INTERNATIONAL JOURNAL OF LAW MANAGEMENT & HUMANITIES

[ISSN 2581-5369]

Volume 7 | Issue 4

2024

© 2024 International Journal of Law Management & Humanities

Follow this and additional works at: https://www.ijlmh.com/
Under the aegis of VidhiAagaz – Inking Your Brain (https://www.vidhiaagaz.com/)

This article is brought to you for "free" and "open access" by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of any suggestions or complaints, kindly contact **Gyan@vidhiaagaz.com**.

To submit your Manuscript for Publication in the International Journal of Law Management & Humanities, kindly email your Manuscript to submission@ijlmh.com.

Melting Ice Sheets: Unravelling the Legal Challenges of Submerging Islands

ADITYA BHUSHAN¹ AND RADHIKA MAHESHWARI²

ABSTRACT

In 1983, India began the exploration of Antarctica with the establishment of Dakshin Gangotri, followed by Maitri and Bharati research centres. In order to build a comprehensive approach and demonstrate India's contribution to Antarctica, research in numerous areas was begun. They were, "Antarctica's contribution towards global sea-level rise, the background of aerosol properties, variability in the sea ice cover and phenomenon like Antarctica haze and Ozone concentrations". To felicitate the study and to ensure environmentally sustainable and viable research procedures, the Indian government enacted the Antarctica Act, 2022. While India's strategy is aligned with its objective of sustainable development, there is vacuum in addressing the legal challenges of submerging islands, due to the global sea-level rise as a result of melting ice sheets, which poses a burden on the island states and is a potential threat for their future. Even the Montevideo Convention, 1933 establishes a conventional definition of a state, but lacks to address the legal status of an island that has submerged and is inaccessible to humans. This paper will critically analyse India's policy on the legal challenges over the existence of Island States, the environmental reverberations, along with a case study of Lohachara island and Ghoramara island of India, and the dearth of a legal framework on critical issues, and practical mitigation strategies for a better tomorrow.

Keywords: International Law, Antarctic, Polar.

I. Introduction

As the climate adversity worsens, states whose islands are submerged face an unprecedented threat from increasing sea levels. In addition to the consequences for the environment and humanity, these sinking islands pose difficult legal issues. The legal ramifications of islands that are sinking as a result of sea level rise will be discussed in this article. A number of problems pertaining to territorial claims, population displacement, and sovereignty are brought up by the loss of these islands. The issues at hand concern the rights and obligations of countries whose

¹ Author is a Research Assistant at School of Integrated Coastal and Maritime Security Studies, Rashtriya Raksha University, India.

² Author is a Research Assistant at School of Integrated Coastal and Maritime Security Studies, Rashtriya Raksha University, India.

lands are sinking, the legal implications for displaced populations, and the methods by which these countries may pursue compensation for the depletion of their natural resources and territory.

The term "sea level rise" refers to the rise in the mean worldwide sea level as a result of seawater expansion because of polar ice cap melting. The basic cause of this issue is human indulgence that releases harmful emissions into the environment, such as deforestation, nuisance flooding and burning of fossil fuels among other issues. Sea levels rise as a result of an increase in Earth's temperature, which also causes ice caps to melt. Sea level rise's broad consequences pose significant challenges for coastal communities and low-lying islands. Rising sea levels are gradually submerging landmasses, endangering not only liveable areas but also the daily chores of lakhs of people who are dependent on these islands for housing, food, and basic necessities.

Moreover, the impact of sea level rise extends beyond the physical displacement of populations, as it raises complex legal issues that require careful consideration and resolution. The article will examine the causes of sea level rise globally and how it affects those who must relocate due to climate change. The sea level rise brought on by the salinity of the oceans and the melting point effect³, which causes the ice sheets in the polar areas to melt quickly. The article will also examine the case study with particular reference to the West Bengal region of India and the challenges that the displaced people are having on a daily basis as a result of these changes. The worst impacted areas were housing, agriculture, fisheries, resource depletion, and nuisance flooding.

The fragile islands of Ghoramara and Lohachara in the case study were hit hard by high tides and land erosion despite having taken the necessary precautions to prevent it. Further, through a comprehensive examination of international treaties, legal frameworks and other relevant database this article will delve into the complex web of legal challenges facing nations grappling with submerging islands. By understanding the legal implications, policymakers and stakeholders should take a step towards finding environment friendly, sustainable ways that prioritize both the affected populations and the preservation of their rights in the face of an uncertain future. The conclusion will concentrate on mitigating techniques to address the issues of statehood and displacement, the hazardous position in relation to other issues like resource depletion and climate change, relocation, human rights, and other legal qualms that the displaced population will have to deal with.

© 2024. International Journal of Law Management & Humanities

[ISSN 2581-5369]

³ Climate change indicators: Ice sheets. (2021, March 18). US EPA. https://www.epa.gov/climate-indicators/climate-change-indicators-ice-sheets

II. ISSUE OF GLOBAL SEA-LEVEL RISE

Many island states have been submerged by the problem of rising sea levels, and there is currently no known cure or hope for a quick fix. There are numerous signs of rising sea levels, such as erosion of the coastal soil, a decline in marine life, mass migration, resource depletion, and the threat to mangrove plantations, among others. Cyclones, flooding, and the melting of ice sheets in the polar regions could be the causes. "The problem of migration is well known to the world at large when it was seen that the Rohingya climate crisis has been on escalation since the recent Cyclone Mocha in May 2023." Another nation currently experiencing flooding is Vietnam, where a large-scale exodus from the coastal region is predicted to occur in the near future. This paper goes into additional detail about the Lohachara and Ghoramara Islands in the Indian setting, using them as an example of the issue of sea level rise in India.

"According to a study conducted jointly by the University of Exeter and Jadavpur University published in 2018, the landmass of the Ghoramara island has reduced by over 70% since the 1920s due to coastal erosion. The study titled Political economy of planned relocation: A model of action and inaction in government responses states, Coastal erosion has reduced the landmass of one island (Ghoramara) by about 70% since the 1920s, with its neighbour Lohachara island lost to erosion in the Hooghly river in 1991." The Sunderbans archipelago has noticed a decline in land mass since late 90s, the mitigation strategy and the policy existent has been scarce. The failure to address such complex issues shows the unprepared society, global community and other important stakeholders. Since the relocation began, there has been a greater sense of uncertainty among the fishing community, the coastal population, and those engaged in shore activities as a result of the increasing sea level.

The international community practices responsibility to protect in catastrophic events, atrocities and other situations⁶ should also be mindful of the problems faced by the island population and their human rights which are inscribed under the "Universal Declaration of Human Rights (UDHR)". The UDHR enshrines certain rights on the individual so as to help form equitable habitation among the society, "Article 3 ensures that Everyone has the right to life, liberty and the security of person" This clarifies why a person has a right to security, especially when their

⁴ Cox's bazar, Bangladesh. (2024, January 24). United Nations Population Fund. https://www.unfpa.org/coxs-bazar-bangladesh

⁵ Das, S. & DHNS. (2019, November 17.). Islanders are fighting a losing battle. Deccan Herald. https://www.deccanherald.com/india/islanders-are-fighting-a-losing-battle-776927.html

⁶ Oman, N. (2019). The Responsibility to Protect in International Law: Philosophical Investigations (pp. 108–120). Routledge.

⁷ Universal declaration of Human Rights, Article 3 (1948). https://www.ohchr.org/sites/default/file s/UDHR/Documents/UDHR_Translations/eng.pdf

money, family, house, and social life are at risk because of relocation. The government and the international community are unable to come up with an obvious threshold to tackle issues like soil erosion, sea level rise, and nuisance floods during emergencies like the Rohingya crisis.

Article 17 of the UDHR also supports the individuals in the sense that it states "no one shall be arbitrarily deprived of his property", 8 With a provision like this in place, the government ought to reimburse any person who loses personal property—such as a home, livestock, farm, or other items essential to their daily existence—and they should also be entitled to housing and work options. Those individuals found it impossible to relocate, settle down, and then begin a new life in a distant nation, even if it was within their own borders. However, given the struggles they have had, legislators should at the very least legalize their presence in order to ensure that they do not feel excluded.

While discussing the personal development of an individual, the Article 22 states "Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international cooperation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality"9 the irony being that any individual is in deficit of personal development as they are in constant dilemma of existence as they are deprived of their rights in reallocated places. We can now count on as we advance toward having more rights covered by the text, Article 25 UDHR heavily when it states "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." It is acceptable to say that the globe has reached the point where the management is essentially what the people expect because the scale to create a sustainable world is currently shifting towards the end. The contents of this article are covered by our laws, but the people living in this region must deal with the modern nuances, which can be lessened with proper fielding. Because of the pervasive effects of industrialized nations, authorities' indifference to the rights of migrants has been deeply ingrained in society. When in 2015 the Sustainable development goals were decided, the "agenda was a plan of

⁸ Universal declaration of Human Rights, Article 17 (1948). https://www.ohchr.org/sites/default/file s/UDHR/Documents/UDHR_Translations/eng.pdf

⁹ Universal declaration of Human Rights, Article 22 (1948). https://www.ohchr.org/sites/default/files/UDHR/Documents/UDHR_Translations/eng.pdf

¹⁰ Universal declaration of Human Rights, Article 25 (1948). https://www.ohchr.org/sites/default/files/UDHR/Documents/UDHR_Translations/eng.pdf

action for people, planet and prosperity"¹¹ As the timeline draws to a close, it is important to remember that a number of people are losing their lives as a result of environmental problems such as salinization, inland water contamination, coastal soil erosion, sea level rise, and climate change.

"According to study average sea levels have swelled over 8 inches (about 23 cm) since 1880, with about three of those inches gained in the last 25 years. Every year, the sea rises another .13 inches (3.2 mm.) research published in February 2022 shows that sea level rise is accelerating and projected to rise by a foot by 2050." Considering that it will take a century for the island states to completely submerge, migration and displacement resulting from difficulties in the residents' daily lives are unavoidable. These displaced people's rights, means of subsistence, and the way the state manages their resources should all be carefully considered. This problem is not limited to migration; the effects of global warming have been felt in practically every sector, with the ecosystem being most severely impacted.

The report "AR5 Climate Change 2014 considered numerous observations over the last decades in all ocean basins show global-scale changes including large scale distribution shifts of species (very high confidence) and altered ecosystem composition (high confidence) on multi-decadal time scales, tracking climate trends. The distribution and abundance of many fishes and invertebrates have shifted poleward and/or to deeper, cooler waters (high confidence). Poleward displacements of phyto- and zooplankton have occurred by hundreds of kilometers per decade." The shift of species from their natural habitat has been noticed throughout the tropics which indicates the change of climate for a long time. The report also noted that "animal displacements are projected to lead to high-latitude invasions and high local extinction rates in the tropics and semi-enclosed seas. This will cause a 30 to 70% increase in the fisheries yield of some high-latitude regions by 2055 (relative to 2005), a redistribution at mid-latitudes, but a drop of 40–60% in the tropics and the Antarctic, based on 2°C warming above pre industrial values (medium confidence in the direction of trends in fisheries yields, low confidence in the magnitude of change). If a decrease in global net primary production (NPP) or a shift toward smaller primary producers occurs, the overall fisheries catch potential may also decrease." 14

¹¹ Transforming our world: The 2030 Agenda for Sustainable Development. (2015, September 25). Department of Economic and Social Affairs; United Nations. https://sdgs.un.org/2030agenda

¹² Nunez, C. & National Geographic Staff. (2023, April 10). Sea levels are rising at an extraordinary pace. Here's what to know. *National Geographic*. https://www.nationalgeographic.com/environment/article/sea-level-rise-1

¹³ AR5 Climate Change 2014: Impacts, adaptation, and vulnerability — IPCC. (2014). IPCC. https://www.ipcc.ch/report/ar5/wg2/

¹⁴ AR5 Climate Change 2014: Impacts, adaptation, and vulnerability — IPCC. (2014). IPCC. https://www.ipcc.ch/report/ar5/wg2/

Sea level rise is primarily driven by the trend of melting ice sheets in the Arctic and Antarctic, which speeds up ocean circulation and affects coastal communities' ability to support themselves. Addressing this issue alone won't be sufficient if we fail to take into account how resources will be distributed inequitably to the next generation. Though it is generally agreed upon in developing nations that they will assist them in strategically diminishing these challenges by giving resources that encourage migrants, this issue requires strong decision-making on the part of all states.

III. CASE STUDY OF LOHACHARA AND GHORAMARA ISLANDS

The endangered Indian islands of Ghoramara and Lohachara are passive witnesses to the catastrophic effects of sea level rise as a result of global climate change. These islands are becoming more and more associated with disappearance with every year that goes by, as the unstoppable waves engulf them completely. This case study explores the effects of sea level rise in the area, illuminating the causes of the disappearing islands and their consequences for the local populace as well as the ecosystem at large.

The demise of the islands would result in far-reaching and disastrous socio-economic effects, displacing thousands of people and threatening the rich wildlife that the islands are host to. When attempting to establish strategies and policies to minimize comparable difficulties encountered by other low-lying coastal locations around the world, it is imperative that we comprehend the lessons learnt from this case study.

(A) Background

1. Geographical location and population

Ghoramara Island, located in the Sundarbans delta, is situated in the South of West Bengal, India. The majority of the residents rely on agriculture and fishing for their sustenance.

Lohachara Island, located in the Bay of Bengal, was once home to a thriving community. However, due to the relentless rise in sea levels, the island has completely disappeared, leaving behind only memories and a cautionary tale.

2. Historical background and cultural significance

Ghoramara Island has a rich history and cultural significance. It was once a thriving hub of trade and commerce, serving as a vital link between India and neighboring countries. The island also holds religious and spiritual importance, with several temples and shrines dotting its landscape.

3. Effects of sea level rise on the island

However, the effects of sea level rise have been devastating for Ghoramara Island. Over the past few decades, the island has lost a significant portion of its landmass due to erosion caused by rising sea levels. The relentless waves have eroded the coastline, swallowing homes, agricultural fields, and even entire villages.

The loss of land has resulted in the forced migration of residents, as their homes and livelihoods are gradually submerged. With each passing year, the island becomes more vulnerable to the encroaching sea, leaving the remaining population in a constant state of fear and uncertainty.

A combination of human and environmental reasons can be traced to the extinction of Ghoramara and Lohachara Islands. Although natural elements like erosion and sea level rise have always contributed to the islands' dynamic terrain, human-caused climate change is largely to blame for these processes' recent acceleration. Unsustainable land-use practices have led to global warming, which has caused the ice sheets and ice caps in the polar regions to disappear, raising sea levels as a result. The land is now exposed to the unrelenting waves since mangroves, which were vital in preventing erosion and safeguarding the islands from it, have been severely reduced. In addition, many of locals have been forced to relocate due to the rising water levels. These communities are forced to flee their native grounds as the sea engulfs their houses, searching for safety elsewhere. Families are losing their means of support and finding it difficult to start over in strange places, which has severe socioeconomic repercussions.

Additionally, the extraction of groundwater for agriculture and human consumption has led to the sinking of the islands, exacerbating the effects of sea-level rise. The overexploitation of natural resources, coupled with the absence of sustainable development practices, has further weakened the islands' suppleness to climate change impacts.

(B) The Human Livelihood Impact

The communities that once lived on the Ghoramara and Lohachara Islands have suffered greatly as a result of their disappearance. Many households have been uprooted, forfeiting their residences, sources of income, and cultural legacy. The locals' main sources of income were agriculture and fishing, and the islands used to be self-sufficient once. Nevertheless, the populations have been compelled to relocate to neighboring towns and cities in quest of alternate means of subsistence due to the loss of land and the devastation of marine habitats.

These communities' social framework has also been negatively impacted. Families have been split up, customs and traditions have been lost, and the islands' sense of identity and belonging has been undermined. One cannot undervalue the psychological effects of being uprooted and

losing their ancestral lands. Not only are the people of the Ghoramara and Lohachara Islands victims of climate change, but they are also forefront in the fight for environmental justice and against the forces threatening the annihilation of their islands.

(C) National and International Initiatives to Address the Issue

The Indian government has taken a number of actions to solve the problems that the Ghoramara and Lohachara Islands are facing since it recognizes how serious the situation is. Encouraging vulnerable communities and ecosystems to be more resilient to the effects of climate change is the goal of the 2008 National Action Plan on Climate Change. The strategy calls for actions include building coastal defense infrastructure, restoring mangrove forests, and promoting sustainable agriculture. The West Bengal government has launched multiple initiatives to solve the severe condition that Ghoramara Island residents are facing.

In order to prevent erosion on the remaining land, these measures include building sea walls and embankments and implementing relocation plans to transfer residents to safer regions. The disappearance of Lohachara Island is a sobering reminder of the gravity and urgency of the problems caused by sea level rise. The local communities have suffered greatly as a result of the island's disappearance; they have lost their homes, means of subsistence, and cultural heritage. Nevertheless, there have been several obstacles to overcome in this endeavor, such as a scarcity of funding and the difficulties of locating appropriate land for relocation. The problem's complexity necessitates a multifaceted strategy that includes community involvement, sustainable development, and engineering solutions.

In addition, the government has put relocation plans into place to assist the impacted communities in relocating to safer places. The absence of sufficient funding and the availability of suitable property for relocation are just two of the many difficulties these projects have had to overcome. Although the government's efforts are praiseworthy, they must be reinforced and assisted by international cooperation in order to guarantee the islands' long-term viability and the welfare of the impacted inhabitants. Acknowledging the worldwide ramifications of rising sea levels, countries and international organizations have united to tackle this problem. Additionally, organizations like the United Nations Environment Programme (UNEP)¹⁵ and the Intergovernmental Panel on Climate Change (IPCC)¹⁶ provide scientific research and guidance to inform policy decisions and promote sustainable development practices. The United Nations

¹⁵ Environment, U. (n.d.). UNEP - UN environment programme. United Nations Environment Programme. Retrieved March 1, 2024, from https://www.unep.org/

¹⁶ UNEP. (n.d.-c). IPCC — Intergovernmental Panel on Climate Change. IPCC. Retrieved March 1, 2024, from https://www.ipcc.ch/

Framework Convention on Climate Change (UNFCCC)¹⁷ and related agreements, such as the Paris Agreement¹⁸, aim to mitigate climate change and its impacts. These agreements recognize the unique vulnerabilities of Small Island Developing States (SIDS)¹⁹ to sea level rise and present a platform for support and cooperation.

(D) The Legal Implications

The submergence of islands due to sea level rise raises a myriad of legal implications for affected nations. One of the key challenges is determining the sovereignty and territorial claims over these disappearing territories. The existing international backing, including the United Nations Convention on the Law of the Sea (UNCLOS)²⁰, provides guidelines for resolving disputes related to maritime boundaries. However, the unique nature of submerging islands necessitates a re-evaluation of these legal frameworks.

Another legal implication is the displacement of populations living on these sinking islands. The forced relocation of communities raises questions about the protection of their human rights, including access to adequate housing, clean water, and livelihoods. Furthermore, the loss of land and natural resources due to submergence can have profound socio-economic consequences for these communities, requiring legal mechanisms to address their rights and compensation.

A significant legal consequence that the island state may encounter is the diminishing sovereignty of its territory. Upon reviewing the case studies, the international community has noted that whenever a coastal state or island experiences flooding, the legal entity of that land dissolves because it is now below sea level. The state is at a loss as to how to resolve this issue, which is likely to recur in the near future due to the interference of the water with the land and vice versa. Relocation-related issues will be resolved with the implementation of a system for submerging island state sovereignty in terms of resource multiplication and land area beneficial to the state receiving the displaced people. Both the submerging state and the states providing habitat to these persons stand to win from this partnership, since each party experiences benefits unique to them.

¹⁷ UN. (n.d.). United Nations Framework Convention on Climate Change. United Nations Climate Change Retrieved March 1, 2024, from https://unfccc.int/

¹⁸ UNFCCC. (2015). ADOPTION OF THE PARIS AGREEMENT - Paris Agreement

¹⁹ UN. (n.d.-a). About Small Island developing states. Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States. Retrieved March 1, 2024, from https://www.un.org/ohrlls/content/about-small-island-developing-states

²⁰ UN. (1982). UNCLOS+ANNEXES+RES.+AGREEMENT. United Nations. https://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf

A support to "Submerging Island State Sovereignty (SISS)"²¹ is an idea that a state does not abstain from practicing its legal identity even after it is submerged. The lesson is that, should a state become submerged, it may still lease its submerged property as long as statehood is intact, and the lessee may continue to exercise its rights there until the lessor state revokes them. This has the potential to become a common method of displacing people while helping the state that is welcoming them. By using this strategy, a sinking state can take charge of the lives of those who have been displaced and relieve them of the burden of relocating.

(E) Major lessons from the disappearance of the Islands

The islands' disappearances provide us important lessons about how to deal with the challenges caused by sea level rise. It emphasizes the necessity of taking preventative action to lessen the effects of climate change and safeguard coastal areas that are particularly susceptible. First of all, the case study emphasizes how critical it is to identify and track sea level rise early on. Policymakers and scientists can create plans to lessen the effects and quickly put adaptive measures into place by regularly monitoring changes in sea levels. Second, the case study highlights how important it is for individuals to participate and engage. Building resilience and ensuring the long-term viability of coastal regions can be achieved through applying sustainable development techniques and including local communities in decision-making processes.

(F) Plausible Solutions

To protect low-lying islands and coastal regions from the impacts of sea level rise, a combination of adaptation and mitigation strategies is required. These include

- 1. Building and strengthening coastal defences, such as embankments and sea walls, to protect against erosion and flooding.
- 2. Implementing sustainable land-use practices to minimize the loss of natural protective barriers, such as mangroves and coastal vegetation.
- 3. Promoting community-based adaptation measures, such as the development of prewarning systems and the establishment of safe evacuation routes.
- 4. Investing in renewable energy sources and decreasing greenhouse gas emissions to mitigate the effects of global warming.

Islands' futures are under jeopardy. Although these islands are facing acute issues, there is still uncertainty about the region's long-term survival. The survival of these islands and the communities that depend on them are seriously threatened by the unrelenting advance of climate

© 2024. International Journal of Law Management & Humanities

²¹ Submerging Island State Sovereignty (Aditya, Radhika 2024)

change and the sluggishness of international response. But there's still hope. The Ghoramara and Lohachara Islands case study should act as a wake-up call to people, governments, and communities everywhere. It emphasizes how critical it is to take prompt, proactive steps to lessen the effects of climate change and prepare for them.

The Ghoramara and Lohachara Islands case study serves as a sobering reminder of the disastrous effects of sea level rise. The urgent need for international action to combat climate change and save vulnerable coastal regions is highlighted by these fading landscapes. We can create plans and policies to lessen the effects of sea level rise by comprehending the intricate network of environmental and human causes that have contributed to the demise of these islands. We may work to safeguard our planet and provide future generations with a sustainable future by implementing sustainable development methods, fostering international collaboration, and engaging the community.

IV. PRESENT LEGAL CHALLENGES

There were a total of fifty recognised States at the start of the twentieth century. Before the Second World War, there were roughly seventy-five. There are approximately 207 countries in the entire world as of August 1, 2016 (193 member states, 2 observer states, and 11 additional states). The formation of numerous new states is considered a significant political advancement of the 20th century. International organisations' operations and the nature of international law have evolved. It has been among the more significant causes of global strife. However, as there is no universally accepted definition of statehood in international law, defining "statehood" remains a challenging task. ²³

There are a few small island states that are "vanishing". ²⁴ Their lands are about to be taken over by the rising sea. The "Maldives, Kiribati, and Tuvalu" are among the states that are at risk. ²⁵ International law experts disagree on the subject whether or not these states loss of land will end up resulting in their loss of statehood. ²⁶ There would be far-reaching effects if a state were to lose its status. Other entities lack the rights that states possess. States have the right to employ force lawfully, for example, and they are the only entities that can claim jurisdiction

²² Upendra Raj Dulal, "Status of Submerged Island State under International Law: An Identity Crisis"

²³ MICHAEL SCHOISWOHL, "STATUS AND (HUMAN RIGHTS) OBLIGATIONS OF NONRECOGNIZED DE FACTO REGIMES IN INTERNATIONAL LAW: THE CASE OF SOMALILAND" 11(2004).

²⁴ Sumudu Atapattu, 'Climate Change: Disappearing States, Migration, and Challenges for International Law' (2014) 4(1) Washington J of Environmental L and Policy 1, 3.

²⁵ Jane McAdam, "Disappearing States', Statelessness and the Boundaries of International Law' in Jane McAdam (ed), *Climate Change and Displacement: Multidisciplinary Perspectives* (Hart Publishing 2010) 107-108.

²⁶ James Ker-Lindsay, 'Climate Change and State Death' (2016) 58(4) Survival 73, 81.

over the "International Court of Justice (ICJ)".²⁷ The people could become stateless as a result of sovereignty coming to an end raising concerns about migration and the viability of "en masse" evacuation.²⁸

(A) Legal Concept of State: -

We will examine the various definitions provided by various academics at various points in time in order to determine what state genuinely implies. The terms "state", "country", and "nation" are colloquial terms to describe what scholars of politics refer to as a "sovereign state", which is an entity with its own boundaries and fully autonomous governance. Although the definition of a sovereign state is debatable, we can start by counting all of the nations that are members or observer states of the United Nations (UN). Furthermore, a state is an organised people, or a group of people where a specific number of people's will consistently wins out.²⁹ A state requires both authority over a region and its citizens, as well as a legal system. 30 The contemporary state is the epitome of what communal life can be.³¹ A population under the control of a structured political authority and a territory constitute a state.³² 'A state may be recognized as a legal person even though it is involved in a dispute with its neighbours as to the precise demarcation of its frontiers, so long as there is a consistent band of territory which is undeniably controlled by the government of the alleged state'. 33 The elements of the Montevideo Convention were primarily intended as "criteria for assessing the creation of States and not as criteria for assessing the continuation of States". 34 This treaty was signed at the International Conference of American States in Montevideo, Uruguay on December 26, 1933. It entered into force on December 26, 1934. The treaty discusses the definition and rights of statehood. These facts include "effective control over a clearly defined "territory and **population**"; an organized governmental administration of that territory; and a capacity to act effectively to conduct foreign relations and to fulfil international obligations". State is cannot be said to be extinguished by substantial changes in its territory, population or government, or

²⁷ Emma Allen, 'Climate Change and Disappearing Island States: Pursuing Remedial Territory' (2018) Brill Open Law 1 https://doi.org/10.1163/23527072-00101008> accessed 3 July 2023

²⁸ McAdam (n 2) 112, 118

²⁹ Thomas Baty, *The Canons of International Law* (London, 1930) at 9-10

³⁰ Hans Kelsen, "The Pure Theory of Law and Analytical Jurisprudence" (1941-1942) 55 HARV.L.REV.44, at 69-70

³¹Clive Parry, "The Function of Law in the International Community" Manual Of Public International Law 6 (1968).

³² The EC Arbitration commission on Yugoslavia, 65 BYIL (1994) at 333.

³³ Malcolm N. Shaw, *International Law* (Cambridge University Press, 2003) 179. [Hereinafter "Shaw international laws"]

³⁴ N. Horbach, R. Lefeber & O. Ribbelink, *Handboek internationaal recht* (T.M.C. Asser Press, 2007) 166

³⁵ 13Eleanor C. McDowell, "Contemporary Practice of the United States Relating to International Law" 71 AM. J.INT'L L. 337 (1977).

even, in some cases, by a combination of all three.³⁶ That means, all the four criteria need to be present for a State to come into existence but the lack of all four may not mean the end of a State because of the strong presumption of continuity of existing States.³⁷ As said by Marek, "The presumption under international law is towards continuance of some kind – either as part of another, pre-existing state, or an entirely new successor state".³⁸

"Article 1 of Montevideo Convention" provides that a State should have the following qualification to be considered as a State under the international law:

- a) A permanent population
- b) A defined territory
- c) Government
- d) Capacity to enter unto relations with other states.³⁹

There always appears an open question under international law, whether the loss of a state's entire land mass due to rising sea levels means that the entity ceases to be a state.⁴⁰ But, the Montevideo Convention's definition of a state does not discuss the requirements for a state to continue to exist once it comes into being. Moreover, it has been argued that "a state is not necessarily extinguished by substantial changes in territory, population, government, or even, in some cases, by a combination of all three."⁴¹

(B) Legal Challenges:

Pursuant to UNCLOS, coastal States are entitled to maritime zones of jurisdiction measured from their baselines. Baselines are vital in defining the starting point from where the outer limits of maritime zones of a coastal State are measured, irrespective of the method used to designate 'normal' baselines⁴² or straight baselines⁴³ (or a combination of both);⁴⁴ or, in reference to an archipelagic State, archipelagic baselines⁴⁵. Moreover, baselines are also important in pursuing equitable solutions between States with opposite or adjacent coasts in the delimitation of the

³⁶ James Crawford, *The Creation of States in International Law* (Oxford: Clarendon Press, 2006)700.

³⁷ Supra note 1, at 5

³⁸ Supra note 15, at 31,36

³⁹ United Nations, "Montevideo Convention on the Rights and Duties of States" 1933; Article 1

⁴⁰ Duke E.E. Pollard, International Law and Protection of Small Caricom States, CARICOM PERSP., 1966, at 4, available at http://www.caribbeancourtofjustice.org/speeches/pollard/03Intl%20Law%20%20the%20Protection%20of%20Small%20States.pdf

⁴¹ JAMES CRAWFORD, THE CREATION OF STATES IN INTERNATIONAL LAW 36 (1979)

⁴² Art 5 UNCLOS

⁴³ Art 7 UNCLOS

⁴⁴ Art 14 UNCLOS

⁴⁵ Art 47 UNCLOS

maritime boundaries of their EEZ⁴⁶ and continental shelf.⁴⁷ Under the International Law the legal challenges faced by a sinking state could be:

a) Retaining of the existing baseline:

In the long term, one challenge could be to freeze the baselines drawn on charters and deposited with the Secretary-General of the United Nations as required by Article 16 UNCLOS. This solution to the challenge seems aligned to the original spirit of the UNCLOS as underlined by Judge Jesus:

"If account is taken of the fact that one of the main purposes of the 1982 Convention is to promote States' orderly relations over ocean resources and uses, then it would seem reasonable for the sake of stability that, once the baselines have been established and given publicity to, in accordance with relevant provisions of the 1982 Convention, such baselines should be seen as permanent baselines, irrespective of changes".⁴⁸

As a logical consequence, freezing baselines would also have the effect of freezing the outer limits of maritime zones.⁴⁹ What is more, any new oceanic area created as a result of sea-level rise, landward from the frozen baseline, would become 'internal waters' over which the State would have full sovereignty and jurisdictional control. Thus, the legal status of the new oceanic area would be no different from the status of the non-submerged territory.

Criticism to this approach is based on UNCLOS being negotiated when the phenomenon of sealevel rise was completely unknown, thus the aim to stabilise maritime boundaries was not conceived with the phenomenon of sea-level rise in mind but to preserve peace between States.

b) Retaining the current outer boundaries of maritime zone's:

States that have already established their maritime boundaries in a treaty would not be able to have them redrawn if a neighbouring State is affected by sea-level rise and consequently loses land territory. Nowadays, State practice seems to support this approach to promote the stability of maritime boundaries where there is a phenomenon of land reclamation; and it is reasonable to assume that such stability can also be invoked in the case of sea-level rise where the coastline of a State is affected by a limited erosive phenomenon.

However, many States enter into treaties with neighbouring States to fix their maritime

⁴⁶ Art 74 UNCLOS

⁴⁷ Art 84 UNCLOS

⁴⁸ JL Jesus, 'Rocks, New-born Islands, Sea Level Rise and Maritime Space' in J Frowein et al (eds), Verhandeln für den Frieden. Negotiating for peace: liber amicorum Tono Eitel (Springer 2003) 579 ff., 602

⁴⁹ RG Rayfuse, Rosemary, 'International Law and Disappearing States: Utilising Maritime Entitlements to Overcome the Statehood Dilemma' UNSW Law Research Paper No 2010-52 (7 November 2010) available at https://ssrn.com/abstract=1704835 6

boundaries in order to maintain the existing outer limits of their maritime zones in the event of serious threats to the survival of their land territory in high tide. For example, the Pacific Island Maritime Boundaries Project, ⁵⁰ launched by the Pacific Island Forum with the aim to facilitate the conclusion of these maritime boundary treaties between Pacific States, has resulted in 73% of boundaries being defined. This solution ends the uncertainty associated with unstable baselines from which the breadth of maritime zones is measured. The formation of such a regional custom, which would establish the freezing of maritime boundaries between the Pacific Island States, 51 does not, however, seem to address the legal consequences of sea-level rise in their entirety. In particular, it should be emphasised that such a custom would regulate only the relations between States of the same geographical area and would not be opposable to third States which, in the event of the disappearance of a State, could legitimately consider the marine space concerned as subject to the regime of the high seas and its subsoil and natural resources subject to the regime of the common heritage of mankind. Only a general practice accepted as law by UNCLOS contracting States would offer a stable and effective solution as a means to interpret the UNCLOS, according to Article 31(3)(c) of the 1969 Vienna Convention on the Law of Treaties.⁵²

c) Establishment of "Maritime States":

Freezing baselines and outer limits of maritime zones, in the event of a complete disappearance of a State due to sea-level rise, leads to the transformation of the concept of statehood so that it is no longer linked to land territory, but to the maritime element. Thus, the State would survive as a subject of international law, but it would be a 'deterritorialized subject', not to be confused with the well-known 'deterritorialized sovereign entities', such as the Holy See and the Sovereign Military Order of Malta.⁵³ In fact, unlike the latter, which only exercise a functional sovereignty to carry out their institutional missions, without having a people and a territory, the new subjects would exercise sovereignty and jurisdiction over well-defined areas of the globe, albeit only linked to the maritime element: a territorial sea, a continental shelf and an EEZ, and when established, a contiguous zone. In such a situation, these 'new deterritorialized states' would be entitled to exercise the powers that UNCLOS provides for any maritime area under

⁵⁰ https://gem.spc.int/projects/pacific-maritime-boundaries-programme

⁵¹ 'Pacific Islands Forum (PIF) Declaration on Preserving Maritime Zones in the Face of Climate Change-Related Sea Level Rise' (6 August 2021) available at <www.forumsec.org/ 2021/08/11/declaration-on-preserving-maritime-zones-in-the-face-of-climate-change-related-sea-level-rise/>; 'Alliance of Small Island States (AOSIS) Leaders' Declaration' (22 September 2021) para 41 available at www.aosis.org/launch-of-the-alliance-of-small-island-states-leaders-declaration/

⁵² Ibid

⁵³ Caligiuri, A. (2022, April 30). *Sinking States: The statehood dilemma in the face of sea-level rise*. QIL QDI. http://www.qil-qdi.org/sinking-states-the-statehood-dilemma-in-the-face-of-sea-level-rise/#_ftn54

the control of a coastal State. This would mean a shift from the concept of a 'territorial state' to that of a 'maritime state'. The eventual acceptance of frozen baselines would also provide the entity in question with full sovereignty over internal waters, which would extend over the entire geographical area formerly occupied by its submerged land territory.⁵⁴

V. WAY FORWARD

International organizations, such as the United Nations ⁵⁵ and its specialized agencies, play a critical role in addressing the legal challenges faced by sinking island nations. These organizations facilitate dialogue, cooperation, and the exchange of best practices among nations. They also provide technical and financial assistance to support the implementation of adaptation and mitigation measures between like-minded states.

Moreover, international organizations can support and facilitate the improvement of legal frameworks and guidelines custom-made to the unique circumstances of submerging islands. By promoting collaboration and knowledge sharing, these organizations can assist in bridging the gap between existing international laws and the specific needs of nations coping with the legal implications of sea level rise.

(A) Potential Solutions and Mitigation Strategies

The dire need of finding sustainable solutions to the legal challenges of submerging islands requires a multi-faceted approach. One key aspect is the implementation of adaptation and mitigation strategies to minimize the impacts of sea level rise. This includes investing in coastal protection measures, promoting sustainable development practices, and reducing greenhouse gas emissions.

Moreover, nations must work towards strengthening international legal frameworks to address the unique circumstances of submerging islands. This may involve revisiting existing treaties, establishing new legal mechanisms, and ensuring the inclusion of sinking island nations in decision-making processes related to climate change and sea level rise. The need to address the sovereignty claim over the submerged land need to be accessed. There is indeed a gap of identifying the "Submerging Island State Sovereignty (SISS)" ⁵⁶ which will help mediate the issue of territories. It will be helpful for the state dissolving the relocated people to accept them with open arms once it realises the geostrategic benefit among others. This way it will be easier for island countries to lease their lands to the relocated state with perpetuity and revocable by

⁵⁴ Ibid

⁵⁵ Nations, U. (n.d.-a). About us. United Nations. Retrieved March 10, 2024, from https://www.un.org/en/aboutus ⁵⁶ Ibid

the lessor state on and when advisable. As far as the expiration of this lease is concerned, it may depend on what both the states decided or as and when deemed necessary.

If the global community finally conceded that resource depletion is unavoidable but that equitable sharing is the best way to protect humanity from the threat of sea level rise, the issue of statehood and its legal ramifications might be settled.

(B) The Importance of Collaboration and Cooperation in Addressing the Issue

Addressing the legal challenges of submerging islands requires collaboration and cooperation among nations, international organizations, and other stakeholders. The developed and developing countries must help each other by sharing knowledge, expertise, and resources, these entities can collectively develop comprehensive solutions that consider the rights and well-being of affected displaced populations. Furthermore, collaboration can help foster a sense of global responsibility and solidarity in addressing the root causes of sea level rise. By working together to reduce greenhouse gas emissions and mitigate climate change, states can contribute to the long-term preservation of sinking island states and the protection of their legal rights.

(C) Call to Action

The legal challenges faced by submerging islands due to sea level rise are complicated and multifaceted. From determining sovereignty and territorial claims to protecting the rights of displaced populations, these challenges require careful consideration and resolution. By understanding the legal implications and examining international frameworks, national responses, and case studies, policymakers and stakeholders can work towards finding sustainable results that prioritize both the affected populations and the preservation of their rights in the face of a dark future.

It is vital that international organizations, nations, and individuals take action to address the root causes of sea level rise and support sinking island nations in their legal battles. By advocating for stronger legal frameworks, promoting collaboration, and implementing adaptation and mitigation strategies, we can strive towards a future where the legal rights of nations and communities facing submerging islands are protected and upheld. Together, we can make a difference in the fight against the legal challenges of sea level rise.
