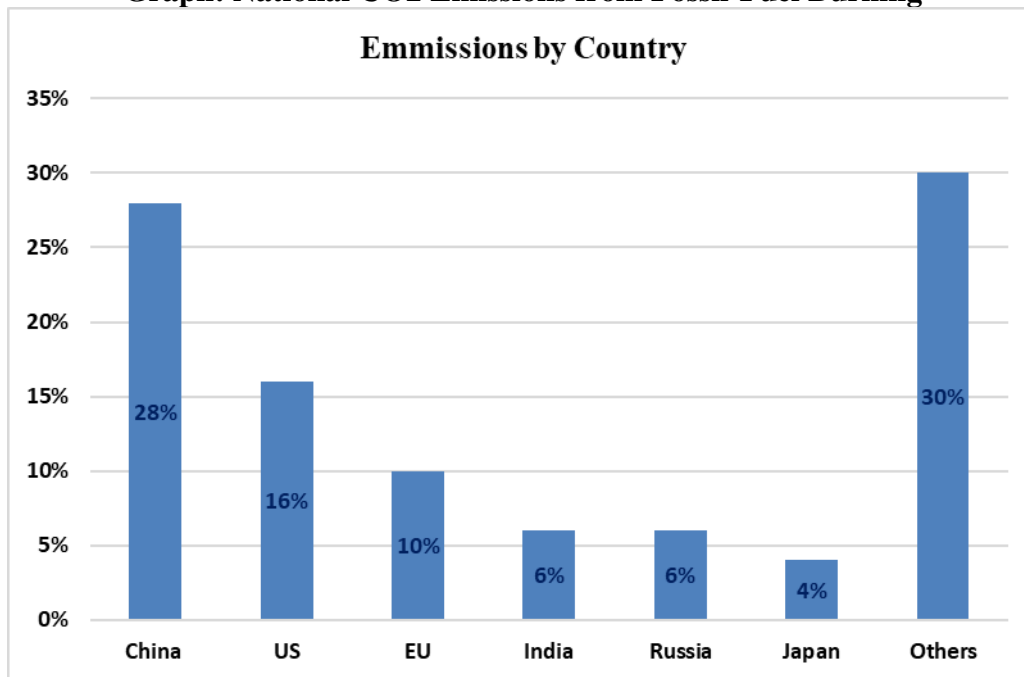
Politics of Climate Change

Climate change is one of the major threats to humanity today and affects every country, community and individual in the world (Government of Canada: 2020). Climate change Politics is the primary agenda of all countries security and foreign policies (Haibach and Kathrin: 2021). The developing and third world countries are mostly affected by climate change and environmental degradation. Women and subaltern communities' conditions will be more vulnerable in developing countries, especially those that depend on natural resources. According to WHO climate change leads to malnutrition, malaria, diarrhoea and other health issues (Government of Canada: 2020). The increasing floods, hurricanes, drought and other environmental disasters across the world are the result of disagreements and politics around climate change (Haibach and Kathrin: 2021).

The emission of greenhouse gases at the global level, due to human activities are 65 per cent of carbon dioxide (industries and fossil fuels), 11 per cent of carbon dioxide (agriculture and other purposes), 16 per cent of methane, 6 per cent of nitrogen oxide and 2 per cent of F-gases (IPCC Report: 2014). Now concentrating on the emission of carbon dioxide, whose emission is an enormous amount at global level, these carbon emission countries wise is illustrated in the following chart.



Graph: National CO2 Emissions from Fossil-Fuel Burning



Source: Boden, T.A., Marland, G., and Andres, R.J. (2015).

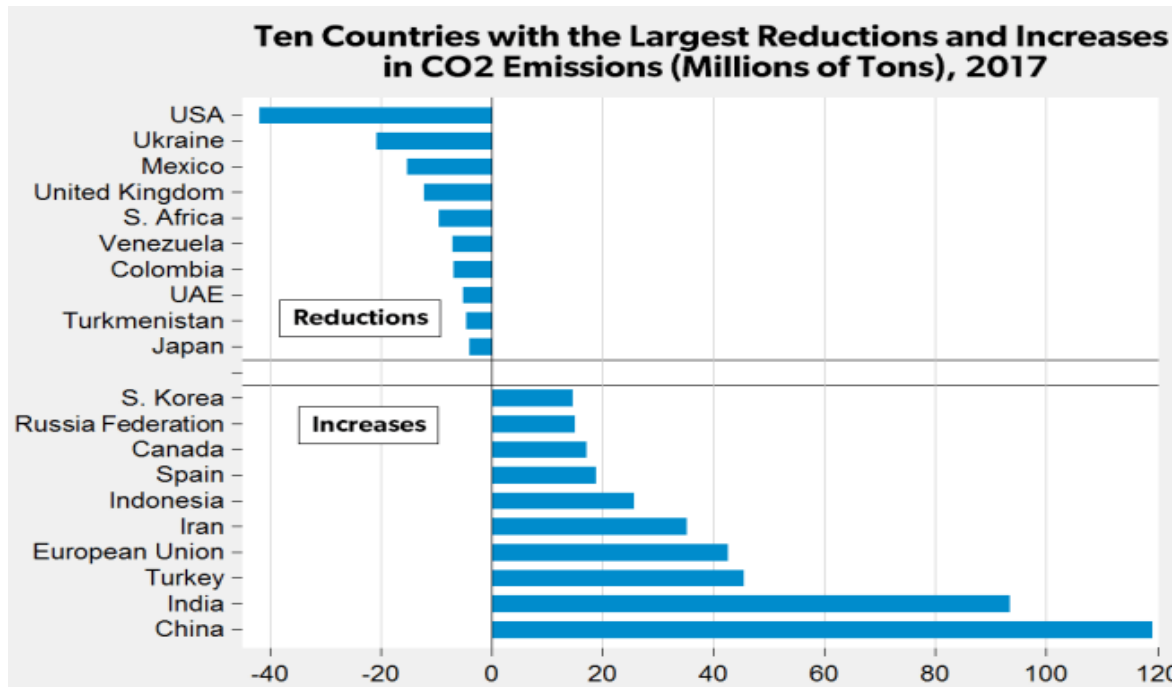
https://19january2017snapshot.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data_.html

This elucidated that developed countries like China (28 per cent), United States (16 per cent) and European Union (10 per cent) are major contributors to the emission of carbon dioxide (by industries processes and fossil fuel burning). Therefore, they are contributing more to climate change than other countries. India (6 per cent), Russia (6 per cent) and Japan (4 per cent) contributions to environmental degradation are very less compared to the developed countries, whereas as all other countries in the world together releasing 30 per cent of gas emissions.

Though climate change contribution is more by the developed countries, consequences are faced by the developing countries in two dimensions, which are- firstly, developing countries though have less emission of greenhouse gases, yet as an issue like environmental degradation, increasing temperature and sea level, etc. Secondly, the trade between countries for greenhouse gases emission will harmless emitting countries economic growth. Based on the environment conventions, the UN has given historical responsibility to the industrialized and developing countries for reducing their greenhouse gas emissions. However, most of the developed countries failed to achieve emissions targets and blamed developing countries as more responsible for climate change. This is can be elucidated in the following chart of ten countries with the largest reduction and emission of carbon dioxide.



Graph: Reduction and Increase of CO2 Emissions by Countries



Source: BP Statistical Review of World Energy Resources (2018).

China, European Union, Canada, South Korea, Turkey, Spain are the developed economies that have failed to achieve the target of carbon reduction but blame developing countries like India and Russia federation are the only two countries that have increases carbon dioxide emission. On another side, the reduction of carbon dioxide emission, developing countries are slightly achieving target though do not contribute the emission of carbon dioxide compared to the developed country like the US, who emits 16 per cent of global carbon emission. Yet the developing countries are blamed responsible for climate change.

Until 2005, the USA not only maintains its economy and military hegemony but also in the emission of carbon dioxide. The developed countries have already contributed to global warming by emitting the largest amount of carbon. It was from 2006 where a developing country like China has surpassed the US total annual emission in just four years, that was after joining WTO. Though the USA has reduced forty thousand tons of carbon emission, yet contribute 16 per cent of global carbon emission. When the developed countries failed to achieve the exact target, have started blaming the developing countries for global warming and climate change (EPA: 2021).

The countries which have not refused even to be a signatory of this agreement are Syria and Nicaragua. In 2017, President Donald Trump of the United States decided to withdraw his nation from the Paris Agreement (The Hindu: 2020). This decision of the United States had taken because this agreement would decrease US economic hegemony which is already challenged by the developing countries, who are emerging economies. However, president trump has ignored the climate change impact and global warming for sake of the US economy. He also mentioned in his address that “the agreement placed unfair standards on American efforts to curtail greenhouse gas emissions while it allowed developing countries, such as China and India in particular, wider latitude to achieve their own climate goals”. But



the former US president Barak Obama committed to curtailing U.S. carbon dioxide emissions by between 26 and 28 per cent of 2005 levels by 2025, the United States was not limited in how it achieved these goals. It is impossible to have the global target of carbon reduction without the US because it emitted the largest amount of carbon till 2006. Now it is completely blaming China and India especially the cause for global warming, whereas the US is the cause for global warming. Now US has stepped back to sustain its hegemony and pose a challenge to the emerging economies in the name of climate change (EPA: 2021).

The lack of commitment from the developed countries on mitigation of gas emissions mostly affects the third world especially countries from Africa and Latin America (Haibach and Kathrin: 2021). Developing and least developed countries are unable to mitigate the emissions due to Overdependence on primary energy resources, political instability, poverty, underdevelopment, lack of renewable energy technology and financial support. However, developing countries find their strategies to control climate change and global warming such as increasing investments and promoting research in renewable energy, by not compromising their economic growth and development (Mann: 2021; Haibach and Kathrin: 2021). Developed countries should acknowledge their responsibility in protecting the environment and support least developed countries by transferring technology and finance to reach the mitigation targets (Haibach and Kathrin: 2021).

The global community can only address the climate crisis through international institutions and genuine commitment and cooperation between states (Chomsky and Pollin: 2020). Eventually, along with governments, individuals and citizens of the world should recognize the significance of the environment and develop an environment-friendly approach to provide better environmental security for future generations (Mann: 2021; Haibach and Kathrin: 2021).

India's Role in Regulating Climate Change

India is one of the founding members of the UN and playing a significant role by extending its support to disarmament, peace and security, human rights, peacekeeping forces and climate change since its inception to the global governing institution. As an emerging economic power, climate change and environmental degradation are one of the major concerns for India. India actively participated in global, multilateral, bilateral initiatives in climate change and ratified all the conventions. India is also considering climate change as one of the priority issues in its bilateral engagements with other states. To avoid the impact of climate change on different sections of the society,

The Indian government adopted several missions under *National Action for Climate Change (NAPCC)* such as:

- National Mission for a Green India
- National Solar Mission
- National Water Mission
- National Mission on Sustainable Habitat
- National Mission for Sustainable Agriculture
- National Mission for Enhanced Energy Efficiency
- National Mission for Sustaining the Himalayan Eco-system
- National Mission on Strategic Knowledge for Climate Change (Ministry of Science and Technology: 2021).



The Ministry of Environment, Forest and Climate Change is promoting environmental education, awareness and training to mitigate global warming. The Indian Government adopted *National Clean Air Programme (NCAP)* and *Comprehensive Action Plan (CAP)* in 2018 to tackle the pollution problems across the country and improve the air quality. India also joined *Climate and Clean Air Coalition (CCAC)* in 2019 to develop environmentally-friendly agriculture, transport and industrial sector (Ministry of Environment, Forest and Climate Change: 2019).

Conclusion

Climate change and global warming affecting both developed and developing nations in the world. The massive industrialization, the emergence of factories, power plants, modern transportation, burning of fossil fuels (primary energy resources), water pollution, and air pollution are the major causes of climate change in developed countries. Whereas, colonialism and neo-colonialism, globalization, privatization, poverty, unemployment, population explosion, deforestation, lack of renewable energy technology and lack of financial support are the major causes for environmental degradation in developing countries. However, both the developing and developed countries actions and development processes causing damage to the environment, developing countries are more vulnerable victims of climate change due to a lack of mitigation capacities. The emerging economies like India, Brazil, South Africa and EU member states are very active in implementing and achieving international climate change targets.

The United Nations Environment Programme (UNEP) initiatives are not very successful in bringing developed and developing countries together to fight against common challenges of climate change and global warming. The Kyoto Protocol and Paris Agreement were successful in legally binding developed countries to take more responsibilities to mitigate climate change and extend their support to developing countries. The non-ratification, withdrawal and re-joining politics of the United States raised doubts on the commitment of the developed world to achieving emission targets. However, many countries including Japan, the USA, UK and several EU member states are increasing their dependency on renewable energy resources and reducing the release of emissions. According to Sir David King, the UK scientific advisor and Climate Crisis Advisory Group (CCAG) international community should focus on triple “R” formula for mitigating climate change:

- **“Reduce:** Current targets for greenhouse gas emissions reduction are not enough. Nations need to triple their emissions-cutting pledges to limit the effects of the climate crisis.
- **Remove:** We need large-scale investment to develop and scale techniques to remove greenhouse gases from the atmosphere.
- **Repair:** Deep research is needed to explore and investigate safe methods and technologies to repair parts of our damaged climate systems” (Jackson: 2021).

References

1. Adhikari Anu, Shah Racchya, Baral Sony and Khanal Rajendra (2011), Terminologies Used in Climate Change Supported by UKaid from the Department for International Development: IUCN, Kathmandu, Nepal.
2. BBC (2014), Climate change glossary, News agency, <https://www.bbc.com/news/science-environment-11833685>, Accessed on 18 September 2021.
3. Boden, T.A., Marland, G., and Andres, R.J. (2015), National CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2011, Carbon Dioxide Information Analysis Centre, Oak Ridge National Laboratory, U.S. Department of Energy,



4. BP Statistical Review of Global Energy (2018),(67th edition) <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/co2-emissions.html>, Accessed on 18 September 2021.
5. Chien-Ho Wang, Ming-Hui Ko and Wan-Jiun Chen (2019), Effects of Kyoto Protocol on CO2 Emissions:A Five-Country Rolling Regression Analysis, file:///C:/Users/sfsfa/Downloads/sustainability-11-00744.pdf, Accessed on 20 September 2021.
6. Chomsky Noam and Pollin C. Robert J. Polychroniou (2020), Climate Crisis and the Global Green New Deal: The Political Economy of Saving the Planet: Verso Books.
7. EEA Report (2012), Climate Change, Impact and Vulnerability, European Environment Agency, report-2012, ISBN: 17259177.
8. EPA (2016), Glossary of Climate Change Terms, United States Environment Protection Agency, https://19january2017snapshot.epa.gov/climatechange/glossary-climate-change-terms_.html, Accessed on 21 September 2021.
9. EPA (2021), Global Greenhouse Gas Emissions Data, United States, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>, Accessed on 18 September 2021.
10. Government of Canada (2020),Climate Change in Developing Countries, https://www.international.gc.ca/world-monde/issues_development-enjeux_developpement/environmental_protection-protection_environnement/climate-climatiques.aspx?lang=eng, Accessed on 22 September 2021.
11. Haibach and Kathrin (2021), The Politics of Climate Change: Review and Future Challenges, URL: <https://www.jstor.org/stable/j.ctv941vsk.18>, Accessed on 04 September 2021.
12. IPCC (2014), Global Green gas emissions from 2010, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>, Accessed on 18 August 2021.
13. Jackson Felicia (2021), Politics Is Now the Battleground for Climate Change Says Leading U.K. Scientist, <https://www.forbes.com/sites/feliciajackson/2021/06/24/politics-is-now-the-battleground-for-climate-change/?sh=696118606231>, Accessed on 20 September 2021.
14. Mann. E Michael (2021), the New Climate War: the Fight to Take Back Our Planet, Scribe Publications Pty Limited.
15. Ministry of Environment, Forest and Climate Change (2019), Government of India, Various Initiatives are undertaken by Government for mitigation of Air Pollution, Press Information Bureau, <https://pib.gov.in/newsite/PrintRelease.aspx?relid=194865>, Accessed on 14 September 2021.
16. Ministry of Science and Technology (2021), Climate Change Programme, Government of India, <https://dst.gov.in/climate-change-programme>, Accessed on 08 September 2021.
17. NRDC (2017), Paris Agreement on Climate Change, <https://assets.nrdc.org/sites/default/files/paris-agreement-climate-change-2017-ib.pdf>, Accessed on 15 September 2021.
18. Rahman Ishaq-ur Muhammad (2012), Climate change a theoretical review, School of Geography and Environmental Science, Monash University Melbourne, Australia DOI: 10.7906/indecs.11.1.1.
19. The Hindu (2020), U.S. formally exits Paris climate deal amid election uncertainty, <https://www.thehindu.com/news/international/us-formally-exits-paris-climate-deal-amid-election-uncertainty/article33021928.ece>, Accessed on 10 September 2021.
20. UN Climate Action (2021), The Paris Agreement, <https://www.un.org/en/climatechange/paris-agreement>, Accessed on 10 September 2021.



21. UN Climate Change (2021), what is the Kyoto Protocol? https://unfccc.int/kyoto_protocol.
22. UNEA (2021), UN Environment Assembly and Governing Council, <https://www.unep.org/environmentassembly/about-united-nations-environment-assembly>, Accessed on 15 September 2021.
23. UNEP (2021), United Nations Energy Programme, <https://www.unep.org/about-un-environment/what-we-do>, OFFICIAL WEB, Accessed on 18 September 2021.
24. UNFCCC (1992), United Nations Framework Convention on Climate Change, https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/c_onveng.pdf, Accessed on 21 September 2021.

Appendix-I

Glossary of Climate Change

Annexe-I Parties

The industrialized countries listed in Annex I to the Convention, which committed to returning their greenhouse-gas emissions to 1990 levels by the year 2000 as per Article 4.2 (a) and (b). They have also accepted emissions targets for the period 2008-12 as per Article 3 and Annex B of the Kyoto Protocol. They include the 24 original OECD members, the European Union, and 14 countries with economies in transition. (Croatia, Liechtenstein, Monaco, and Slovenia joined Annex 1 at COP-3, and the Czech Republic and Slovakia replaced Czechoslovakia.).

Annex-II Parties

The countries listed in Annex II to the Convention have a special obligation to provide financial resources and facilitate technology transfer to developing countries. Annex II Parties include the 24 original OECD members plus the European Union.

CO₂

Carbon dioxide.

Deforestation

Conversion of forest to non-forest.

Greenhouse Gases (GHGs)

The atmospheric gases are responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent --but very powerful -- greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

Kyoto Protocol

An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of greenhouse-gas emissions by industrialized countries.

Least Developed Countries (LDCs)

The world's poorest countries. The criteria currently used by the Economic and Social Council (ECOSOC) for designation as an LDC include low income, human resource weakness and economic vulnerability. Currently, 48 countries have been designated by the UN General Assembly as LDCs.



Mitigation

In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other "sinks" to remove greater amounts of carbon dioxide from the atmosphere.

Non-Annex Parties

Refers to countries that have ratified or acceded to the United Nations Framework Convention on Climate Change that is not included in Annex I of the Convention.

Source: United Nations Climate Change (2021), Glossary on Climate Change, <https://unfccc.int/process-and-meetings/the-convention/glossary-of-climate-change-acronyms-and-terms>, Accessed on 22 September 2021.