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Integrating the Climate Change Migration Paradox into the Maritime Jurisdiction of Small Island Developing Countries (SIDs)†

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ABSTRACT

The United Nations Convention on the Law of the Sea (UNCLOS) provides monumental effort in maritime jurisprudence. However, Climate change (CC), and its impacts are threatening the preservation of maritime rights especially for Small Island Developing States (SIDS). The complex effects of CC are meted out on SIDS populations, their jurisdiction and in a worst-case scenario-loss of territory. This review paper probes this through a lens that analyzes Maritime Law policy challenges facing SIDS, and emerging legal challenges therein due to CC. The core effects of CC explored relate to how CC affects the determination of the rights of SIDS and their complex socioeconomic systems. Current literature shows a gap in addressing the concerns of SIDS. We propose two policy suggestions (i) draft an article/injunction in UNCLOS to define future jurisdiction for SIDS and (ii) create specific provisions specifically on safeguarding the sovereignty of SIDS and CC vulnerable populations.

Key words : climate change migration, maritime jurisdiction, climate change refugees, small island developing states, blue economy

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1. Introduction

This paper explores the maritime laws and jurisdictional rights related to Island states to document the different legal mechanisms in Small Island Developing States (SIDS) and the extent to which the concept of climate change (CC) refugees and SIDS' maritime jurisdictional rights are addressed by current maritime legislations.

For the last four decades, the United Nations Convention on the Law of the Sea (UNCLOS); dubbed '*the constitution of the Oceans*' has successfully provided legal guidance and sanctity on maritime law of both coastal states and SIDS (Ashley Roach, 2014; Hassanali, 2022). Unfortunately, increasing evidence of CC and its global impacts are increasingly threatening the benchmarks used in negotiating maritime jurisprudence; especially for SIDS in the 21st century (Boyle, 2005; IPCC, 2022). Maritime research has demonstrated that the increasing frequency and magnitude of CC-induced disasters such as drought, floods, typhoons and storm surges, tsunamis, cyclones, and global ocean warming are threatening livelihoods, socioeconomic systems, and infrastructure (IPCC, 2021). On a spatial and temporal scale, CC effects are projected to be more devastating to coastal regions and poor SIDS (Yamamoto and Esteban, 2011). The increasing sea-level rise and ocean acidification has exposed low-lying coastal zones and SIDS to vulnerabilities of submergence (Rayfuse, 2009). Since the 1990s, the number of vulnerable coastal people due to sea-level rise has increased from 160 million to 260 million; 90 percent of whom are sedentary in poor developing states and SIDS (UNHCR, 2021). Storm surges, typhoons, and tsunamis have accelerated coastal erosion and biodiversity loss reigniting prospects of 'climate change refugees, loss of SIDS territory, and loss of state sovereignty due to the projected disappearance of some SIDS in the near future (IPCC, 2022; Rayfuse, 2009; Yamamoto and Esteban, 2011). The Ecosystem Threat Register (ETR) projects that about 1.2 billion people could be '*Climate change-induced Refugees'* by 2050 and urgent policies to mitigate and adapt to this reality are urgently needed (Institute for Economics and Peace, 2018). According to the Convention on Biological Diversity Strategic Plan (2011–2020), supporting SIDS and protecting their maritime territories could supplement efforts for sustainable territorial protection and management (Techera, 2019). These benefits extend even to Areas Beyond National Jurisdiction (ABNJ) surrounding SIDS that are crucial in enforcing other legislations such as on migratory species (Coelho, 2022).

However, there is increasing recognition of the CC effects on marine ecosystems and resources in ABNJ, there is limited scholarship on understanding the issue of climate displaced persons-climate refugees and the future jurisdiction of SIDS in a scenario of CC-induced disappearance (The Commonwealth, 2014). In other words, SIDS face uncertain futures because of the very real threat of CC causing sea level rise and submergence of their land territory (inundation)-that

could extend continental shelves of some territories; e.g., in the Continental Shelf Outer Limit Claims of 2008 between the Bahamas, Barbados, Costa Rica, and Suriname scenario (Russell and Macnab, 2008; UNIDO, 2019). The threatened loss of their homes, extinction of SIDS people's cultures, and the unwelcome prospect of becoming CC refugees prove a looming eventuality of SIDS of losing their rights of sovereignty in International law (Turkas, 2022; World Bank, 2020).

Several studies concur that laws and regulations are critical in ensuring maritime governance and protection of territorial iintegrity (Techera, 2019); but current provisions in International refugee law and the UNCLOS are either subjective on the issue of CC refugee stipulation or do not directly or adequately address the concerns of SIDS threatened by inundation respectively. Article 1(A) (2) of the 1951 Refugee Convention (Geneva Convention) and the 1967 Protocol Relating to the Status of Refugees are subjective on CC-induced refugees (Hathaway, 2005). In addition, the criteria enumerated in the Montevideo Convention in the case of an inundated state crop up worrying conclusions and questions for the SIDS threatened with inundation such as *permanent population* and *defined territory* (Huang et al., 2021; World Bank, 2021). In other words, what criteria will determine the permanent population of a given SIDS if CC has denuded her maritime territory and rights? Will other states continue to recognize the sovereignty of inundated SIDS? And if so, how long will such sovereignty last given the absence of territory or population? (Hathaway, 2005).

Furthermore, Article 76 of the UNCLOS places undue emphasis on complying with the demands of the Technical, and Scientific Guidelines (CLCS/11) that deters the designing of a holistic approach to seabed exploration and subsequent sustainable exploitation in threatened SIDS Exclusive Economic Zones (EEZs) (Burgess et al., 2021; Russell and Macnab, 2008); the stipulated survey methodologies for non-living resource skews water measurements for bathymetry and marine biological research (Artack and Lal, 2004). Thus, most SIDS with wide EEZs are increasingly vulnerable to logistical and financial requirements for commissioning and conducting surveys as stipulated under Article 76 of the UNCLOS yet feasible legal frameworks such as the Warsaw International Mechanism for "Loss and Damage" associated with impacts of CC is in its infancy (SPLOS, 2008). This raises several concerns related to SIDS: the identification and creation of support mechanisms to reduce their vulnerabilities related to CC and strengthening of maritime provisions to ameliorate tensions related to the challenges in implementing maritime law that most SIDS do face.

Thus, there is a palpable risk that under current provisions of the UNCLOS, loss of territory might extinguish existing claimed maritime boundaries of SIDS-as maritime boundaries are calculated from the coastal baselines or marine resources, and populations of inundated SIDS might lose their rights as most countries hardly apply the "*non-refoulement principle*" (UNHCR, 2018). This insightful and thought-provoking debate formed the focus of this literature review paper

that aims at probing and identifying the current and projected CC-induced risk facing SIDS, existing gaps in the regime of SID, and document the current interventions (legal and socioeconomic) aimed at sustainably protecting the jurisdiction of SIDS in case of CC and environmentally induced disasters.

2. Methodology

This research paper is based on a non-systematic desktop review of maritime laws and regulations related to SIDS. These maritime laws and regulations analyzed were extracted, reviewed, and examined from reports, articles, and resolutions relating to the maritime jurisdiction, dated until March 2022. Jurisdictional laws and regulations related to SIDS were specifically analyzed partly because SIDS share more or less similar concerns related in part to their being developing states such as a lack of special rules related to Marine Scientific Research (MSR) and technology in the Area (Coelho, 2022), highly dependent on the maritime environment (Djunarsjah and Putra, 2021), and are experiencing increasing threats of CC such as in Kiribati (Techera, 2019). Most of these rules avail contradicting legal systems and are hardly implemented related to their application in SIDS' issues and emerging efforts by SIDS to advance their maritime challenges have not fully been incorporated into crucial legal discussions (Alam et al., 2013).

This paper, therefore, is based on a state-of-the-art analysis of maritime laws and literature related to SIDS maritime rights and territorial jurisdictions. To obtain the literature, an online search of important legislative instruments was conducted including PacLII (https://www.paclii.org), AustLII (https://www.austlii.edu.au), FAOLEX (https://www.fao.org), the United Nations Division of Ocean Affairs and Law of the Sea (DOALOS), and International Maritime Organization (IMO). A further search was conducted on legal databases for maritime jurisdiction that governs BBNJ, and the Area and this was accessed through reports and publications of international and regional maritime organizations and divisions such as the United Nations Office for Disaster Risk Reduction (UNDRR), Regional Law of the Sea Institutes such as Yeosu Academy of the Law of the Sea (YALOS), Korea Maritime Institute (KMI), International Maritime Law Institute (IMLI), and subnational institutes such as the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the Association of Southeast Asian Nations (ASEAN), The Pacific Community (SPC), and Alliance of Small Island States (AOSIS), and subnational institutes such as the ESCAP and the ASEAN, SPC, and AOSIS.

A broader search was also conducted using specific search terms such as 'climate change refugees', 'the Small Island States and maritime laws', 'SIDS and climate change', 'UNCLOS and SIDS', and 'Environmental Refugees and SIDS.' The results obtained were sieved through by reading their abstracts after which

legislative reports and publications that were not related to SIDS, UNCLOS, and CC were removed. The scoped results mainly included statutes and legal instruments related to Island States, Area, and emerging concerns in the BBNJ and related ordinances and Acts especially in the Pacific and Caribbean Island Developing States that are specifically designated to address the governance challenges of SIDS (Table 1).

Using the online search tool accessed via the website of the United Nations Codification Division, statements and legislative interventions related to SIDS were further accessed; especially those related to the consent regime, and the developments in legislation related to the maritime jurisdiction of SIDS. Each identified legislation, ordinance, or Act obtained was further analyzed to identify the extent to which it incorporates the issues of SIDS especially CC, the maritime resources, and populations of SIDS in tandem with the recommendations of Principle 10 of the 1992 United Nations Conference on Environment and Development. Most of the identified sources included plenary discussions and resolutions, meetings, and resolutions from committees; though not all sources were included as they did not directly relate to CC and SIDS. To identify the feasibility of existing maritime laws in addressing the CC concerns and jurisdictional rights of SIDS, a typology of key elements were considered in analyzing the legislation (i) the meaning of a concept in relation to existing legislative practice, (ii) implementation procedures and processes in relation to SIDS and (iii) current gaps related to the state of SIDS in relation to environmental issues, maritime powers, and ability/inability to implement a given maritime law within their (SIDS) jurisdiction. Based on this

Table 1. Selected maritime legislations scoped and analyzed in the study

Scoped and analyzed maritime law	Area of jurisdiction
UNCLOS (1982)	International
Geneva Convention (1951)	International (refugees)
Montevideo Convention (1933)	International (refugees)
Protocol Relating to the Status of Refugees (1967)	International (refugees)
Convention on Biological Diversity (1993)	International
Rio Declaration on Environment and Development (1992)	International
High Seas Treaty (2022) (Proposed)	International (area)
Protected Area Act (2010)	Solomon Islands
MARPOL (1978)	International
Pacific Islanders Protection Act (1872)	Pacific Island States
Caribbean Basin Economic Recovery Act (CBERA) (1983)	Caribbean States
Marine Protected Area Ordinance (2016)	Pitcairn Islands
Suva Declaration on CC (2013)	Pacific Islands States

CC: climate change; UNCLOS, United Nations Convention on the Law of the Sea.

analysis, the article is portioned into sections including (a) Contextual meaning of Island states in Maritime Law, (b) Existing risks and challenges facing SIDS, (c) Legal challenges facing SIDS in relation to Maritime Law, (d) Current interventions relating to the jurisdiction of SIDS.

3. The Contextual Origins of the Meaning of Island and the Challenges Facing SIDS in Maritime Law

The Second World Ocean Assessment report portrays the vulnerabilities of SIDS in relation to their maritime rights and capacities stemmed from the inequalities in the initial international negotiations relating to the ocean (Vadrot et al., 2021). The historical maritime law negotiations and resolutions were hardly linear and reinforced the powers of major coastal states which restrain interpretation (partly due to colonial science in SIDS) and clarity on several provisions; especially related to marine research in Part XII and Part XIII (Long, 2007); and thus require review and revisiting of several ‘consent regimes' (Galindo, 2015). These gaps have perpetuated misrepresentations and promulgation of crucial provisions for SIDS (De Vos, 2020). During UNCLOS I, the SIDS imbalances and crippled representation of SIDS’ needs and future aspirations came to the fore as only Cuba, Haiti, and the Dominican Republic represented SIDS (UNCLOS, 1958). During UNCLOS III, most SIDS’ interests related to their maritime jurisdictions were compromised by either their previous colonial masters or the lack of capacity in maritime research and negotiations (Tanaka, 2013). Sound actions and discussions only gained ground after the adoption of the New International Economic Order (NIEO) (Grote, 2010); though these positive discussions started to fold in the late 1980s (Coelho, 2022). This implied that most resolutions of the UNCLOS do not have special rules devoted to SIDS and interventions to reduce environmental vulnerabilities such as CC are spearheaded through regional bodies in SIDS regions such as CARICOM and AOSIS (Chasek, 2005).

The lack of a binding force and mechanism to promote maritime governance of SIDS has been well documented in the subjective nature of definitions of maritime rights of SIDS and the inequalities in accessing maritime resources or enforcing their maritime jurisdictional rights in their territories (Slade, 2003). The International Law Commission report reported that though current ABNJ and BBNJ negotiations are partly focusing on the revision of the common heritage of humankind principle, persistent asymmetries related to CC vulnerabilities of SIDS are less incorporated (Rogers et al., 2021).

3.1 Contextual, and Historical Definition of an Island in Maritime Law

Several scholars have documented that one of the great concerns in ocean governance has been the failure of the negotiating groups in the 1950s–1970s to define the islands (Coelho, 2022). Though the contextual discussions came to the fore in the 1930 Hague Codification Conference (Hiro, 2014); the definitions lack mechanisms that incorporate spatial and temporal changes emanating from demographic, social, and environmental changes (Colombos, 1973). Initial descriptions related to "*An island near the mainland. An island at a distance from the mainland. A group of islands; how near must islands be to one another to cause the whole group to possess a single belt of territorial waters.* "According to Quirk and Hanich (2016), this description negated the issues of ecological connectivity and traditional knowledge of SIDS related to the BBNJ around their maritime zones.

The 1956 International Law Commission Report defined under Provision II (Articles concerning the law of the sea), Part I (Territorial Sea), Section II (Limits of the Territorial Sea), and Article 10 (Islands) expounded that; "*Every island has its own territorial Sea. An island is an area of land surrounded by water, which in normal circumstances is permanently above the high-water mark"* (Colombos, 1973). However, the report was dotted with cynical gaps relating to the future loss of Island territory (Hiro, 2014). For instance, Article 10 contradicts the use of the term "abnormal circumstances" due to climatic or weather conditions in contrast to "normal circumstances" (Yamamoto and Esteban, 2011). Defining islands as "*permanently* above the high-water mark," negates the prospect of the island lying below the high-water mark, regardless of the circumstances (Burgess et al., 2021). This can be interpreted as intended to withhold the status of an island from land that is below the high-water mark in other than "normal circumstances" (Hiro, 2014). Based on the current provisions of UNCLOS III, a state or island ceases to be considered so, and does not possess territorial waters; if; technical installations are set up on the seabed for exploitation of the continental shelf, or when it is submerged as elevations must be above the high tide elevations (UNCLOS Article 121). Even if an installation is built on such an elevation and is itself permanently above water--a lighthouse, for example--the elevation is not an island. Paragraph 3 of Article 71 in the draft states: Such installations, though under the jurisdiction of the coastal State, do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea of the coastal State (Burgess et al., 2021). This further means that SIDS maritime jurisdictions negate temporal social and territorial changes as provided for in Article 10 of the 1958 Convention on the Territorial Sea (CTS) which states that an Island is; *A low tide elevation is a naturally formed area of land which is surrounded by and above water at low tide but submerged at high tide*.

The current legal regime and definition of an Island in under the UNCLOS hovers around naturally formed land areas that are wholly surrounded by water

(Sea) (Caron, 1990). This implies that an Island in Maritime Law can be a Rock, Atoll, or Reef (Hiro, 2014). In addition, the Law of the Sea Convention (LOSC) postulates that Islands possess the same maritime zones as other landmasses, including a territorial sea, contiguous zone, EEZ, and continental shelf (Russell and Macnab, 2008). Therefore, an Islands does not need to be inhabited to create those maritime zones; rather it should be *capable* of sustaining human habitation or economic life (UNCLOS, 2016, Part VIII, p. 63). An Island can be an archipelagic state or a part of an archipelagic state (Article 46 (a) (b)). However, UNCLOS Article 121 (3) highlights that if a rock does not have human habitation, or sustain economic activity, it '*shall have no exclusive economic zone or continental shelf*.' Thus, the definition of rock is just a legal term and does not refer to any particular type of coastal geological formation (Yamamoto and Esteban, 2011). For example, a sand spit or sand bar can be considered a rock (Hiro, 2014). Therefore, the core definition of islands is embodied in UNCLOS Article 121, and the CTS Geneva treaty regulates islands in Article 10. Article 121 (1) of the UNCLOS defines an Island as "*An island is a naturally formed area of land, surrounded by water, which is above water at high tide*." p. 66. UNCLOS Article 121 (2) further explains the criteria for determining an Island as; "*Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone, and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory*" (UNCLOS, 2016, Part VIII, p. 63).The UNCLOS definition of an Island shows that artificial islands even in the EEZ of a coastal state hardly qualify as islands; as they are not naturally occurring; which subdues sustainability regulations for SIDS in strengthening scientific and technological needs due to environmental changes (Coelho, 2022). In addition, UNCLOS Article 60 applies *mutatis mutandis* to artificial islands, installations, and structures on the continental shelf, and EEZ (UNCLOS Part V, p. 41). Article 60 (8) categorically states that, "*Artificial islands, installations, and structures do not possess the status of islands. They have no territorial sea of their own, and their presence does not affect the delimitation of the territorial sea, the exclusive economic zone or the continental shelf*." (p. 45).

The description of an Island is precisely problematic due to a lack of a consensus among parties on which mechanism to classify an Island; especially for coastal states and also the fear by major coastal states to forfeit colonial science gains from the privileges of Article 5 (8) of the CSC related to the freedom of seas; especially in conducting MSR in the BBNJ and around the EEZ of SIDS with less capacity in technology, finance, and human capital (Tanaka, 2013). According to Gorina-Ysern (2003), UNCLOS III provisions on Islands preclude the need to revise the long-standing principle for sustainable development developed during the Rio Summit of 1992 and Agenda 2030 on ocean and CC vulnerabilities facing SIDS (World Ocean Assessment II, 2021).

3.2 Definition and Extent of Small Island Developing States (SIDS)

Since 1992, SIDS have been championing equity in maritime governance and the sustainable use of marine resources (UNCTAD, 2014a). The conceptual meaning of SIDS is documented in international policy frameworks focusing on the Blue Economy (BE) which shows that SIDS are scattered across the Caribbean Sea, the Atlantic Ocean, the Indian Ocean, the South China Sea area and the Pacific Ocean (UN-OHRLLS, 2018). Crucial commonalities of SIDS are they share a history of colonialism, consider the ocean as sacred, and the source of their livelihood (Coelho, 2022). The United Nations International Development Organization (UNIDO) defines SIDS as relating to the magnitude of environmental vulnerabilities and risks, geographical location in the Maritime Areas, small geographical size, and high dependence on limited natural resources (UNIDO, 2019). SIDS are marine island nations experiencing high levels of socioeconomic, and environmental vulnerabilities mainly due to changing CC and declining marine ecosystem resources (World Bank, 2020). The maritime location and disadvantaged geography of SIDS increasingly make them vulnerable to environmental shocks as they have a small resource base, are highly dependent on imports, face high energy costs, have infrastructure and transportation problems, fragile natural environments, and very less resilience to natural disasters (ECLAC, 2010; The Commonwealth, 2014). The increased vulnerabilities of SIDS have created special case scenarios to develop pathways for sustainable development of SIDS in line with the United Nations BE Framework and Agenda that was birthed at the Rio Earth Summit (CBD, 2013; Conservation International, 2013; UNCTAD, 2014b).

Geographically, SIDS are located in a typology of maritime geographical regions: (i) Caribbean, (ii) Pacific, and (iii) the Atlantic, Indian Ocean, Mediterranean, and South China Sea (AIMS) (UNHCR, 2021). According to the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States (OHRLLS), currently, there are 38 SIDS are UN member states (Table 1) and 20 SIDS are either

Table 2. UN Member SIDS

Country	Maritime geographical region/ zone/ocean	Country	Maritime geographical region/ zone/ocean
1. Bahrain	AIMS (Indian Ocean)	5. Maldives	AIMS (Atlantic Ocean)
2. Guinea-Bissau	AIMS (Atlantic Ocean)	6. Seychelles	AIMS (Atlantic Ocean)
3. Sao Tome and Principe	AIMS (Atlantic Ocean)	7. Comoros	AIMS (Atlantic Ocean)
4. Cape Verde	AIMS (Atlantic Ocean)	8. Mauritius	AIMS (Atlantic Ocean)

9. Singapore	AIMS (Atlantic Ocean)	24. Dominica	Caribbean
10. Antigua and Barbuda	Caribbean	25. Barbados	Caribbean
11. Belize	Caribbean	26. Fiji	Pacific Ocean
12. Dominican Republic	Caribbean	27. Federated States of Micronesia	Pacific Ocean
13. Haiti	Caribbean	28. Papua New Guinea	Pacific Ocean
14. Saint Lucia	Caribbean	29. Timor-Leste	Pacific Ocean
15. Trinidad and Tobago	Caribbean	30. Vanuatu	Pacific Ocean
16. Bahamas	Caribbean	31. Kiribati	Pacific Ocean
17. Cuba	Caribbean	32. Nauru	Pacific Ocean
18. Grenada	Caribbean	33. Samoa	Pacific Ocean
19. Jamaica	Caribbean	34. Tonga	Pacific Ocean
20. Saint Vincent and the Grenadines	Caribbean	35. Marshall Islands	Pacific Ocean
21. Suriname	Caribbean	36. Palau	Pacific Ocean
22. Saint Kitts and Nevis	Caribbean	37. Solomon Islands	Pacific Ocean
23. Guyana	Caribbean	38. Tuvalu	Pacific Ocean

Source: Sustainable Development Goals Knowledge Platform (2020). https://sustainabledevelopment.un.org/
SIDS, Small Island Developing States.

Table 3. Non-UN Members/Associate Members of Regional Commissions SIDS

Country	Maritime geographical region/zone/ocean	Country	Maritime geographical region/zone/ocean
1. American Samoa	Pacific	11. Martinique	Caribbean/Atlantic
2. Bermuda	Caribbean	12. Niue	Pacific
3. Guam	Pacific	13. Turks and Caicos Islands	Atlantic Ocean
4. New Caledonia	Pacific	14. Aruba	Caribbean
5. Sint Maarten	Caribbean	15. Cayman Islands	Caribbean
6. Commonwealth of Northern Marianas	Pacific	16. Curacao	Caribbean
7. Anguilla	Caribbean	17. Guadeloupe	Caribbean
8. British Virgin Islands	Caribbean	18. Montserrat	Caribbean
9. Cook Islands	Pacific	19. Puerto Rico	Caribbean
10. French Polynesia	Pacific	20. U.S Virgin Islands	Caribbean

Source: Sustainable Development Goals Knowledge Platform (2020). https://sustainabledevelopment.un.org/
SIDS, Small Island Developing States.

Non-UN member states or Associate members of Regional Commissions (Table 2, 3) (UN-OHRLLS, 2018).

4. Existing Risks and Vulnerabilities Facing Small Island Developing States (SIDS)

Studies show that since the initial negotiations related to maritime governance in UNCLOS I, concerns about SIDS have been secondary (Rogers et al., 2021). The inequalities have been perpetuated under UNCLOS II and III, especially in relation to frameworks related to the MSR (Manoa, 2016). The level of risk is compounded by a lack of a core legal instrument to regulate the activities in the jurisdiction of SIDS and the top-down nature of initiatives or institutional mechanisms to help in maritime governance in SIDS (Coelho, 2022). In most cases local initiatives; some of which predate international maritime governance efforts such as the *tabu* in Vanuatu have been ignored in maritime governance discussions (Techera, 2005). In addition, as Techera (2019) observed, most of these initiatives lay less emphasis on sustainable legislation related to CC issues that threaten the maritime jurisdictional rights of SIDS. SIDS are documented as highly volatile countries with a plethora of vulnerabilities (UN, 2015). Equally relevant is that the influence of SIDS in most discussions and negotiations is in form of observer status thus constraining the championing of inclusive debates to create a binding legal instrument to support SIDS (Tanaka, 2013).

The SAMOA Pathway recently reported that SIDS, especially in the Pacific-rim such as Kiribati and Tuvalu are prone to myriad environmental hazards and several disasters owing to its geography and location in the '*Pacific Ring of Fire*' (ADB, 2015; Polidoro et al., 2022). The spatial disadvantages of several SIDS that are located in disadvantaged and farfetched zones affect the economy of most SIDS, low economic base, heavy reliance on nature and imports, and fragility of ecosystems due to high dependence (UNDRR, 2017). The breakdown of anthropogenic technical, structural, and environmental risks and vulnerabilities below puts into perspective the challenges facing SIDS (UNWTO, 2012).

4.1 Marine Pollution and Waste

Historically, SIDS have been the least global polluter. SIDS generates about 0.02% of greenhouse gas emissions (UNDRR, 2017). The ratio of waste generation in SIDS is low compared to OECD countries at 1.2: 1.35 kg/capita/day respectively (Mohee et al., 2015). But SIDS are among those who stand to experience the most risks and challenges emanating from terrestrial and marine pollution (UNDRR, 2017). SIDS are located in the paths of marine plastic gyres, have a small land area for setting up landfills, and the poor waste management attitudes (Polidoro et al., 2022; UNEP, 1999). This could have dire effects on the revenues emanating from services such as tourism owing to health warnings about infec-

tious and vector-borne diseases, and the poor aesthetics of litter in the streets (UNIDO, 2019). The health concerns relating to waste management in SIDS have affected local food markets and the exportation of seafood emanating from SID to OECD (ADB, 2015). The cost of internally and externally generated waste and its management is increasing in SIDS (UNCTAD, 2021). In Tonga, for instance, the cumulative annual economic cost of improper waste management and disposal has skyrocketed to about 5.6 million USD! (Agamuthu and Herat, 2014). In addition, the application of the Basel and Waigani Conventions has been subjectively applied in SIDS; especially in the South Pacific Zone as ballast and other hazardous waste is spilled over by long-liners and vessels in their EEZs (Mohee et al., 2015; UNEP, 1999). Globally, Maldives has the highest level of microplastic pollution affecting pristine marine life and food sources that sustain the local economy (Phys.org, 2020).

In addition, SIDS especially in the Caribbean such as Barbados, and Jamaica are stifled by the legal and technical obstacles preventing the efficient implementation of MARPOL 73/78, and application of Special Area statutes for the Wider Caribbean area under Annex V of MARPOL such as the development of robust systems for port waste reception facilities and public awareness campaigns (UNIDO, 2019).

4.2 Limited Financing, Technical Expertise, and Trade for Development

The paucity of human and financial resources limits the range of possible options for the sound development of sustainable investments and solutions for disaster risk financing and recruitment of technical expertise for the development of inclusive solutions for SIDS (Russell and Macnab, 2008). Geospatial isolation of SIDS shots up travel costs for potential economic sectors and investments in marine sectors such as tourism (UNWTO, 2012). The World Trade Organization (WTO) financing criteria are rocket science for most poor SIDS such as Tuvalu due to stringent financing conditionalites (Mohee et al., 2015; The Commonwealth, 2014). 37 percent of SIDS are Non-UN Member states thus deprived of the international fora on financing and global trade regulating organizations-International Monetary Fund (IMF), World Bank, and WTO respectively (Sustainable Development Knowledge Platform, 2020). Jamaica has experienced annual average losses between 1991 and 2011 equivalent to 2.6 percent of its average annual investment leading to impeded and sluggish national growth (UN-OHRLLS, 2018). In addition, Official Development Assistance (ODA) to SIDS is low. In 2011, Anguilla received a paltry 0.42 million USD in ODA (OECD, 2011)! During the COVID-19 induced lockdowns the Gross Domestic Product (GDP) of SIDS was projected to decline further by 9 percent (UNCTAD, 2021). The 2006 UNESCO report from the 3rd Global Conference on Oceans, Coasts, and Islands categorically lays bare this conundrum that; "*Despite the fact that SIDS have large ocean areas rich in resources (fisheries, oil and gas, minerals, renewable energy), many island States*

are unable to benefit from the existence of these resources within their EEZ as a result of inadequate technical, financial, and management capacity." (Russell and Macnab, 2008).

4.3 Marine Transportation and Communication Hiccups

Because of their geographical location, small population, and high investment costs (UNIDO, 2019). SIDS have been vulnerable to accessibility and connection problems which have increased transnational crime, laundering, and trafficking. SIDS are increasingly experiencing varied, complex and many marine transport challenges with a great external threat stemming from globalization (UN, 2015). The vast EEZs are increasingly leading to ocean added security vulnerability of the islands emanating from Non-Flagged vessels, as did the growth in transnational organized crime, which tests the ill-equipped law enforcement agencies (The Commonwealth, 2014).

4.4 Natural Disasters

For the last 50 years, over 650 hydro-meteorological disasters have impacted SIDS, affecting more than 35 million people and causing approximately US$ 34 billion in damages (WMO, 2022). Since 2001, the magnitude and frequency of natural hazards of meteorological, hydrological, and climatological nature have exponentially increased (Center for Research on the Epidemiology of Disaster, 2020). Extreme weather events such as floods, geophysical hazards such as tsunamis and earthquakes and CC are affecting SIDS populations and increasing the cost of mitigation and adaptation (UNDRR, 2022). The 2016 Hurricane Matthew in Haiti decimated over 600 people and led to losses equivalent to 32 percent of Haiti's Gross Domestic Product (Global Platform for Disaster Risk Reduction, 2017). The small geographical sizes and small populations of SIDS accelerate disaster risk as to the recurrence of natural disasters such as storms surges, hurricanes, and floods delays short-term and long-term socioeconomic recovery mechanisms (Huang et al., 2021). In fact, SIDS are prone to the most catastrophic form of floods worldwide that emanate from catastrophic events such as quakes (WMO, 2018).

4.5 High Dependence on Marine Natural Resources

One of the covert risks facing SIDS is over-dependence on finite marine natural resources (IORA, 2019). 90 percent of SIDS either directly or indirectly rely on marine goods, resources, or services for their socio-economic development (The Commonwealth, 2014). SIDS such as Guinea Bissau, Tuvalu, and New Caledonia basically rely on natural biodiversity resources for socioeconomic survival

(UNDRR, 2022). Increased Illegal, unreported, and unregulated marine resource exploitation practices such as IUU fishing in the EEZs of SIDS have ruined socio-economic survival and led to expulsion from marine fishing cooperation (UNCTAD, 2021). The issuance of a 'yellow card' to Kiribati over unregulated fisheries governance by the European Union from 2016-to 2020 threatened local revenue sources secured through the selling and issuance of access permits to distant marine fishing nations such as Japan and China (Holland, 2020).

Overfishing by local fish communities in SIDS and increasing IUU fishing have drastically reduced valuable marine species such as sea turtles, some shark species, and corals in contravention of Appendix 1 and 2 of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) (The Commonwealth, 2014; UNCTAD, 2014b). The intricacies of dependence have stymied the GDP of SIDS. The average GDP of SIDS is estimated at 13.7 billion USD though states such as Singapore fetch in excess of 222.7 billion USD (World Bank, 2011).

5. Legal Challenges Facing Small Island Developing States (SIDS) in Relation to Climate Change and Maritime Law

5.1 Catastrophic Sea-Level Rise

One of the wicked challenges engulfing SIDS is the increasing sea-level rise mainly emanating from CC (IPCC, 2022). The ripple effects of CC such as an increase in coastal flooding, and storm surges are more pronounced across the globe; especially in the Pacific Ocean dotted with Atoll states such as Tuvalu, Kiribati, and the Marshall Islands (World Bank, 2020). Studies postulate that in the West Pacific Ocean, the sea level has been rising at a rate of 2–3 times higher than the global average (World Bank, 2021). By 2100, it is estimated that the sea levels will rise between 0.5 to 1.1 meters (IPCC, 2021). An increase in sea level is increasingly jeopardizing the historical maritime regime in relation to entitlement to marine resource zones, survival of marine resources such as coral reefs, and increase in 'climate change and environmental refugee populations' that the global and maritime regime has not addressed (The Commonwealth, 2014). The core maritime challenges resulting from sea-level rise include:

5.1.1 Changes in coastal baselines

UNCLOS Section 2 Articles 5, 6, 7, and 8 provide guidelines for determining coastal baselines. Under Article 6 on the determination of baselines for Reefs,

it is stated that; '*In the case of islands situated on atolls or of islands having fringing reefs, the baseline for measuring the breadth of the territorial sea is the seaward low-water line of the reef…*' (pp. 22-26). However, sea-level rise especially in SIDS situated on Atolls such as Maldives and Tuvalu has increased the ambulatory nature of the baselines depending on the sea level (ADB, 2015). This creates a conundrum of challenges such as a likely loss of legal entitlement in the Territorial Sea and EEZ, a need to redraw boundaries, and an increase in vulnerable populations yet legislation for CC migrants, CC-induced state loss in maritime jurisdiction is either inadequate or lacking (Yamamoto and Esteban, 2011). For instance, though UNCLOS Article 14 states that '*the coastal State may determine baselines in turn by any of the methods provided for in the foregoing articles to suit different conditions'*, it is subjective on the meaning of 'different conditions.' This increases ambiguity on the plight of SIDS and SIDS populations in a scenario where there is increased loss of territory (Rayfuse, 2009).

In addition, the increase in the submergence of coastlines of SIDS threatens coral reef survival (Caron, 1990). Increased siltation, typhoons, and storms have precipitated coral mortality (IORA, 2019). About 75 percent of coral reefs are being threatened globally by CC-induced sea-level rise (Burke et al., 2011; Yamamoto and Esteban, 2011). It is further estimated that by 2050 if sea-level rise increases and carbon dioxide levels reach 450 ppm, geological structures onto which reef occupying states will be lost increasing stateless populations (UN-OHRLLS, 2018). The loss of geological structures leads to the entire submergence of Islands that form most SIDS such as Kiribati, Tuvalu, and Fiji (Jha et al., 2013; UNWTO, 2012); and thus ceasing to have jurisdiction as they will fall under rocks and thus cease to have an EEZ and Continental Shelf as stipulated in UNCLOS (2016) Part VIII Article 121 (3).

5.1.2 Loss of the Territorial Sea, exclusive economic zone (EEZ), and continental shelf

SIDS have been documented as vulnerable to submergence (UNISDR, 2013; World Bank, 2020). The Intergovernmental Panel for Climate Change (IPCC) report documented that a small increase in sea level around the Pacific Island States such as Kiribati especially at Tarawa Atoll could trigger a mass loss of land territory due to the presence of low lying coastlines (IPCC, 2021). In the Maldives, a rise in sea level by 100 cm by 2100 is projected to wipe out some Atolls such as Seenu and Gnaviyani (ADB, 2015). With increasing submergence, the loss of territory is a real and clear unprecedented threat to the future existence of SIDS and particularly Atoll states in the Pacific which poses unprecedented legal questions (Yamamoto and Esteban, 2011). The 2008 Fourth Global Conference on Oceans, Coasts, and Islands in Hanoi, Vietnam observed that "… *the rising sea level and increases in storm intensity and frequency is subjecting SIDS to loss of coastal*

protection and increased erosion" that is affecting their maritime jurisdiction and maritime territory (Russell and Macnab, 2008).

Under UNCLOS Article 4 on the Outer Limit of the Territorial Sea, submergence of Atoll states leads to the loss of the territorial sea due to loss of the Terrestrial sea breadth (Hiro, 2014). In addition, increased submergence of SIDS affects their jurisdiction as defined in UNCLOS (2016) Part VIII on Islands leading to loss of their EEZ and Continental Shelf (Burgess et al., 2021). Pursuant to UNCLOS Part V Article 56 (1)(a), on the rights of the coastal state in the EEZ, it is probable that SIDS will lose their sovereign rights to explore, exploit, conserve, and manage their natural resources as there is a subjective regime on the rights of lost territories and rights as well as populations (Hiro, 2014; Russell and Macnab, 2008).

5.1.3 Alteration of maritime zones, baselines, and delineation zones

Sea level rise around SIDS has sprawled a plethora of puzzles relating to the demarcation of maritime zones such as the Territorial Sea and Contiguous zone as provided for under UNCLOS Section 1 on General Provisions (The Commonwealth, 2014). UNCLOS Article 1 (2) provides that; '*The sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea'* and this extends to the bed, subsoil, and airspace (UNCLOS, year, Part I, p. 22). Article 5 on the determination of normal baselines further states that '*the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State*.' (UNCLOS, year, SECTION II, p. 23).

These provisions partly debunk the current prospect of the impact of sea-level rise on baselines of coastal states that are flooded, or submerged (Yamamoto and Esteban, 2011). A rise in sea level effectively downsizes and downgrades the status of some SIDS, especially Atoll states such as Maldives and Kiribati into rocks or low-tide elevations (UNCTAD, 2021). This sprawls the loss of EEZ, Territorial Sea, and maritime jurisdiction on living organisms therein (ADB, 2015). Provisions and legal guidance on the effect of sea-level rise and CC on altered maritime delineation zones are still subjective (Burgess et al., 2021).

5.2 Contradictory and Abstract Definition of Islands in Maritime Law

The meaning of Islands and their rights-especially in relation to the concept of habituation is an incentive for legal debate (AOSIS, 2021). Though some provisions on Islands under Part VIII Article 121 on the regime of Islands provide candid jurisdictional focus on the rights of coastal states-SIDS creating an incentive for States to obtain island status for their deep ocean features; Article 121 (3) paradoxically creates a critical debate on the sovereignty of SIDS affected by CC

effects (Chand and Sloan, 2021). In addition, jurisdictional control of Islands in their Territorial Sea and EEZ over rocks and low-water elevations creates futuristic puzzles on the jurisdiction of CC affected SIDS (Kench et al., 2015). This scenario is prominent in those areas rich in marine resources such as in the case of Spratly Islands in the South China Sea where debate on whether some small features such as rocks (that might not fully constitute) islands deserve full control over their EEZ and in the case of the Okinotorishima which some States such as China dispute its claim for the EEZ as it is claimed that it is an artificial Island (Yamamoto and Esteban, 2011).

5.3 Stringent Terms for the Extended Continental Shelf (ECS) and Conditionalites for Marine Research

The guidelines for conducting marine research provide a basis for the determination of maritime jurisdictional rights for coastal states (Creel, 2003; Russell and Macnab, 2008). Article 76 of the UNCLOS provides for Coastal states collection, assembly, and analysis of a body of relevant hydrographic, geological and geophysical data in accordance with the provisions outlined in the Scientific and Technical Guidelines (Chand and Sloan, 2021). The technical guidelines aid in the collection of data that aids in the provision of *inter alia*; datasets for the Extended Continental Shelf (ECS) delineation, lodging of a claim, preparation, presentation, and defense of a submission on the Commission for the Limits of the Continental Shelf (CLCS) (Geloso, 2007; Russell and Macnab, 2008; Yamamoto and Esteban, 2011).

The 2008 Island Business Report for the South Pacific Applied Geoscience Commission (SOPAC) concluded that the potential ECA entitlement of the 8 participating SIDS in the region could extend their maritime jurisdiction to a gross 1.5 million square kilometers of seabed and subsoil-a 10 percent increase in their EEZs and a potential for increased collection of data and utilization of maritime resources for sustainable development, resilience and adaptation to technological and logistical gaps in preserving their maritime rights and jurisdiction in the face of the increasing CC impacts (Russell and Macnab, 2008; Yamamoto and Esteban, 2011). Under Article 76, the EEZ delimitation Constraints affects mechanisms to extend the continental shelf beyond 200 nautical miles (Kench et al., 2015).

The hesitancy to conclude boundary agreements in EEZs of SIDS endowed with huge sums of valuable marine resources constraining SIDS from directing resource utilization and seeking partnership for sustainable mapping of their zones (Burgess et al., 2021). Most SIDS are constrained to signing passive and exploitative licenses for research and natural resource exploitation (The Commonwealth, 2014). The complexity and deliberate conservative regulations affect SIDS from securing financial resources for exploration, fair partnerships in research and reduce the net benefit they gain from the presence of resources in their EEZs (3rd

Global Conference on Oceans, Coasts, and Islands, 2006). The bureaucracy in delineation has scaled up conflicts among SIDS such as in the case of Barbados and Trinidad and Tobago over fishing rights (AOSIS, 2021).

Most SIDS are bulldozed by neighboring stronger coastal powers due to imbalances in expertise for negotiations, and resources in securing technical experts in negotiations (Webb, 2005). By 2005, 39 highly potential maritime boundary delimitation claims were unresolved (CARICOM, 2005). The 2008 SPLOS report observed that the complexity, scale, and cost involved in conducted maritime research as stipulated under Article 76 to compile a credible submission are rocket science to SIDS and increase their vulnerability to maritime jurisdictional conflicting issues (Russell and Macnab, 2008; SPLOS, 2008). Furthermore, the UNCLOS jargon relating to claims for the ECS are ambiguous and disadvantage SIDS implying that SIDS will lose more jurisdictional rights due to their increased vulnerabilities emanating from CC (Russell and Macnab, 2008).

6. Current Interventions and Strategies Relating to the Jurisdiction and Sustainable Development of Small Island Developing States (SIDS)

SIDS are exponentially disadvantaged owing to their geographical location, small territory, weak socioeconomic systems, and their limited human resources to spur sustainable development (World Bank, 2020). The increasing vulnerabilities of SIDS due to CC catastrophically increase the risk of losing the limited maritime rights that are crucial in sustaining SIDS economies through the utilization of marine resources (UNCTAD, 2021). Thus, multi-faceted and sustainable solutions that reduce vulnerability to environmental risks such as CC and increase the functioning of socioeconomic systems in SIDS are crucial in promoting resilience and adaptation (The Commonwealth, 2014). Global institutions, partners and different stakeholders are increasingly designing bold interventions at regional and global scales that focus on promoting and protecting the sovereignty and socioeconomic development of SIDS (UNIDO, 2019). The exiting policy interventions aim at increasing resilience, adaption, and recovery through legislation, financing, research, capacity building and training (UN-OHRLLS, 2018). Prominent interventions include:

6.1 The 2021 Declaration on Preserving Maritime Zones in the Face of Climate Change Related Sea Level Rise

The 2022 IPCC Report categorically concluded that SIDS are one of the most vulnerable due to the impacts of CC (IPCC, 2022). Climate induced disasters such as typhoons, storm surges, and sea level rise has led to the loss of territory of SIDS (Rayfuse, 2009). In fact, about 26 percent of SIDS have their terrestrial land surface at less than 5 meters above sea level (UNISDR, 2013). Countries such as Maldives and Tuvalu have all their land area at 5 meters or less above sea level (ADB, 2015). Studies in Kiribati have documented a loss of Island zones in Kiribati due to sea-level rise (Chand and Sloan, 2021). Moreover, legislation on protection of the maritime zones of lost territory is lacking (Yamamoto and Esteban, 2011). In addition, increased sea level rise has led to coastal flooding and environmentally threatened refugees (AOSIS, 2021). Reports have documented that SIDS in the Pacific Ocean zone such as Kiribati, Tuvalu and Marshal Islands are more likely to lose more territory and thus require urgent action through financing and legislation (UN-OHRLLS, 2018). In 2021, through the Pacific Island Forum (PIF), 12 Pacific Ocean SIDS have a declaration to maintain the jurisdictional rights of SIDS (World Bank, 2021). Through the program, the PIF aims at addressing gaps in UNCLOS Article 76 on maritime delimitation and research (Turkas, 2022).

The declaration will help in clarifying how territorial and maritime entitlements including resources of SIDS can be preserved in the face of rising sea levels (World Bank, 2021). To address the funding gaps in promoting maritime research, promoting sustainable projects, claims, and submission, the PIF has secured and attracting financing through the Global Facility for Disaster Reduction and Recovery (GFDRR) to launch livelihood projects (UNIDO, 2019). A 2 billion USD partnership among 12 Pacific Ocean SIDS is supporting 87 projects at a for sustainable livelihood projects including climate resilience (World Bank, 2021). Increasing partnership among small atoll states such as Kiribati has led to the launch of the Building Resilience in Pacific Atoll Island Countries (UNIDO, 2019).

6.2 The 2014 Samoa Pathway

Since the beginning of the 21st century CC anomalies and vulnerabilities have been increasing (ADB, 2015). The disproportional effects, and vulnerabilities imply that poor communities, and countries are projected to bear more brunt of the effects of climate change (IPCC, 2021). SIDS and Member Island Territories have inadequate systems to strengthen weather and climate monitoring, mitigation and adaptation strategies (UNIDO, 2019). The Third International Conference on SIDS in Apia in Samoa endorsed the SIDS Action Platform leading to the birth of the Accelerated Modality Action (S.A.M.O.A) Pathway to boost climate resilience and adaptation to protect SIDS (The Commonwealth, 2014; World Bank, 2020).

The pathway has laid a platform for designing of targeted and feasible action programs to build capacity in weather monitoring, national meteorological and hydrological services and application of science-based climate knowledge and information in decision making on resources, livelihoods, and protection and conservation of marine resources (UNDRR, 2017). In 2015, through the Seventeenth World Meteorological Congress (Cg-17) the adoption of Resolution 54 targeting SIDS has increased capacity development and research of SIDS National Meteorological and Hydrological departments (WMO, 2022).

Further funding of SIDS' National Meteorological and Hydrological Services avails new early warning systems for environmental and marine use related risks to aid the sustainable socio-economic development of Small Island Developing States and Member Island Territories (UNIDO, 2019). The World Meteorological Organization (WMO) supports its Members in developing adequate structures and building capacity to ensure is boosting the development of structures and systems for proactive disaster risk management relating to CC, sea-level rise, environmental degradation, agriculture, fishing and mariculture, freshwater resources, coastal zone management, transport by sea and air, energy and tourism (WMO, 2022). The SAMOA Pathway has birthed the development of the 2019–2025 SIDS Strategy to create enabling pillars for strengthening knowledge and institutions in inclusive and shared prosperity, socioeconomic development and sustainable environmental management (UNIDO, 2019).

6.3 The United Nations Blue Economy Framework

The maritime economy of the SIDS is one of the most lucrative globally (UNCTAD, 2014a). Most SIDS; especially in the Pacific Ocean poses massive EEZs that are habitats to vast amounts of living and non-living marine resources (The Commonwealth, 2014). Though SIDS cover only about 3 percent of the earth's surface, it is estimated that about 20 percent of marine plants, birds, and reptile species habituate in the Marine EEZs belonging to SIDS (UN-OHRLLS, 2018). 10 out of the 34 global biodiversity hotspots are located in SIDS zones (Conservation International, 2013). However, SIDS have not reaped from the potential of maritime resources (World Bank, 2020). Overexploitation by powerful neighbors, CC, and unfavorable maritime jurisdictions on marine species have made most of the species endemic (World Bank, 2011). The Convention on Biological Diversity (CBD) reported that 90 percent of the global reptile extinctions have occurred in zones near SIDS (CBD, 2013). In the Caribbean Island, for instance, 93.4 percent of the 502 reptile species have experienced endemism (Conservation International, 2013).

To promote sustainable development and inclusive gaining of benefits from the marine economy, the SIDS at the 'Rio +20' United Nations on Sustainable Development advocated for the refinement of the global agenda and framework on the sustainable development of oceans leading to the birth of the BE (IORA, 2019;

UNCTAD, 2014b). The BE endorses the principles of socioeconomic inclusiveness through initiatives of low carbon, resource efficiency, and social inclusion, grounded in a developing world context and fashioned to reflect the circumstances and needs of countries whose future resource base is marine (United Nations Blue Economy Concept Paper, 2014). The BE is not only envisioned to reduce the energy costs and levels of energy vulnerability facing SIDS but also to aid in sustainable practices in marine resource use that SIDS rely on (World Bank, 2014; World Bank, 2020).

Crucially, the BE is viewed as a paradigm shift in the maritime jurisdictional rights of SIDS due to calls to consider SIDS as 'large ocean states' with equal marine powers and rights to terrestrial coastal states (Turkas, 2022). This will give SIDS more jurisdictional rights on the utilization of maritime resources, management of their maritime zones, and claims on maritime research and resource protection that are ambiguous under UNCLOS Provisions, especially Article 76 (Russell and Macnab, 2008).

6.4 Mauritius Strategy of Implementation 2005

The MSI was born out of a review of the Barbados Programme Of Action (BPOA) for the Sustainable Development of SIDS (Sustainable Development Goals Knowledge Platform, 2022) (UNIDO, 2019). The comprehensive review of the gaps in the 14 thematic areas under the BPOA set forth the identification of 19 priority areas for the SIDS (United Nations, 2005). Under the mandate of the United Nations Resolution (A/57/262), the MSI hinges on the need to graduate SIDS from least developed country status, trade, sustainable production and consumption (as called for by the JPOI), health, knowledge management, build resilience to CC, maritime challenges and culture – all of which are intended to support SIDS in achieving internationally agreed targets and goals under Agenda 2030 of the United Nations Sustainable Development Goals (The Commonwealth, 2014; World Bank, 2020).

The MSI has acted as a conduit for the initiation of a Commission on Sustainable Development (CSD) of SIDS to address the future environmental vulnerabilities of SIDS (United Nations, 2005). The International Strategy for Disaster Reduction (ISDR) recommended in subsequent MSI conferences has led to increased financing in telecommunication for SIDS, adoption of strategies for renewable energy generation in SIDS, and adoption of the 2005 Hyogo Framework for the monitoring of disaster risk progress among SIDS (World Bank, 2011). The 'SIDS DOCK' initiative for the harnessing of Blue Energy technologies in SIDS is increasing linkages between SIDS and the global financial market in energy trading (UNIDO, 2019).

7. Do Current Initiatives and Maritime Provisions Resonate with the Concerns of Small Island Developing States (SIDS) in Relation to CC and Maritime Rights?

For almost a century since the 1930 Hague Codification Conference developing a comprehensive definition and legislation for SIDS has been part of the international discussions (Hiro, 2014). However, as Panke et al. (2017) observed, the participation of SIDS in these discussions has been minimal and the positive debates and legislation on SIDS sovereignty have been ambiguous. Since UNCLOS II and III, the main issues of discussion related to SIDS have mainly related to MSR, capacity building, and technology advancements which mainly favor large coastal states (Tanaka, 2013). New advances in the maritime legal framework obliterate the ability of SIDS to keep pace with conflicting interests; especially on resources around the EEZ of SIDS and the Area (Coelho, 2022). Consequently, the powers of most SIDS have been subdued or subverted and their interests have increasingly been taken over by former colonial powers; especially in discussions relating to the principle of the freedom of the seas and Article 5(1) of the CSC (Gorina-Ysern, 2003). Under Articles 246 (5) and 246 (6), SIDS are frequently compromised and normally accept restrictive forms of consent regimes in exploratory operations around their maritime zones affecting the integrity of the Continental Shelf regulations (Clegg et al., 2020).

In addition, discussions relating to CC-inducted vulnerabilities of SIDS territory are abysmal (UNIDO, 2021). The International Science Council observed that the interests of SIDS related to CC vulnerabilities and resource interests have gained less attention yet the resources of SIDS promote the principle of 'mutual benefit' under Article 242 (1) in maritime governance (Manoa, 2016). These examples highlight an implementation gap in major coastal states' practices in the sharing of maritime benefits, the inability of SIDS to adapt to environmental threats such as CC, the enforcement of their needs, and interests. Though the current negotiations in the BBNJ and ABNJ can recuperate some of these concerns, uncertainties still linger on how SIDS could sail through in case of CC catastrophe if strenuous compromises and legislation are not undertaken.

8. Conclusion

Based on recent studies; especially in the CARICOM and Pacific Island

states, it is evident that CC is increasingly threatening SIDS (Coelho, 2022) and the interest in SIDS needs to become more prominent in UNCLOS III negotiations than ever before; especially in relation to BBNJ, Marine biodiversity, and territorial loss (Hassanali, 2022; Murtasidin and Sujadmi, 2021). Several authors have highlighted that for SIDS, consent regimes on MSR, international cooperation, and transfer of marine technology, research, and knowledge could help in reducing CC and anthropogenic-induced vulnerabilities facing SIDS. However, as observed in most UNCLOS negotiations and discussions, most of these approaches and strategies are either less regionally strategized, manipulated, or dominated by interest groups that exploit SIDS' resources (Panke et al., 2017). In addition, the chronic postponement of formal proceedings relating to the protection of CC refugees and vulnerable states including the Pacific Small Island States (PSIDS) has increased the complexities related to the common strategy on the future sovereignty of SIDS.

Within the realm of SIDS and the provisions of UNCLOS related to 'Islands' and their maritime jurisdictional rights, a judicious approach to secure a sustainable and coherent mechanism for SIDS should be developed to reduce the juxtapositions related to current definitions and rights of SIDS. Based on the concerns of SIDS in relation to their legitimate concerns, some policy suggestions and action plans could be brought to the fore.

Foremost, a draft article or subsection in the UNCLOS could be inserted to define Islands and their territory or resources lost by CC, and the future jurisdiction of SIDS which might lose its territory or maritime rights due to CC. Within the context of the legal architecture and definitions of UNCLOS that have been subjective to the sovereignty of SIDS is Article 121; especially when there is a loss of territory. This can help in remedying possible breaches in maritime laws related to the sovereignty of SIDS. A study on governance in the Indo-Pacific SIDS further recommended that developing clear legislation related to SIDS can help reinforce the customary uses and traditional rights of such states as currently applied in the case of Samoa and Cook Islands (Clegg et al., 2020).

Secondly, immediate provisions specifically focused on safeguarding the sovereignty of SIDS, their maritime space, and vulnerable populations affected by CC-induced vulnerabilities to maritime rights. With the UNCLOS III and BBNJ negotiations being negotiated, this could serve as an opportunity to develop a sustainable agreement for equity for SIDS' resources and CC-threatened communities. Devoting attention to safeguarding the sovereignty of SIDS is critical in garnering support for BBNJ resource management and also developing procedural rights and guidelines on the management of SIDS' resources and populations threatened by CC. This correlates with the temporal dimension of the UNCLOS which is considered a 'living instrument' (Coelho, 2022) and thus can accommodate the changing circumstances and needs of countries such as SIDS which are chronically affected by CC (Tanaka, 2013).

This paper has given insight into the legislative status of SIDS and how CC

risks and effects are threatening the maritime jurisdictional rights of SIDS. Several studies included in the paper document that UNCLOS has provided a sound legislative instrument that defines an Island and the rights of such states. Related legislation and statutes; however partly address the rights of SIDS under a CC scenario or risk to both the resources and populations of SIDS. In this regard, therefore, I argue that since there is an overt inconsistency in provisions on maritime rights and contestations over authority for SIDS that are threatened by CC, it is possibly crucial to develop a specific legal option to safeguard the rights of SIDS. By developing such provisions, there could be a realization of connectivity between maritime laws with the sustainable management of territorial rights of both communities and resources of SIDS threatened by CC.

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