SEA LEVEL RISE AND HUMAN MIGRATION AT THE EXTREME ENDS OF INDIA: MIGRATION PATTERNS AT THE LAP OF BAY OF BENGAL IN THE EAST & ARABIAN SEA IN THE WEST

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ABSTRACT

The Indian Ocean is warming up at a rapid speed. The Ministry of Earth Sciences reports that about 1.7 mm/ year rise in the Sea Level has been observed over the last century (1900 to 2000) in the coastal part of the country. Then from 1993 to 2017, the Ministry again observed a hiked rate of 3.3 mm/ year. It reported in its 6th assessment report,' Climate Change 2021: The Physical Science Basis', that Mumbai, Kochi, Chennai, Visakhapatnam, Mangalore and Thiruvananthapuram will be submerged partially due to the sea level rise. The findings in the IPCC report are further corroborated by Global Temperature change, which is estimated to rise 2° Celcius by 2050, according to the Indian Institute of Tropical Meteorology. The impact of this change will be seen through frequent and intensified coastal flooding, cyclones, extreme rainfall and storms, resulting in vulnerability for the coastal cities. Realising the significance of migration in coastal areas, the paper focuses on four destinations covering a large number of coastal areas, Sundarbans Delta, Odisha, Kerala and Lakshadweep Island. The paper ensured slow onset migration and rapid onset by taking up these areas to see the ramifications of the sea level rise on the human population, the correlation between sea level rise and migration, and lastly, the pattern in which the human population is migrating in the coastal areas. The researcher has opted for a doctrinal method of study by relying on policy documents, previous Empirical studies, and secondary data available from the government.

Keywords: Sea Level Rise, Migration Patterns, Human Migration, coastal migration, coastal vulnerability

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Introduction

When nature starts shifting its course, it doesn't discriminate between rich or poor, a landless laborer or corporate tycoon, populated cities or sterile landmasses. Yet those who have fewer resources to adapt to the changes suffer the most. Migration from the affected areas to safer landmasses is one of the swift responses to the terrestrial changes. According to the Inter-Governmental Panel on Climate Change (IPCC) Report 2021, the water level in the Bay of Bengal close to Sundarbans, West Bengal, is expected to rise by 0.17m compared to 0.6m in 2020. [3]This poses a threat to the neighboring mega-city, Kolkata to go underwater by magnified inundation. In the same report, while talking about the western part of the land, the IPCC report says that Cochin, Kerala, will likely see a sea level rise of 0.15m compared to 0.6m in 2020. That indicates an intensification in land salination and soil erosion in coastal Kerala. The upsurge in the ocean acts as a push factor for human beings to migrate to better habitats because survival tactics no longer work in those areas. According to Deltas, vulnerability & Climate Change: Migration & Adaptation (DECCMA) Project, most of the affected people in the Sundarbans migrate near their homes, close to Kolkata city, mainly along the train line and 30% move outside West Bengal[4]. As per the available data, the migration pattern seems typically outflowing to international borders since the 1970s, to the Gulf countries mostly. During COVID-19, the Kerala Migration Survey (Centre for Development Studies) assisted the government in arranging safe returns and adequate health facilities for the immigrants, this shows the importance of having a policy-based solution and preparedness. At the same time, it is intriguing to note that Kerala is also a destination for migrants, moving internally. As per the National Centre for Sustainable Coastal Management (NCSCM), 63% of Kerala's coastline stretch is eroding making the state vulnerable to drastic climatic change.[5] The immediate response was to build sea walls, but that turned out to be a failure, as the sediments washed away everything at the next high tide, leaving no other option with the locals but to migrate to distant places. As the human race is suffering the consequences of acts of one end of the world through decades on the other end of the world, we have certainly entered the Anthropocene epoch. The researcher has opted doctrinal method of study, by relying on policy documents,

[3] Inter-Governmental Panel on Climate Change (2021), *Climate Change 2021: The Physical Science Basis*, https://www.ipcc.ch/report/ar6/wg1/

[4] Deltas, Vulnerability and Climate Change: Migration and Adaptation, (2017), *Climate Change, Migration and Adaptation in Deltas, http://generic.wordpress.soton.ac.uk/deccma/wp-content/uploads/sites/181/2017/02/online-version_small_Climate-Change-Migration-and-Adaptation-in-DeltasKey-findings-from-the-DECCMA-project.pdf*

[5] A. P, Sachin & Menon, N. & K.C. Sankaranarayanan (2014), An Analysis of Various Coastal Issues in Kerala, International Journal of Scientific Research and Education, 2, 1993-2001

previous empirical studies, available secondary data, government documents, reports from various organizations and legal sources such as Legislation, bye-laws, notifications and rules. This research paper aims to focus on the ramifications of the sea level rise on human beings and their habitation, its correlation with Migration and the pattern in which the population is migrating due to sea level rise. The paper covers four regions, Odisha, Sundarbans Delta, Kerala and Lakshadweep Island, for the legal analysis of the patterns of migration due to sea level rise.

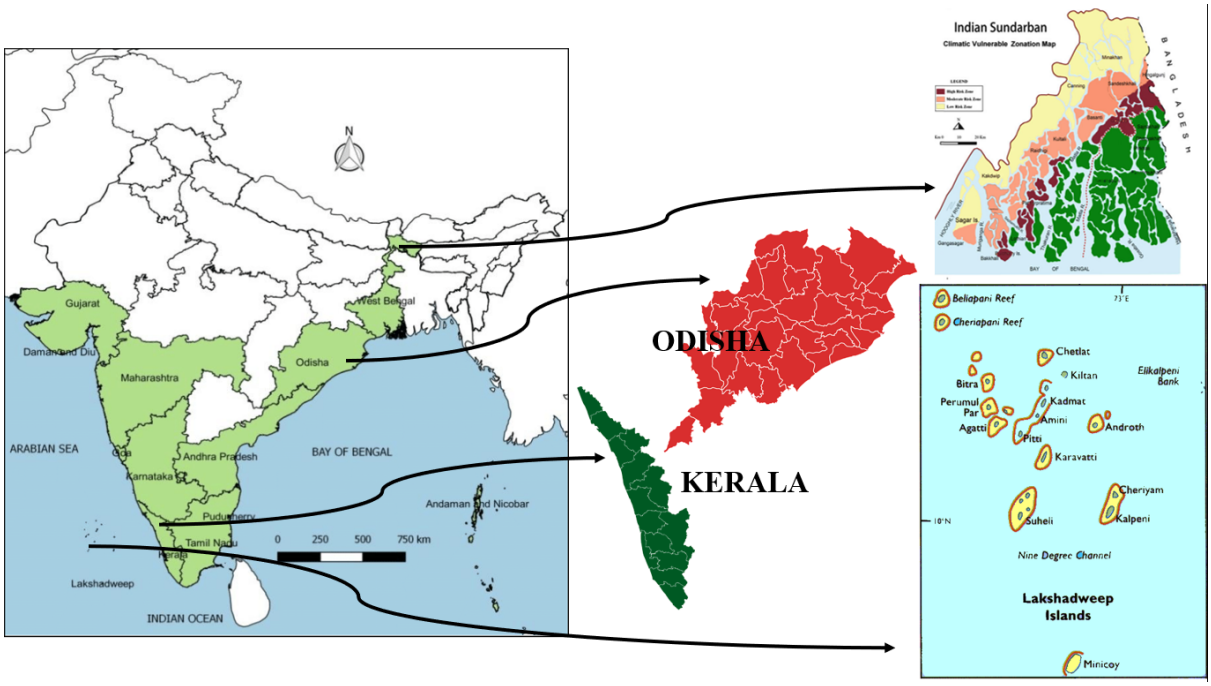

Fig.1 Study Area Map

Variability of Sea Level Rise in India

India has an approximately 7500 KM coastline border, surrounded by the Arabian Sea on the west, the Bay of Bengal on the east and the Indian Ocean on the south of the country. The two union territories, Andaman and Nicobar and Lakshadweep Islands, respectively, also contribute to the coastal outlining, covering around 5000 km area[6]. The reason for sea level rise can be attributed to two causes, melting of ice and thermal expansion. Both causes are aggravated due to global warming. The rise in temperature across the globe has not left the Indian Ocean untouched, resulting in the regional sea level rise in the Indian peninsula. It proves how one change in the corner of the world can lead to a multi-fold effect on the other

[6] Centre for Environment and Development, *Draft Final Report, World Bank Assisted Integrated Coastal Zone Management Project: Environment and Social Assessment* (Ministry of Environment and Forests 2009)

edge of the world. The World Meteorological Organization's (WMO) "Global Sea-level Rise and Implications" Report 2022 analyzed the global mean sea level and said that from 2013 to 2022, there was an annual increase of 4.5mm. The report also contributes to the increase in the sea level rise to human influence since 1971. [7] The areas believed to be most susceptible to SLR include the Kutch region of Gujarat state, Mumbai in Northern Malabar, Southern Kerala, the Cauvery delta of Tamil Nadu, the Krishna and Godavari deltas of Andhra Pradesh, the Mahanadi delta of Orissa, and the Ganges delta of West Bengal[8].

Depending on how much the global average temperature rises, Deltas, vulnerability & Climate Change: Migration & Adaptation (DECCMA) Project examined the potential effects of sea level rise in Bangladesh. Before 2033, the global average temperature is probably going to rise by 2 degrees Celsius. A 5–14 cm rise in sea level will result from this temperature increase. The year-to-year fluctuation already typical of deltas until 2040 makes it impossible to distinguish between the variations that are likely from a 1.5℃ increase to a 2℃ increase. Some of the effects more than double if the temperature increase reaches 3℃. [9]Compared to a 1.5℃ increase in temperature, the amount of land that floods is more than 2.5 times larger with a 3℃ increase.

Spatial Patterns of Migration as a Result of SLR (Sea Level Rise)

World Meteorological Organization's (WMO) "Global Sea-level Rise and Implications" report noted that India faced several flooding and landslide issues, particularly in northeast India, where 700 deaths have been reported and as many as 663000 displacements due to the same in the state of Assam[10]. There were also 900 deaths reported due to lightning.

Within Indian coastal areas, people have been moving about ever since. Movement is one strategy for managing the coastal changeable natural environment. Internal movement between rural and urban areas is prevalent, and migrants typically cite economic factors, such as the chance to find a job, as the main driver of their migration. Gender plays a significant role in

[7] World Meteorological Organization (2022), *Global Sea-level Rise and Implications Report*, https://public.wmo.int/en/global-sea-level-rise-and-implications-facts-and-figures

[8] L. Noronha, 'The Rising Seas: Need for Longer-term Perspective in Coastal Planning and Adaptation for Developing Countries in TERI (ed.), *Environmental Threats, Vulnerability, and Adaptation: Case Studies from India* (The Energy and Resources Institute, Delhi, 2004) 167,174

[9] Deltas, Vulnerability and Climate Change: Migration and Adaptation, (2017), *Climate Change, Migration and Adaptation in Deltas, http://generic.wordpress.soton.ac.uk/deccma/wp-content/uploads/sites/181/2017/02/online-version_small_Climate-Change-Migration-and-Adaptation-in-DeltasKey-findings-from-the-DECCMA-project.pdf*

[10] World Meteorological Organization (2022) "Global Sea-level Rise and Implications Report", https://public.wmo.int/en/global-sea-level-rise-and-implications-facts-and-figures

migration trends. The consequences of migration are determined by the circumstances surrounding its occurrence. The ramifications vary depending on whether migration is voluntary or involuntary, with the latter occurring when people do not want to migrate but do so owing to a lack of options in their current region. Involuntary migration can contribute to metropolitan places being risky, with poverty in terms of material status and perceived well-being (even if migrants' capacity to remit money back home enhances material well-being in migrant-sending areas). Migrants and families left behind are more inclined to consider voluntary migration successful.

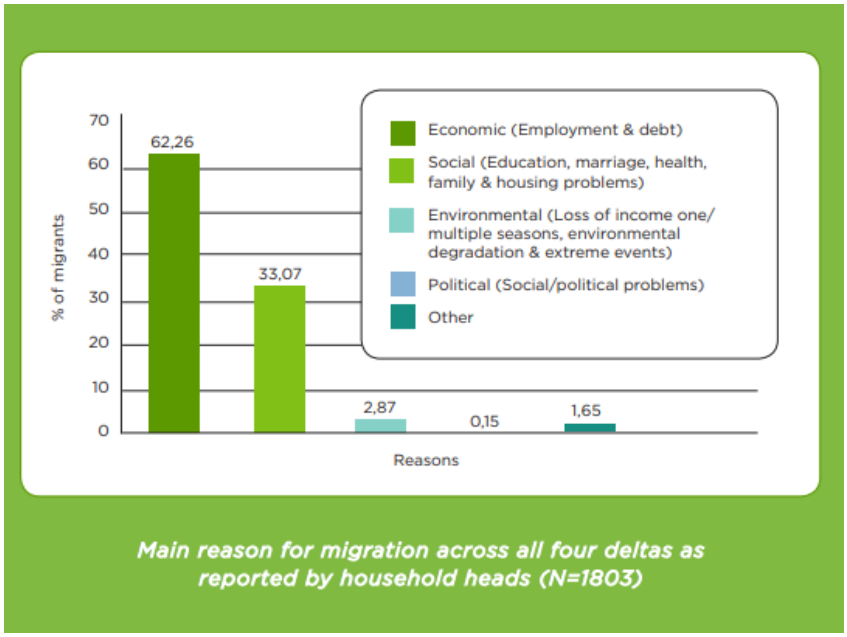

Figure-2 (Source: Deltas, vulnerability & Climate Change: Migration & Adaptation (DECCMA) Project)

In Figure 2 we can understand that when the Deltas, vulnerability & Climate Change: Migration & Adaptation (DECCMA) Project interviewed and questioned the population living near the Bengal Delta about the main reason for migration, less than 3% of respondents specifically cited an environmental problem as the primary driver of their migration. However, one-third of all migrant households believed that they were exposed to additional environmental risks, and between 40 and 80% of respondents in the four deltas connected environmental problems to less secure livelihoods. Climate and environment, therefore, influence migration indirectly by affecting people's capacity to earn a living, especially in the case of slow-onset environmental risks like drought and coastal erosion example Uttarakhand and desert areas of Rajasthan on the northern and western front.

Every year, at least 400,000 migrants move to the city, many of them seeking work outside of the vulnerable coastal aquaculture sector threatened by sea level rise or fleeing cyclones or other natural disasters. According to the estimation of the Inter-Governmental Panel on Climate Change (IPCC), if no further adaptation measures are taken, risk due to SLR (including erosion, flooding, and salinization) is expected to rise drastically along all low-lying coasts by the end of this century.[11]

Legal Interposition and Policy Response related to SLR (Sea Level Rise)

Environmental Migration is not being tackled effectively by many nations. For that matter, there is no proper acknowledgement of this concept in many nations and as a result of it, there is a huge "policy gap". In India, policies for environmental migration are absent. With the fear of losing their belongings, people hesitate to move from the climate-affected regions as there are no proper legal frameworks that protect their land and belongings if they relocate (e.g., in the Indian Bengal Delta).

Because of inadequate monetary aid and arbitrary deadlines, the policies are not being implemented effectively and thoroughly. Effective adaptation of policies may not happen on the legal frameworks.

Legal Measures to Rising Sea Levels in Odisha

In 1992, Odisha's government attempted to rehabilitate the cyclone victims of the Satabhaya region. The Satabhaya Resettlement and Rehabilitation Yojana was initiated to relocate 571 families to the Bagapatia colony, 12 kilometres from Satabhaya. After several attempts, it was successfully taking place in the year 2011. The survey conducted in the year 1992 for the colony's land allocation failed to consider the future growth of the population. This resulted in the inadequacy of area for the later generations, who were not included in the rehabilitation policy, forcing them to relocate to other regions of the country in search of employment as unskilled daily wage workers.

The Odisha government spends Millions of rupees every year on cyclone-related disaster aid. Due to the sea level rise and high severity of cyclones in the Bay of Bengal, enhancing the adaptation ability of coastal ecosystems and populations has become a main challenge to coastal management and planning policies.

[11] Inter-Governmental Panel on Climate Change (2019), *Special Report: Special Report on The Ocean and Cryosphere in A Changing Climate*

Over the past ten years, the village of Pentha in Kendrapara, similar to Satabhaya, has experienced a wave of erosion that turned out worse eventually. Due to the high tides, irreparable damage has occurred to the village's protective embankment. Because of that, this location has been chosen as an ideal target for the implementation of the Integrated Coastal Zone Management (ICZM) geo-synthetic tubes pilot project.

In Odisha, ICZM phase I adaptation initiatives have been implemented as community-based livelihood interventions and infrastructure projects. India's mainstay of coastal control – the Coastal Control Zone (CRZ) Notification, 2011, and the Environmental Impact Assessment (EIA) Notification, 2006, leads these projects. Any proposed economic activity or the extension of an existing operation must receive environmental clearance by the Environmental Protection Act (EPA) of 1986's notification requirements for the CRZ and EIA. CRZ controls the coastal area under 4 zones with definite levels of human activity.

Legal Measures to Rising Sea Levels in Kerala

The state of Kerala because of its coastal location experiences the risk of sea level rise and higher sea erosion at its coastline. Over the past 26 years, Kerala's coastline has been lost to the sea leading to increased frequency and severity of coastal flooding in low-lying areas and coastal erosion (Kankara et al., 2018)[12]. In the research findings carried out in Kerala's coastal region, it is found that there is a growth of salinity in the freshwater sources (Remya et al., 2018).[13] In low-lying places like Kuttanad, which is 500 square kilometres in size, there is a population displacement due to sea level rise and an elevation between 0.6 and 2.2 meters below sea level (Rao, 2011).[14]

According to the Kerala State Action Plan on Climate Change (2023-2030), making coastal villages climate resilient is one of the major goals to be reached. In the state of Kerala, 8.9 lakh people reside in 221 fishing villages as per Kerala State Coastal Area Development Corporation Limited (KSCADC). To make coastal villages climate resilient, it is important to make an action plan that focuses on and prioritizes developing alternative livelihoods, encouraging

[12] Kankara, R.S., Murthy, M.R., & Rajeevan, M. (2018). National Assessment of Shoreline Changes along Indian Coast: Status report for 26 years (1990-2016). National Centre for Coastal Research, Ministry of Earth Sciences.
[13] Remya, R., Nath, A. R., Akhil, T., Babu, S. D., & Ramachandran, K. K. (2018). Assessment of saltwater intrusion and role of sea level rise (SLR) along the coast of Thiruvananthapuram District in Kerala, India. Nature Environment and Pollution Technology, 17(4), 1235-1242
[14] Rao, G. P. (2011), Climate Change Adaptation Strategies in Agriculture and Allied Sectors, Scientific Publishers

income through fisheries, strengthening the energy-efficient safety measures for fishing, and concentrating on providing basic amenities like clean drinking water supply, sanitary facilities, and electricity for the people residing in the households located in the coastal fishing villages.

The Ministry of Environment, Forests, and Climate Change in India launched the Integrated Coastal Zone Management (ICZM) Project, to execute the National Environment Policy 2006, and to maintain and conserve the coastal and marine ecosystems and their environment through a holistic coastal management approach. It includes:

1) Sustainable development of the marine and coastal environments.
2) Mitigating the effects of natural disasters, mainly Sea Level Rise (SLR), frequent cyclones, and storm surges can have a major effect on coastal towns and areas.
3) To reduce coastal water pollution, raise the standard of living for locals, and conserve and preserve the incredibly fragile coastal ecosystems, including mangroves, brackish water wetlands, and coral reefs.
4) Strengthening institutional and administrative capacities with an integrated approach for Sustainable Coastal Management through the National Environmental Policy of 2006.
5) Observing the effective measures being taken both globally and locally and disseminating the lessons learnt through such practices.

The government of Kerala has decided to implement, through the Kerala State Action Plan on Climate Change (2023-2030), the Integrated Coastal Zone Management (ICZM) framework, which can provide a framework for fostering development initiatives that consider local conditions as well as state socioeconomic and environmental issues. The sea level monitoring and river gauging stations will be established through the application of Climate Change Monitoring and Database Management Mechanisms. State's Hydrographic Survey Wing has identified five potential regions (Vizhinjam, Neendakara, Munambam, Beypore, and Azheekal), as appropriate regions for developing sea level monitoring systems. Features of the tides, monitoring the safety of the fishermen, helping them in catching the fish, easing the navigation of the vessels, protection of the coastal infrastructure, mixing of near-shore water with tides etc., can be understood by these tide monitoring stations.

As per the Kerala State Action Plan on Climate Change (SAPCC), over the next 100 years, there will be an expected Sea Level Rise (SLR) of 100 to 200 mm on a conservative calculation

along the Kerala coast[15]. As a result of an anticipated one-meter sea level rise, 169 Sq.km of coastal area surrounding Kochi will be underwater. The Kerala government's relocation project in Punargeham is undoubtedly an effective step in this regard. The project proposal suggests relocation of the population residing below 50 meters from the water level to protect them from coastal erosion. Under this project, if a family agrees to give up their rights to their current plots, a maximum amount of Rs. 10 lakhs will be given to each family for purchasing land. As of July 2021, 3000 homes were built under this project. Although the measures taken by the Kerala government are commendable the policy failed to consider the socio-economic effects of this relocation on the fishing community. It has also failed to propose corrective measures to mitigate these effects. The government has relieved itself from the responsibility of indemnifying the loss of people who are reluctant to relocate under this project. Instead of this kind of carelessness by the government, it should have tried to understand the reasons for people's resistance to relocate even in the face of life-threatening Climate effects and should make an effort to address those concerns. Community-centred interventions should be developed as the quality of life of the fishermen's community is not secure enough, instead of focusing on relocating them to other places.

Legal Measures to Rising Sea Levels in Lakshadweep Island

India has two union territories floating in the sea, namely Lakshadweep Island and Andaman and Nicobar Island. Out of the two, Lakshadweep is in a miserable situation as human beings have already inhabited 10 islands out of 36 islands, divided into 12 atolls. The population in these islands is gradually increasing and land is sinking. Interestingly Lakshadweep is made up of coral reefs, 300 km away from India's mainland.

Island Bangaram, the largest island in the atoll, with an area of 0.623 sq. km shut down in 2011 due to the sea rise. Whereas Thinnakara island with an area of 0.522 sq. km is on the verge of sinking. Apart from the above islands, the struggle of Parali Island-I and Minicoy Island is known at the international dais since the Tsunami in 2004, the Okchi Cyclone in 2017 [16]and subsequently due to soil erosion.

To overcome the environmental disasters in Lakshadweep, the government has brought several legislations such as the Animal Preservation Regulation, Lakshadweep Action Plan on Climate

[15] http://www.themigrationnews.com/news/a-closer-look-at-punargeham-project-keralas-attempt-at-climate-change-induced-relocation/ (last visited on 10th April, 2023 at 11:53pm)
[16] N. Jayaraju et al. (eds.), Coasts, Estuaries and Lakes, https://doi.org/10.1007/978-3-031-21644-2_6

Change 2012, The Prevention of Anti-Social Activities Regulation (Goonda Act), the Panchayat Regulation of 1994, LDAR 2021- Lakshadweep Development Authority Regulation, Justice Ravindram Committee Report 2014, IPMP- Integrated Island Management Plan, Land Acquisition Rehabilitation and Resettlement Act 2013, Biological Diversity Act 2002 and several other bye-laws.

Despite the available legislation, there is nothing concrete on either the control of the ramifications of the sea level rise and subsequent sinking of the island or the rehabilitation steps for the people who inhabited the territory. Several warnings have been given by national and international bodies for the sinking islands. Inter-Governmental Panel on Climate Change (IPCC) says that coral reefs would decline by 60-90% [17]if the temperature is rising across the globe at the current pace of 1.5 °C. If the temperature rises by 2.0 °C then all the coral reefs will be decimated. Not only sinking, Lakshadweep is also under the threat of Coral Bleaching, it has faced the incident in 1998, 2010 and 2016.

Lakshadweep has only worked on one side of the problem, by restricting entry and travel on the Island, but what about the 64000 people living on the sinking coral reefs? The government is neither thinking towards rehabilitation nor taking any reports on the impact of climate change in Lakshadweep, seriously.

Legal Measures to Rising Sea Levels in Sundarbans Delta

Sundarbans, constituting 8 blocks is the largest river delta in the world, a heritage site declared by UNESCO[18] is at risk of being washed off due to the rising sea levels. The shores of the Sundarbans Delta are outlined with cement embankments since the 18th Century. The 108-year-old colonial law regulates those stone/ cement embankments through the Bengal Embankment Act of 1915. The Irrigation and Waterways Department handles the outlaying of the embankments. The embankment covers 3500 km of coastline, created around the 18th Century. The sole purpose of making embankments was to extend the fertile land, which could be used for crops. To extend the embankments Britishers went beyond the limits and cropped off mangroves, not realizing their significance during the environmental disasters. In 2009, an Aila cyclone with a speed of 140km/hour breached 400 km of embankments. So, in 2019, after a decade of the cyclone and the gradual washing off of the coastline embankments, the

[17] https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-CCboxes_FINAL.pdf (Last Visited on 4th July 2023 at 9 pm)
[18] https://whc.unesco.org/en/list/798/, (Last Visited on 4th July 2023 at 8 pm)

government of West Bengal started the project to rebuild the embankment across the coastline. But as opined by Anurag Danda in 2012, the head of the World-Wide Fund (WWF), "*embankments disrupt the natural ecology"*[19]. This means that the natural coastline is being altered at the cost of losing lives spread across those coastlines, relying upon the embankment, because it is not a permanent solution and every year some or other natural disaster destroys those embankments leaving the population dwelling there extremely vulnerable. The only option left to them is to shift because when the embankments wash off, no scope of adaptation remains. In 2020 Amphan cyclone destroyed the mangroves [20]to a large extent, making the vulnerable community living across the coastline, more susceptible to the situation, leaving no other option than to flee the place and move to mega cities already crowded with economic migrants. Out of 104 river islands, only 54 support human settlement and now this number is also reducing gradually. The West Bengal government has come up with two policies to control the havoc, the West Bengal Disaster Management Policy and the Delta Vision Document of 2011. At the central level, the National Rehabilitation and Resettlement Policy (NRRP) of 2007 also plays a vital role in resettling the affected population by sea level rise resulting from global warming, or any other natural disasters. The NRRP majorly takes care of rehabilitation as an outcome of development-induced development and any other involutory displacements. Whereas the West Bengal Disaster Management Policy covers the strategies of prevention of disasters, mitigation steps, vulnerability assessment, disaster response, recovery and rehabilitation and long-term rehabilitation program/ planning. The policies speak remarkably on paper, but to show that they have moved an inch on the ground the government has no data.

Conclusion

The management of coastal activities and land use under the unpredictability, complexity, and contestation that characterize sea level rise can be managed by communities through spatial planning or land use even when the government intervention is less. The Communities can be strengthened in advance, with proper training, and skill development to adapt to the changes, to increase the probability of surviving after the disaster leaves them vulnerable and also for those who are facing slow on-set migration. Ultimately, it's the locals who are there for each other when some adaptation has to be made due to changes in the patterns of sea level rise. The

[19] https://www.thehindubusinessline.com/economy/sundarbans-fragile-ecology-under-threat-from-concrete-embankments/article64250861.ece (last visited on 4th July 2023 at 7 PM)
[20] https://timesofindia.indiatimes.com/city/kolkata/mangroves-spread-over-40-of-sunderbans-ravaged-by-amphan/articleshow/76048941.cms (last visited on 4th July 2023 at 3 Pm)

community-based approach has to be looked upon first in situations of rapid changes happening around the sea.

For the slow on-set changes due to sea level rise in the coastal areas, the government should develop policies to recognise the affected population as victims of environmental migration if they are voluntarily or involuntarily shifting from their usual habitual places. As the Refugee Convention of 1951 does not recognise *climate-displaced people* under the definition of refugee, the Environmental Justice Foundation, an international NGO, suggested Refugees as-

> "*People who move due to environmental factors, due to sudden and progressive climate-related changes which adversely affected their living conditions and hence obligated to leave their home, should also be recognised*".

In 1969, the organisation of the African Unity Convention made similar efforts to broaden the definition under the Refugee Convention of 1951 to bring "*events seriously disturbing public order*" under the purview of the definition. Hence the first measure to be taken towards supporting people affected by any environmental calamity, slow or rapid, is to legally recognise them.

The spatial pattern observed in the study of the four regions Odisha, Sundarban Delta, Kerala and Lakshadweep Island shows that there is a clear tilt in moving temporarily when the disaster is sudden, and the impact is high, and most of the displaced people return to their homeland once the situation calms down for their land and property. So *firstly*, it is temporary migration and s*econdly,* it is mostly from Rural to Urban cities as the sea level rise affects the economic capacity of the people of affected areas. *Thirdly*, policies have to be updated regularly to control the movement of the vulnerable population and to reestablish living conditions with a community-based approach.

It is interesting to note that the state government has issued certain schemes at the state level for the specific areas where people suffer from some coastal changes. Whereas at the national level, no legislative efforts are made to address the issues related to the sea level rise comprehensively. Their lack of uniformity related to the measures taken by the Central government is attributed to the differences in the impact it puts in different segments of the coastal locations in the country, where the temperature, economic activities, and sources of livelihood vary. With the above study, the researcher agrees that specific issues need specific attention and there need not be a whole package of legislation to cover all the geographical areas for the same issue, for example, Sea Level Rise (SLR). Though an attempt to recognise

"Environmental Migration" can be made at the national level, which may cover each kind of displacement, happening due to adverse changes in the Environment.

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