

# Sea level rise, statehood and artificial islands for environmentally displaced persons under international law: Future of the Maldives

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## Abstract

The Republic of Maldives is a small, South Asian archipelagic State consisting of low-lying islands, hence, climate change and sea level rise are not just mere words for us, the Maldivian people; they are a grim reality that is consuming our nation. The loss of a nation does not only mean the loss of home, substantial livelihood, natural wealth, and cultural identity; it also means the erosion of sovereignty and statehood at the international level. The analysis of applicable international laws and state practice indicates that the Maldives will not lose its statehood due to the loss of its territory resulting from sea level rise. The pragmatic way forward to protect the legal personality of statehood for low-lying island states such as the Maldives is to declare islands above the mean sea level, in case of complete inundation of naturally formed land, as Artificial Islands for Environmentally Displaced Persons, and to declare maritime borders established under the 1982 Law of the Sea Convention as non-ambulatory.

**Keywords:** Sea level rise, Statehood, Artificial Islands, Environmentally Displaced Persons, Maldives.

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## 1. Introduction

Sea level records of Maldives for the past twenty years shows a rise of 3.75 millimeter and 2.93 millimeter per year in the capital city Male', and in Addu city respectively (Ministry of Environment and Energy, 2016, p. 22). Hulhumalé, an artificially reclaimed island which is also a suburb of Male', has observed a long-term trend of a 1.7 millimeter increase in sea level rise per year (Hosterman & Smith, 2015). Such empirical evidence suggests that the possibility of land inundation is high (Ministry of Environment and Energy, 2016, p. 22).

Climate change, because of the severity and global scope of its impacts, threatens the collective rights of the Maldivian people, including the right of self-determination, in a manner unprecedented by any other environmental harm (Government of Maldives, 2008, p. 6). Despite increased attention to the security aspect of global warming and the adverse impacts of climate change generally, there has been little discussion about the implications of climate change on the rights of coastal states, especially the rights of those living in low-lying atoll states (Di Leva and Morita, 2008, p. 7; Doig, 2016, pp. 72-73).

As a small island nation, the Maldives is especially vulnerable to climate change impacts. These impacts include: (i) sea-level rise causing permanent inundation and flooding, sea-level surges, and erosion; (ii) increases in sea and surface temperatures causing changes to island and marine ecosystems; (iii) increases in the intensity of extreme weather events, such as severe storms and cyclones causing high waves, winds, and sea surges; (iv) changes in precipitation, which can exacerbate the effects of sea-level rise; and (v) increases in sea temperature causing damage to coral reefs and other aquatic life. The Maldives Government's submission to the Office of the United Nations High Commissioner for Human Rights in 2008 under the Human Rights Council Resolution 7/23 provides incontestable proof that physical impacts of climate change have already begun to affect the lives, livelihoods and rights of people across the island nation (Government of Maldives, 2008, p. 5).

Most significantly, sea level rise is the main concern for the islands of the Maldives (Jaleel & Fazi, 2017), since the average elevation is 1.5 meters (Asian Development Bank, 2018) and over 80% of the land area is less than 1 meter above mean sea level (Government of Maldives, 2008; Ministry of Environment and Energy, 2016, p. 22). The Inter-Governmental Panel on Climate Change (IPCC) has projected, with medium to high confidence, that the global mean sea level rise to be within an indicative range of 0.26 to 0.77m by 2100 for 1.5 degrees Celsius of global warming (IPCC, 2018). For the Maldives, a 0.49 meter rise in sea level would mean that, fifteen percent of the densely populated Malé would be submerged by 2025 (Gagain, 2012, pp. 79-80; Hosterman & Smith, 2015) and the entire Maldives to submerge by 2050 or by 2100 (Dolla, 2015, pp. 2, 9; Government of Maldives, 2008, pp.18-19), losing its sovereign

rights over its Exclusive Economic Zone (EEZ) covering almost one million square kilometers (Techera & Cannel-Lunn, 2019, p. 230). It has been widely debated that the loss of naturally formed territory will lead to the loss of sovereignty and statehood at the international level (Dolla, 2015, p. 2).

The threats of climate change and sea level rise in particular have gone beyond environmental concerns- they have now reached a stage where they raise geopolitical concerns due to their potential effect on national boundaries and statehood (Di Leva and Morita, 2008, p. 1). In fact, many small island states worldwide may become completely submerged as sea levels continue to rise (Blanchard, 2016, p.70; Gagain, 2012, pp.79-80; Jain, 2014, pp.4-7; Ker-Lindsey, 2016, pp.73-84; Petzold & Magnan, 2019, pp. 145-165; see also Willcox, 2012). From an international perspective, a one-meter rise in the sea level could result in the total loss of land territory for Nauru and Tuvalu, loss of 75 percent of certain low-lying islands of Vanuatu, and 80 percent of the Majuro atoll in the Marshall Islands, which is home to 50 percent of that nation's population (Di Leva and Morita, 2008, p. 8). Among these low-lying island nations, Maldives has the highest resident population.

The existing international laws are not only ill-equipped to provide protections or the much-needed relief for environmentally displaced persons (Sharon, 2019, p. 133), they also make no mention of climate change refugees (Dolla, 2015, p. 2). People of endangered states cannot be left to fend themselves simply because there is a legal vacuum (Hsiao, 2017, p. 268). This article examines the international laws and state practice pertinent to the protection of statehood in the event of total loss of territory due to sea-level rise, and proposes possible ways forward to protect the legal personality of statehood for low-lying island states such as the Maldives.

## **2. The legal personality of statehood due to complete inundation of territory**

Climate change may destroy one of the hallmarks of statehood, which is the country's territory (Government of Maldives, 2008). The present population of any low-lying, small island states will become stateless once their territory completely submerged under water (Hsiao, 2017, p. 269) and is no longer habitable. While international law has dealt with state succession and the resulting legal situation, it has yet to deal with a situation where habitable territory of a state completely disappears. There is no framework dealing with citizens of uninhabitable countries with no possibilities of return in the long term future. The international community needs to address the legal vacuum that would arise as a result of states disappearing due to consequences associated with climate change (Hsiao, 2017, p. 269).

The Montevideo Convention signed on 6 December 1933, which codifies the declarative theory of statehood as accepted as part of customary international law (Lauterpacht, 2012, p. 419) provides the requirements and qualifications of statehood (Hsiao, 2017, p. 272). Article 1 of the Convention reads:

The State as a person of international law should possess the following qualifications: a) a permanent population; b) a defined territory; c) government; and d) the capacity to enter into relations with the other States.

From a legal point of view, loss of any one of the above four constitutive elements can lead to state extinction. However, the defining distinction so far has been on possession of habitable land. International law does not require the territory to be of a particular size nor does it require a particular number of people to be present to satisfy the requirement of population. It would seem that territory, however small, is necessary for statehood (Hsiao, 2017, p. 272), although skeptics argue that territorial compensation has to meet “appropriate size condition” (Dietrich & Wundisch, 2015, p. 96). The criteria of territory like the criteria of population are not a question of number but criteria of viability (Paco, 2019, p. 192). The requirement of defined territory does not mean that a state with border delimitation problems is not anymore a state. Today many states have territorial disputes, such as the dispute between China and the Philippines in the South China Sea, but their statehood have not been questioned (Burkett, 2011, p.345-274; Rayfuse & Crawford, 2011, p. 9; Paco, 2019, p. 192).

Forcible displacement will be inevitable should the territory of an island state becomes uninhabitable and that the disappearance of low-lying island states gives rise to a risk at least of *de facto* statelessness (Park, 2011, p. 21). Scholars argue that if the Maldives submerges beneath the sea, those of its nationals who lack citizenship in any other country will be *de jure* stateless and subsequently refugees, whether or not the international community chooses to continue to recognize the Maldives as a State (Simon & Alexander, 2017, pp. 307-308).

On the other hand, there is a strong presumption against extinction of states once they are firmly established, so the disappearance of territory, by itself, may not lead to a loss of statehood and sovereignty (Atapattu, 2014, p. 35; Hsiao, 2017, p.272; *see also* Kittel, 2014, p. 1225). A growing number of scholars argue against recognizing the former inhabitants of small islands as stateless (Simon and Alexander, 2017, p. 307-308). In particular, Dolla have argued that the Montevideo Convention should permit the Maldives to remain a State permanently as “whether or not a State exists is a mixed question of law and fact.” (Dolla, 2015, pp. 18-19). Thus, by all accounts, territory plays a crucial role in relation to statehood and sovereignty. Importantly, territory does not mean only physical land. Under international law, sovereignty extends to the territorial sea and the air space above within the limits of the territorial sea (Hsiao, 2017, p. 272).

### 3. Recognition of de-territorialised existence of states

International law can no longer continue with the fiction of a uniform model of a state, founded historically upon the territorial rights of a “unified” and self-determining people. Rather, law must now begin to accommodate the changing character of the sovereign state landscape by granting legal recognition to alternative forms of statehood in response to deteriorating climate conditions (Skillington, 2016, p.46). The International Law Association has generally agreed that there should be a presumption of continuing statehood in cases where land territory was lost (International Law Association, 2018, p. 25; Jain, 2014, p. 53), as a de-territorialised state (Yamamoto & Esteban, 2010, p. 8). The Association was conscious of the fact that there have been no precedents for the situation which might initially be faced by a small number of island states if sea level rise reached existential proportions for them (International Law Association, 2018, p. 25). The Association took this view taking in to consideration that the international law rules on the loss of territory and the acquisition of territory were clear and well established, and that there had been numerous situations in the past where governments have existed without physical control of territory, as for example in the cases of governments in exile (International Law Association, 2018, p. 25) or government failure to function as in Afghanistan recently.

For example, Somalia has on numerous occasions operated out of and carried out governmental functions as a government in exile due to unrest within its own territory. There is no requirement under the Montevideo Convention for state governments to be located within its own territory. Therefore, governments can function from a state that is not their own, as a government in exile (Dolla, 2015, pp. 18-19). Furthermore, some institutions are recognized as states even though they do not possess a permanent population in accordance with Article 1(a) of the Montevideo Convention. The Holy See is one example of such a State, which serves as ‘the supreme organ of government of the Catholic Church’, yet it lacks the traditional population of its own. Irrespective of a set population, the Holy See is recognized as a sovereign State by the UN and is entitled to the same privileges as other states (Dolla, 2015, pp. 18-19).

In the Maldives, the long-term adaptation strategy was the establishment of a sovereign wealth fund to facilitate the purchase of new land and the relocation of the population should it become necessary. However, if the population is successfully relocated to another state, the island state will not continue to have the same legal status (Doig, 2016, p. 86). Unless provided for in a legal agreement, the land will be bought as a private property purchase with no accompanying rights for citizens, and the laws of the selling country will apply. In a scenario where the host state wishes to reclaim the purchased land, international law will not adequately prevent it. The principle of territorial integrity will be a fundamental obstacle in the preservation of island state sovereignty (Doig, 2016, p. 86).

It is imperative to note that, therefore, sovereignty will be difficult to preserve in the event of collective resettlement, under current international law (Doig, 2016, p. 89). Citizens may be able to maintain symbolic citizenship, but they will be under the jurisdiction of the host state, unless a new international law category may be created. One suggestion is ‘the Nation *Ex-Situ*’, for sovereign states whose citizens (while in various new locations) require an entity to protect their rights and act in their best interests on their behalf, similar to a deterritorialised state, under a UN International Trusteeship System (Doig, 2016, p. 89; Skillington, 2016, p. 46). The UN International Trusteeship System in a contemporary climate change context aims to allow elected citizens to be trustees so that self-governance and self-determination can continue.

If the Maldives opts to relocate to another state, its government (as a government in exile for being away from its homeland) can still continue to operate and to govern Maldivian citizens despite their physical location. If a government were still carrying out functions, it would enable the state to enact laws and enter into relations with other nations. In such a situation, it would meet the requirements under Article 1 of the Montevideo Convention (Dolla, 2015, pp. 18-19).

#### **4. Protection to persons affected by sea level rise**

In accordance with the principle of sovereignty as enshrined in Principle 2(7) of the UN Charter, states have the primary duty and responsibility to provide protection and assistance to persons who are affected by sea level rise. Furthermore, Principle 4 of the Sydney Declaration by the International Law Association stipulates the primary duties and responsibilities of states to protect and assist people affected by climate change. The United Nations Guiding Principles on Internal Displacement of 1998 provides responsibilities of states to provide protection and humanitarian assistance to internally displaced persons (International Law Association, 2018, p. 28). More generally, the same principles are enshrined in the International Law Association’s Draft Articles on the Protection of Persons in the Event of Disasters (International Law Commission, 2016) and several UN General Assembly Resolutions on humanitarian assistance with regard to all persons affected by a disaster (International Law Association, 2018, p. 29). However, sceptics argue that the international law on this matter is unclear (Hsiao, 2017, p. 268). For people who are forced to migrate due to climate change whether caused internally or internationally, current legal framework is unclear to what extent should they be protected. The primary duty and responsibility of states to protect persons affected by sea level rise also derives from their obligations under international human rights law, which stipulate the responsibilities of the international community to cooperate with countries affected by sea level rise (International Law Association, 2018, p. 28).

In light of the empirical evidence, the Maldives will not lose its statehood due to the loss of its territory resulting from sea level rise. Scholars suggest that collective resettlement and creation of Artificial Islands for Environmentally Displaced Persons are possible ways forward for low-lying island States to address the impacts of sea level rise (Doig, 2016, pp. 72, 77; *see generally* Burkett, 2011, p 363), which are explored in the following sections. Prior to the analysis on the legal basis of artificial islands in international law, it is prudent to explore the impacts on maritime boundaries due to sea level rise.

## 5. Impacts on maritime boundaries due to sea level rise

The 1982 Law of the Sea Convention (LOS Convention) is the undisputed ‘Constitution for the Oceans’ (Anderson 1998, p. 557; Doussis, 2006, p. 355) that is the primary instrument in the international legal framework providing the legal ‘toolkit’ (Doussis, 2006; p. 355) in governing maritime boundaries and maritime features, establishing the basis for the statehood of states and the geographic limits in which states exercise sovereignty and sovereign rights. The LOS Convention applies to 168 states via ratification or accession as of 23<sup>rd</sup> April, 2020 (United Nations, 2020). Some authors argue that the LOS Convention has achieved such widespread acceptance as to amount to customary international law, and thus even non-parties are bound by it (Doelle, 2006, p. 232; Molenaar, 1998, p. 10; Song, 2008, p. 168). The Maldives is a party to the LOS Convention and deposited its submission on the Maldivian territorial boundaries and the outer limits of its continental shelf in 2010 (Government of Maldives, 2010; Techera & Cannel-Lunn, 2019, pp. 236-237).

The LOS Convention provides the legal framework for natural and artificial islands, and the determination of maritime zones. Under the LOS Convention, state parties are obliged to calculate the geographic breadth of each maritime zone through an elaborate measuring process contained in the Convention, which generally uses the state’s coast as a baseline for the measurements (Gagain, 2012; p. 95). From these baselines, states may measure their territorial sea, contiguous zone, exclusive economic zone (EEZ) and continental shelf. Article 121 of the LOS Convention establishes the regime of islands as follows:

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.
2. 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.

3. Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.

Paragraph (1) of Article 121 of the LOS Convention contains the definition of an 'island' as a naturally formed area of land, surrounded by water, which is above water at high tide (International Law Association, 2018). Subsequently, were a state's territory to be submerged, it would cease to be land, and would not generate any maritime zones. An island state will likely lose its maritime claims if its defined territory becomes completely submerged (Gagain, 2012, p. 99). Once rendered uninhabitable by sea level rise (or other environmental degradation), uninhabitable islands will, *prima facie*, lose their exclusive economic zone and their continental shelf. Should the island disappear entirely, it will lose its territorial sea as well (Di Leva & Morita, 2008, pp. 27-28). Even if the territory did remain free of permanent inundation by the sea, by virtue of Article 121(3), it might lose the right to generate an exclusive economic zone or continental shelf if it no longer could support human habitation (Kaye, 2017, p. 249).

Furthermore, all land, including islands, are entitled to generate a territorial sea of up to twelve nautical miles under Article 3 of the LOS Convention (Kaye, 2017, pp. 245-246). States will lose the right to claim the territorial sea, pursuant to Article 3 of the LOS Convention, due to complete inundation of its land and islands. In the case of archipelagos, the Convention provides that an archipelagic State may enclose its territory and waters in straight baselines, subject to certain criteria. Article 47 of the LOS Convention sets forth these criteria:

1. An archipelagic State may draw straight archipelagic baselines joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands and an area in which the ratio of the area of the water to the area of the land, including atolls, is between 1 to 1 and 9 to 1.

2. The length of such baselines shall not exceed 100 nautical miles, except that up to 3 percent of the total number of baselines enclosing any archipelago may exceed that length, up to a maximum length of 125 nautical miles.

3. The drawing of such baselines shall not depart to any appreciable extent from the general configuration of the archipelago.

4. Such baselines shall not be drawn to and from low-tide elevations, unless lighthouses or similar installations which are permanently above sea level have been built on them or where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the nearest island.



Each of these requirements could be problematic for a low-lying archipelagic state affected by sea level rise. Most prominently, for some archipelagic states, there is the challenge of meeting the land-to-water ratio and the maximum length of baselines. For widely scattered archipelagoes with small islands, the land-to-water ratio is a difficult, if not insuperable problem, as they have too much water to enclose. A rise in sea level might remove drying reefs from the archipelagic state's calculation in relation to land, and therefore it might struggle to retain its archipelagic status (Kaye, 2017, p. 235).

The same problem may arise in the use of low-tide elevations as base-points for archipelagic baselines. Low-tide elevations can only be used where there is a lighthouse or similar installation built upon them. In the terminology of the LOS Convention, a feature that is exposed at low tide but covered with water at high tide is referred to as a 'low-tide elevation' (see South China Sea Arbitration, *Phil. v. China*). An archipelagic state, faced with the loss of archipelagic base points because of sea level rise, could take remedial action to retain its base points through the construction of features upon them. Since there is no requirement under Article 47(4) for lighthouses to be crewed, or even capable of occupation, a relatively modest installation could meet this requirement (Kaye, 2017, 235). Although it is generally accepted that coastal states may undertake physical measures to maintain their existing baselines, this would not be a feasible option for coastal states due to the costs involved (International Law Association, 2018, p. 10).

It is imperative to note that, although the islands of Maldives lose their natural island status as defined in Article 121(1) of the LOS Convention, they are likely to be low-tide elevations with features constructed on top, which can be used as base points in calculating the baselines in accordance with Articles 7(4) and 47 of the LOS Convention. Article 7(4) reads:  
Straight baselines shall not be drawn to and from low-tide elevations, unless lighthouses or similar installations which are permanently above sea level have been built on them or except in instances where the drawing of baselines to and from such elevations has received general international recognition.

Article 7(4) provides a requirement that such baselines must receive general international recognition (International Law Association, 2018). The Maldives deposited its submission on the territorial boundaries and the outer limits of its continental shelf in 2010, in the effort to cement its maritime jurisdiction (Kaye, 2017, pp. 244-245; Rayfuse, 2010) and it is unlikely (based on the facts below) that the Maldives will receive protest from the international community for claiming the full maritime zones, as currently declared, in a situation that the natural islands were to reduce to low-tide elevations under the purview of the LOS Convention (Government of Maldives, 2008; Techera & Cannel-Lunn, 2019).

Notably, the impact of rising sea levels on baselines does not seem to have been considered from the time the notion of baselines was originally devised during the Hague Conference all the way up to the adoption of the LOS Convention (Gagain, 2012, p. 99). However, the loss of maritime zones of at least 200 nautical miles in width would be a substantial loss to any state, but the loss would be particularly great for small island developing states whose economies overwhelmingly depend on exploiting their ocean resources. No state has yet brought a legal action with respect to losses caused by anthropogenic climate change (Kaye, 2017, pp. 241-242, 249).

It is important to note that LOS Convention does not expressly provide that boundaries should move with baselines nor provide provisions that potentially 'fix' the outer boundary of the exclusive economic zone, the contiguous zone, or the territorial sea (Di Leva & Morita, 2008, p. 18). Many scholars have therefore considered the legal and physical boundary of these maritime zones to be ambulatory (Rayfuse, 2010; Santos, 2008, p. 41). This view, perhaps more than any other, makes clear how rising sea levels may soon affect boundary lines (Di Leva & Morita, 2008, p. 18).

Constant changes to boundaries have the potential to cause confusion and possibly reduce confidence in the location of physical maritime boundaries. Scholars have also argued that tying maritime boundaries to dynamic baselines of coastal markers at low tide would encourage wasteful spending by states to protect the baselines (Di Leva & Morita, 2008, pp. 21-22). A number of commentators have, therefore, suggested the need for the explicit rejection of the ambulatory theory of baselines and the adoption of new positive rules of customary or conventional international law freezing either baselines or the outer limits of maritime zones, or both (Rayfuse, 2010). Such a rule would be fair and equitable because it would merely freeze the present division of authority and allocation of maritime entitlements agreed to in the LOS Convention. No state would gain any additional share of the earth's space even if the baselines were to recede (International Law Association, 2018, p. 10; Rayfuse, 2010).

However, if the international community determines that the maritime boundaries are ambulatory and that they need to address the issue of shifting boundaries of coastal markers at low tide, developing countries may be at a disadvantage if they have limited access to historical records or lack the capacity to address complicated historical and geographic approaches to boundary claims. Therefore, it seems appropriate and prudent to provide both technical and financial assistance to these countries so that they can approach any future territorial and maritime boundary negotiations with the necessary tools (Di Leva & Morita, 2008, pp. 32).

In March 2018, eight Pacific island leaders attending the second Leaders' Summit of the Parties to the Nauru Agreement agreed to pursue legal recognition of the defined baselines established under the LOS Convention and that these baselines to remain in perpetuity irrespective of the

impacts of sea level rise. Another practical example from the region is provided by the Republic of the Marshall Islands, which on 18 March 2016 passed comprehensive new legislation, repealing 'in its entirety' the 1984 Maritime Zones Declaration Act, and declared new maritime zones in the attempt to freeze its maritime jurisdiction (International Law Association, 2018, p. 16). Freestone and Schofield have pointed out that this Marshall Islands action represents one of the latest developments in an emerging pattern of practice in the Pacific region whereby states are unilaterally declaring and publicizing their maritime jurisdictional baselines, limits and boundaries (International Law Association, 2018, p. 16).

Similar legislation, designating new archipelagic waters and designating the outer limits of the national EEZs has also been passed by Kiribati and Tuvalu (Kaye, 2017, p. 444). There is at least *prima facie* evidence of the development of a regional state practice in the Pacific Islands, many of which are the most vulnerable to losses of territory and, consequently, baseline points from sea level rise (International Law Association, 2018, p.18).

## 6. Recognition of artificial islands for environmentally displaced persons

In case of the Maldives, a one meter rise in sea level is believed to inundate all natural islands, leaving the purpose built artificial islands above water, at high tide. This situation leads to the question whether the artificial islands in the Maldives can maintain maritime zones and satisfy the elements of statehood if the Maldives become fully submerged (Dolla, 2015, p 23-24). The question that needs to be answered soon is whether the artificial islands of the Maldives designed to be at least 0.5 meter higher than the natural islands as a climate change adaptation measure in line with national climate change adaptation policies (Jaleel & Fazi, 2017) will become considered as *de facto* Artificial Islands for Environmentally Displaced Persons, and on their own would they generate maritime zones, when natural islands lose their 'island status' pursuant to Article 121(1) of the LOS Convention.

The LOS Convention does not explicitly define the term 'artificial island,' so the best way to define an artificial island may be by determining what it is not. The definition of islands in Article 121(1) of the LOS Convention effectively eliminates some types of formations, including islands constructed artificially and land masses at low-tide elevations, from having the legal status of islands. The LOS Convention states further in Article 60(8), at least in the context of the EEZ, and through Article 80 regarding the continental shelf, that "[a]rtificial islands, installations and structures do not possess the status of islands" (Articles 60(8) and 80 of the LOS Convention). Henceforth, artificial islands cannot generate maritime zones. Maritime zones can be generated only from land territory over which a state has sovereignty—which is often described as the

principle that “the land dominates the sea.” The maxim is long-standing and has often been cited with approval by international courts and tribunals (Beckman, 2013, pp.149-150). This current limitation may have significant impacts on the maintenance of maritime zones of small island states such as the Maldives, which has already chosen to construct artificial islands as protective margins against climate change (Gagain, 2012, p.102).

The Maldives’ construction of the artificial islands may serve as a practical solution to mitigate the effects of climate change for small island states, and in particular, the loss of maritime zones (Gagain, 2012, p. 101). At the current moment, whether such construction may serve as a legal solution remains unclear, especially considering the fact that the status of artificial islands remains limited under international law.

As no island state has been considered completely submerged, as of now, the law and discussion on the matter of artificial islands is relatively new. Nonetheless, in light of the current sea level rise and the threat it poses to low lying small island states such as the Maldives, several legal scholars have proposed to expand the text of LOS Convention to consider Artificial Islands for Environmentally Displaced Persons to form a legally recognized state (Dolla, 2015, pp.23-24; Gagain, 2012, p. 106), although some scholars suggest that the LOS Convention needs no revision or redefinition (Kaye, 2017, pp.244-245). In fact, the LOS Convention is flexible enough to allow for new developments, elaborations and clarifications through new multilateral conventions or instruments (Anderson, 1998, p.558). The Preamble to the LOS Convention provides that “matters not regulated in this Convention continue to be governed by the rules and principles of general international law”. Scholars suggest that small island states such as the Maldives should advocate for status of artificial islands to be expanded, potentially through a new law (Gagain, 2012, p. 102), such as the Draft Convention on the International Status of Environmentally-Displaced Persons (Hsiao, 2017, pp. 268, 272). The proposed new law shall be designed to give equal legal effect to Artificial Islands for Environmentally Displaced Persons as has been given to natural islands under Articles 3 and 121 of the LOS Convention, in a situation of complete or significant loss of territory due to sea level rise.

An alternative suggestion is to use the legal mechanism of the LOS Convention, not to have an adjudication of the issue, but to seek the issuance of an advisory opinion on the legal question presented by climate change and Artificial Islands for Environmentally Displaced Persons in light of the international agreements related to the subject. The problem with such an advisory opinion, however, would be its effectiveness due to its non-binding character (Lee & Bautista, 2018, p. 154).

Perhaps the most significant challenge would be obtaining consensus among the international community to give legal effect to Artificial Islands for Environmentally Displaced Persons in

case of complete inundation of natural land, because international law is formed through the choices and consent of states, as opposed to being dictated by a legislating entity (Gagain, 2012, p. 120). Thus, the Maldives must ultimately convince other states that it is in their best interest to collectively give legal effect to the proposition of Artificial Islands for Environmentally Displaced Persons (in order to avoid a migrant refugee crisis) and fixing its maritime zones as currently declared, and obtain global consensus (Doig, 2016, p. 84).

## 7. Conclusion

Climate change brings unprecedented challenges to both the international community as well as international law (Hsiao, 2017, p. 268). Given rapidly rising sea levels, low lying small island states such as the Maldives are particularly vulnerable to the impacts of climate change (Di Leva & Morita, 2008, p. 1; Doig, 2016, pp. 72-73). In fact, climate change impacts constitute a threat to the statehood of Maldives, due to loss of territory, and the enjoyment of the fundamental right of the Maldives' people to self-determination.

In light of the empirical evidence and significant practice by states and international organisations, the Maldives will not lose its statehood due to the loss of its territory resulting from sea level rise, and will continue its legal personality and protection in accordance with applicable international law. The pragmatic way forward to cement the legal personality of statehood for low-lying island states such as the Maldives, is to declare islands above the mean sea level, in case of complete inundation of naturally formed land, as Artificial Islands for Environmentally Displaced Persons, and to declare maritime borders established under the LOS Convention as non-ambulatory, in order to cope with the adverse impacts of sea level rise being manifested.

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