

UNDERSTANDING CLIMATE CHANGE: A SOCIOLOGICAL PERSPECTIVE

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The health of people is fundamentally threatened by climate change. It has an impact on the physical environment in addition to all facets of human and natural systems, such as the health systems' operation and the social and economic environments. As a result, it intensifies the threat and has the ability to undo decades of advancements in health. Storms, intense heat waves, floods, droughts, and wildfires are among the weather and climate events that are becoming more common and intense as climatic conditions change. The risks of non-communicable illnesses, infectious disease onset and transmission, mortality, and medical emergencies are all increased by these weather and climate-related hazards, which have an impact on health both directly and indirectly. More broadly, the environmental and social determinants of physical and mental health are weakened by climate shocks and increasing pressures such as shifting patterns of temperature and precipitation, droughts, floods, and rising sea levels. Climate change affects all facets of health, including food systems, livelihoods, and access to clean air, water, and soil. Decades of progress in improving global health will be undermined, health risks will rise, and our shared commitment to guaranteeing everyone's right to health will be broken if we continue to put off addressing climate change.

This paper attempts to understand the role of climate change, its aspects and its impact on society. The study is conducted by using secondary sources. Through this paper, attempts are taken to understand how climate change impacts the health of the people and its impact on the environment.

Keywords:

Climate, health, environment, temperature.

According to Lee (1966), who takes into account both the temporal and spatial dimensions of migration, migration is simply

the movement of people from one city to another, from rural to urban, from urban to urban, and from one country to another. He defines migration as a change in permanent or semi-permanent residence; something that involves an origin, a destination, and intervening obstacles (Lee, 1966).

Neuman, 2015, Foresight, 2011, Black, 2011 have discussed about intervening obstacles such as cost of moving, social networks, political and legal frameworks. Some personal factors are also there such as age, sex education, marital status, wealth etc. These affects the decision whether to migrate or stay. Rao (1981, 21) offers the following definition and types of migration-Migration is the act of moving over an extended period of time. It encompasses a variety of deliberate and involuntary movements, although it does not cover brief trips or excursions. Involuntary migrations include population transfers, riots, floods, droughts, earthquakes, and migration during times of crisis like war. It also covers transfer migration and marriage migration, which can be virilocal, uxorilocal, or neolocal. There are additional migration scenarios in which people migrate in order to make a living. Nomads, roving farmers, traveling salespeople, artisans, and laborers are among them.

Disasters and environmental change have long been important causes of migration. However, as extreme weather-related events like floods, droughts, and storms increase in frequency and intensity and as changes in precipitation and temperature patterns affect livelihoods and human security, it is predicted that even more people will be on the move in the twenty-first century due to climate change (IPCC, 2014).

Environmental migrants are individuals or groups of individuals who are forced to leave their homes of habit, either permanently or temporarily, and who relocate either domestically or overseas, primarily due to abrupt or gradual changes in their surroundings

that negatively impact their lives or living conditions (IOM, 2007:33).

We discover that human activity, related global warming, and the ensuing shift in the global climate are all related. According to reports from the Intergovernmental Panel on Climate Change (IPCC), human activities like using fossil fuels for electricity generation and automobiles have increased the amount of carbon dioxide and other greenhouse gases (like sulphur dioxide, carbon monoxide, and methane) in the atmosphere. These greenhouse gases impact the global climate by trapping more heat inside the atmosphere through counter radiation. Data from the IPCC indicates that human activity has contributed to an approximate 0.85 degree Celsius increase in global temperature over the past 130 years following the industrial revolution. Every decade since 1850 has been warmer than the one before it. The glaciers are melting. In the summer, the ice in the Arctic Ocean at the North Pole is melting. Sea levels are increasing, and many islands are in danger of going extinct. Global precipitation patterns have been impacted by rising temperatures.

Extreme weather occurrences are growing more frequent and intense, demonstrating this trend. In India, for instance, floods and droughts have been frequent occurrences in recent years.

After being divided from northern Uttar Pradesh, Uttarakhand became the 27th State of India on November 9, 2000. Mostly a hilly State, it shares international borders with China (Tibet) to the north and Nepal to the east. It is situated at the base of the Himalayan mountain ranges. Uttar Pradesh is to the south, and Himachal Pradesh is to the northwest. It has an abundance of natural resources, particularly rivers, forests, snow-capped high peaks, and water. Nestled amidst the majestic mountains are the Char-dhams, the four most respected and sacred Hindu temples: Badrinath, Kedarnath, Gangotri, and Yamunotri. It really is the Land of God (Dev Bhoomi). Uttarakhand's capital city is Dehradun. It is renowned for its picturesque surroundings and is one of the most exquisite resorts in India's submountain regions. Situated near the

confluence of the Ganga and Yamuna rivers, the town is situated in the Dun Valley. There are multiple physiographic zones in Uttarakhand, all of which run parallel to one another from northwest to southeast. The Zaskar and Great Himalaya mountains are partially present in the northern region, often referred to as the Himadri. Elevations in this region typically range from 10,000 to 25,000 feet (3,000 to 7,600 meters). Within this zone are the majority of the big summits. The Lesser Himalayas, often referred to as the Himachal, are located in an area south and adjacent to the Great Himalayas and range in elevation from 6,500 to 10,000 feet (2,000 to 3,000 meters); The Mussoorie and Nag Tibba are the zone's two linear ranges. A portion of the Siwalik Range lies south of the Himachal. The Kumaun Himalayas refer to the region that encompasses the Himadri, Himachal, and Siwalik mountains. The Bhabar, a narrow channel of gravel and alluvium that connects to the marshy Tarai region to the southeast, is where the southern edge of the Siwalik Range meets. The total elevation of the Siwalik-Bhabar-Tarai region is between 1,000 and 10,000 feet (300 and 3,000 meters). Flat-floored depressions, referred to as duns locally, can be found south of the Siwaliks. One such dun is the Dehra Dun.

Uttarakhand has a temperate climate, with seasonal temperature changes as well as the influence of the tropical monsoon. The coldest month is January, when daily highs often hover around 70 °F (21 °C) in the southeast and below freezing in the north. July is the hottest month in the north, with average daily highs of 70 °F (about 7 °C) rising from the mid-40s F. May is the warmest month in the southeast, with daily highs typically reaching the mid 100s F (about 38 °C) from lows of about 80 °F (27 °C). Approximately 60 inches (1,500 mm) of precipitation fall on the state each year, most of it from the southwest monsoon, which blows from July to September. In the lower portions of the valleys during the wet season, flooding and landslides are issues. Between December and March, there is typically 10 to 15 feet (3 to 5 meters) of snowfall in the state's northern regions.

Over time, human activity has caused the environment to deteriorate quickly, which has had a significant impact on climate change. The numbers of individuals being uprooted and experiencing displacement are steadily increasing as a result of this spiraling environmental degradation. According to estimates, there would be between 25 million and 1 billion "Environmental Displaced Persons," or EDPs, worldwide in the near future. In addition to having an effect on international relations and geopolitical ties between countries, this will also cause new problems and conflicts as a result of addressing this new issue. The purpose of this is to examine concerns surrounding migration and displacement brought on by climate change, the differing effects of this phenomenon, and the ways in which it is being addressed.

Environmental Refugees:

Lester Brown coined the phrase "environmental refugees" in 1976. Essam El-Hinnawi used the word in 1985 to refer to persons who were forced to leave their home countries, either permanently or temporarily, because of environmental disasters that not only endangered their lives but also negatively impacted their quality of life. People who have been displaced by climate-related calamities are referred to by a number of labels, including climate refugee, environmental displacee, climate migrant, and environmental migrant. However, because the idea of climate-induced migration is still relatively new, these words are subject to criticism. There is much discussion over the status of climate-induced migrants because they do not fall under the traditional definition of refugees.

Migration and Climate Change in Uttarakhand:

Uttarakhand's resources, income, and food security are all being impacted by climate change. It also affects how people migrate about the state and serves as a risk modifier. Seventy-one percent of Uttarakhand's population lives in rural areas and relies on rainfed agriculture, namely terrace farming on steep slopes.

Das (2021) In the northern Indian state of Uttarakhand, climate change is having an

impact on agricultural livelihoods and fueling internal migration. A large number of migrants are relocating to the plains districts from the hills. (Blocher and others, 2021).

In Uttarakhand, the number of abandoned villages is rising as a result of migration. A 2018 survey found that since 2011, 734 communities in the state have been abandoned. These communities, which are dispersed among all 13 districts, are frequently called "ghost villages." Das (2021)

Impact of Climate Change:

Recessing glaciers and an upward-moving snowline, unpredictable rainfall, irregular winter rains, less snowfall in the winter, rising temperatures, an increase in the frequency and severity of flash floods, and the drying up of perennial streams are some of the documented climate change-induced changes in the Uttarakhand Himalayas, according to the Government of Uttarakhand's "Uttarakhand Action Plan on Climate Change (2014)." Uttarakhand Government, 2014.

By 2050, the state might warm by 1.6 to 1.9 degrees Celsius, with the highest elevation areas warming at the greatest rate (Das, 2021). Certain crops' growing seasons and zones have been altered by climate change, and some areas are now fallow.

A reduction in the amount of land per person, a lack of irrigation infrastructure, crop damage from animals, and a decline in young people's enthusiasm in farming are all consequences of climate change that are making farming more difficult. Das (2021)

Differential impacts of climate change

Every location is impacted by climate change in a different way depending on a number of factors, from low adaptation to topographical characteristics like low-lying terrains. The latter characteristic makes areas especially susceptible to sea level rise. In this regard, migration will ultimately turn into a tactic for adapting to the effects of climate change. In response to environmental catastrophes, there will be significant population migration in the impacted areas as well. According to the World Bank's 2021 Groundswell Report, 216 million individuals would experience internal movement within their nation by 2050, with