

# Addressing the Climate Change–Migration–Poverty–Gender Nexus for Sustainable Development in India

<sup>1</sup>Sonali Singh., <sup>2</sup>Dr. Prashant Singh

<sup>1</sup>Senior Research Fellow, Department of Geography FAA Government PG College Mahmudabad Sitapur (University of Lucknow)

<sup>2</sup>Assistant Professor, Department of Geography FAA Government PG College Mahmudabad Sitapur (University of Lucknow)

DOI: <https://doi.org/10.51244/IJRSI.2026.13010212>

Received: 01 February 2026; Accepted: 06 February 2026; Published: 17 February 2026

## ABSTRACT

Climate Change is currently one of the most discussed issues in international politics regarding its growing significance in the 21<sup>st</sup> century as a global threat to the environment, social, as well as economic structures. As climate change deepens, negative weather conditions such as droughts, prolonged dry seasons, floods, heat waves, etc. has increased and exerted a lot of pressure on the environment. This stress compelled migration, especially in the Rural and Agricultural sentinel groups that saw their sources of earning a livelihood are affected. Thus, the motives of migration are determined by socio-economic conditions and poverty deprives individuals of the opportunity to move safely and efficiently. Climate Change disproportionately affects populations in a manner that is governed by gender. The gender-specific risks are managed by pre-existing conditions in social relations, which means a worsened situation for women, such as greater poverty and forced migration. The study compares the findings' direct and indirect impacts of climate change on migration, poverty, and gender through secondary data analysis. The conclusions made in the research would help to establish the proactive strategies in the governmental agenda potentially beneficial for overcoming the detrimental effects of climate change on socially vulnerable population groups including women as well as contributing to attainment of the Sustainable Development Goals.

**Keywords:** Climate Change, Migration, Poverty, Gender, Sustainable Development.

## INTRODUCTION

Climate Change is now widely acknowledged as one of the most urgent global issues of the 21<sup>st</sup> century, with significant impacts that span environment, social and economic systems. Because of the rising temperatures across the entities of the world, disasters such as drought, flood and heat waves are common and severe, therefore exerting great pressure to the natural environment. This environmental stress, in other words, implicates human societies in such domains as migration, poverty, and gender issues. Sometimes the movement of people is as a result of the action of climate change on the natural environment in this regard migration is unavoidable. When employment sources are affected particularly in areas of rural and agricultural nature, people tend to seek other opportunities in other places. But migration is not something that occurs in isolation; the process takes place within certain conditions that encompass the social and economic status of the migrant, the available resources, social inequality among other factors. The vulnerability however increases when poverty is added into the equation, the poor are always the first to feel the effects of climate change and are always the ones who cannot move at all let alone moving efficiently.

Gender is another significant aspect that cannot let the impact of climate change not to be considered as something crucial. Several papers suggest that stress arising from climate change affects women since they are charged with household chores, they care for the sick, and are involved mostly in subsistence farming especially in the developing world. The gender specific risks are compounded by today's social inequity regime placing women in a disadvantaged position as they are probably going to be confronted with a major climate change

consequences such as poverty and forced migration. As a result, it is the purpose of this paper to examine and describe the climate change, migration, poverty and gender from the interdisciplinary perspective. Furthermore, in order to offer the context in which the linkages between the identified challenges will be considered, the paper situates its analysis in relation to the Sustainable Development Goals (SDGs) 1, 5, and 13 and it will stress that these things are not singular problems but interconnected concerns that must be addressed in integrated manner.

## Climate Change and Migration

Climate change has been described as being closely linked with migration, where environmental changes trigger human mobility, which in most cases compounds socio-economic vulnerabilities. The environmental, social and governance effects where the climate change is most pronounced are made worse by rapid changes in climate experienced globally. These changes lead to movements, sometimes cyclic or short term, but nowadays more or less permanent in nature. This relationship remains complex, thus the need of unravelling them in order to present a clear policy framework and national and international strategies to address the issues brought about by climate-induced migration.

### a. Environmental Drivers of Migration

Climate change and other related factors leads to various physical impacts which result into environment induced mobility which is commonly referred to as “environmental migration”. These include:

- **Rising Sea Levels:** Small countries particularly those in the coastal areas as well as island nations are experiencing difficulties in dealing with the rising sea level which is a direct consequence of global warming. Resulting from the melting of polar ice caps and glaciers, sea levels rise as ocean temperatures warm, which in turn leads to coastal erosion or wetlands being submerged underwater (Cooley et al.,2009). Furthermore, warmer waters can worsen salinity intrusion into freshwater resources further inland leading lowering water tables on coral atolls. Millions of people who live on low-lying coastal areas will be affected, properties and infrastructure lost or seriously damaged by increased sea levels, hundreds of millions are more forced to move completely away from these locations.
- **Extreme Weather Events:** Frequent and severe cyclones, floods, and wildfire have common effects due to climate change. These events make people to be displaced at a one-go since they have to run away from their homes in the process. The cyclones in the eastern states of West Bengal and Odisha led to the mass evacuation, and wildfires which occurred in Uttarakhand in 2020, resulted in the displacement of thousands of people. Such migrations can be temporary, although most often, due to the loss of shelters and other civilian objects, people have to become internally displaced for an indefinite period.

### b. Socio-economic Implications of Climate Induced Migration

Though, internal migration is observed to be triggered by environmental variables after which the socio-economic factors come into play to the extent of who migrates, where and the difficulties involved. The socio-economic impacts of climate-induced migration include:

- **Economic Disruption and Instability:** The changes in climate are known to affect economic activities within a region or country, especially areas that are mainly an agricultural or tourism base regions or other sectors which depend on climate. Whenever these industries are affected by climate change through factors such as drought, flooding or any other factor, then there is economic imbalance. This may result in cases like loss of employment, low earnings, and consequently poverty and people are forced to move to other areas that will offer better opportunities of finding employment. The Bundelkhand region has experienced severe water scarcity and prolonged droughts due to climate change (S.S. Jatav et al.,2023). The decline in agricultural output has resulted in widespread poverty, pushing many rural residents to migrate to nearby states like Delhi and Punjab to work as labourers. The economic migrants may have challenges in that they may not find employment as soon as they get to their given destinations while the movement of people can strain resources in both the source and reception communities.

## 1. Climate Change, Poverty and Vulnerability

Climate change exacerbates poverty by disproportionately affecting vulnerable communities that rely on climate sensitive sectors like agriculture. Heavy rain-induced floods, droughts or storms disrupt people's ability to earn a living, reduce food availability for poorer populations and plunge them further into poverty. Consequently, poverty constraints these communities to cope and revert from climate impacts hence resulting in a vicious cycle whereby the poor are trapped in deteriorating situations due to their limited resources and adaptive capacities.

### a. Climate Change as a Driver of Poverty and Vulnerability

Climate change is a powerful force that exacerbates poverty and increases the vulnerability of already disadvantaged populations.

- **Loss of Assets:** Floods, cyclones, and landslides which are common natural disasters triggered by climatic change compel people to lose their houses, livestock and other personal belongings. These losses are disastrous to the poor who have limited savings or access to insurance to cover the loss. Every year during the rainy season, many houses and agricultural fields in Bihar (Udas et al., 2021) are washed away by the floods resulting to families being stranded and with no source of income. Recovery is slow and difficult, pushing many into deeper poverty.

Low-income households live in hazardous zones, like flood-prone areas or slum areas on slopes and poor neighbourhoods cannot afford the better infrastructure that could cope with climate vulnerabilities. Once calamities occur, homes, schools, and health care centres are damaged which contribute to poverty through disruption of education, health, and economic activities.

- **Health Impacts:** This is due to climate change that has caused high temperatures that result in heat waves during summer, a factor that may be unbearable for those who cannot afford extra or an air-conditioned room or home. This can be so because it may lead to heat related diseases and high mortality especially to the most vulnerable in the society such as the aged and those with some illnesses.

Variations in rainfall and increased flooding can bring about water pollution and cause water related diseases such as cholera and diarrhoea. Low-income communities that are usually deprived of clean water and hygiene are more at risk of these health problems. In Mumbai during the monsoon months, the infection of leptospirosis in slums is prevalent owing to heavy flooding and poor sanitation.

### b. Poverty Increases Vulnerability to Climate Change

It is poverty which enables a community to remain more vulnerable to the adverse effects of the climate change, than they otherwise would be. **Insecure Livelihoods:** A large proportion of poor depend upon climate-sensitive activities like rain-fed agriculture, forestry, and fishing. In the absence of other form of employment, if these livelihoods get disrupted due to climate change, then it leads to a vicious cycle where people are driven below poverty line. In rural Rajasthan, desertification has made traditional agriculture unviable, forcing many to migrate in search of work, often ending up in precarious, low-paying jobs in urban centres.

### c. The Vulnerability of Women and Marginalized Groups

Women and other marginalized groups in many parts of the world also experience intersecting challenges that make them more vulnerable to climate change. Women are responsible for collecting water, firewood, and food in most parts of India. Climate change makes this task even more difficult by diminishing natural resources. In drought-prone regions, women have to travel farther from home for water and do not have time left over after providing their families' basic needs to attend school or participate in income-generating activities or rest. These increase their physical and emotional strain thereby deepening the vicious cycle of poverty.

On an average, women have lower levels of access to land and credit than men, making it more difficult for them to adapt their agricultural practices in response to climate change. Furthermore, social norms may prevent

women from participating in decision-making at both household and community levels, which further constrains their ability to shape adaptation strategies.

#### **d. Social Inequality**

Marginalized communities, including Scheduled Castes (SCs) and Scheduled Tribes (STs), often live in more vulnerable areas like remote rural regions or Ecologically Endangered Zones. They are more likely to be significantly impacted by climate-induced changes due to their severe socio-economic vulnerabilities. Limited access to resources, social services, or government support worsens their already dire situations. For example, many tribal communities in central and eastern states, such as Chhattisgarh and Jharkhand face displacement due to deforestation for development projects like mining, compounded by the impacts of climate change.

#### **e. Climate Induced Migration and Urban Vulnerability**

Climate change is a significant driver of migration, which in turn creates new vulnerabilities, particularly in urban areas. Forced Migration: With climate change affecting the sustainability of rural-life, many people migrate to cities in search of better opportunities. However, this usually results in new vulnerabilities. Migrants often wind up in slum colonies that lack adequate accommodation, sanitation, and access to basic services. In India, thousands of people from drought affected areas like Vidarbha in Maharashtra migrate to cities like Mumbai in search jobs, but eventually find themselves in precarious conditions with no shelter. In some of their new communities, migrants- particularly those from marginalized or rural backgrounds are likely to face discrimination and social isolation. This can hinder their ability to work.

## **2. Gender Dimensions of Climate Change, Migration and Poverty**

Climate change affects men and women differently, as gender roles tend to see the world's most vulnerable shoulders. Women, especially in poorer countries, are at a greater disadvantage as they have fewer resources and land ownership; often not being allowed to control or own their property. They are the primary caretakers of many tasks that can become more difficult as climate change exacerbates resource scarcity. Moreover, in natural disaster contexts, women have higher fatality rates as well as post-disaster chores and psychological burdens to care-support systems from violent experiences. Gender inequality is a critical aspect of climate change adaptation and resilience.

In many parts of the world, water collection is the role or prerogative of a women or a girl. Due to climate change that has led to drought and water scarcity, they have to travel for farther distance to acquire water and increasing the risk they will come up against sexual violence. Women account for a sizeable portion of the agricultural workforce, particularly in subsistence farming. A reduction in crop yields is one of the consequences, which can lead to both food insecurity and financial hardship. Women are particularly vulnerable to the negative effects of traditional norms when crop fail or property is destroyed due to natural disasters like erosion of river banks, because they typically have less access to land, credit, and agricultural inputs than men do. Migration has important gender elements as well and is frequently a direct response to the effects of climate change. Men and women migrate, yet there may be significant differences between their experiences and the reasons behind their migration. In the majority of occasions, it is men who move from one region to another in the search for employment when the climatic factors become unfavourable. This can end up neglecting the woman who is left behind to manage the household chores, care for children, and tend to do agricultural activities on their own. This makes the women to work harder in order to feed their families and at the same time experience high rates of poverty.

It should also be noted that when women migrate in search of better lives, they are more vulnerable than men. Some of the risks that accompany migration include; exploitation, trafficking, and gender-based violence both during migration processes and in the areas where the migrants set out to live. Women migrants are often trapped in low-wage employment sector with little or no security, which makes it very difficult for them to escape poverty. Poverty itself is gendered because there is the general perception that women endure high poverty rates than men because of the social injustices Women's income is comparatively lower than men and they have fewer resources and services in their disposal as men. These economic differences are exacerbated by climate change

as women, unlike men, lack the capacity to cope with climate change, recover from losses, or migrate to safer areas. Women endure many legal and social constraints within many societies, such as inhibitions to ownership and use of land, claims to inheritance, and decision-making. The above factors limit their capacity to recover effectively from climate shocks, thus being trapped in poverty cycles. The intersection of gender with other social identities such as age, ethnicity, and socio-economic status further complicates the experience of climate change, migration and poverty. **Rural Women:** Women in the rural areas particularly those in the indigenous communities bear the brunt of climate change impacts. As such, due to their reliance on natural resources and their informal positioning in economies, they are more prone to the effects of environment degradation and poverty. **Women-Headed Households:** Women-headed households are more likely to be poorer or more susceptible to climate impacts than men-headed ones because women have no male breadwinner to help them and because women-headed households are socially depreciated and the social stigma can limit their access to resources and opportunities. This is evident from the gender factors associated with climate change, migration, and poverty, which call for a comprehensive and integrated approach to sustainable development. Mitigating these challenges entails understanding the differential risks and assets of women especially those from poor backgrounds and empowering them through leadership in climate change mitigation and poverty eradication. It means that when gender-sensitive climate change and migration policies are incorporated, stronger and socially just societies can be developed to face climate change repercussions.

### 3. Sustainable Development Goals (SDGs)

The Sustainable Development Goals are a set of 17 universal goals adopted by UN for realizing the tasks of fighting poverty and inequality, changing the climate and preserving the environment by 2030. This research relates with the SDGs in that it analyses how climate change worsens poverty, induces migration, and perpetuates gender disparities. The study relates to some of the SDGs i.e. SDG-1, SDG-5, SDG-10, SDG-11 SDG-13.

SDG-1 deals with No Poverty and this study looks at how poverty exacerbates with the climate change with the vulnerable groups being the most affected. This calls for poverty reduction plans which are resilient to the effects of climate change and global warming. Since the study offers policy recommendations that decrease the exposure of the poor communities to climate change effects, it serves the purpose of eliminating poverty in every of its forms. For instance, the sustainable agriculture, the access to appropriate financial products and services and social protection of adverse climate change impacts are some of the fields of interest.

SDG-5 deals with Gender Equality and gender is relevant in understanding the impacts of climate change since women and girls are usually the most affected by inequalities in society as compared to men. Women are mainly tasked with the roles of sourcing water, food and energy in a household particularly in rural areas and these become difficult to obtain as the environment becomes harsh. Secondly, women typically have less access to land, education, and financial services than their male counterparts and hence are exposed to climate change. This research reveals the gendered dimensions of climate change, showing how women are disproportionately affected by climate-induced migration and poverty. This approach promotes policies that will make women sensitive to the prevailing vices and ensure women help in solving the same. Including women in the policy making and decision-making process, providing women access to financing for adaptation, addressing gender violence in migration related cases are essential for realizing women's rights in climate change.

Climate change compounds vulnerabilities and increases adverse impacts on socially disadvantaged communities. The inhabitants of developing nation, indigenous, and other vulnerable population reside in the regions that are more vulnerable to disasters and have less capacity to bear the loss due to climate change. These inequalities are often made worse by climate induced migration since such individuals are discriminated against, and do not receive the necessary support in the new areas they settle in. The research concerns itself with the imperatives of eradicating such distinctions by promoting equitable climate policies (SDG-10 Reduce Inequalities). It requires initiatives that safeguard special needs and guarantee that they will receive the level of care and will enable them to adjust and recover from the impacts of climate. For instance, equitable distribution of resources, accessing health and education services more easily and protection of land rights for indigenous people are some of the aspects in eradicating inequalities brought about by climate change.

SDG-11 deals with Sustainable Cities and Communities and this research clearly points that sustainable planning and development of urban areas, in the backdrop of climate change, is highly desirable. It lists recommendations for developing coping capacities of cities that will receive climate migrants and the quality of life for all citizens. This comprises of infrastructure in building structures, making housing affordable, designing and developing open spaces to reduce on heat boost in build up area. If met the needs of inhabitants and immigrants, cities can become more inclusive and sustainable.

The fight against climate change (SDG-13 Climate Action) is vital in addressing the issues highlighted in the research study. Climate policies require factors such as environmental stress, migration, poverty, and gender to be taken within a system of correlated factors. The adverse effects of climate change on vulnerable persons will persist due to lack of specific climate interventions, subsequently increasing the social and economic burden for every nation. The study gives the perspectives on how climate change scenarios can be tackled effectively by incorporating considerations of migration, poverty and gender. These are interconnected and require co-ordinated, climate sensitive approaches to mean that adaptation and mitigation do not deepen social injustice. This may, for example, involve encouraging deployment of renewable energy sources in the poor households, enhancing climate smart agriculture, and strengthening the climate change risk alert mechanisms.

Hence, the study has a close relation with the SDGs as it deals with climate change, migration, poverty and gender that are under the consideration of the SDGs. Analysing these complex issues found in this research contributes to a better understanding of what needs to be done, in order to approach the SDGs in a more integrated way. Besides the fact that the study underlines the urgency of climate change, it also underlines that these issues should be solved taking into considerations social and economic justice.

## Findings

Many climate policies currently lack sufficient consideration of gender concerns, that is why women and other vulnerable persons remain insufficiently assisted. The disaster relief and rehabilitation measures adopted in India have been condemned to bring gender insensitive including women housing and health needs. The study suggests extensive policies on climate change that incorporate Gender Parity and Poverty Eradication. It should also guarantee that women have a voice in decision-making processes and their issues of concern are well captured. There must be an interrelated solution to these challenges. Policies should not only be aimed at providing a short-term remedy but should adopt strategies that are sustainable in nature and minimize risks. The research supports the idea of incorporating women in climate change adaptation measures due to their uniqueness. This includes supporting education, resources, and decision-making capacity of women to address climate challenges. Therefore, mainstreaming climate adaptation measures with the support of women from the local community is essential to the process. The community-based strategies mean that the interventions provided are culturally relevant and the real issues that exist in the population are addressed. Women should be encouraged to participate in leadership positions as they facilitate more positive change in climate change adaptation processes. Climate-smart agriculture practices have been piloted through innovative gender approaches such as women's SHGs across several villages of India as well.

In this respect, the research advocates for incorporation of progressive social policies that enhance social justice which aims at catering for the disadvantaged groups. This includes ensuring that climate adaptation efforts are accessible to all irrespective of gender, socio-economic status or geographic location. The measures in achieving the SDGs should therefore target the vulnerable groups in the society such as the women, children, the elderly, and marginalised communities. The study showcases the need to set special programs for these vulnerable groups since they are likely to be affected by the social issue. Thus, the research highlights the fact that more attention should be paid to enhancing the adaptation of climate-sensitive populations to climate change to achieve long-lasting sustainable development. This calls for sustained commitment towards health, education, infrastructure and social protection. For interventions to have sustainable effectiveness, it is crucial to tackle the hierarchy of risk factors, which includes poverty, inequality, and social marginalization. This needs an integrated policy response that addresses climate change in parallel with poverty and gender initiatives. The research also stresses on the international collaboration and contributions as climate change has become an issue of global concern. This has involved cooperation in areas such as migration, climate finance, and the exchange of experience. Therefore, the results echo for climate justice, meaning, that those who contribute little to the climate change

but most suffer should be supported. This involves support in terms of finances and technology to the mentioned countries and other vulnerable groups. Explaining these concepts further helps in achieving a better appreciation of the relationships between the problems covered in the research, including climate change, migration, poverty, and gender discrimination in relation to sustainable development, wherein comprehensive and multisectoral approaches that encompass equality of gender are essential.

## CONCLUSIONS

Climate change, migration, poverty, and gender inequality are the interconnected issues that interact in multiple complex ways and form one of the biggest concerns of the country. Climate change as a force that deepens environmental degradation and social unrest is not only an environmental issue but also be considered as a fundamental cause of human displacement and social injustice. The observations of this research show that climate change, in the form of environmental stress, begins the migration process and contributes to poverty levels and worsening of gender inequality. This creates the need to understand this relationship so as to develop sound, sustainable and equitable policies that can tackle all these global issues.

This research seeks to underscore the importance of gender-responsive policies on climate security and socio-economic justice. It is found that involving women, ensuring resources and education, and incorporating them into the process of climate action planning will contribute to the establishment of stronger and sustainable communities. To this effect, while attempting to address the climate change impacts that exacerbate women's vulnerabilities, the policies would instead cement the gender imbalance. Equally important is ensuring that climate change is linked to the United Nations Sustainable Development Goals (SDGs) which focus on such concerns. These goals ensure that the eradication of poverty and the improvement of the status of women is part of the dividends of sustainable development and should not be separated from climate resilience when promoting development. It will become possible to create a better and sustainable future for all the world's inhabitants, particularly for women and girls who are often left in the vulnerable position in the face of the constantly aggravating climate change situation, only in cooperation with one another on the basis of sexual equality and following the principles of international cooperation. The way forward is in acknowledging of these interconnected social challenges and addressing them through policy co-ordination, with the aim to leave no one behind in the process of attaining global sustainability.

## REFERENCES

1. Arora-Jonsson, S. (2011). Virtue and Vulnerability: Discourses on women, gender and climate change. *Global Environmental Change*, 21(2), 744–751.
2. Assaduzzaman, M., Filatova, T., Coenen, F., & Lovett, J. (2020). Freedom of choice to migrate: adaptation to climate change in Bangladesh. *International Journal of Sustainable Development and World Ecology*, 27(7), 652–661.
3. Baldwin, A., & Fornale, E. (2017). Adaptive Migration: Pluralising the debate on climate change and migration. *The Geographical Journal*, 183(4), 322–328.
4. Brown, O. (2008). Migration and Climate Change. *International Organization for Migration No.31*
5. Castelli, F. (2018). Drivers of migration: why do people move? *Journal of Travel Medicine*, 25(1).
6. Chindarkar, N. (2012). Gender and climate change-induced migration: proposing a framework for analysis. *Environmental Research Letters*, 7(2).
7. Cooley, H., Christian-Smith, J., Gleick, P.H., Allen, L., Cohen, M. (2009). Understanding and reducing the risks of climate change for transboundary waters. Pacific Institute.
8. Deshar, R., & Koirala, M. (2020). Climate Change and Gender Policy. *Global Climate Change and Environmental Policy: Agriculture Perspectives*, 411–422.
9. Ferris, E. (2020). Research on climate change and migration where are we and where are we going? *Migration Studies*, 8(4), 612–625.
10. Fussel, H. (2012). Vulnerability to Climate Change and Poverty. *Climate Change, Justice and Sustainability: Linking Climate and Development Policy*, 9–17.
11. Guivarch, C., Taconet, N., & Mejean, A. (2021). Linking Climate and Inequality. *Finance and Development*

12. Hallegatte, S., & Rozenberg, J. (2017). Climate Change through a poverty lens. *Nature Climate Change*, 7(4), 250–256.
13. Hallegatte, S., Bangalore, M., Bonzanigp, L., Fay, M., Narloch, U., Rozenberg, J., & Vogt-schilb, A. (2014). Climate change and poverty-- an analytical framework. World Bank Policy Research Working Paper.
14. Intergovernmental Panel on Climate Change. (2001). *Climate Change 2001: The Scientific basis* (Houghton, J.T., Ding, Y., Griggs, D.J., Nogour, M., Linden, P.J., Dai, X., Maskell, K., Johnson, C.A.). Cambridge University Press.
15. Jatav, S.S., Bharati, N. (2023) Development of Climate Vulnerability Index for Bundelkhand Region, India. *Journal of National Institute of Disaster Management*, 12(1), 18-19
16. K Bardsley, D., & J Hugo, G. (2010). Migration and climate change: examining thresholds of change to guide effective adaptation decision-making. *Population and Environment*, 32, 238–262.
17. Khan, M. I., Alharthi, M., Haque, A., & Illiyan, A. (2023). Statistical analysis of push and pull factors of migration: A case study of India. *Journal of King Saud University-science*, 35(8).
18. Kniveton, D., Schmidt-verkerk, K., Smith, C., & Black, R. (2008). *Climate Change and Migration: Improving Methodologies to estimate flows*. United Nations.
19. Leichenko, R., Silva, J. (2014). Climate Change and Poverty: vulnerability, impacts, and alleviation strategies. *Wiley Interdisciplinary Reviews: Climate Change*, 5(4), 539–556.
20. Lilleor, H. B., & Broeck, K. V. D. (2011). Economic drivers of migration and climate change in LDCs. *Global Environmental Change*, 21.
21. McGuigan, C., Reynolds, R., & Weidmer, D. (2022). Poverty and climate change: Assessing impacts in developing countries and the initiatives of the international community. London School of Economic Consultancy Project for the Overseas Development Institute, 1–40.
22. Nelson, V., Meadows, K., Cannon, T., Morton, J., & Martin, A. (2002). uncertain predictions, invisible impacts, and the need to mainstream gender in climate change adaptations. *Gender and Development*, 10(2), 51–59.
23. Parrish, R., Colbourn, T., Lauriola, P., Leonardi, G., Hajat, S., & Zeka, A. (2020). A critical analysis of the drivers of human migration patterns in the presence of climate change: A new conceptual model. *International Journal of Environment Research and Public Health*, 17(7).
24. Raleigh, C., & Jordan, L. (2010). Climate Change and Migration: Emerging Patterns in the Developing World. *Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World*, 103–131.
25. Udas, P.B., Prakash, A., Goodrich, C.G. (2021) Struggles with Floods in the Gandak river basin in Bihar, India. *Engendering Climate Change*, 38-57
26. Winsemius, H. C., Jongman, B., Veldkamp, T. I., Hallegatte, S., Bangalore, M., & Ward, P. J. (2018). Disaster risk, climate change, and poverty: Assessing the global exposure of poor people to floods and droughts. *Environment and Development Economics*, 23(3), 328–348.