

**Recognising the Social and Cultural Rights of the Climate Refugees:
A Case Study of the Sundarban Delta (West Bengal, India)**

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Abstract

Climate change is now a global challenge and climate refugees are one of the prime stakeholders to who face the brunt of it. Apart from being legally unrecognized, the climate refugees are also socially and culturally affected from their untimely displacement. While analysing the international human rights conventions/ treaties, the authors have established how these conventions/treaties can be interpreted for protecting the social and cultural rights of the climate refugees. This article also focuses on exploring ways to safeguard the human rights of people affected during such times of crisis. The article further elaborates on this issue by narrating a case study of the climate refugees residing in the Sundarban Delta (West Bengal, India).

Keywords: *Climate change refugees, Sundarban Delta, Climate Change, Natural disaster, social rights, Cultural rights*

I. INTRODUCTION

Climate refugees are in the midst of a global debate as it is a challenge for the international community to accommodate and integrate them in civil society in absence of their legal recognition by the government(s) of host countries. It is speculated that a billion people would be displaced due to issues related to climate change.³ In this article, the authors have highlighted the social and cultural right of the climate refugees by providing a case study of the Sundarban Delta (West

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³ Rachel Baird, Katy Migiro, Dominic Nutt, Anjali Kwatra, Sarah Wilson, Judith Melby, Andrew Pendleton, Malcolm Rodgers and John Davison, Human Tide: The Real Migration Crisis, Christian Aid (May, 2007), www.christianaid.org.uk/Images/human_tide3__tcm15-23335.pdf.

Bengal, India). The Sundarban Delta is a cyclone prone region and also faces problems due to rise of sea-level. The islands in the delta (for example, Lohachara, Bedford etc.) are sinking at a fast pace, consequentially and continually displacing a large number of climate refugees. In this article, the authors have examined the social and cultural problems faced by the climate refugees and also provided solutions to overcome these issues. The authors have also illustrated on how the local communities are troubled due to huge influx of migrants from neighboring countries. In fact, the real challenge is that the islands where the climate refugees are taking shelter, also do not have a secured future. For example, the Lohachara island which was home to ten thousand people is now submerged; there are also speculations that the Ghoramara island which is now the home for many climate refugees would also be completely submerged in the upcoming years.

During the empirical research, the authors found out that the government does not take concrete measures to save the habitants of the Sundarban Delta (West Bengal, India), apart from providing aid through the national and state level programs existing to mitigate poverty. The authors opine that there should be climate-specific strategies which address Sundarban Delta's unique topography and geological position. Moreover, there should be various psychological workshops dedicated to the climate refugees facing trauma due to social and cultural isolation.

II. SCOPE OF THE ARTICLE

The authors of this essay have focused solely on climate refugees. Because there is no legal definition of climate refugees, the authors have come up with an operational definition based on their study.

'Climate refugees are persons who need to evacuate their home country to another country due to a well-founded fear of persecution as a result of an environmental disaster, and their home country is unable to protect them from such disasters.'

The authors have limited their case study only to Sundarban Delta (West Bengal, India).

III. METHODOLOGY

The purpose of this essay is to investigate and highlight the social and cultural issues that climate refugees encounter. The authors investigated this by conducting a case study of climate refugees living in the Indian territory's Sundarban Delta. The research was carried out by the authors using socio-legal approaches and quantitative research. The research was carried out in two stages by the writers. In the first phase, the authors have conducted an extensive literature review from the available primary and secondary sources. In the second phase the authors have gathered information by the help of an open-ended questionnaire and semi-structured interviews. The rationale behind choosing Sundarban Delta, India, as a place of research is because of its topography and geological position. The scope of this research is limited to relevant few blocks of Sundarban Delta, namely: Gosaba Block, Sandeshkhali, Canning, Chota Mollah, as these blocks are primarily occupied by the Climate refugees migrated from Bangladesh to India due to repetitive natural calamity and adverse effect of climate change.⁴ The questionnaire was filled by 54 respondents settled in the afore-mentioned region. The respondents were selected randomly. Also, the authors have conducted 4 in-depth interviews where the questions were semi-structured. The 4 interviewees are subject experts and closely associated with the theme of the article. Lastly, the authors have critically analysed the data and also tried to provide viable solutions to overcome this issue.

IV. LEGAL FRAMEWORK PROTECTING THE SOCIAL AND CULTURAL RIGHTS OF THE CLIMATE REFUGEES

The International Human Rights Law and its principles, does safeguard the human rights of the people affected during crisis. However, this law is insufficient and inadequate to protect the human rights of all kinds of crisis, for eg: protection of the human rights (social and cultural rights) of the climate refugees. Despite this legal gap, in order to protect the rights of the climate refugees we need to take recourse to Human rights law as the authors opine that there are various conventions under the Human rights laws which if well-interpreted can be made applicable for the climate refugees. The topic of climate refugees is not specifically governed by refugee frameworks; hence the climate refugees

⁴ Mrinalini Banerjee, S. Shanthakumar, *Analysing the legal rights of the climate refugees during Covid-19 pandemic in India: Challenges to International Law*, AJEL, 11-12, (2022).

confront with the same recurrent problem of their legal identity. Additionally, there persist unanswered issues about what constitutes ‘climate-induced’ or ‘Displacement’, as a consequence of ambiguous and inadequate protection standards. Climate Refugees currently do not fall either under the ambit to the 1951 Refugee Convention nor under the 1967 Protocol relating to the Status of the Refugees.⁵

Article 1 of the 1951 Convention, followed up by the 1967 Protocol Relating to the Status of Refugees, does define the term ‘Refugee’ but it does not include climate as a reason of *well-founded fear of persecution*. However, the authors opine that climate refugees would fall under the purview of this definition if the climate refugees are constituted under the condition of being *member of a particular social group*, and face persecution owing to which they flee from their country of nationality and are unable to avail protection from their home State or are unable to return to their country of nationality owing to such fear. Some scholars say, “The only time environmentally-induced displaces may be regarded as ‘refugees’ is when the state uses environment as an instrument of political oppression. This requirement exists because at the heart of the notion of persecution lies state failure to provide protection”.⁶

Apart from the Refugee Convention, The United Nations Human Rights Council enacted a resolution in October 2021 that recognised the basic right to a safe, clean, healthy, and sustainable environment, as well as the human rights implications of the climate crisis. Also, the Council appointed a UN Special Rapporteur on the promotion and protection of human rights in the context of climate change.⁷ This showcases that deliberations on the rights of climate refugees have already started and the authors opine that, the day is not far when there would be a hard law protecting the rights of the climate refugees and binding on all States.

⁵ SHUVRO PROSUN SARKER, REFUGEE LAW IN INDIA: THE ROAD FROM AMBIGUITY TO PROTECTION, (Palgrave Macmillan, 2017).

⁶ Elizabeth Keyes, *Environmental Refugees? Rethinking What's in a Name*, 44, N.C. J. INT'L L 461, 472, (2019).

⁷ *No Shelter from the storm the urgent need to recognise and protect climate refugees*, ENVIRONMENTAL JUSTICE FOUNDATION, (2021), https://ejfoundation.org/resources/downloads/EJF_Climate-Refugee-Report_2021_final.pdf.

The authors during their doctrinal research identified the trend of mixed migration – which essentially refers to the fact that migration streams encompass both those seeking relief and those seeking betterment, while also recognising that for some, the inspiration may be both – may mean that legal provisions governing migrant worker rights, such as the 1990 Convention on Migrant Workers, can only provide limited support to those displaced across borders who participate in remunerated employment.⁸ Additionally, Customary International Law is a source of International Law that exists outside of any treaty system and gives legal legitimacy for some well-established norms of International Law. It may also control treaty gaps and the behavior of nations that are not signatories to a treaty. It might thereby impose a legal responsibility to provide social services to those displaced as a result of climate change, even if no such requirement exists under a treaty.⁹ The authors have further interpreted a few conventions or declarations falling under the ambit of Human Rights Law. The authors are of the view that if specific sections of the Universal Declaration of Human Rights (UDHR), if made obligatory, it would entail a duty to provide social assistance to people displaced by climate change. According to Article 22¹⁰, everyone has the right to exercise the economic, social, and cultural rights that are necessary for their dignity and the free development of their personalities. Furthermore, right to labor is guaranteed under Article 23¹¹ and right to education is guaranteed under Article 26¹² and these articles are enough for the time being to protect the basic rights of the climate refugees. However, as the Declaration is non-binding, hence the author opine that its articles may be binding only if they are incorporated as a part of the Customary International Law as these provisions serve as the non-treaty foundation for Customary Human Rights Law. Additionally, any customary responsibility to offer social assistance to climate refugees is likely to come from Customary Human Rights Law or later from agreements based on them.¹³

⁸ *Id.* at 19.

⁹ Nathan Stopper, *Adrift From Home and Neglected By International Law: Searching for Obligations to Provide Climate Refugees with Social Services*, CJTL, <https://climate.law.columbia.edu/sites/default/files/content/docs/Stopper-2011-05-Social-Services-for-Climate-Refugees.pdf>.

¹⁰ Universal Declaration of Human Rights (United Nations), 1948, Art. 22.

¹¹ Universal Declaration of Human Rights (United Nations), 1948, Art. 23.

¹² Universal Declaration of Human Rights (United Nations), 1948, Art. 26.

¹³ Stopper, *supra* note 8.

Aside from the UDHR, certain sections of the International Covenant on Economic, Social, and Cultural Rights (ICESCR) can also be used to provide protection to climate refugees in general. These include, but are not limited to, Article 6 of the ICESCR, which addresses the right to work and earn a living, so ensuring the right to life. In addition, Article 12 of the ICESCR requires states to recognise the people's right to the best possible bodily and mental health standards. The Convention on the Elimination of Discrimination Against Women (CEDAW) and the Convention on the Rights of the Child (CRC) would also apply.¹⁴

Specifically, with respect to current pandemic crisis response and healthcare facilities for the climate refugees, the relatively nascent International Health Regulations, 2005 can be put to test. The implementing states, in such unprecedented conditions as a pandemic, should endeavour to undertake their obligations not only with respect to the citizens and residents, but also towards climate refugees.¹⁵

The UN International Organization for Migration, in 2005, issued the MiGOF (Migration Governance Framework). The Framework aimed to determine essential elements which could facilitate responsible and safe migration during times of crises. Climate change, being crises, might fall under the purview of the MiGOF.¹⁶

Although provisions of various laws, regulations, conventions and non-binding measures such as the Sustainable Development Goals can help to protect the climate refugees as a stop gap measure. However, the absence of a legal recognition for this group of people is a lacuna which should be alleviated by the implementation of a dedicated law highlighting on the rules and procedures.

¹⁴ Priya Pillai, *COVID-19 Symposium: COVID-19 And Migrants—Gaps In The International Legal Architecture?*, OJ (2020), <http://opiniojuris.org/2020/04/04/covid-19-symposium-covid-19-and-migrants-gaps-in-the-international-legal-architecture> .

¹⁵ *Id.*

¹⁶ Rhea Abraham, *Migration Governance In A Pandemic: What Can We Learn From India's Treatment of Migrants in the Gulf?*, EPW, (2020), <https://www.epw.in/engage/article/migration-governance-pandemic-india-gulf>.

V. RESULT AND FINDINGS

In this part the authors have provided a detailed case study of the Sundarban Delta (West Bengal, India) highlighting on its geographical location followed by the social and cultural problems faced by the climate refugees residing in that area.

A. Topography of the Sundarban Delta

Sundarban, the earth's biggest delta, spans 10,200 square kilometers of Mangrove Forest spread over India and Bangladesh. It is also home to the earth's largest mangrove forest. In 1989, the Sundarban was designated as a UNESCO World Heritage Site owing to its unique ecosystem. Moreover, Sundarban also has a 5400-square-kilometer non-forest, populated territory in India that runs along the north and north-western edge of the mangrove forest.¹⁷ Besides the Ganga and the Brahmaputra, a cumulative catchment area of 1.6 million sq. km contributes to the delta, which is fed by several small to medium sized peripheral streams that originate in the nearby uplands. The Bengal Depositional System includes both the sub aerial and subaqueous portions of the delta. The Ganga–Padma–Lower Meghna River splits the Ganga–Brahmaputra delta in half diagonally.¹⁸ Around the months of January to June, the Bay of Bengal's oceanic current flows in a circular pattern. As a consequence, marine water seeps further into the woodlands, raising salt levels. Whereas, the oceanic current rotates in an anticlockwise pattern from July to December.

B. Demography of the Sundarban Delta

The Sundarban is home to one of the world's most diverse ecosystems. The delta is noted for its outstanding biodiversity and has potentially the world's biggest surviving expanse of mangroves. The Sundarban forest spreads over almost 10,200 square kilometers across Indian and Bangladesh. Out of which 40%

¹⁷SUNDARBAN ECOLOGY, SSDC, Department of Sundarban Affairs, Govt. of W.B., <http://ssdcindia.org.in/sundarbancontent.php?id=3+&+title=SUNDARBAN+ECOLOG+Y>.

¹⁸Bushra Nishat, *Landscape Narrative of the Sundarban : Towards Collaborative Management by Bangladesh and India*, Environmental Science, IWA, (2019), <https://documents1.worldbank.org/curated/ru/539771546853079693/pdf/Sundarban-Joint-Landscape-Narrative.pdf>.

of the delta belongs to India, (based out of the State of West Bengal) and the rest of the delta lies in the Bangladesh territory.¹⁹

In 1872, the entire population of the Sundarban Delta was 296045 people, but by 2011 it had risen to over 4.44 million people as stated in Figure No.1.²⁰ However, the scheduled census for India in 2021 due to the Covid-19 pandemic was rescheduled to 2022.²¹ Between 1872 and 2011, the population rose by about 15 times. Prior to independence, the population was quite low. However, between 1901 and 1951, the population nearly doubled. Due to different political events, the population rose about fourfold between 1951 and 2001. The Sundarban has attracted a large number of people from Bangladesh. In other words, it is observable that the rate and pattern of population growth in the region have not been uniform. According to census statistics from 2001 and 2011, the maximum positive and negative temporal fluctuation may be seen in Sagar and Sandeshkhali-II, respectively. Canning –II and Sandeshkhali –I, on the other hand, show the smallest positive and negative variances. In compared to 2001, the coefficient of variation demonstrates that the growth rate in 2011 is more unpredictable and less steady.²²

In a given time period, positive variation indicates that the block level pace of increase is lower as compared to the overall regional rate of growth, while negative variation indicates that the block level growth rate is more than the regional growth rate.²³

“The highest male population recorded in 2001 in Patharpratima and in 2011 in Basanti. On the other had the highest female population was recorded in 2001 in Patharpratima and 2011 in Basanti. The lowest male population was recorded in

¹⁹Sundarban Demography, SSDC, Department of Sundarban Affairs, Govt. of W.B., <http://ssdcindia.org.in/sundarbancontent.php?id=1+&+title=SUNDARBAN+DEMOGRAPHY>.

²⁰*About Sundarbans*, WWF, https://www.wwfindia.org/about_wwf/critical_regions/sundarbans3/about_sundarbans/.

²¹Office of Registrar General and Census Commissioner, India, Ministry of Home Affairs, Government of India, <https://censusindia.gov.in/census.website/>.

²² Bablu Samanta, *Population Growth in Sundarban Region – A Spatio-Temporal Analysis*, 6 (2018), <https://sasjournals.com/wp-content/uploads/2018/04/SJAHSS-64-877-883-c.pdf>.

²³ *Id.*

*Sandeshkhali-II in both 2001 and 2011. The lowest female population was recorded in Sandeshkhali-II in both 2001 and 2011.*²⁴

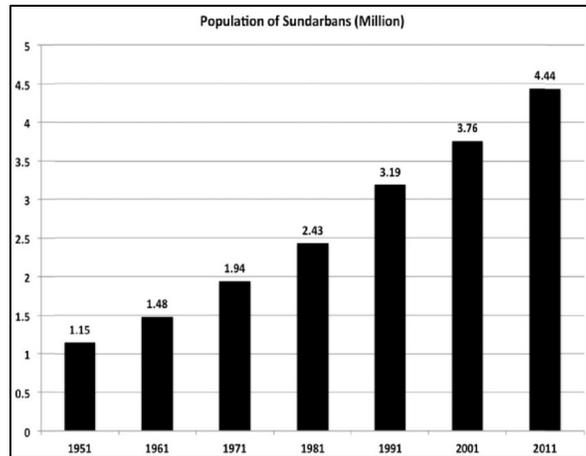


Figure No. 1: Highlights the Population growth in the Sundarban Delta, India over the years. (Ghosh, Aditya & Schmidt, Susanne & Fickert, Thomas & Nüsser, Marcus. (2015). The Indian Sundarban Mangrove Forests: History, Utilization, Conservation Strategies and Local)

VI. ANALYSING THE NEED FOR CLIMATE REFUGEES TO MIGRATE TO WEST BENGAL, INDIA FROM BANGLADESH AND THEIR AFTERMATH

Migration is never the first option for any person, it is generally the last resort specially when the reason for displacement is climate change. Climate refugees do have any legal protection neither in International Law and in the Domestic law of India still they need to migrate cross-border specially when the home State does not or cannot provide satisfactory aid to the hostile people. As per the author's research the main reason for the climate refugees to opt for migrating to another country is hoping for survival and a better life. One of the adverse effects of climate change is the rise of the sea-level and the islands of the Sundarban Delta are one of the victims of the same. This has led a massive number of cross-

²⁴ Samanta, *supra* note 21.

border migration. Coming to the global scenario if there is a further increase of sea-level by a meter then 145 million people would have to face the brunt of it.²⁵

- i. The authors have explored the possible situations in which climate refugees migrate to Sundarban Delta, India. One when the entire island is submerged and another when a part of the island is submerged.
- ii. Eg: Islands like New Moore Island, South Talpatti Island, a disputed island between India and Bangladesh, Lohachara, Kabasgadi and Bedford are completely submerged.²⁶ Ghoramara island is partly submerged and researchers state that it would be sinking completely very soon.²⁷
 - The main reason for the climate refugees to migrate are the loss of islands as they are shrinking or drowning because of the following reasons: -
 - Islands have low altitude shores
 - High amount of silt in the rivers
 - Rise in the sea-level
 - Repetitive Cyclones

The Sundarban Delta has fallen into trap to the adverse effect of climate change. Specially because of its topography and geological positioning. Also, the islands are low-lying hence with the rise of sea-level they are easily sinking. However, the climate refugees who are migrating to India are not safe too in the Sundarban Delta of the Indian territory. For eg: The Lohachara island which was once a habitat of 10,000 people is now submerged, the Ghoramara island is partly submerged hence the residents of that island are now moving to Sagar island.²⁸ Moreover, Sundarban delta of the Indian territory consists of 8.5 million hectares

²⁵ Anthoff, D, R. J. Nicholls, Richard S.J. Tol and A Vafeidis, *Global and Regional Exposure to Large Rises in Sea-Level: A Sensitivity Analysis*, Working Paper No 90. Tyndall Centre for Climate Change Research, Norwich, London (2006), https://www.researchgate.net/publication/313156282_Global_and_regional_exposure_to_large_rises_in_sea-level_a_sensitivity_analysis.

²⁶ Island Claimed by India and Bangladesh Sinks Below Waves, THE GUARDIAN, (March 24 2010), <https://www.theguardian.com/world/cif-green/2010/mar/24/india-bangladesh-sea-levels#:~:text=New%20Moore%20island%20in%20the,and%20sea%20patrols%2C%20he%20said>.

²⁷ Nikita D, *No home for Ghoramara island's climate refugees*, TWOCIRCLES.NET, (Dec. 3, 2021), <https://twocircles.net/2021dec03/444291.html>.

²⁸ Architesh Panda, *Climate Refugees Implications for India*, 14 EPW 20, (2010).

of agricultural land but if the sea-level rises by 2 meter then 486 thousand hectares of fertile agricultural land would be inundated.²⁹ Recently, the Sundarban Delta has faced a number of devastating cyclones, like: Amphan, Fani, Yass etc. During such times the rivers are over- following leading to 5 – 6 ft. of water on the streets. Additionally, hardly any delisting of the river hence during heavy rain the water is flooding the residential area leading to saline water is entering into the fertile paddy land and making the soil infertile for irrigation. When the authors interviewed the respondents most of them mentioned that the mud bunds are a major reason for rivers overflowing as it cannot withstand the cyclone and the water pressure. They are of the opinion that if concrete bunds, of a greater height is built then it can resist the flow of water to some extent. During the field investigation the authors witnessed that the infrastructure in the Sundarban Delta is poor and majority of the population are living in mud or kuchcha houses hence whenever any natural calamity hits the area it destructs their houses leaving them devastated. Additionally, repetitive re-construction of houses and resettling is not possible especially when their economic conditions are not strong and there is almost nil subsidy for rehabilitation and resettlement from the Government. The schemes from the Government are available only for the Indian citizens and not for the climate refugees as stated in Table No. 2.

A. Nature of Migration of the Climate Refugees

The migration of the climate refugees can be either temporary and permanent in nature. While analysing this part the authors realised that it would be somewhat similar to the migration of the Internally Displaced Persons (IDPs), hence the authors have aimed to analyse the nature of migration only from the perspective of the climate refugees. The authors have laid down a few differences between temporary migration and permanent migration due to climate change and also highlighted the difficulties faced by the host state as stated in Table No.1.

Table No. 1: Highlights the distinction between the two types of migration occurring due to climate change and the problems arising due to such kind of cross-border migration.

²⁹ *Id.*

Title	Temporary climate refugees	Permanent climate refugees
Definition	<p>The temporary climate refugees are those who do migrate to another States but remains there only till the disaster and its effect remains in their State of Origin. Once the adverse climatic effect reconciles in their State of Origin, the temporary climate refugees move back to their State of Origin.</p>	<p>The permanent climate refugees are those who do migrate to another States but remains back in the host State forever. The speculated reasons by the authors for their remaining back are as follows:</p> <p>They do not have a place to return as their land is completely destroyed due to the negative effect of climate change.</p> <p>They seem to be comfortable in the host State hence they do not wish to face the struggle of migrating back to their State of Origin.</p> <p>They fear that there can be a similar environmental catastrophe in the future hence they would again have to migrate. Moreover, there are chances that they may not be able to migrate depending on the severity of the calamity.</p>
Problems	<p>Many a times the host countries on humanitarian grounds or having a good relationship with the neighbouring country allows the temporary climate refugees to migrate but end up with many civil issues with the local residents. Additionally, there is a huge financial burden on the host State to provide the</p>	<p>As explained in Part III and IV, the climate refugees are not legally recognised hence they are not allowed to entered the territory of the host country and seek for refugee status. Moreover, if the climate refugees somehow enter the territory of the host country and over stay or migrate to other parts of the country then they</p>

	required relief to the climate refugees.	would be termed as illegal migrants. Subsequently, the climate refugees would be violating the immigration law of that host countries.
Problems which are similar for the host country irrespective of the nature of migration	<p>Unavailability of resources – As the climate cross-border migration occurs all of a sudden hence it is quite challenging for the host country to maintain the demand and supply ratio.</p> <p>Economic stress</p> <p>Cultural and social misbalances</p> <p>Security issues</p>	<p>The details of the same has been elaborated in Part VI of the article.</p>
Example – Sundarban, India Case Study	<p>– In the Sundarban Delta of the Indian territory, the authors interviewed 54 respondents and all of them were permanent climate refugees, migrated due to the rise of the sea-level and recurrence of natural calamity for e.g.: Fani, Amphan etc.</p> <p>The authors wish to make a point that there is a check met situation for the climate refugees as neither can they go back to their home country as there is lack of resources to sustain the effect climate change specially when the sea-level is rising nor would the host country accept them wholly as mentioned in part III and IV of the articles. Furthermore, the author’s during their in-depth interviews and doctrinal research found out that there is a better transition for the climate refugees to migrate when there is a need of vote bank for the local government.³⁰ During such times the host country would accept the incoming of the climate refugees to fulfill their political agendas.³¹</p>	

³⁰ Abhijit Dasgupta, *The Politics of Agitation And Confession: Displaced Bengalis in West Bengal*, Refugees and Human Rights: Social and Political Dynamics of Refugee Problem in Eastern and North-eastern India (2002).

³¹ Abhijit Dasgupta, *Displacement and Exile: The State-Refugee Relations in India* OS (2022), <https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780199461172.001.0001/acprof-9780199461172>.

B. Characteristics of Migration of the Climate Refugees

The main characteristics of the migration of the climate refugees are that it is forceful, non-voluntary and compulsory. E.g., When the islands are submerging due to the rise of sea level. The climate refugees do not have a choice but to migrate if they wish to survive. Hence during such circumstances, the people would automatically relocate to the nearest and safest location. The authors also want to highlight that the chance of climate refugees moving back to their State of origin is doubtful as their return depends on whether their place of origin is still advisable to stay.

C. Difficulties Faced by the Climate Refugees from Pre to Post-Migration

While analysing the responses from the fifty-four (54) respondents and the four (04) interviewees, the authors were able to empathize with the problems that the climate refugees face throughout the entire process of transition. Hence, to illustrate their problems, the authors have divided the migration of the climate refugees into three phases. In these three phases the authors have elaborated on the problems, difficulties and insecurities faced by the climate refugees while moving to Sundarban Delta, India.³²

Phase 1: Before leaving the State of Origin

Phase 2: During the transition phase from the State of Origin to the State of destination

Phase 3: After seeking the State of destination

Phase 1: Before leaving the State of Origin:

Wherever there is an environmental catastrophe or regular occurrence of natural calamities, the locals of that region face its brunt, consequently compelling them to become climate refugees. During any such crisis, the climate refugees need to prioritize the survival of themselves and their family members; instead, they are left with the worries of an uncertain future. In reality, the very first problem the

³² S. A. Pourhashemi, B. Khoshmaneshzadeh, M. Soltanieh and D. Hermidasbavand, *Analyzing the individual and social rights condition of climate refugees from the international environmental law perspective*, 9 IJEST, 57-67 (2012).

climate refugees face is in identifying the country they can migrate to, especially when there is lack of express domestic policies, of political will, and of compliance. Next comes the uncertainty of what action will be taken by the host country. From the interaction and subsequent responses from the respondents, the authors have listed a few queries that prevail over them: for example, whether the host country would accept/ reject their arrival?; if accepted, what would be the time duration for their acceptance?; further, whether there would be any particular civil conditions applicable to them? which would be the designated place to stay for the climate refugees? whether they would be provided with the basic necessities of a dignified life?, etc.

Phase 2: During the transition phase from the State of origin to the State of destination:

During this transitional phase, the climate refugees face various other problems apart from the difficulties mentioned in phase 1. The authors have analysed the problems faced by the climate refugees as per their empirical research. Some of the problems that the climate refugees need to withstand are: the harsh weather, limited availability of food and water, and health complications among the children and the older people while travelling to the State of destination. Apart from these problems, a significant risk lies in crossing the border because they are generally considered as illegally migrant due to inadequacy of law as previously explained in part IV of this article. Even if, the climate refugees somehow successfully cross the border, they face hindrance in arranging for their boarding and local currency.

Phase 3: After reaching the State of destination:

Even after reaching the State of destination, the struggle of the climate refugees still continues. The authors have classified the problems faced by the climate refugees in two parts i.e., personal problems and socio-cultural problems as stated in Table no.2.

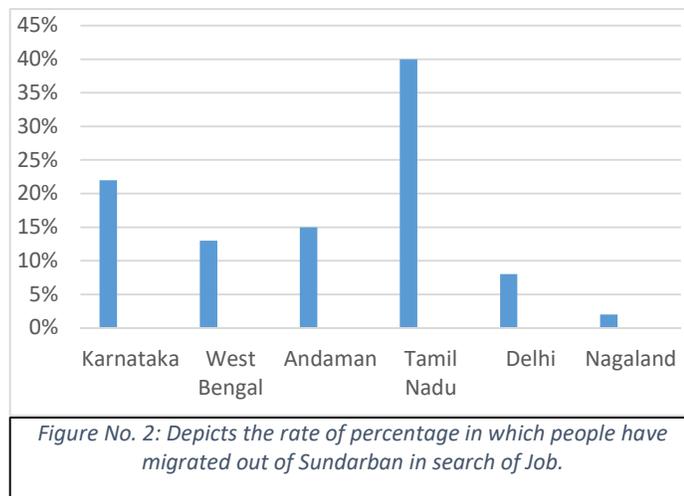
Table No. 2 The authors have analyzed the problems faced by the climate refugees in 2 parts:

Personal Problems	Social and Cultural Problems
Identity crisis and insecurity within oneself.	Social Insecurity Dependency on one's own culture Difficulty in accepting other's culture
Due to the lack of local identity proof, there is a high chance of corruption in receiving it.	Social Rank/ Status Isolating on the basis of caste Discrimination on the basis of gotra
The search for a job or to find a new occupation is quite challenging in a new country.	Religion can be different and there are chances of becoming minority in the new country. Customs } Festivals } Moreover, the customs and festivals would automatically be different, and the climate refugees may feel isolated and ignored.
Unaware of where to find a safe and secure stay. Lack of information on how to own property.	Communication is a major issues as the language and dialect generally differs.
Lack of knowledge of the schemes and policies prevalent in host country.	The climate refugees are not socially accepted that quickly; hence they feel lonely and face a significant problem finding brides or grooms for their children.
Inadequate health facilities	Other family issues

The Possible Reasons for the Host Country to be Apprehensive to Accept the Climate Refugees

The authors feel that unnecessarily one cannot blame the host country for their hesitance and resistance to accept climate refugees into their territory. A few reasons that the authors contemplated are as follows:

- i. Whenever there is an environmental catastrophe due to climate change the movement of the people is in huge numbers and the host state may not be prepared for the same, as mentioned in details in part V(g).
- ii. There are high possibilities that the climate refugees can bring various diseases along with them and the authors opine that there is a possibility of spreading of the same amongst the other local people.³³
- iii. Due to huge influx of the climate refugees, there can be shortage of resources as the host country was not prepared for the same.
- iv. The authors witnessed that most of the climate refugees migrate



permanently to the Sundarban Delta, India and as there is shortage of job opportunities hence the locals inclusive of the climate refugees migrate to various parts of India (as stated in Figure No. 2)

³³ Chiara Altare, Vincent Kahi, Moise Ngwa, Amelia Goldsmith, Heiko Hering, Ann Burton, Paul Spiegel, *Infectious disease epidemics in refugee camps: a retrospective analysis of UNHCR data (2009-2017)*, 3 JGHR (2019), doi:10.29392/joghr.3.e2019064, <https://www.joghr.org/article/12009-infectious-disease-epidemics-in-refugee-camps-a-retrospective-analysis-of-unhcr-data-2009-2017>. ; Andreas Halgreen Eiset and Christian Wejse, *Review of infectious diseases in refugees and asylum seekers—current status and going forward*, 38 PHR (2017), <https://doi.org/10.1186/s40985-017-0065>, <https://publichealthreviews.biomedcentral.com/articles/10.1186/s40985-017-0065-4#citeas>.

creating a disparity in the price for domestic service for e.g.; domestic household jobs, jobs as family drivers. Consequentially leading to a civil tension which ³⁴has high possibility to get converted into a civil conflict.

- v. As these climate refugees are desperate to get a job for their sustenance hence the authors feel that there is a high chance for exploitation of the workers at the workplace, mainly at the unrecognised sectors.
- vi. The host countries are also concerned with the safety and security of its citizens due to the sudden influx of unknown people in one's territory.³⁵ Moreover, it also increases the risk for *domestic terrorism*.³⁶
- vii. Lastly, all ruling governments are worried and concerned about their come back to power. Hence, accepting the climate refugees who are generally in huge numbers can upset the citizens moreover, there needs to be major re allocation of resources. Therefore, the authors opine that if the citizens are upset with the present government, then their coming back to power could be really difficult ultimately leading to the host country not accepting the climate refugees in their country.

VII. Recommendations and Solutions

The authors have listed below a few proposals to provide a feasible suggestion to end the long time complaint of the climate refugees.

- Proposal 1: Amending the present Refugee Convention or the Protocol to the Refugee Convention.
- Proposal 2: Coming up with a new legal framework dedicated for the environment and climate refugees / immigrants.
- Proposal 3: Bilateral / Multilateral agreement amongst the States

³⁴ 1 BHAB SEKHAR MONDOL, ABIMUKH SUNDARBAN, (1 ed. 2020).

³⁵ Nizar Messari and Johannes van der Klaauw, *Counter-terrorism Measures & Refugee Protection in North Africa*, 29 RSQ 4, 83-103 (2010), <https://doi.org/10.1093/rsq/hdq034>.

³⁶ Graig R. Klein, *Refugees, Perceived Threat & Domestic Terrorism*, *Studies*, CT, (2021), DOI: 10.1080/1057610X.2021.1995940, <https://www.tandfonline.com/doi/full/10.1080/1057610X.2021.1995940>.

- For E.g.: The vulnerable states should join hands through any bilateral or multilateral treaties to save themselves whenever there is an environmental catastrophe.

All this way, this will enable us to secure the future of the environmental victims.

- Proposal 4: There can be a financial allocation of fund by the international community which the authors has named it as *Climate Change Induced migration Fund*.³⁷
- For Eg: The International Community can allocate a special fund, Climate Change Induced Migration Fund, for the climate refugees. The supervising committee can monitor it, and whenever required, the operational team can set up a temporary camp for the climate refugees with their permission. In this process, the high cost of relocation and other needs or requirements, as mentioned earlier in the article, could be managed well without burdening other States. Eventually, the climate refugees can be moved back to their State of origin in due course. If their State of Origin does not exist, the climate refugees can be shifted to the countries capable of welcoming them without hampering the needs of their citizens.
- Proposal 5: The vulnerable States, who are under high alert of an environmental catastrophe can either buy or lease land from the neighboring country and save their people of any kind of uncertainty.

The authors opine that on implementing any of the proposals, the basic needs of the climate refugees will be well-taken care of. Such positive change will ensure that the climate refugees are taken care of, and they do not need to be victims of more suffering. Moreover, in this fashion, the climate refugees do not need to be illegal migrants, and it would also reduce the apprehension about the climate refugees amongst the host countries.

VIII. SOLUTIONS TO THE PROBLEM

The authors believe that to execute the proposals (mentioned in Part VI.), a well-planned standard of operating procedure (SOP) is required. A challenge which

³⁷ © The authors reserve the right to this new term. This new term is created by the authors.

can be faced while executing the SOP, is to identify the genuine climate refugees amongst the many who claim to be one of the many. To find a solution to this challenge, the authors divided the climate refugees into three categories on the effect of environmental catastrophe on the State of origin, as mentioned in Table No. 3. The authors have also laid down some conditions which can be applied generally for all the climate refugees irrespective of which category they fall into as mentioned in Table No.3.

The general information to be collected are as follows:

- a) To disclose the place from where the climate refugees are coming.
- b) Identity proof/ residence proof of the place mentioned at point no. a.
- c) Matching the Identity card as mentioned in point no. b with the number of the family members as claimed by the climate refugees in the borders.
- d) Details of the property if any in the State of the Origin and also whereabouts of the property.
- e) Identifying the nature of the environmental calamity and verifying it.
- f) Understanding the frequency of the calamity and how severe it was.
- g) Figuring out the possibility of relieving of the place.
 - If yes, calculating the financial expense in relieving the place.
 - Finding out how much would it take to be restored

Table No. 3: Evaluating to what extent has the environmental catastrophe has affected the State:

Category A	Category B	Category C
Country completely submerged	Country partially submerged	Country likely to be submerged and under threat
In this category everyone is a victim. Hence, further scrutiny is not required.	Main difficulty arises in this category because of the following reasons: There is a chance for the victims to migrate to some	Precautionary principle should be applied. The residents of such a place can be identified from the

	<p>other place of their own country. Therefore, the actual reason for the climate refugees to migrate to some other neighboring country needs to be analysed.</p> <p>There can be cases where people can take opportunity of this situation and claim to be one of the victims of the environmental catastrophe and migrate to the neighboring countries for better living and livelihood.</p> <p>Hence the operational team needs to be vigilant and identify the genuine cases amongst the many.</p>	<p>criteria mentioned-above</p>
<p>The ideal manner in which such a crisis can be handled is if the State herself can negotiate for its rights at an international forum.</p>		<p>The country should come up with strategies to manage the pollution and control the adverse effect of climate change.</p>
<p>In such category there would be a greater number of people who would want to flee. Hence, it is advisable that if the State purchase a land for its citizens.</p>		<p>Developed nations can come forth to help the States falling under this category so that they can sustain.</p>

IX. CONCLUSION

The deplorable plight of climate refugees has made global organisations take notice of their stateless existence and poor living conditions. The authors strongly opine that if there is a legal implementation of conventions and laws on the protection of climate refugees from the affiliated councils of United Nations, then this issue can be sorted to an extent. However, unless such laws and conventions are binding on the countries, there is not much hope that the countries will suo moto recognise the social and cultural rights of climate refugees. Hence, this is where the authors feel that the ‘Common but differentiated responsibility’ principle should be made applicable. The developed states should own up to their responsibility to help the struggling states, both financially and technologically. The authors do acknowledge the various inadequacies in the Refugee Convention; despite that, at least on humanitarian grounds and also on account of having ratified various conventions of international human rights law, a State should provide some basic rights (health rights, right to life and personal liberty) to the climate refugees.