

Climate Change and Migration

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Abstract: *Climate change is a change in the pattern of weather, and related changes in oceans, land surfaces and ice sheets, occurring over time scales of decades or longer. There are several reasons for the climate change Natural disasters have always been regarded as the reason for sudden displacement or migration of population. But over the past few decades there have been serious probing into the role of climate change — a long period of change that fundamentally alters the coordinates of human existence, such as rain, water availability and sea level — in large-scale human migration. Media outlets, think tanks, researchers, and advocacy groups are increasingly raising the specter that climate change will cause mass migration via its spiralling impacts on agriculture, water resources, and infrastructure, particularly in the developing world. More than just speculation about the future, however, environmental migration is already here. The migration may take place within the state as well outside the territory but the issues faced by the migrants is always of a concern. The paper is a doctrinal study trying to write back to the interrogatories such as: The reason for the climate changes and factors leading to climate changes? Is Climate Changes persuading Migration? and what are the various international institutions and National level panels that are combating the issue of migrants?*

I. Introduction:

Migration is not new or a recent development. The evolution of human race started with the nomadic settlements based on the availability of water, food, etc. Eventually the history reveals that with the advent of the agriculture the formation of clan, Society, village, cities had developed. But today the migration has different dimension here is an attempt to understand the concept of migration that occurs due to Climate changes. Earth has had a climate long before we showed up and started noticing it and it is influenced by a whole series of cycles that have been churning along for hundreds of millions of years. And those cycles will continue after we're gone. Well, the migration due to climate changes is also not a new phenomenon we can trace back its history. The reasons for climate changes are natural and human influence as well. What is climate change and factors that lead to the Climate change? How Climate changes lead to Migration? are the interrogatories that has been answered in the paper.

Climate Change

Climate is the weather of a place. Climate can be different for different seasons. A place might be warm and dry in the summer and be cool and wet in the winter. Different places can have different climates. For example, A desert, is referred to as an arid climate because little water falls, as rain or snow, during the year. Other types of climate include tropical climates, which are hot and humid, and temperate climates, which have warm summers and cooler winters. Climate change is a change in the usual weather found in a place. The weather changes may occur in few hours where the climate changes will take years together sometimes million of years together. Climate change is a change in the pattern of weather, and related changes in oceans, land surfaces etc. Earth's climate is always changing. There have been times when Earth's climate has been warmer than it is now. There have been times when it has been cooler. These times can last thousands or millions of years. People who study Earth see that Earth's climate is getting warmer. Earth's temperature has gone up about one degree Fahrenheit in the last 100 years. This may not seem like much. But small changes in Earth's temperature can have big effects. Some effects are already happening. Warming of Earth's climate has caused some snow and ice to melt. The warming also has caused oceans to rise. These unexpected weather patterns can make it difficult to maintain and grow crops in regions that rely on farming because expected temperature and rainfall levels can no longer be relied on. Climate change has also been connected with other damaging weather events such as more frequent and more intense hurricanes, floods, downpours, and winter storms. Earth's climate has changed dramatically many times since the planet was formed 4.5 billion years ago. These changes have been triggered by the changing configuration of continents and oceans, changes in the Sun's intensity, variations in the orbit of Earth, and volcanic eruptions. The last 8,000 years, which includes most recorded human history, have been relatively stable at the warmer end of this temperature range. This stability enabled agriculture, permanent settlements and population growth.

Factor influencing Climate Changes:

The climate change can be natural as well as with human influence . Throughout Earth's history, climate has been changing. When occurring naturally, it is a slow process that has taken place over hundreds and thousands of years. The human influenced climate change that is happening now is occurring at a much faster rate. The cause of current climate change is largely due to human activity, like burning fossil fuels, like natural gas, oil, and coal. Burning these materials releases greenhouse gases into Earth's atmosphere. These gases trap heat from the sun's rays inside the atmosphere causing Earth's average temperature to rise. This rise in the planet's temperature is called global warming. The warming of the planet changes the local and regional climates.

Climatic warming or cooling arises from changes in the flows of energy through the climate system that can originate from a number of possible driving factors. The main drivers that have acted over the last century are:

- increases in atmospheric CO₂ and other long-lived greenhouse gases (methane, nitrous oxide and halocarbons)
- increases in short-lived greenhouse gases (mainly ozone)
- changes to land cover (replacement of darker forests with paler croplands and grasslands)
- increases in aerosols (tiny particles in the atmosphere)
- solar fluctuations (changes in the brightness of the sun)
- volcanic eruptions.

Climate changes drives Migration:

There is a wide spectrum of interactions between humans and the environment that can potentially influence migration decisions and behavior, a spectrum that is heavily influenced by the nature of the environmental conditions, events or changes in question; the timescale over which these conditions emerge or occur; and, the timescale over which migration responses occur. There are many example in the history to show us that climate has played significant role in the people moving from one place to various places. Variations in the climate has led to migration for several centuries. The human migration from the Indus Valley Civilization is very similar to the one that would take place — or is already been happening — from regions impacted by human-induced climate change, especially in low-lying coastal regions and islands that often bear the brunt of extreme weather events and sea level rise. Back in 1990, the Intergovernmental Panel on Climate Change (IPCC) noted that the single greatest impact of climate change will be on human migration. Experts believe that by 2050, more than 200 million people will be forced to flee their homes. They are referred as climate migrants or climate refugees. World Migration Report 2020, was released by the UN in December 2019. The report establishes the role of natural disasters in migration and says: “Many more people are newly displaced by disasters in any given year, compared with those newly displaced by conflict and violence, and more countries are affected by disaster displacement.”

Walter Kalin, Representative of the United Nations Secretary General on the Human Rights For Internally Displaced Persons, presents a helpful breakdown of situations that may lead to climate induced migration:

- 1: "Sudden onset disasters" such as flooding or storms;
- 2: "Slow onset disaster" such as rising sea levels and increased salination of freshwater;
- 3: "So-called sinking "small island States", which are perhaps a special case of a slow-onset disaster;
- 4: governments designating areas as " high risk zones too dangerous for human habitation" on account of environmental dangers;
- 5: " Unrest seriously disturbing public order, violence or even armed conflict" resulting from the depletion of natural resources such as drinking water ,became of climate change".

Climate change will cause population movements by making certain parts of the world much less practicable place to live; by causing food and water supplies more unpredictable and escalating the frequency and severity of floods and storms around the world. There are several other factors also that will lead to migration apart from climate changes. Other objects contributing to the large number of migrants to climate change, on the grounds that it is generally a variety of factors that trigger decisions to migrate. These factors are usually summarize cost of travel , and government policies that either facilitate or discourage migration). as "Push" factors that encourage migrants to leave their homes (such as economic conditions), "pull " factors that encourage them to opt for a specific destination (such as better economic conditions, and an existing presence of family members), and other factors (including the cost of travel, and government policies that either facilitate or discourage migration).Climate changes, or environmental conditions more generally, fit the category of "push" factors.

Impact of Climate Change Migration :

The Climate Change Migrant will first move within the village later with in the country and sometimes there are high chances of them moving internationally as well. Now do we have adequate Law to govern or resources to take care of these migrants. Now the question is if the Country can maintain sovereignty in the international law if its citizen live within another country's borders. Let us assume the citizen belong to a island that will soon disappear do they have the right

to settle in another country. None of the countries have the obligation under the international law to take in such migrants. This will displace the migrants and create social exclusion and the impact of the same is evidently disastrous. Effects of climate change can include displacement, loss of livelihoods, weakened governments, and in some cases political instability and conflict. Although there are few instances of climate change as the sole factor in migration, climate change is widely recognized as a contributing factor in migration.

In South Asia, increasing temperatures, sea level rise, more frequent cyclones, flooding of river systems fed by melting glaciers, and other extreme weather events are aggravating current internal and international migration patterns. Additionally, rapid economic growth and urbanization are magnifying the impact and are the drivers of climate change—the demand for energy is expected to grow 66 percent by 2040. Based on this, many of the expanding urban areas are located in low-lying coastal areas are threatened by sea level rise. These factors leads the World Bank to predict that the collective South Asian economy (Bangladesh, Bhutan, India, the Maldives, Nepal, and Sri Lanka) will lose 1.8 percent of its annual GDP due to climate change by 2050. The New York Times reports that the living conditions of 800 million people could seriously diminish. Diminishing living conditions on this scale and intensity will prompt mass migration possibly at an unprecedented level.

Measures to Tackle the Situation:

The Present International legal system is not well equipped to handle the situation . There were several laws that protected the war refugees in most of the countries but the climate changes has lead and will further lead to millions of migrations internally and internationally as well but are they protected and provided shelter under the united Nations . There requires a standard protocol to face and handle the situation.

While there are no legally binding international regimes that protect climate migrants, there are voluntary compacts that could be used to support them. Most notably, 193 countries adopted the 2030 Sustainable Development Goals (SDGs), which address both migration and climate change

SDG 13 on climate action outlines several targets that address the climate crisis:

- 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- 13.2: Integrate climate change measures into national policies, strategies, and planning
- 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.

“Rebuilding and Enhancing Programs to Resettle Refugees and Planning for the Impact of Climate Change on Migration,” in which he directed the National Security Advisor to prepare a report on climate change and its impact on migration. This report marks the first time the U.S. Government is officially reporting on the link between climate change and migration.

Immediate action preventing the scaling of Climate change and Migration:

There are several measures that are planned through the SDG along with initiatives taken up by several countries to resolve the climate change and the factors that lead to migration due to climate changes.

NASA is a world leader in climate studies and Earth science. While its role is not to set climate policy or prescribe particular responses or solutions to climate change, its purview does include providing the robust scientific data needed to understand climate change. NASA then makes this information available to the global community. Responding to climate change involves two possible approaches: reducing and stabilizing the levels of heat-trapping greenhouse gases in the atmosphere “**mitigation**” and/or adapting to the climate change already in the pipeline “**adaptation**”.

Apart from the resolution given by NASA there can also be steps taken to prevent the Migration that is majorly because of climate change by appropriating several funds towards the same . The displacement that is happening because of the Climatic changes can be addressed by supporting them financial. for example the climate change factors that push migration in Northwest Africa could—at least in part—be addressed by supporting irrigation infrastructure, providing food supplies, fostering regional water cooperation, and supporting livelihood security.

To Conclude

The paper is just an attempt where just the main points of climate changes leading tomigration addressed. But however, there are several measures that have been taken by many countries internal even with

no standard international law in place for the same. for instance, Australia and New Zealand have taken people from neighbouring countries who are affected by the climate changes. Yet we also have several countries who fear the consequences of the Climatic Changes and the impact it will have on the country due to the migration India fears the migration that may happen or is happening from Bangladesh due the climate impacts. There is a need for standard Law in place to address the issue rather than wait for the aftermath policies unlike what happen post II world war the world leaders need to work on Stabilizing the Climate Change Migrants.

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