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**ENSURING THE RIGHT TO LIFE IN THE
CONTEXT OF SEA LEVEL RISE: THE CASE OF
PACIFIC ISLAND STATES**

Master's Thesis

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INTRODUCTION

One of the main consequences of climate change is sea level rise, which poses problems both for the law of the sea as well as for other branches of law, including human rights and environmental law.¹ Under the law of the sea, baselines are generally determined in the normal approach from the low water line.² If these baselines move landward, then the baselines shift and the maritime zones move landward, significantly reducing the extent of maritime entitlements of coastal States.

Consequently, sea level rise poses questions about potential changes of the maritime boundaries also regarding Pacific Island States in focus in this thesis. This in turn poses questions about their rights, obligations, sovereignty over these maritime zones, and ability to claim maritime zones. Pacific Island States are low-lying and archipelagic States, therefore they are the most vulnerable to sea level rise. This also has consequences for the survival of people in these States. Thus, the focus of this thesis is to examine how the right to life of Pacific Islanders can be protected in the context of sea level rise.

Pacific Islanders often claim that « We are not drowning, we are fighting ».³ These States have made modifications to their laws and regional declarations to address the issues stemming from sea level rise. They put forward strong legal arguments which can be used in the development of a comprehensive approach to sea level rise, applicable in other contexts.

The Montevideo Convention defines States as having defined territory, permanent population, government, and capacity to enter into legal relations with other States.⁴ The very existence of these Pacific Island States is threatened if they are to be partially or completely submerged. The territory of the State might very well disappear because of sea level rise, and its maritime

¹ International Law Association (ILA), Minutes of the Meeting of the Executive Council (London, 10 November 2012), p 5, The ILA created the ILA International Committee on Baselines under International Law of the Sea to the Law of the Sea Issues raised by sea level rise.

² United Nations Convention on Law of the Sea, Montego Bay, 10 December 1982. LNTS 1833, adopted by the Third United Nations Conference on the Law of the Sea, Article 5 [hereinafter LOSC].

³ Ms Brianna Fruean in her opening Statement at the COP26 in Glasgow, November 2, 2021.

⁴ Convention on Rights and Duties of States, Montevideo, 26 December 1933. LNTS 165, adopted by the Seventh International Conference of American States, Article 1 [hereinafter Montevideo Convention]; See also Ms Brianna Fruean in her opening Statement at the COP26 in Glasgow, November 2, 2021.

zones will be returned to the high seas, as in the ambulatory baselines theory.⁵ In turn, the population may have no other choice but to migrate or to see life end on the islands, as even partial inundation of these islands can render the territory uninhabitable.⁶

In that respect, sea level rise also threatens the right to life of Pacific Island States' people. Among other threats, sea level rise can render the land not cultivable, uninhabitable, and the water not drinkable. Thus, it can adversely impact on various categories of human rights, including the right to drinkable water, the right to food, property rights, and the right to a clean healthy environment. The focus of this thesis is on the right to life, as it is the most crucial to humans and is necessary for the enjoyment of all other human rights.

In light of the right to life protection, the right to a clean and healthy environment may be relevant. Michael B. Anderson explained what is at the core of environmental protection and human rights protection. He argued that environmental degradation can lead to threats to human rights, and the degradation of human rights can lead to degradation of the environment.⁷ This is a vicious cycle, but it also means that it can be a virtuous cycle, where protection of the environment and human rights can lead to the protection of the other.

As highlighted by the literature, sea level rise has no precedent.⁸ The literature has underlined that the current international instruments⁹ are not suited to address the multiple issues that are caused by sea level rise.¹⁰ For this reason, taking these branches together holistically helps

⁵ Rosemary Rayfuse, 2012. 'Climate Change and the Law of the Sea' in Rosemary Refuse and S Scott (eds), *International Law in the Era of Climate Change* (Edward Elard Cheltenham 2012), p 147 [hereinafter Rayfuse]; Moritaka Hayashi, 2011. 'Sea-Level Rise and the Law of the Sea: Future Options' in Davor Vidas and Peter Johan Schei (eds), *The World Ocean in Globalisation* (Martinus Nijhoff Leiden), p 187 [hereinafter Hayashi]; Clive Schofield, 2009. Shifting Limits?: Sea Level Rise and Options to Secure Maritime Jurisdictional Claims. *Carbon and Climate Law Review*, 4, p 405 [hereinafter Schofield]; David Freestone, 1991. 'International Law and Sea Level Rise', in Robin Churchill and David Freestone (eds), *International Law and Global Climate Change* (Martinus Nijhoff Leiden), p 109 [hereinafter Freestone]; Alfred H.A Soons, 1990. The Effects of a Rising Sea Level on Maritime Limits and Boundaries. *Netherlands International Law Review*, 37(2), p 207 [hereinafter Soons]; David D Caron, 1990. When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level. *Ecology Law Quarterly*, p 621 [hereinafter Caron]; International Law Association, Committee on Baselines Under the International Law of the Sea, 2012, Final Report [ILA, Baselines Committee, 2012, Final Report].

⁶ Rosemary Rayfuse and Emily Crawford, 2011. Climate Change, Sovereignty and Statehood. *Legal Studies Research Paper*, 11(59), University of Sydney, p 2 [hereinafter Rayfuse and Crawford].

⁷ Michael B. Anderson, 1998. 'Human Rights approaches to Environmental Protection: An Overview', in Alan Boyle and Michael Anderson (eds), *Human Rights Approaches to Environmental Protection*, Clarendon press, Oxford, pp 1-25 [hereinafter Anderson].

⁸ *Ibid.*, Freestone (supra 5), p 116.

⁹ LOSC; Montevideo Convention; Universal Declaration on Human Rights, Paris, 10 December 1948 [hereinafter UDHR]; International Covenant on Civil and Political Rights, New York, 16 December 1966. LNTS 999 [hereinafter ICCPR]; International Covenant on Economic, Social and Cultural Rights, New York, 16 December 1966. LNTS 993 [hereinafter ICESCR]; United Nations Framework Convention on Climate Change, New York, 9 May 1992. LNTS 1771, adopted by the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change, during its Fifth session, second part [hereinafter UNFCCC].

¹⁰ Rosemary Rayfuse, 2010. International Law and Disappearing States : Utilising Maritime Entitlements to Overcome the Statehood Dilemma. *UNSW Law Research Paper*, 52, p 12 [hereinafter Rayfuse].

address sea level, and its consequences on the human rights of Pacific Islanders. It is not only warranted but also extremely topical. Hence, this thesis intends to analyse simultaneously and link together the law of the sea, human rights law, and environmental law and attempts to answer the legal questions raised by sea level rise.

Regarding the law of the sea, there are doctrinal debates on the baseline theories, with one dominant theory but no clear answer. There are three main theories of interpretation of the United Nations Law of the Sea Convention (LOSC), ambulatory baselines and shifting maritime zones theory, fixed outer limit of maritime zones theory, and fixed baselines theory. The dominant theory is that of ambulatory baselines. This is because the commentators of the LOSC concluded that since there were only two instances where baselines and maritime delimitations were fixed, at Article 7(2)¹¹ for straight baselines and Article 76(9)¹² for the continental shelf, therefore, the negative implication is that baselines are otherwise ambulatory.¹³ However, as argued by Tim Stephens, neither of these variants of the ambulatory theory « can draw express support from the text of the LOSC, or any other instrument ».¹⁴ Nevertheless, it is the most widely accepted view that baselines are ambulatory and move as land recedes, because the main principle of the law of the sea is that land dominates the sea.¹⁵ With sea level rise, maritime zones will be moving landwards, limiting the extent of coastal States' claims over the sea. Thus, shifting maritime zones will cause a decrease in the extent of coastal States' sovereignty and rights.¹⁶

In the specific case of Pacific Island States, which are low-lying islands and archipelagic States, the consequences of the ambulatory baselines theory will be dramatic for them.¹⁷ An island cannot be artificial and has to be above water at high tide.¹⁸ This might become an issue with the sea level rise explained Schofield and Freestone: « For example, an island that

¹¹ LOSC, Article 7(2).

¹² LOSC, Article 76(9).

¹³ *Ibid.*, David Freestone (supra 5), pp 109-125; Lewis M. Alexander, 1983. Baseline Delimitations and Maritime Boundaries. *Virginia Journal of International Law*, 23, pp 503-536 [hereinafter Alexander]; *ibid.*, Caron, 1990. (supra 5), pp 621-53, 634; David D. Caron, 2008. 'Climate Change, Sea Level Rise and the Coming Uncertainty in Oceanic Boundaries: A Proposal to Avoid Conflict', in Seoung-Young Hong and Jon M. Van Dyke (eds.) *Maritime Boundary Dispute, Settlement Processes and the Law of the Sea*, p 14 [hereinafter Caron].

¹⁴ Tim Stephens, 2015. 'Warming waters and souring seas', in: Donal Rothwell, Alex G. Duda Elferink, Karen Nadine Scott, Tim Stephens (eds), *The Oxford Handbook of the Law of the Sea*, (Oxford University Press), p 789 [hereinafter Stephens].

¹⁵ *Ibid.*, Rayfuse (supra 5), p 147; *ibid.*, Hayashi (supra 5), p 187; *ibid.*, Schofield (supra 5), p 405; *ibid.*, Freestone (supra 5), p 109; *ibid.*, Soons (supra 5), p 207; *ibid.*, Caron (supra 5), p 621; ILA, Baselines Committee, 2012, Final Report.

¹⁶ Signe Veierud Busch, 2018. Sea Level Rise and Shifting Maritime Limits : Stable Baselines as a Response to Unstable Coastalines. *Artic Review on Law and Politics*, 9, p 177 [hereinafter Busch].

¹⁷ *Ibid.*, Stephens (supra 14), p 790.

¹⁸ LOSC, Article 121(1).

is presently always above water level may, as a consequence of sea level rise, disappear during high tide, thus being reduced to the status of low-tide elevation ».¹⁹ The consequences of sea level rise and this interpretation of the LOSC are immense. Here, more than sovereignty and jurisdiction, it is the very existence of the State which is potentially threatened, according to Lustaud and Busch.²⁰ If the island is fully submerged, it means that it will not be above water at high tide, and without enhancing it, its reclassification as a rock is inevitable.²¹ As highlighted by Freestone and Schofield, the potential loss of maritime basepoints due to sea level rise could lead to compromising these States' ability to maintain their claim of archipelagic status within Part IV of the LOSC and fulfil the criteria of Article 47(1): « [a]lthough the group of islands would still remain an archipelago geographically and politically, it could lose all the advantages that UNCLOS confers ».²²

According to the Montevideo Convention, statehood is composed of four main criteria. Formally, in the context of sea level rise, the population criterion may not be met. Islands could become inhabitable before even being entirely submerged because of partial submersion,²³ causing the population to flee. However, when considering the population, these Pacific Island States not only have human rights, but they also have a very unique interpretation of the environment and the population,²⁴ bringing into question the fulfilment of

¹⁹ Clive Schofield and David Freestone, 2014. 'Options to Protect Coastlines and Secure Maritime Jurisdictional Claims in the Face of Global Sea Level Rise', in : Gerrard Michael B. And Wannier Gregory E. (Eds) *Threatened Island Nations, Legal Implications of Rising Seas and a Changing Climate*, (Cambridge University Press, New York, USA), p 146 [hereinafter Schofield and Freestone].

²⁰ Jonathan Lusthaus, 2010. *Shifting Sands : Sea Level Rise, Maritime Boundaries and Inter-state conflict. Politics*, 30(2), p 114 [hereinafter Lusthaus]; *ibid.*, Busch (supra 16), p 179.

²¹ *Ibid.*, Soons (supra 5), p 223; see also LOSC, Article 121(3).

²² LOSC, Article 47(1); David Freestone and Clive Schofield, 2021. *Sea Level Rise and Archipelagic States: A Preliminary Risk Assessment. Ocean Yearbook*, 35, p 16 [hereinafter Freestone and Schofield]. Indeed, according to Article 47(1), to be legally recognized as archipelagoes States should respect a land to water ratio that is not smaller than 9 to 1.

²³ *Ibid.*, Rayfuse and Crawford (supra 6), p 2.

²⁴ 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes; 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25); and 2018 Marshall Islands Ministry of Environment Act 2018.

the States obligations to ensure and protect the right to life and to a healthy environment. This is especially the case for Kiribati²⁵ and Tuvalu,²⁶ and indirectly for the Marshall Islands.²⁷ Nevertheless, one of the LOSC aims is the conservation of living resources. This is crucial for the protection and preservation of the marine environment, as set out by the International Tribunal of Law of the Sea (ITLOS).²⁸ Therefore, one of the principles to follow and use for the preservation and protection of maritime life is the precautionary principle, according to ITLOS.²⁹ It has even identified a trend towards making the precautionary approach part of customary international law.³⁰ But the LOSC is not specifically an environmental law convention. The LOSC, it must be recalled, was drafted in the 1970s and early 1980s, at a time when there was no clear consciousness of climate change. The drafters did not know the details and implications of climate change, and even less about sea level rise.³¹ Therefore, one of the solutions that has been found is to rely on environmental law conventions, such as the United Nations Framework Convention on Climate Change (UNFCCC) and its following instruments, specifically the 1997 Kyoto Protocol.³² However, even if the latter sets targets for the industrialised States, as argued by Tim Stephens, referring to the Intergovernmental Panel on Climate Change (IPCC) work:³³ « [...] the Kyoto Protocol in its current form will not deliver the emissions reductions necessary to stabilise atmospheric concentrations of CO₂ at a level that would avoid serious and irreversible damage to the marine environment ». ³⁴ Therefore, since the LOSC was drafted long ago without taking into

²⁵ 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes, Article 2 Interpretation: « In this Act, unless the context otherwise requires - “Environment” includes all natural and social and cultural system and their constituent parts, including people, communities and economic, aesthetic, culture and social factors ».

²⁶ 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25): « “environment” includes all natural, physical and social resources and ecosystems or parts thereof, people and culture and the relationship that exists between these elements ».

²⁷ 2018 Marshall Islands Ministry of Environment Act 2018, § 602(e): « “Environment” means the physical factors of the surroundings of human beings and includes the land, soil, water, atmosphere, climate, sound, odors, tastes and the biological factors of animals and plants of every description situated within the territorial limits of the Republic including the exclusive economic zone ».

²⁸ Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999, § 70 [hereinafter ITLOS, 1999, Southern Bluefin Tuna].

²⁹ ITLOS, 1999, Southern Bluefin Tuna.

³⁰ Responsibilities and obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, § 135 [hereinafter ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion]. See also, ITLOS, 1999, Southern Bluefin Tuna, §§ 73-80.

³¹ *Ibid.*, Stephens (supra 14), p 787.

³² United Nations Framework Convention on Climate Change (UNFCCC) and 1997 Kyoto Protocol

³³ IPCC, *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) Chapter 6.

³⁴ *Ibid.*, Stephens (supra 14), p 783.

consideration these issues of climate change and especially sea level rise, different theories of interpretation have emerged, such as fixed outer limits of maritime zones and fixed baselines. Regarding human rights, there have been developments of the literature and case law, dealing with human rights and rights to the environment. However, these evolutions are recent and do not encompass all the issues raised by sea level rise. In this sense, the Inter-American Court of Human Rights (IACtHR) acknowledged the relationship between the protection of the right to life and a healthy environment, in line with the Protocol of San Salvador,³⁵ and the regional protection of forests, rivers and seas.³⁶ The Human Rights Committee (HRC) acknowledged this Advisory Opinion, but did not go as far. The HRC recognised that there can be a violation of the right to life even if the victim is not deprived of their life, this is linked to the concept of dignity.³⁷ Even though the HRC used the concept of dignity in the Teitiota case, concerning the refusal of refugee status in New Zealand by the alleged victim,³⁸ the living conditions in Kiribati did not fulfil that right, as impacted by sea level rise, salinisation, impossibility to exploit the land and live off it.³⁹ This is because of dignity's fluid nature, which may be used to extend or counterbalance human rights,⁴⁰ as everyone can agree on its minimum core.⁴¹ These publications are interesting and noteworthy, but there is a gap in the literature as to how to ensure human rights in the context of sea level rise. This thesis intends to fill the gap regarding the protection of human rights of Pacific Islanders in the context of sea level rise. More precisely, it will focus on the right to life. Consequently, the research problem analysed in this thesis is the following: In the context of sea level rise, how to ensure the right to life of persons living in Pacific Islands States? For this purpose this thesis deals with different branches of law which have not been analysed together, especially not in the context of sea level rise. Namely, this thesis links the law of the sea, human rights and environmental law to

³⁵ Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, San Salvador, 17 November 1988. 28 I.L.M. 156, adopted at the Eighteenth Regular Session of the General Assembly of the Organization of American States, Article 11 [hereinafter Protocol of San Salvador].

³⁶ IACtHR Advisory Opinion OC-23/17 of November 15, 2017 Requested by the Republic of Colombia, The Environment and Human Rights (State obligations in Relation to the Environment in the Context of the Protection and Guarantee of the Rights to Life and to Personal Integrity: Interpretation and Scope of Articles 4(1) and 5(1) in Relation to Articles 1(1) and 2 of the American Convention on Human Rights), § 62 [hereinafter IACtHR, 2017, Advisory Opinion].

³⁷ United Nations Human Rights Committee, General Comment No. 36, Article 6 of the International Covenant on Civil and Political Rights, on the right to life, 3 September 2019, CCPR/C/GC/36 [hereinafter HRC GC No 36].

³⁸ Human Rights Committee on Civil and Political Rights, *Teitiota v New Zealand*, 24 October 2019, CCPR/C/127/D/2728/2016, § 9.4 [hereinafter HRC, *Teitiota case*].

³⁹ HRC, *Teitiota case*, *Duncan Laki Muhumuza (Dissenting)*, §§ 4-5.

⁴⁰ Paolo G Carozza, 2013. 'Human Dignity', in Dinah Shelton (ed), *Oxford Handbook of International Human Rights Law*, (Oxford University Press), p 358 [hereinafter Carozza].

⁴¹ *Ibid.*, Carozza (supra 40), p 349.

analyse the consequences of sea level rise for Pacific Island States. This holistic analysis is the main novelty of the approach taken by this thesis.

The first hypothesis underpinning this research is that Pacific Island States have a unique interpretation of human rights and especially of the environment as it is making an intrinsic link between the people and the environment.⁴² Regarding the right to life, this research posits that a new interpretation can arise through dignity principle, as seen in the IACtHR's Advisory Opinion from 2017 on States obligations.⁴³ So that it takes into account the impact of climate change and the right to a healthy environment, to analyse the concept of life with dignity and States' obligations stemming from it.

Regarding sea level rise, this research posits that a new interpretation of maritime baselines definition as fixed can help protect States rights. It could be argued that it benefits the protection of the environment, as it retains the States duties of environmental protection and their sovereignty over the territory. Therefore, fixing baselines also benefits the protection of the right to a healthy environment, which contributes to the protection of the right to life.

Within States obligations, there are two main approaches to address climate change and its consequences, climate change mitigation, and climate change adaptation. Climate change mitigation is the measures taken to reduce the adverse future effects of climate change, such as the reduction of greenhouse gas (GHG) emissions.⁴⁴ Climate change adaptation is intrinsically linked to climate change mitigation,⁴⁵ in the sense that climate change adaptation aims at « enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change ».⁴⁶ Thus, as recognised by the Parties of the 2015 Paris Agreement: « [...] greater levels of mitigation can reduce the need for additional adaptation efforts [...] ».⁴⁷

⁴² 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes, Article 2; 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25); 1984 Marshall Islands National Environmental Protection Act, § 103 (d) and as recalled in 2018 Marshall Islands Ministry of Environment Act, § 602 (e).

⁴³ IACtHR, 2017, Advisory Opinion.

⁴⁴ Paris Agreement, Paris, 12 December 2015. LNTS 3156, adopted by the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, Articles 4(4), 4(14), 6(2), 6(4) [hereinafter Paris Agreement].

⁴⁵ Paris Agreement, Articles 4(7), 5(2), 6(1), 6(8), 9(1), 9(4), 10(6).

⁴⁶ Paris Agreement, Article 7(1).

⁴⁷ Paris Agreement, Article 7(4).

The hypothesis is that climate change mitigation may give rise to obligations, such as the duty of care as recognised by various domestic courts.⁴⁸ This duty of care entails the State responsibility in fulfilling and protecting the right to life of the people under its jurisdiction. The other hypothesis regarding climate change adaptation is that the law may find new ways to adapt to the new factual situation, such as through new definitions and approaches.

Therefore, the exposition of these issues raises several questions such as: why is sea level rise a threat to the right to life and the environment? How is the right to life threatened by sea level rise and how is it protected by the law? What are the States' obligations in protecting the right to life in the context of sea level rise?

Within the scope of this thesis, the case of study will focus on low-lying archipelagic States situated in the Pacific Ocean. They will be referred to as Pacific Island States. These States are the Marshall Islands, Tuvalu, Kiribati, and Solomon Islands. This thesis will also take into consideration other States whose case law may be of analytical interest, such as the Netherlands and Australia, which have recognised a duty of care of the State in the context of climate change.⁴⁹ For this purpose, ensuring the right to life in the context of sea level rise is of analytical interest, this thesis will analyse States obligations to protect such right. This thesis will concentrate on sea level rise as it poses an existential threat to States. Even if sea level rise poses other legal questions,⁵⁰ this thesis will not focus on potential inter State conflicts and navigational rights. This thesis acknowledges that sea level rise may lead to migration, but it falls outside the scope of this thesis.

To answer the research questions this thesis will use mainly three methods. The first method is to make a case study on Pacific Island States, to effectively study the vulnerable and drastic situation in which these States find themselves. They are low-lying States and archipelagic States. As they are the most vulnerable States to sea level rise, they will be disproportionately impacted by it as low-lying States. This means that they are but a few meters above sea level. In addition, they are composed of islands. This entails that they have numerous maritime zones, and that these will be impacted by sea level rise. Also, these States have been active at

⁴⁸ The Supreme Court of the Netherlands, Civil-law Division, Case number: 19/00135, *The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Urgenda Foundation* (20 December 2019) [hereinafter Supreme Court of the Netherlands, 2019, Urgenda case]; *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] The Federal Court of Australia (FCA) 560 [hereinafter FCA, 2021, Sharma case].

⁴⁹ Supreme Court of the Netherlands, 2019, Urgenda case; FCA, 2021, Sharma case.

⁵⁰ Alain Khadem, 1998. Protecting Maritime Zones from the Effects of Sea Level Rise. *IBRU Boundary and Security Bulletin*, 5(3), pp 76-78 [hereinafter Khadem]; see also *ibid.*, Lusthaus (supra 20), p 113.

domestic, regional and global levels to address this issue. As stated above, domestic and regional courts have had different human rights approaches, in the context of climate change. These are especially relevant to this thesis on the right to life, in the context of sea level rise. This case law recognise a duty of care;⁵¹ a link between the right to life and right to healthy environment;⁵² and the violation of the enjoyment of the right to life in the context of climate change.⁵³ These will be relevant to compare and analyse to develop answers in tackling the protection of the right to life in the context of sea level rise.

The second method used will be to have use correlated approaches to address the issues in a holistic manner. This thesis will be combining three different branches of law, the law of the sea, human rights law, and environmental law. This approach will be beneficial to start answering these research questions as they are of a global nature. As stated previously, sea level rise is a global issue that intertwines many legal questions. These can be best answered by a systematic approach correlating different branches of law to address sea level rise. Analysing the different branches of law in a holistic manner is beneficial to correlate the different legal obligations of States in the context of sea level rise to protect the right to life.

The third method used will be the qualitative method, which is a substantial theoretical analysis of a phenomenon, in this case, sea level rise in the Pacific Island States. This is because this thesis will be analysing the law, policies and cases at national, regional and international levels, to encompass a broad approach from different perspectives. It will focus on Pacific Island States laws as they are the case study and they have a unique approach to sea level rise which may help to address sea level rise effectively to protect the right to life.

As for the structure followed in this thesis, firstly, the legal consequences of sea level rise will be explored. These relate to the maritime zones and the implications for the statehood status of Pacific Island States. Secondly, the duty of care will be analysed. It will take into consideration the right to life and right to a healthy environment, and their interpretation with the dignity principle, highlighting States obligations under the duty of care. Thirdly, the potential legal evolutions will be assessed. It will strive to answer the legal issues raised in the previous chapters through interpretations of the LOSC, statehood criteria, and refugee law.

Keywords: Sea boundaries; human rights

⁵¹ Supreme Court of the Netherlands, 2019, Urgenda case; FCA, 2021, Sharma case.

⁵² IACtHR, 2017, Advisory Opinion, § 47.

⁵³ IACtHR, 2017, Advisory Opinion, § 143, see also §§ 118-121.

1. LAW OF THE SEA LEGAL CONSEQUENCES OF SEA LEVEL RISE

This chapter aims at analysing the legal consequences of sea level rise on law of the sea interpretations, States rights and obligations, and the State's capacity to fulfil statehood criteria. Sea level rise represents a threat to the stability and definition of baselines and maritime zones. There are three types of baselines. The most used is normal baselines, it is « the low water line along the coast », following the geography of the coast.⁵⁴ Straight baselines « [join] appropriate points » following the general direction of the coast.⁵⁵ Archipelagic baselines « [join] the outermost points of the outermost islands and drying reefs of the archipelago ». ⁵⁶ The breadth of every maritime zone is calculated from the baselines. These include the territorial sea, contiguous zone, exclusive economic zone (EEZ), and continental shelf.⁵⁷ Each gives the coastal State a different degree of sovereignty, jurisdiction, rights and obligations, which progressively diminishes going seawards. Sea level rise entails that the baselines will move landwards. In the ambulatory baselines approach, coastal States risk losing the extent of their maritime zones and the sovereign rights and obligations recognised in them. These are especially crucial as they encompass the right to exploit the resources of these maritime zones, giving an economic activity to the State and the resources necessary to fulfil the population's human rights.⁵⁸ These obligations also include the protection of the environment which is intrinsically linked to the right to life protection.⁵⁹

Pacific Island States are low-lying States and archipelagic States, which means that sea level rise will affect them significantly. They are more vulnerable than other States because of their geographic characteristics and also because they possess little resources to counter sea level rise. Pacific Island States may be partially or completely submerged, which lead to questions about the fulfilment of the Montevideo Convention criteria on statehood.

The first part of this chapter will analyse the predominant interpretation of the baselines,⁶⁰ and its consequences for States' territory and maritime zones. The second part will analyse the

⁵⁴ LOSC, Article 5.

⁵⁵ LOSC, Article 7, the criteria for a coastline must fulfill in order for the coastal State to have the right to draw straight baselines are that « coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity », straight baselines may also be drawn in « the presence of a delta and other natural conditions [where] the coastline is highly unstable », the drawing of straight baselines must not depart to any appreciable extent from the general direction of the coast, the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters ».

⁵⁶ LOSC, Article 47(1).

⁵⁷ LOSC, Articles 3, 33, 48, 57.

⁵⁸ LOSC, Articles 24, 33, 56.

⁵⁹ See 2. Pacific Island States Duty of Care

⁶⁰ *Ibid.*, Freestone (supra 5), pp 109-125; *ibid.*, Alexander (supra 13), pp 503-536; *ibid.*, Caron (supra 5), pp 621-53, 634; *ibid.*, Caron (supra 13), p 14; *ibid.*, Soons (supra 5), pp 216-218.

impact of this interpretation on rights and duties of States in relation to their maritime zones, resources, and environment. The third part will analyse the question of statehood criteria and the ability of States to fulfil these criteria within the ambulatory baselines theory.

1.1. Ambulatory Baselines and Shifting Maritime Zones

One of the core principles of the Law of the Sea is that land dominates the sea, as recognised by the International Court of Justice (ICJ) in the North Sea Continental Cases, which state that « the land is the legal source of the power which a State may exercise over territorial extensions to seaward ». ⁶¹ Therefore, land gives rise to rights over the sea, as maritime zones are calculated from the baselines and coastal States enjoy more sovereignty, rights and duties the closer to the land. There are several interpretations of the LOSC, the dominant one being in line with the principle of land dominating the sea, meaning that the baselines are ambulatory. They move according to sea level rise.

The predominant interpretation of the LOSC is that of ambulatory baselines, which leads to shifting maritime zones. ⁶² There are two variants to this interpretation. The first is that sea level rise shifts baselines automatically; and the second is that this shift is not automatic, but entails that States have an obligation to adjust their baselines accordingly. ⁶³ However, as argued by Tim Stephens, neither of these variants of the ambulatory theory « can draw express support from the text of the LOSC, or any other instrument ». ⁶⁴ In the first variant, no action of the State is needed for there to be a change in the baselines. However, since the baselines are to be declared by the State, it may be argued that there is no such automatic effect. ⁶⁵

By requiring State action, the second variant would allow States to retain control over their maritime zones, in the absence of modification of maritime baselines. However, it must be noted that the LOSC does not provide any obligation for States to modify their maritime baselines. Article 7(2) of the LOSC, on which those in favour of ambulatory baselines base their argumentation, provides that « the straight baselines shall remain effective until changed by the coastal State in accordance with this Convention ». ⁶⁶ It does not provide an obligation

⁶¹ ICJ, 20 February 1969, North Sea Continental Shelf (Federal Republic of Germany/ Netherlands), § 96.

⁶² *Ibid.*, Freestone (supra 5), pp 109-125; *ibid.*, Alexander (supra 13), pp 503-536; *ibid.*, Caron, 1990. (supra 5), pp 621-53, 634; *ibid.*, Caron, 2008. (supra 13), p 14; *ibid.*, Soons (supra 5), pp 216-218.

⁶³ *Ibid.*, Stephens (supra 14), p 789.

⁶⁴ *Ibid.*, Stephens (supra 14), p 789.

⁶⁵ LOSC, Article 16(2).

⁶⁶ LOSC, Article 7(2).

on States to modify their baselines, but gives the possibility of modifying them. Furthermore, as Purcell argues, Article 7(2) could also be interpreted as « an express assurance that the general rule regarding [the] effectiveness [of baselines] will apply even in circumstances of significant coastal change ». ⁶⁷

1.1.1. States and Islands

Concerning coastal States, those with low-lying coasts will be more adversely impacted by sea level rise. The ambulatory baselines and shifting maritime zones can therefore be forecasted to change more drastically. The example of Bangladesh is particularly telling as it has large stretches of low-lying coasts. It has been calculated that a one-meter rise will have dramatic consequences for Bangladesh, flooding 17 percent of its landmass. ⁶⁸ They may be more or less drastic. This section will analyse a comparison between a country less exposed to sea level rise and a country more exposed.

In the less drastic example, land and internal waters become territorial sea. The territorial sea becomes contiguous zone and EEZ, assuming that the coastal State declared these zones. The EEZ becomes part of the high seas. Part of the continental shelf becomes part of the Area. Here, it is important to note that the territorial sea would become part of the contiguous zone and even part of the EEZ. This means that the coastal State would no longer have full sovereignty over the zone of the territorial sea, the airspace above and the subsoil below. Moreover, other States in the EEZ would enjoy freedom of navigation, overflight and would be able to lay submarine cables and pipelines on the continental shelf. ⁶⁹

In the more drastic example, land and internal waters become territorial sea, contiguous zone, and EEZ. The territorial sea becomes EEZ, whilst the contiguous zone and EEZ become part of the high seas. Here, it is important to note that land and internal waters, which are an integral part of the coastal State's territory, would potentially become part of the territorial sea, contiguous zone and even EEZ. This would be a tremendous change in the rights and obligations of coastal and other States. Internal waters are an integral part of the States' territory and vessels flying other State's flags do not enjoy the right of innocent passage in

⁶⁷ Kate Purcell, 2012. 'Maritime Jurisdiction in a Changing Climate', in Michael B Gerrard and Katrina Fischer Kuh (eds), *The Law of Adaptation to Climate Change: United States and International Perspectives* (ABA Chicago), p 739 [hereinafter Purcell].

⁶⁸ *Those in Peril by the Sea*, *The Economist* 6, 8 (September 9, 2006).

⁶⁹ LOSC, Article 58.

them. However, in the EEZ, the sovereign rights and jurisdiction of the coastal State are limited, while other States enjoy more freedoms. Besides, the contiguous zone and the EEZ would become part of the high seas, in which all States have equal freedoms and obligations, including freedoms of navigation, over-flight and fishing.⁷⁰

On the question of islands which are part of a State, it is important to define what is an island, a rock, and their significance. Article 121(1) defines an island as: « a naturally formed area of land, surrounded by water, which is above water at high tide ». ⁷¹ An island cannot be artificial and must be above water at high tide. This might become an issue with the sea level rise, explained Schofield and Freestone: « an island that is presently always above water level may, as a consequence of sea level rise, disappear during high tide, thus being reduced to the status of low-tide elevation ». ⁷² The consequences of sea level rise and this interpretation of the LOSC are immense. An example to illustrate this would be Rockall in the United Kingdom, which lost around 60,000 square nm. ⁷³ This is crucial for coastal States for two reasons. First, coastal States use islands as basepoints to draw their baseline. A few nautical miles shift of the baseline can have great consequences on the outer limit of maritime zones.

Second, islands allow coastal States to claim a territorial sea, contiguous zone and EEZ around them. ⁷⁴ However, if the island is submerged at high tide it will lose its status as an island and be reclassified as a rock. Article 121(3) provides that « Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf ». ⁷⁵ The sea level rise could render the island submerged at high tide but, before then, a slight rise could render the island uninhabitable because of a deterioration of weather conditions, severe flooding and salinisation. The island would not be able to sustain human habitation or economic life of its own, thus it will be classified as a rock, and lose its claim to contiguous zone and EEZ. These maritime zones, previously claimed by coastal States, will be turned back to their status of high seas. The same goes for the continental shelf becoming part of the Area. ⁷⁶

⁷⁰ LOSC, Articles 87, 90, 116.

⁷¹ LOSC, Article 121(1).

⁷² *Ibid.*, Schofield and Freestone (supra 19), p 146.

⁷³ Clive Schofield, 2011. Rising Waters, Shrinking States: The Potential Impacts of Sea Level Rise on Claims to Maritime Jurisdiction, *German Yearbook of International Law*, 53, p 147 [hereinafter Schofield].

⁷⁴ LOSC, Article 121(2).

⁷⁵ LOSC, Article 121(3).

⁷⁶ *Ibid.*, Busch (supra 16), p 179.

1.1.2. Island States

The question of island nations is the same as with island part of a State, but the issue is all the more crucial. Here, more than sovereignty and jurisdiction, it is the very existence of the State which is threatened, as explained by Lustaud⁷⁷ and Busch.⁷⁸ This section will examine two situations, first if the island is partially submerged; second if the island is fully submerged.

If the island is not fully submerged, maritime zones could shift drastically. The shift of maritime zones landwards would lead to the State's sovereignty over these areas to be severely reduced.⁷⁹ Partial submersion could lead to the island being unable to sustain human habitation, and to its reclassification as a rock. This is the case for certain developing island States whose population has begun to migrate, such as Nauru, Tuvalu, and Kiribati.⁸⁰

If the island is completely submerged, it means that it will not be above water at high tide, and without enhancing it, its reclassification as a rock is inevitable.⁸¹ Besides, the low watermark used to calculate the normal baseline will no longer exist due to the full submersion. With the provisions of the LOSC and current interpretation, the island States would lose all claims to maritime zones, which would become high seas.

Schofield and Freestone give various examples of island nations.⁸² These island States have argued against ambulatory baselines. This can be explained by the fact that they would lose their maritime claims which they have argued for, and are a great source of resources. Arguably this interpretation of the LOSC creates and enhances unfairness and conflicts. This is not the main aim of the LOSC and international law. Other interpretations could potentially ensure that States would not be deprived of their maritime claims, rights and sovereignty.

1.2. Impact on Rights and Duties of States

1.2.1. Right to Exploit Resources

As seen above, these ambulatory baselines and shifting maritime zones will affect the rights of States: for neighbouring and adjacent States, by increasing their rights; for coastal States, especially island States, by diminishing their rights, sovereignty and jurisdiction over these

⁷⁷ *Ibid.*, Lusthaus (supra 20), p 114.

⁷⁸ *Ibid.*, Busch (supra 16), p 179.

⁷⁹ LOSC, Articles 2, 56.

⁸⁰ UNU-EHS, Institute for Environment and Human Security, *Climate Change and Migration in the Pacific: Links, attitudes, and future scenarios in Nauru, Tuvalu, and Kiribati* (2015).

⁸¹ *Ibid.*, Soons (supra 5), p 223.

⁸² Such as Kiribati, the Maldives, the Marshall Islands, and Tuvalu; See *ibid.*, Schofield and Freestone (supra 19), p 144.

zones. Article 193 of the LOSC makes clear that: « States have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment ». ⁸³ This right is a sovereign right of the island States which may only be limited by the protection of the environment.

In the context of sea level rise, where island States may lose parts of maritime zones, it is also the extent of their sovereign rights which is impacted. The more landwards, the more sovereignty and discretion States possess. Hence, in the territorial sea, States have « broad-ranging capacity to implement rigorous marine environmental protection provisions consistent with its sovereignty over the zone ». ⁸⁴ While in the EEZ, States have less broad-ranging capacity, even if they may « implement adaptive measures in relation to resources with little, if any, consideration of the interest of other States ». ⁸⁵ In the case of maritime zones becoming high seas, this is all the more a drastic change to the protection of the environment and resources. One of the main consequences of States losing sovereignty over these maritime zones relates to the protection of these resources, the environment and climate change adaptation. These are not ideal at high seas, as they partly depend on Regional Fisheries Management Organization (RFMOs). The performance of which largely depends on their membership and institutional dynamics, many have failed to manage stocks. ⁸⁶

These resources provide for an important part of the benefit and budget of coastal States, even more so for Pacific Island States which are largely dependent on the exploitation of the resources of their maritime zones. ⁸⁷ The resources may be living, like fish and other living creatures, or non-living. If States were to lose their entitlement to the maritime resources, and therefore the right to exploit them, the consequences would be dramatic for the ability of the island State to sustain an economic activity, which would be further detrimental to its determination as an island and not a rock. Furthermore, should States be unable to enjoy such a right, they would not be able to gain from the resources and ensure the well-functioning of the States for the fulfilment of their obligations. These obligations entail the protection of the environment and the protection of the right to life.

⁸³ LOSC, Article 193.

⁸⁴ *Ibid.*, Stephens (supra 14), p 794.

⁸⁵ *Ibid.*, Stephens (supra 14), p 795.

⁸⁶ *Ibid.*, Stephens (supra 14), p 796.

⁸⁷ UN Office of the high representative for the least developed countries, landlocked developing countries and small island developing states, Small Islands Developing States (SIDS) Statistics, UN-OHRLLS, 2013, p 11.

1.2.2. Duty to Protect the Environment

The LOSC provides for a duty of the States to protect the environment, conserve the resources and preserve the marine environment.⁸⁸ However, these obligations are broad and do not provide a clear threshold or specific and detailed obligations of environmental protection. It can be argued that the LOSC is not an environmental law convention, and its main purpose is not to protect the environment but to establish provisions for the governance of maritime zones and the stability of the international law of the sea. Hence, in Article 1(4) of the LOSC,⁸⁹ the due diligence obligation has a broad definition of the marine environment pollution, requiring States to control and reduce their greenhouse gas (GHG) emissions that will damage the maritime environment,⁹⁰ and « result in such deleterious effects as harm to living resources and marine life, hazards to human health ».⁹¹ The LOSC uses due diligence as a principle of environmental law. But again, it is a broad definition of pollution and does not define GHG emission reduction targets or timetables, making it difficult to assess whether States have fulfilled their obligations under the LOSC. Therefore, one of the solutions found is to rely on environmental law conventions which are the UNFCCC and its following instruments, specifically the 1997 Kyoto Protocol. However, even if the latter sets targets for the industrialised States, as argued by Tim Stephens, referring to the IPCC work:⁹² « [...] the Kyoto Protocol in its current form will not deliver the emissions reductions necessary to stabilise atmospheric concentrations of CO₂ at a level that would avoid serious and irreversible damage to the marine environment ».⁹³ Not only are the objectives of the Kyoto Protocol not sufficient for the prevention of marine environmental harm, but they are also not enough for climate change mitigation to prevent or reduce sea level rise adverse impacts. Nevertheless, one of the aims of the LOSC is the living resources conservation. This is crucial for the marine environment protection and preservation as ITLOS set out.⁹⁴ Hence, Article 117 of the LOSC places a duty on States to adopt national measures for the conservation of living resources at high seas, in cooperation with others.⁹⁵ The fact that there are no specific obligations, quotas and timetables, renders this obligation vague and virtually moot.

⁸⁸ See LOSC, Articles 192, 193, 194(1), 212(1), 212(3).

⁸⁹ LOSC, Article 1(4).

⁹⁰ *Ibid.*, Stephens (supra 14), p 783

⁹¹ LOSC, Article 1(4).

⁹² IPCC, Climate Change 2014: Impacts, Adaptation, and Vulnerability, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2014) chapter 6.

⁹³ *Ibid.*, Stephens (supra 14), p 783.

⁹⁴ ITLOS, 1999, Southern Bluefin Tuna, § 70.

⁹⁵ LOSC, Article 117.

Furthermore, due to sea level rise, part of the island States' EEZ will become part of the high seas. As a result, other States will have the possibility to exploit living resources without having to respect the stricter conservation measures provided by the LOSC and Pacific Island States.⁹⁶ These resources are essential for the State's economy, job market, and State's capacity to fulfil human rights. The protection of the environment is also essential for the protection of the right to life and the natural capacity of the islands to withstand sea level rise. The protection of the environment goes hand in hand with the aim of climate change mitigation. It is a step in the prevention of climate change, to preserve and conserve the marine environment and the resources which currently exist, but are threatened by climate change. Therefore, according to ITLOS, one of the principles to follow and use for the preservation and protection of marine life is the precautionary principle. It has even identified a trend towards making the precautionary approach part of customary international law.⁹⁷ The IACtHR observed that « [the ITLOS] has also indicated that the precautionary approach is an integral part of the general obligation of due diligence which obliges States of origin to take all appropriate measures to prevent any damage that might result from their activities ».⁹⁸ Thus making a direct reference to the due diligence obligation present in the LOSC to integrate the precautionary approach as part of the interpretation of the LOSC. As is widely recognised in international environmental law, the precautionary principle is to be followed, but the absence of scientific certainty may not be an excuse for not acting.⁹⁹ Hence, the IACtHR stated, referring to ITLOS, that « even in the absence of scientific certainty, [States] must take “effective” measures to prevent severe or irreversible damage ».¹⁰⁰ Therefore, in the

⁹⁶ LOSC, Articles 56(1)(a), 87(1)(e)

⁹⁷ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 135. See also, ITLOS, 1999, Southern Bluefin Tuna, §§ 73-80.

⁹⁸ IACtHR, 2017, Advisory Opinion, § 131.

⁹⁹ Vienna Convention for the Protection of the Ozone Layer, Vienna, 22 March 1985. LNTS 1513, adopted by the Conference on the Protection of the Ozone Layer, preambular recital 5; Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 16 September 1987. LNTS 1522, adopted by the Conference of Plenipotentiaries on the Protocol on Chlorofluorocarbons to the Vienna Convention for the Protection of the Ozone Layer, Preambular recital 8; 1993, Report of the United Nations Conference on Environment and Development (UN 1993) vol I, annex I, Rio Declaration on Environment and Development, Principle 15; UNFCCC, Article 3(3); 2012 UNGA RES 66/288, 'The Future We Want' (11 September 2012) UN Doc A/RES/66/288, annex, UN Conference on Sustainable Development (Rio+20), § 15; 2030 UNGA RES 70/1, 'Transforming our World: The 2030 Agenda for Sustainable Development' (21 October 2015) UN Doc A/RES/70/1, Declaration, Agenda for Sustainable Development, § 12; 2014 Declaration SAMOA Pathway, § 57; Jacqueline Peel, 'Precaution', in: Latanya Rajamani and Jacqueline Peel (eds), *The Oxford Handbook of International Environmental Law*, (Oxford University Press, 2021), p 317; Owen McIntyre and Thomas Mosedale, 1997. The Precautionary Principle as a Norm of Customary International Law. *Journal of Environmental Law*, 9(2), p 221.

¹⁰⁰ IACtHR, 2017, Advisory Opinion, § 177; See ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 128.

context of sea level rise, States must take action to protect and preserve the environment, in keeping with their obligations under the LOSC as interpreted within the scope of international environmental law. Island States are better equipped and more knowledgeable about their coastal environment to be best able to preserve and protect the environment. However, as seen above, if Pacific Island States were to lose their maritime zones, they would no longer have the jurisdiction, nor the obligations to protect and preserve these environments. These environmental law obligations are not typically constraining nor detailed as obligations for maritime zones.

1.3. Statehood criteria

As seen above, sea level rise impacts maritime entitlements of coastal and island States and also impacts the territory of the State. So much so that in the case of Pacific Island States, there is the possibility of the State being partially or completely submerged. This leads to the question of the existence of a State, as Schofield and Freestone have formulated, taking the example of the Maldives.¹⁰¹ This raises the question of the fulfilment of the Montevideo Convention criteria on statehood. The Montevideo Convention defines the main actors of international law as possessing a permanent population, a defined territory, a government, and a capacity to enter into relations with other States.¹⁰² This is a crucial question in the context of sea level rise, especially for Pacific Island States if they no longer fulfil the criteria for statehood and are no longer recognised as States. Island States would cease to exist entirely because they would no longer have a territory nor a permanent population, due to the sea level rise and the currently predominant interpretation of the LOSC. However, the crucial point is that « [w]hen statehood vanishes, the privileges linked to the specific exclusive legal personality of a state will most likely suffer the same fate ».¹⁰³ This means that in the context of sea level rise, States that may no longer fulfil the criteria of statehood and no longer be recognised as such would not be able to claim maritime zones, exploit the resources, protect the environment and human rights, nor fulfil their rights and obligations.¹⁰⁴

¹⁰¹ *Ibid.*, Schofield and Freestone (supra 19), p 149.

¹⁰² Montevideo Convention, Article 1.

¹⁰³ Anemoon Soete, 2014. The Legal Position of Inhabited Islands Submerging due to Sea Level Rise, Master's Thesis University of Ghent, p 6 [hereinafter Soete].

¹⁰⁴ *Ibid.*, Lusthaus (supra 20) p 116.

1.3.1. Definition of Territory

As detailed by Soete, there are three theories of territory.¹⁰⁵ From this can be deduced the legal consequences of partial or complete loss of territory for the State. The first views territory as State property. But it cannot be accepted as it entails that the loss of territory would not affect the State, because territory is a criterion of the Montevideo Convention, its loss will necessarily affect the State. The second views territory as a specific attribute of the State. But it may not be retained since the territory is not fixed and boundaries are allowed to vary without impacting the fulfilment of the territory criterion. The third views territory as the spatial scope of a State's legal order. As the effectiveness principle can be deduced from the Montevideo Convention, this last theory may be retained. Here, the territory is not merely a criterion for statehood, but takes into account the exercise of power.¹⁰⁶ The principle of effectiveness and exercise of power come into play when it comes to defining territory. The doctrine seems to consider that territory may not be composed solely of maritime zones but must have some land.¹⁰⁷ In any case, in the present interpretation of the LOSC, land gives rise to maritime zones entitlement, without land a State may not claim any maritime zones.

As Marke analysed, according to the principle of *impossibilium nulla obligatio*, where the State no longer has part of its territory, the treaty obligations no longer apply on that part of the territory which is no longer under the State jurisdiction.¹⁰⁸ It is even more the case where a State has lost all its territory. This is reinforced by the Vienna Convention on Law of Treaties where a State may terminate a treaty on the grounds that there has been a « permanent disappearance or destruction of an object indispensable for the execution of the treaty ».¹⁰⁹ This territory analysis comes even before mentioning the question of statehood.

In Marke's analysis of loss of territory, the complete loss of it necessarily entails the loss of statehood, the extinction of a State.¹¹⁰ This is because without territory, an area of jurisdiction, the State cannot exercise its power effectively. Furthermore, if the land is completely

¹⁰⁵ *Ibid.*, Soete (supra 103), p 12.

¹⁰⁶ James Crawford, 2006. 'The Criteria for Statehood: Statehood as Effectiveness', in James Crawford (ed), *The Creation of States in International Law*, Oxford, Clarendon Press, p 843 [hereinafter Crawford].

¹⁰⁷ Beth A. Simmons, 2006. 'Trade and Territorial Conflict in Latin America: International Borders as Institutions', in Miles Kahler and Barbara F. Walter (eds.), *Territoriality and conflict in an era of globalization*, Cambridge, Cambridge University Press, p 255; 383rd meeting of the Security Council of the United Nations (2 December 1948), UN Doc. S/PV.383 (1948), p 11.

¹⁰⁸ Krystyna Marek, 1968. Identity and continuity of states in public international law, Geneve, Librairie Droz, 5, p 23 [hereinafter Marek].

¹⁰⁹ Vienna Convention on the Law of Treaties, Vienna, 23 May 1969. LNTS 1155, adopted by the United Nations Conference on the Law of Treaties, Article 61(1) [hereinafter 1969 Vienna Convention].

¹¹⁰ *Ibid.*, Marek (supra 108), p 7.

submerged and no longer falls within the definition of the Montevideo Convention, it cannot give rise to maritime entitlement as there is no longer a State entity.

Another issue is the archipelagic status, in the case of Pacific Island States, as they are low-lying States and possess an archipelagic status, sea level rise may threaten this status. In fact, the archipelagic status requires that the State has a 9 to 1 water land ratio,¹¹¹ as set out in Part IV of the LOSC.¹¹² This is achieved using basepoints on the normal baseline along the coast of a number of insular features. These features may be low tide elevations within the territorial sea and outside the territorial sea high tide elevations with a lighthouse or similar installation.¹¹³ However, considering Pacific Island States geography, it is likely that these features would be submerged and no longer constitute a basepoint. As Freestone and Schofield highlighted, the loss of maritime basepoints could compromise these States' ability to maintain their archipelagic status:« [a]lthough the group of islands would still remain an archipelago geographically and politically, it could lose all the advantages that UNCLOS confers ».¹¹⁴ The authors take the examples of Kiribati, Marshall Islands, and Tuvalu as they are especially vulnerable to sea level rise, it is also the case of the Solomon Islands. They would have been in any case able to draw large maritime zones, but the archipelagic status allows them to enhance and extend their stabilised maritime entitlements.¹¹⁵

1.3.2. Definition of the Population

One of the Montevideo Convention criteria is a permanent population. In the context of sea level rise, if Pacific Island States are even partially submerged, the population may not be able to remain and would have to flee to safety. It is even more probable if these States are completely submerged. This gives rise to the question of the fulfilment of the criterion of the permanent population by Pacific Island States.¹¹⁶ Even in the case of partial submersion, the

¹¹¹ LOSC, Article 47(1).

¹¹² Rosemary Rayfuse, 2014. 'Sea Level Rise and Maritime Zones: Preserving the Maritime Entitlements of 'Disappearing' States', in Michael B. Gerrard and Gregory E. Wannier (eds.), *Threatened Island Nations: Legal Implications of Rising Seas and a Changing Climate*, (Cambridge University Press), p 174 [hereinafter Rayfuse]; *ibid.*, Freestone and Schofield (supra 22), p 3.

¹¹³ *Ibid.*, Freestone and Schofield (supra 22), p 15.

¹¹⁴ *Ibid.*, Freestone and Schofield (supra 22), p 16.

¹¹⁵ David Freestone and Clive Schofield, 2016. Republic of the Marshall Islands: 2016 Maritime Zones Declaration Act: Drawing lines in the sea. *The International Journal of Marine and Coastal Law*, 31, pp 720-746 [hereinafter Freestone and Schofield].

¹¹⁶ Jon Barnett and John Campbell, 2010. Climate change and Small Island States, 'Disappearing states', statelessness and the boundaries of international law, 168 and J. MCADAM, unpublished paper, University of New South Wales Faculty of Law Research Series, 2.

population may choose to flee, even before complete submersion,¹¹⁷ because life is no longer sustainable on these islands, due to the impossibility to harvest, salinisation, land reduction, and the country's economic difficulties. It seems that the population criterion could not be fulfilled, in the context of sea level rise. So according to statehood traditional requirements, submerged island States could cease to exist, and no longer be able to claim maritime zones.

Therefore, the capacity of the State to ensure and protect the rights to life and to a healthy environment is substantially threatened, if the people of Pacific Island States are displaced and their State no longer has means, because it no longer has the maritime zones, no longer has the obligations nor jurisdiction because it no longer has a territory and its statehood is questioned. Furthermore, if the States were to disappear, and these people were to become stateless, they would still have human rights, but no State responsible for them.

When it comes to the Pacific Island States definition of the environment it is unique in its phrasing, encompassing people. This is especially the case for Kiribati¹¹⁸ and Tuvalu,¹¹⁹ and indirectly for the Marshall Islands.¹²⁰ This entails that the preservation of the population goes through that of the environment and vice versa. Hence, preserving the maritime zones and the ecosystem, and the environment means the preservation of the population.

2. PACIFIC ISLAND STATES DUTY OF CARE

This chapter tackles the impact of sea level rise on the right to life. It aims at analysing the interpretation of the right to life and the right to a healthy environment both in the traditional sense and within the context of sea level rise. Inspired by the Pacific Island States' definition of the environment and taking into consideration the ecosystem approach of the law of the sea, this chapter makes a connection between these two rights, analysing States' obligations and duties to fulfil, preserve and protect such rights.

¹¹⁷ *Ibid.*, Rayfuse and Crawford (supra 6), p 2.

¹¹⁸ 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes, Article 2 Interpretation: « In this Act, unless the context otherwise requires - 'Environment' includes all natural and social and cultural system and their constituent parts, including people, communities and economic, aesthetic, culture and social factors ».

¹¹⁹ 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25): « "environment" includes all natural, physical and social resources and ecosystems or parts thereof, people and culture and the relationship that exists between these elements ».

¹²⁰ 1984 Marshall Islands National Environmental Protection Act, § 103 (d) and as recalled in 2018 Marshall Islands Ministry of Environment Act, § 602 (e): « "Environment" means the physical factors of the surroundings of human beings and includes the land, soil, water, atmosphere, climate, sound, odors, tastes and the biological factors of animals and plants of every description situated within the territorial limits of the Republic including the exclusive economic zone ».

As seen above, sea level rise threatens Pacific Island States maritime zones entitlements and claims, but also threatens States coastal environment and territory. It endangers the environment and resources on which the population depends for survival and on which the State depends for its economy. These are inherent threats to the enjoyment of the right to life and the capacity of the State to fulfil the right to life of its population, and life in dignity. The IACtHR in its Advisory Opinion on State obligations in relation to the environment in the context of the protection and guarantee of the rights to life and personal integrity « stressed that the general obligation to prevent human rights violations is an obligation of means or behavior rather than of results, so that non-compliance is not proved by the mere fact that a right may have been violated ».¹²¹ This is similar to the obligation of means and does not result in environmental law when it comes to the obligation of prevention.¹²² This obligation of means and not results implies the respect of certain obligations, the taking of effective and sufficient measures, and a certain duty of care.

Firstly, this chapter deals with the right to life and right to a healthy environment in the traditional meaning, in the scope of life with dignity and in the context of sea level rise. Secondly, this chapter deals with States' obligations regarding the right to life and the right to a healthy environment protection, concluding on the duty of care.

2.1. Right to Life and Right to a Healthy Environment

2.1.1. Right to Life

2.1.1.1. Traditional Meaning

The traditional interpretation of the right to life is that it is a core human right. The HRC in its General Comment No 6 recognised the right to life of Article 6 International Covenant Civil and Political Rights (ICCPR) as the supreme right from which no derogation is permitted even at a time of public emergency.¹²³ The HRC further enunciated in General Comment No 14 that « [it] is basic to all human rights ».¹²⁴ It is the most fundamental human right « whose effective protection is the prerequisite for the enjoyment of all other human rights and whose

¹²¹ IACtHR, 2017, Advisory Opinion, § 143, see also §§ 118-121.

¹²² ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 110; Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 2 April 2015, ITLOS Reports 2015, § 129 [hereinafter ITLOS, 2015, Request for Advisory Opinion by the SRFC].

¹²³ HRC, CCPR General Comment No 6: Article 6 (Right to Life), 30 April 1982 [hereinafter HRC GC No 6].

¹²⁴ HRC, CCPR General Comment No 14: Article 6 (Right to Life) Nuclear Weapons and the Right to Life, 9 November 1984, § 1 [hereinafter HRC GC No 14].

content can be informed by other human rights ». ¹²⁵ Therefore, the case law has set a high threshold for the recognition of a violation of a right to life. Allowing a low threshold would deprive it of its importance. As highlighted by Rhona Smith, for all sides of the literature, the right to life is the most fundamental: « To those commentators arguing in favour of a hierarchy of rights, the right to life is undoubtedly at the apex of that hierarchy; to those submitting arguments for universal fundamentality and thus no hierarchy, the right to life is still recognized as pre-eminent given that violations can never be remedied ». ¹²⁶ This is essential for the traditional meaning of the right to life. Since its violation cannot be remedied, its protection must be of equal measure. The understanding of the right to life is equally broad as it is a core human right, it encompasses the quality of life and life in dignity.

2.1.1.2. Personal Integrity and Dignity

The HRC has recognised that there can be a violation of the right to life even if the victim is not deprived of their lives. This is linked to the concept of dignity. ¹²⁷ Even though the HRC used the concept of dignity in its decision, ¹²⁸ it decided that the living conditions on Kiribati were not dire enough to amount to a violation of the enjoyment of the right to life. ¹²⁹ Climate change and sea level rise have caused the salinisation of the land and the change in the composition of the water, its acidity, and have impacted the aquaculture, rendering life on the Pacific Island States more difficult.

The HRC did not recognise a violation of the right to life while still using the principle of dignity. This can be explained by the fluid nature of dignity, which may be used to justify and extend human rights, ¹³⁰ or counterbalance human rights, as everyone can agree on its minimum core. ¹³¹ At the regional level, the IACtHR uses the concept of dignity through the right to personal integrity. ¹³² The concept of dignity has been defined dually as being both « an affirmation that every human being has an equal and inherent moral value or worth »; ¹³³

¹²⁵ HRC GC No 36, § 2.

¹²⁶ Rhona K. M. Smith, 2016. 'The right to life'. In: Rhona K. M. Smith (ed) *International Human Rights*, Oxford: Oxford University Press, 7th Edition, p 216 [hereinafter Smith].

¹²⁷ HRC GC No 36.

¹²⁸ HRC, Teitiota case, § 9.4.

¹²⁹ HRC, Teitiota case, Duncan Laki Muhumuza (Dissenting), § 4-5.

¹³⁰ *Ibid.*, Carozza (supra 40), p 358.

¹³¹ *Ibid.*, Carozza (supra 40), p 349.

¹³² IACtHR, 2017, Advisory Opinion, § 112.

¹³³ *Ibid.*, Carozza (supra 40), p 346.

but also a normative and legal principle whereby « all human beings are entitled to have others respect this status of equal worth ». ¹³⁴

There is no denying that climate change impacts and threatens human rights, which impact the quality of life, hence the right to life. Climate change takes many forms of environmental destruction, as the HRC noted in the Teitiota case it can be « both sudden onset environmental events, such as storms, and slow onset processes, such as sea-level rise ». ¹³⁵ The impact of climate change is broad. Therefore, States obligations to reduce its impact on human rights must be broad to encompass all the possible harm. It impacts the personal integrity of the population, which means the right to life will be threatened by it. This is the approach which has been taken by the Supreme Court of the Netherlands, in taking into consideration the evidence and the impact that sea level rise has on the life, livelihood, health, as well as personal and family lives, to establish that the risk is in fact real and immediate. ¹³⁶

2.1.1.3. In the context of Sea Level Rise

Justified by the fundamental nature of the right to life, the HRC places a high threshold for the violation of this right. ¹³⁷ This high threshold is best seen in the HRC Teitiota case, where the complainant claimed that his right to life had been violated by New Zealand because it refused to grant him refugee status and sent him back to Kiribati. However, in Kiribati, one of the States in study here, the land is gravely threatened by sea level rise, impacting all areas of life. The HRC admitted the claim but not the violation or the substantial, personal and imminent risk to the right to life, because of the unreasonably high and unattainable threshold, and the lack of evidence. ¹³⁸ This poses the question of the reason behind the high threshold and the burden of proof placed on the individual, which disadvantages complainants, and discourages changes by jurisprudence. The two dissenting experts urged for easier access to the HRC and shared burden of proof with the State. ¹³⁹ It was noted that it would be: « counter-intuitive to the protection of life to wait for deaths to be very frequent and considerable in number to consider the threshold of risk as met ». ¹⁴⁰ The aim is to protect the right to life and not to place further burden on the victim. This decision can be interpreted as a

¹³⁴ *Ibid.*, Carozza (supra 40), p 346.

¹³⁵ HRC, Teitiota case, § 2.7; see also § 9.11.

¹³⁶ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.6.2.

¹³⁷ HRC GC No 36, § 9.3.

¹³⁸ HRC, Teitiota case, Laki Muhumuza (Dissenting), § 5.

¹³⁹ HRC, Teitiota case, Vasilka Sancin (Dissenting), § 5.

¹⁴⁰ HRC, Teitiota case Duncan Laki Muhumuza (Dissenting), § 5.

warning to States in granting asylum to climate refugees. Thus, a new broader definition could emerge.¹⁴¹ Nevertheless, in this case, it shows that at the international level, the high threshold of the right to life prevents the recognition of its violation, even if the dignity of life would have led to conclude that it was violated.

The Supreme Court of the Netherlands later took a different approach in acknowledging that Articles 2 and 8 of the European Convention on Human Rights and Fundamental Freedoms (ECHR)¹⁴² imply that the State is to take measures for their protection even in the context of climate change, and especially sea level rise.¹⁴³ This is because the Court had recognised that climate change is a « real and immediate risk »¹⁴⁴ and that « it entails the risk that the lives and welfare of Dutch residents could be seriously jeopardised ».¹⁴⁵ The Court does not give reason to the defences presented which are that sea level rise will only materialise in a few decades and will only affect certain parts of the territory and categories of people.¹⁴⁶ The Supreme Court acknowledged that Articles 2 and 8 of the ECHR offer protection against this sea level rise in accordance with the precautionary principle.¹⁴⁷ Therefore, States ought to take measures in accordance with it, as will be analysed later.

2.1.2. Right to a Healthy Environment

2.1.2.1. Traditional Meaning

The right to a healthy environment may be defined following the Norwegian Constitution as the « right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained ».¹⁴⁸ The 2008 Environment Protection Act of Tuvalu also refers to the right to a healthy environment.¹⁴⁹ The right to a healthy environment is recognised in some regional systems,¹⁵⁰ such as the Inter-American regional system.¹⁵¹ The IACtHR made use of it in an Advisory Opinion in analysing the link with the right to life and

¹⁴¹ Draft European Rules of the Council of Europe (Rule B1).

¹⁴² Convention for the Protection of Human Rights and Fundamental Freedoms, Rome, 3 September 1950. LNTS 213, adopted by the Council of Europe, Articles 2 and 8 [hereinafter ECHR].

¹⁴³ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.6.2.

¹⁴⁴ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.2.2.

¹⁴⁵ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.6.2.

¹⁴⁶ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.6.2.

¹⁴⁷ ECHR, Articles 2, 8.

¹⁴⁸ Norwegian Constitution, Article 112; see Norwegian climate case (Greenpeace Nordic Ass'n v. Ministry of Petroleum and Energy 2016).

¹⁴⁹ 2008 Tuvalu Environment Protection Act, § 4(c); See also 2021 Fiji Climate change Bill, §§ 5(i), 65(a), 79.

¹⁵⁰ See African Charter on Human and Peoples' Rights, Nairobi, 27 June 1981. LNTS 1520, adopted by the Organization of African Unity, Article 24: « All peoples shall have the right to a general satisfactory environment favorable to their development » [hereinafter African Charter].

¹⁵¹ Protocol of San Salvador, Article 11 (declaring a Right to a Healthy Environment).

personal integrity.¹⁵² The IACtHR details the link between the right to life, the right to a healthy environment and climate change, listing States obligations entailed, such as the protection of the environment.¹⁵³ The HRC refers to that very paragraph in its 22nd footnote.¹⁵⁴ By doing so, the HRC is acknowledging this approach by the IACtHR, without necessarily adopting it. It recognises that the environment should be protected, that States have obligations to further that goal, and that environmental degradation may impact human rights.¹⁵⁵ As recognised by the HRC « environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life ». ¹⁵⁶ Moreover, HRC recognises the right to a healthy environment as being impacted, with the right to life, by climate change,¹⁵⁷ and referring to the IACtHR advisory opinion acknowledging its approach.¹⁵⁸ Thus there is a trend towards recognising the threat posed by environmental degradation and climate change and the need to recognise a right to a healthy environment, which is crucial as Pacific Island States are particularly threatened.¹⁵⁹

2.1.2.2. Personal Integrity and Dignity

The right to a healthy environment protection may provide protection to the population's personal integrity and dignity. This may be done through the consideration that the population lives in an environment on which it depends for its survival. Harm to the environment not only diminishes the population's chances of survival but also its quality of life.

This is especially the case in the Pacific Island States where the protection of the environment and the right to a healthy environment equates to the protection of human rights. The protection of the environment protects the quality of life and life in general. It preserves the access to drinkable water, the possibility of agriculture and aquaculture, the biodiversity and the possibility to exploit living resources, ensuring States existence and economy. This was detailed by the IACtHR, relaying on the Protocol of San Salvador,¹⁶⁰ acknowledged « [...] the close relationship between the exercise of economic, social and cultural rights - which include

¹⁵² IACtHR, 2017, Advisory Opinion, § 47.

¹⁵³ IACtHR, 2017, Advisory Opinion, § 47.

¹⁵⁴ HRC, Teitiota case, footnote 22, p 10.

¹⁵⁵ HRC, Teitiota case, §§ 9.4-9.5.

¹⁵⁶ HRC, Teitiota case, § 9.4 and HRC GC No. 36, § 62.

¹⁵⁷ HR Council 46/28, § 25.

¹⁵⁸ *Ibid.*, HRC, Teitiota case § 36.

¹⁵⁹ *Ibid.*, HRC, Teitiota case, § 19.

¹⁶⁰ Protocol of San Salvador.

the right to a healthy environment - and of civil and political rights, and indicates that the different categories of rights constitute an indivisible whole based on the recognition of the dignity of the human being [...] ».¹⁶¹ Therefore, the right to a healthy environment helps ensure dignity, by contributing to the fulfilment and protection of human rights.

2.1.2.3. In the context of Sea Level Rise

The right to a healthy environment is crucial to ensure stability and protection of ecosystems, and preservation of the environment and human rights. It is vital for Pacific Island States which have taken various measures to mitigate and adapt to climate change with the purpose of preserving a healthy environment in which human rights may be fulfilled and protected. Thus, these States and their neighbours have passed numerous of domestic laws¹⁶² and policies¹⁶³ for the purpose of environmental protection, in the context of climate change mitigation and adaptation. Such is the case of Tuvalu which enacted an Environment Protection Act creating various bodies with the aim of promoting a clean and healthy environment for all Tuvaluans.¹⁶⁴ The Marshall Islands also established the Ministry of the

¹⁶¹ IACtHR, 2017, Advisory Opinion, § 47.

¹⁶² 1993 Kiribati National Disaster Act; 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes; 2007 Kiribati Act to Amend the Environment Act of 1999; 2007 Samoa Disaster and Emergency Management Act; 1998 Fiji Natural Disaster Management Act; 2021 Fiji Climate change Bill; 1989 Solomon Islands National Disaster Council Act; 2008 Tonga Renewable Energy Act; 2010 Tonga Environment Management Act; 2012 Tonga National Spatial Planning and Management Act; 2010 Vanuatu Environmental Management and Conservation Act; 2016 Vanuatu Meteorology Geological Hazards and Climate Change Act; 2005 Tuvalu Native Lands Act; 2007 Tuvalu National Disaster Management Act; 2008 Tuvalu Neglected Lands Act; 2008 Tuvalu National Fishing Corporation of Tuvalu Act; 2008 Tuvalu Environmental Protection Act; 2008 Tuvalu Marine Resources Act; 2008 Tuvalu Wildlife Conservation Act; 2012 Tuvalu Maritime Zones Act; 2015 Tuvalu Climate Change and Disaster Survival Fund Act; 2016 Tuvalu Energy Efficiency Act; 2017 Tuvalu National Human Rights Institution of Tuvalu Act; 2019 Tuvalu Climate Change Resilience Act; 1987 Marshall Islands Disaster Assistance Act; 1988 Marshall Islands Coast Conservation Act; 1990 Marshall Islands Limitation of Liability for Maritime Claims Act; 1997 Marshall Islands Marine Resources Act; 2003 Marshall Island Office of Environmental Planning and Policy Coordination (OEPPC) Act; 2015 Marshall Islands Human Rights Committee Act; 2016 Marshall Islands Maritime Zones Declaration Act; 2018 Marshall Islands Ministry of Environment Act.

¹⁶³ 2018 Marshall Islands 2050 Climate Strategy; 2016 Marshall Islands National Energy Policy and Energy Action Plan; 2014 Marshall Islands Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management 2014-2018; 2014 Marshall Islands National strategic plan 2015-2017; 2011 Marshall Islands National Climate Change Policy Framework; 2019 Solomon Islands National Biodiversity Strategy Action Plan; 2016 Solomon Islands National Development Strategy 2016-2035; 2014 Solomon Islands National Energy Policy; 2012 Solomon Islands National Climate Change Policy 2012-2017; 2011 Solomon Islands National Development Strategy 2011 to 2020; 2018 Fiji Low Emission Development Strategy 2018-2050; 2018 Fiji National Adaptation Plan 2018; 2018 Fiji National Climate Change Policy 2018-2030; 2017 Fiji NDC Implementation Roadmap 2018-2030; 2017 Fiji Environment and Climate Adaptation Levy (Plastic Bags) Regulations 2017 (L. N. No. 61 of 2017); 2017 Fiji 5-Year and 20-Year National Development Plan; 2014 Fiji Green Growth Framework 2014; 2005 Fiji National Energy Policy 2006; 2012 Tuvalu National Strategic Action Plan for Climate Change Adaptation and Disaster Risk Management 2012-2016; 2012 Tuvalu Te Kaniva: Tuvalu National Climate Change Policy; 2012 Tuvalu Master Plan for Renewable Electricity and Energy Efficiency ; 2009 Tuvalu National Energy Policy; 2006 Tuvalu National Action Plan to Combat Land Degradation and Drought; 2005 Tuvalu Te Kakeega II and III-National Strategy for Sustainable Development.

¹⁶⁴ 2008 Tuvalu Environmental Protection Act, especially § 4(1)(c).

Environment with the aim of protecting the environment and enacting climate change mitigation measures.¹⁶⁵

There is a relation between the protection of the right to life and the right to a healthy environment, in the context of sea level rise. The HRC and the IACtHR recognise that human rights can be impacted by environmental degradation, but the protection of the right to life is different in both cases. The HRC establishes a high threshold to the right to life violation, but does not establish a right to a healthy environment, even though it admits the possibility of its existence. However, the IACtHR recognises that the protection of both the right to life and the right to a healthy environment require a broad understanding of the both of them.

2.1.3. Link between the Two through the Definition of the Environment

2.1.3.1. Meaning

States must protect human rights, especially the right to life. It is protected at the international,¹⁶⁶ and regional level.¹⁶⁷ It is interpreted as including the positive obligation to provide a certain standard of life, a life with dignity. The HRC highlighted that the right to life must not be interpreted narrowly.¹⁶⁸ The right to life includes life with dignity and a potential right to a clean environment.¹⁶⁹ In the Teitiota case,¹⁷⁰ the HRC reiterated that climate change is one of: « the most pressing and serious threats to the ability of present and future generations to enjoy the right to life ». ¹⁷¹ This has been recognised by international,¹⁷² and regional organisations.¹⁷³

The IACtHR acknowledges the relationship between the protection of the right to life and a healthy environment, in line with the Protocol of San Salvador,¹⁷⁴ and the regional protection of forests, rivers and seas.¹⁷⁵ The reasoning is that States have to fulfil human rights, because human rights are endangered by environmental degradation, therefore States have obligations

¹⁶⁵ 2018 Marshall Islands Ministry of Environment Act, especially § 606.

¹⁶⁶ ICCPR, Article 6.

¹⁶⁷ ECHR, Article 2

¹⁶⁸ Rights under ICCPR, Article 17; Human Rights Committee on Civil and Political Rights, *Portillo Cáceres v Paraguay*, 25 July 2019, CCPR/C/126/D/2751/2016.

¹⁶⁹ HRC GC No 36, § 3.

¹⁷⁰ HRC, *Teitiota case*.

¹⁷¹ HRC, *Teitiota case* and HRC GC No 36, § 3.

¹⁷² HRC, *Concluding observations on the initial report of Cabo Verde* ; CEDAW, *Concluding observations (2019)*.

¹⁷³ Resolution 2307 (2019) of the Council of Europe Parliamentary Assembly on A legal status for « climate refugees ».

¹⁷⁴ Protocol of San Salvador, Article 11.

¹⁷⁵ IACtHR, 2017, *Advisory Opinion*, § 62.

for environmental protection. The IACtHR notes that there is a clear relation between the two and that climate change negatively limits the « real enjoyment of human rights ». ¹⁷⁶ The Court notes that all these human rights are part of a whole, therefore the Court links all the rights back to the notion of human dignity. ¹⁷⁷

One way to exemplify such a link between the right to life and the right to a healthy environment is to examine the definition of the environment of certain Pacific Island States. For instance, the Marshall Islands define the environment as having « human beings » at its centre, ¹⁷⁸ while Tuvalu and Kiribati consider the people as an element of the environment. ¹⁷⁹ It is expressed in the Tuvaluan definition where the relationship between the elements constitutive of the environment actually constitutes part of the environment. ¹⁸⁰ This implies that the protection of people's human rights is fulfilled through the protection of the environment. It also implies that reciprocally the protection of the environment is achieved through the protection of human rights. Thus, as the enjoyment of the right to a healthy environment and human rights are threatened by sea level rise, their fulfilment and protection can be approached through their relation together in a holistic manner, following the ecosystem approach.

2.1.3.2. Personal Integrity and Dignity

Michael Anderson argues that there are two approaches to the relationship between environmental protection and human rights: « First, environmental protection may be cast as a means to the end of fulfilling human rights standards. [...] In the second approach, the legal protection of human rights is an effective means to achieving the ends of conservation and environmental protection ». ¹⁸¹ Therefore, to have full protection of the environment and human rights, both of them ought to be combined for a protection which encompasses the full scope of the issues raised by sea level rise and guarantee personal integrity.

¹⁷⁶ IACtHR, 2017, Advisory Opinion, § 47; See also IACtHR Case of Kasa Fernández v. Honduras. Merits, reparations and costs. Judgement of April 3, 2009. Series C No. 196. § 148.

¹⁷⁷ IACtHR, 2017, Advisory Opinion, § 47; See also IACtHR Case of Kasa Fernández v. Honduras. Merits, reparations and costs. Judgement of April 3, 2009. Series C No. 196. § 148.

¹⁷⁸ 1984 Marshall Islands National Environmental Protection Act, § 103 (d) and as recalled in 2018 Marshall Islands Ministry of Environment Act, § 602 (e).

¹⁷⁹ 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25) and 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes.

¹⁸⁰ 2008 Tuvalu Environmental Protection Act (Revised edition, CAP.30.25) « “environment” includes all natural, physical and social resources and ecosystems or parts thereof, people and culture and the relationship that exists between these elements ».

¹⁸¹ *Ibid.*, Anderson (supra 7), p 3.

The Supreme Court of the Netherlands seems to be taking the approach that the preservation and protection of the environment are vital for the quality of life, private life and family life.¹⁸² The Court interprets the obligations derived from the right to life¹⁸³ and the right to private and family life¹⁸⁴ as being one and the same, furthering the interpretation that these rights are so important they raise the same obligations.¹⁸⁵ Furthermore, even if the violation of Article 2 is not recognised because of its significantly high threshold, the violation of Article 8 may be recognised and give rise to the same obligations as under Article 2.¹⁸⁶

Regarding personal integrity, Kiribati's definition of the environment exemplifies the link between the right to a healthy environment and right to life.¹⁸⁷ The definition « includes all natural and social and cultural system and their constituent parts, including people, communities and economic, aesthetic, culture and social factors ».¹⁸⁸ This acknowledges that environment preservation and protection are vital for the quality of life, for the economic and social development, and for the life in dignity of the population. This is another aspect of the relationship between the right to life and the right to a healthy environment, not only when life is violated or threatened but when the quality of life and its dignity are impacted.

2.1.3.3. In the context of Sea Level Rise

The link between climate change and the protection of human rights was also made by John Knox in his analyses of the OCHR Report.¹⁸⁹ The latter recognised that climate change and its consequences affect the enjoyment of human rights.¹⁹⁰ The ILA referring to the Report of the Special Rapporteur also noted that « States have duties to respect, protect, and fulfil human

¹⁸² Supreme Court of the Netherlands, 2019, Urgenda case, §§ 5.2.4; See also ECHR, Articles 2, 8.

¹⁸³ ECHR, Article 2.

¹⁸⁴ ECHR, Article 8.

¹⁸⁵ See ECtHR, 20 March 2008, Case of Budayeva and Others v. Russia, (Applications nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02) § 133 [hereinafter ECtHR, 2008, Budayeva]; ECtHR, 24 July 2014, Case of Brincat and Others v. Malta (Applications no. 60908/11, 62110/11, 62129/11, 62312/11 and 62338/11), § 102 [hereinafter ECtHR, 2014, Brincat].

¹⁸⁶ ECHR, Articles 2, 8.

¹⁸⁷ 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes Article 2 Interpretation: « In this Act, unless the context otherwise requires- "Environment" includes all natural and social and cultural system and their constituent parts, including people, communities and economic, aesthetic, culture and social factors ».

¹⁸⁸ 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes.

¹⁸⁹ John H. Knox, 2009. Linking Human Rights and Climate Change at the United Nations. *Harvard Environmental Law Review*, 33, pp 477-498.

¹⁹⁰ UNGA, A/73/188, 2018, Promotion and protection of human rights: human rights questions, including alternative approaches for improving the effective enjoyment of human rights and fundamental freedoms, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, § 3.

rights so as to protect persons from foreseeable harms emanating from the impacts of climate change, including sea level rise ». ¹⁹¹

In the context of sea level rise, Pacific Island States, as they are the most vulnerable, have taken regional declarations and agreements to recognise the threat that climate change poses to human rights.¹⁹² They have also done so in domestic laws,¹⁹³ and policies,¹⁹⁴ in implementing climate change mitigation and adaptation mechanisms. This is for the purposes of protecting and conserving the environment, while also fulfilling human rights. For instance, in 2018 the Marshall Islands established a Climate Change Directorate to plan the future climate change impacts and human rights challenges,¹⁹⁵ as well as to « develop, revise, and implement climate change adaptation and mitigation policies, strategies or measures ». ¹⁹⁶ Furthermore, the Marshall Islands' environment definition exemplifies the willingness of Pacific Island States to protect the environment and the marine environment to the fullest extent. The Marshall Islands extend its environment and its protection to include its EEZ.¹⁹⁷ It is crucial in the context of sea level rise that States include such areas. Indeed, as seen previously, the environmental protection of the EEZ is not as developed and constraining as the others.

¹⁹¹ ILA, Sydney Conference, 2018, International Law and Sea Level Rise, p 30 [hereinafter ILA, 2018, International Law and Sea Level Rise]; see Human Rights Council, Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, UN Doc. A/HRC/31/52 (1 February 2016), §§ 33-84.

¹⁹² Declaration on Preserving Maritime Zones in the Face of Climate Change - related Sea Level Rise 50 Pacific Island Forum (1971-2021); 2014 SAMOA Pathway; see also 2015 Taputapuātea Declaration on Climate Change.

¹⁹³ 2016 Marshall Islands Maritime Zones Declaration Act § 102(c); 2018 Marshall Islands Ministry of Environment Act 2018 §§ 602(1)(a), (d), (m), and (n), § 603, § 613D, E, and F; 2019 Tuvalu Climate Change Resilience Act Articles 2, 6, 8, 17, and 22; 2016 Tuvalu Energy Efficiency Act Articles 5, 6, 39; 2015 Tuvalu Climate Change and Disaster Survival Fund Act Articles 5, 7, and 13; 2008 Tuvalu Environmental Protection Act; 1999 Kiribati Act to provide for the Protection Improvement Conservation of the Environment of the Republic of Kiribati and for Connected Purposes; 2007 Kiribati Act to Amend the Environment Act of 1999.

¹⁹⁴ Marshall Islands 2050 Climate Strategy (2018); Marshall Islands National Energy Policy and Energy Action Plan (2016); Marshall Islands Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management 2014-2018 (2014); Marshall Islands: National strategic plan 2015-2017 (2014); Marshall Islands National Climate Change Policy Framework (2011); 2019 Solomon Islands National Biodiversity Strategy Action Plan; 2016 Solomon Islands National Development Strategy 2016-2035; 2014 Solomon Islands National Energy Policy 2014; 2012 Solomon Islands National Climate Change Policy 2012-2017; 2011 Solomon Islands National Development Strategy 2011 to 2020; 2018 Fiji Low Emission Development Strategy 2018-2050; 2018 Fiji National Adaptation Plan 2018; 2018 Fiji National Climate Change Policy 2018-2030; 2017 Fiji NDC Implementation Roadmap 2018-2030; 2017 Fiji Environment and Climate Adaptation Levy (Plastic Bags) Regulations 2017 (L. N. No. 61 of 2017); 2017 Fiji 5-Year and 20-Year National Development Plan; 2014 Fiji Green Growth Framework 2014; 2005 Fiji National Energy Policy 2006; 2012 Tuvalu National Strategic Action Plan for Climate Change Adaptation and Disaster Risk Management 2012-2016; 2012 Tuvalu Te Kaniva: Tuvalu National Climate Change Policy; 2012 Tuvalu Master Plan for Renewable Electricity and Energy Efficiency ; 2009 Tuvalu National Energy Policy; 2006 Tuvalu National Action Plan to Combat Land Degradation and Drought; 2005 Tuvalu Te Kakeega II and III-National Strategy for Sustainable Development.

¹⁹⁵ 2018 Marshall Islands Ministry of Environment Act, § 613 D.

¹⁹⁶ 2018 Marshall Islands Ministry of Environment Act, § 613 E.

¹⁹⁷ 2018 Marshall Islands Ministry of Environment Act, § 602 (1)(e).

From this analysis the link between human rights law and environmental law can be made, using the law of the sea's ecosystem approach. The latter entails that every aspect of the law of the sea, human rights and environmental law may be linked in a holistic manner. This is with the aim of ensuring the protection of both the right to life and the right to a healthy environment in the context of sea level rise. Hence, coastal States have the right to exploit living and non-living resources in the different maritime zones, with the obligation of management and conservation.¹⁹⁸ This requirement aims at protecting the environment, which helps the preservation of the fishing capacity of these States,¹⁹⁹ protecting the economic capacity of the State and the right to life of the population. A fruitful economic activity helps guarantee, for the population, a prosperous job market and decent living conditions. It also provides States the public revenue to maintain the infrastructures and take the necessary measures for the enjoyment of human rights. The LOSC also sets broad obligations to protect and preserve the environment.²⁰⁰ As noted, the population depends on the exploitation of these living and non-living resources. However, human activities, overexploitation of biotic resources, climate change effects and pollution²⁰¹ may lead to global oceanic ecosystem collapse.²⁰² Hence Article 1(1)(4) of the LOSC has a broad definition of pollution of the marine environment.²⁰³ As analysed by Tim Stephens, this imposes a due diligence obligation upon States to control and reduce GHG emissions causing harm to marine environment and other States.²⁰⁴ ITLOS recognised that States have obligations with regards to the due diligence obligation under international law to respect and ensure the rights to life and to personal integrity.²⁰⁵ However, because the objectives are broad, using other environmental conventions is necessary to use to set clear targets,²⁰⁶ even if not sufficiently restrictive to avoid serious and irreversible damage to the marine environment.²⁰⁷

¹⁹⁸ LOSC, Articles 56, 61, 62, 63, 116-120, 192, 193, 197.

¹⁹⁹ For example LOSC, Article 61.

²⁰⁰ LOSC, Articles 192, 194(1), 212(1), 212(3).

²⁰¹ Alex David Rogers and Dan Laffoley, 2013. Introduction to the Special Issue: The Global State of the Ocean. *Marine Pollution Bulletin* 74, pp 491-493.

²⁰² *Ibid.*, Stephens (supra 14), p 779.

²⁰³ LOSC, Article 1(1)(4).

²⁰⁴ *Ibid.*, Stephens (supra 14), p 783.

²⁰⁵ ITLOS, 2015, Request for Advisory Opinion by the SRFC, §§ 128-129; ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, §§ 110-120.

²⁰⁶ UNFCCC and the Kyoto Protocol to the UNFCCC, Kyoto, 11 December 1997. LNTS 2303, adopted by the Third Session of the Conference of the Parties to the 1992 UNFCCC [hereinafter Kyoto Protocol].

²⁰⁷ IPCC, Climate Change 2014: Impacts, Adaptation, and Vulnerability, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (2014) Chapter 6.

Hence, in the context of sea level rise, the issue of the protection of marine resources against climate change consequences is crucial, as coastal States have broad ranging capacity to implement strict marine environmental protection legislation over the territorial sea, and a more reduced one in the EEZ.²⁰⁸ Furthermore, climate change adaptation and the protection of the marine environment is all the more challenging at high seas as they partly depend on Regional Fisheries Management Organization (RFMOs). The functioning of which varies significantly depending upon the members and institutional dynamics, resulting in the failure of a number of RFMOs to manage stocks in a sustainable manner, putting in question the effectiveness of their answer to climate change.²⁰⁹

2.2. States Obligations

2.2.1. Right to Life Protection

2.2.1.1. Positive Obligation to Protect Right to Life

As noted by Rhona Smith: « States must take all reasonable steps to ensure the right to life is protected within their jurisdiction ».²¹⁰ This is an international law obligation for the right to life is one of the core rights recognised in the ICCPR.²¹¹ Therefore, Pacific Island States have an obligation to fulfil and preserve human rights, and have positive obligations to ensure the right to life. In protecting the right to life, States must take active measures to ensure its fulfillment and its protection.²¹² As the Dutch Supreme Court analysed Article 2 of the ECHR, there is a positive obligation to take appropriate steps to safeguard the lives of those within its jurisdiction in situations of hazardous activities, and situations involving natural disasters.²¹³ Furthermore, there is an obligation to take appropriate steps if there is a real and immediate risk to persons. Such a risk is defined as a genuine and imminent risk. Immediate does not necessarily imply a short period of time but a risk which is directly threatening the persons involved.²¹⁴ Therefore, sea level rise being a real and immediate risk is genuinely threatening

²⁰⁸ *Ibid.*, Stephens (supra 14), p 794.

²⁰⁹ *Ibid.*, Stephens (supra 14), p 796.

²¹⁰ *Ibid.*, Smith (supra 126), p 216.

²¹¹ ICCPR, Article 6(1); See also UDHR, Article 3.

²¹² HRC GC No 36, § 18-31; HRC, Teitiota case, § 9(4); See, inter alia, ECtHR, 28 March 2000, Case of Kılıç v. Turkey (Application no. 22492/93), § 62, and ECtHR, 17 July 2014, Case of Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania (Application no. 47848/08), § 130.

²¹³ Supreme Court of the Netherlands, 2019, Urgenda case, §§ 5.2.1-5.3.4; ECHR, Article 2.

²¹⁴ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.2.3.

the life of the population, and will directly do so in the future as projected by the IPCC Reports for years.²¹⁵

2.2.1.2. Life in Dignity

To prove that there are State obligations that it did not respect, the claimant bears the burden of proving that the State had obligations which it did not uphold. However, as seen in the Teitiota case, the burden of proof is particularly difficult to meet because of the high threshold of the right to life violation.²¹⁶ Because of this high threshold, the principle of life with dignity may be used. Therefore, even if there is no deprivation of life, there may be substantial impact on life, which generates obligations for States. In the context of sea level rise, climate change does not necessarily violate human rights, but may violate their enjoyment, as noted by the OCHR.²¹⁷ This is a reasoning similar to that of the principle of life with dignity. It is affirmed by the HRC in the Teitiota case, recalling its General Comment No 36: « [...] the right to life also includes the right of individuals to enjoy a life with dignity and to be free from acts or omissions that would cause their unnatural or premature death ».²¹⁸

2.2.1.3. Right to the Protection of Private Life

One way in which the right to life has been understood in Europe is that the right to a private life may generate the same States obligations as those under the right to life.²¹⁹ This is because where there is no violation of the right to life because of its high threshold, there may be impacts on private life. This gives rise to the protection of the right to private life through the substantially similar obligations as under the right to life. The Dutch Supreme Court affirmed that in case of the materialisation of environmental hazards, there may be « direct consequences for a person's private lives and are sufficiently serious, even if that person's health is not in jeopardy ».²²⁰ The Court relies on the ECtHR interpretation that « Article 8 ECHR encompasses the positive obligation to take reasonable and appropriate measures to

²¹⁵ IPCC Reports of 2007, 2014, 2018.

²¹⁶ *Ibid.* HRC, Teitiota case.

²¹⁷ OHCHR, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, U.N. Doc. A/HRC/ 10/61 (January 15, 2009).

²¹⁸ *Ibid.* HRC, Teitiota case, § 9(4); see also HRC GC No 36 § 3.

²¹⁹ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.2.3-5.2.4; See also ECtHR, 2014, Brincat, § 102.

²²⁰ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.2.3.

protect individuals against possible serious damage to their environment ».²²¹ Since the ECtHR has recognised that there may be a violation of Article 8 in the case of environmental harm and that Article 8 gives rise to the same obligations as Article 2, the right to private life may be used to generate States obligations in the context of sea level rise.²²² Since the interpretation of the high threshold of the right to life is similar in other regional and international systems, the right to private life may be an approach for States obligations in protecting such rights in other legal systems. This is also in accordance with the environmental law precautionary principle as Articles 2 and 8 encompass the « duty of the state to take preventive measures to counter the danger, even if the materialisation of that danger is uncertain ».²²³

2.2.2. Environmental Law Obligations

2.2.2.1. Climate Change Adaptation and Mitigation

As seen above climate change affects human rights, at the very least their enjoyment. States have an obligation to fulfil and protect such human rights. Therefore, since climate change and its consequences affect the enjoyment of human rights, States ought to mitigate climate change effects. Hence, States have climate change mitigation and adaptation duties under environmental law. These are analysed by the IACtHR in its advisory opinion on State obligations.²²⁴ The right to life may be protected by the recognition of States obligations to protect the environment, and the right to a healthy environment.²²⁵ This ensures that manmade and natural environment destruction will be taken into account, prevented and remedied.²²⁶ Environmental protection can ensure the protection of the right to life, and vice versa. The recognition of a right to a healthy environment as a human right encompasses this dynamic.

²²¹ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.2.3; See ECtHR, Guide on Article 8 of the European Convention on Human Rights (version dated 31 August 2019), 119-127, 420-435 and 438-439 and the ECtHR judgments mentioned there.

²²² ECHR, Articles 2, 8.

²²³ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.3.2.

²²⁴ IACtHR, 2017, Advisory Opinion.

²²⁵ IACtHR, 2017, Advisory Opinion, §§ 108-126.

²²⁶ IACtHR, 2017, Advisory Opinion, §§ 123-210.

There are arguments against climate change mitigation and adaptation, such as the one drop in the ocean defence.²²⁷ This means that the reduction of GHG emissions is only a small or insignificant factor of climate change. However, States have environmental obligations such as under the 2015 Paris Agreement, which requires them to take measures to reduce the increase of the average surface temperature to below 2°C.²²⁸ All States parties have a part to play in reducing their GHG emissions. This is confirmed by the Dutch Supreme Court under Articles 2 and 8²²⁹ even if climate change is a global problem.²³⁰ Moreover, the Paris Agreement takes into consideration the least developed States which have less revenue to tackle pollution, to avoid placing too high a burden on them.²³¹ This means that every State, no matter how small in size or population, has an obligation to strive towards the protection of the environment and the reduction of its emissions and pollution.

2.2.2.2. Precautionary Principle

When taking environmental protection measures and other measures susceptible to impact the environment, States must take into account the precautionary principle for the purposes of climate change anticipation, prevention, mitigation and adaptation. It requires acting with precaution when taking measures, so as to not further harm the environment, while taking into consideration different socio-economic contexts.²³² It also entails that development should be reasonable in its exploitation of resources and sustainable for present and future generations.²³³ The precautionary principle has been recognised as an integral part of the due diligence obligation, so that States must take all appropriate measures to prevent any damage that may result from their activities.²³⁴ This is in line with the obligation of prevention of

²²⁷ The one drop in the ocean defence argues that the reduction of GHG emission is not as necessary for small countries as it is 'one drop in the ocean'. However, the Dutch Supreme Court States that: « [...] Nor can the assertion that a country's own share in global greenhouse gas emissions is very small and that reducing emissions from one's own territory makes little difference on a global scale, be accepted as a defence. [...] » Hague Supreme Court, *The State of the Netherlands (Ministry of Infrastructure and the Environment) v Urgenda Foundation* (2018), § 5.7.7; Hari M. Osofsky, « Is Climate Change 'International'? Litigation's Diagonal Regulatory Role », 49(3) *Virginia Journal of International Law* (2009), 585, p 587.

²²⁸ Paris Agreement, Article 2(1)(a); See also on reducing GHG emission Paris Agreement, Articles 2(1)(b), 2(1)(c), 4(1), 4(6), 4(19), 6(4), 10(1).

²²⁹ ECHR, Articles 2, 8.

²³⁰ Supreme Court of the Netherlands, 2019, *Urgenda case*, § 5.7.1.

²³¹ Paris Agreement, Preamble §§ 5, 6, 16, Articles 3, 4(1), 4(5), 4(6), 4(15), 5(2), 6(6), 7(2), 7(3), 7(6), 7(7)(d), 7(10), 7(13), 7(14)(a), 9, 10(5), 10(6), 11, 13.

²³² 1992 UN Framework Convention on Climate Change, Article 3(3).

²³³ UNFCCC, Article 3(1); 1987 World Commission on Environment and Development, *Our Common Future*, § 27; Resolution adopted by the General Assembly on 14 November 2014, 69/15. SIDS Accelerated Modalities of Action (SAMOA) Pathway, Declaration SAMOA Pathway 2014, §§ 1, 35.

²³⁴ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 131.

environmental damage which is part of international customary law.²³⁵ These obligations have been detailed further as to use all means at the State's disposal to avoid activities under its jurisdiction causing significant environmental harm.²³⁶ ITLOS clarified that this obligation of prevention, which may be equated to climate change mitigation, applies to all States regardless of their level of development.²³⁷

The precautionary principle has been added to various laws of Tuvalu,²³⁸ and other Pacific Island States domestic policies,²³⁹ in line with international environmental law.²⁴⁰ ITLOS has recognised a trend towards making the precautionary principle part of international customary law.²⁴¹ However, this principle does not prevent States from acting. In the situation of « threats of serious or irreversible damage », the principle does not entail that the lack of full scientific certainty prevents States from acting or having to postpone measures to prevent environmental degradation.²⁴² Even in the absence of scientific certainty, States must take effective measures to prevent severe or irreversible damage.²⁴³ As has been noted by the Pacific Island States, the preferable solution is to act rather than to abstain from action.²⁴⁴ According to this 'no regret approach' no matter the amount of scientific data, actions will be

²³⁵ Delimitation of the Maritime Boundary in the Atlantic Ocean (Ghana/Côte d'Ivoire), Provisional Measures, Order of 25 April 2015, ITLOS Reports 2015, § 71; ICJ, Reports 1996, Advisory Opinion, Legality of the Threat or Use of Nuclear Weapons, p 226, pp 241-242, § 29.

²³⁶ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 117, and ILA, Commentaries on the draft articles on prevention of transboundary harm from hazardous activities, Yearbook of the ILA 2001, vol. II, Part Two (A/56/10), Article 3, § 11.

²³⁷ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 158.

²³⁸ 2019 Tuvalu Climate Change Resilience Act, Articles 17, 33; 2016 Tuvalu Energy Efficiency Act, Article 6; 2008 Tuvalu Environmental Protection Act, Article 27.

²³⁹ 2012 Kiribati Integrated Environment Policy; 2012 Solomon Islands National Climate Change Policy 1.4, under Policy Guiding Principles; 2013 Kiribati National Framework for Climate Change and Climate Change Adaptation; 2014 Fiji Green Growth Framework; 2018 Fiji National Adaptation Plan; 2018 Marshall Islands 2050 Climate Strategy; 2009 Solomon Islands National Biodiversity Strategy and Action Plan.

²⁴⁰ UNFCCC Article 3(3); see also on climate change adaptation and mitigation: International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Brussels, 29 November 1969. LNTS 970, adopted by the International Maritime Organisation; Convention on Environmental Impact Assessment in a Transboundary Context, Espoo, 25 February 1991. LNTS 1989, adopted by the Senior Advisers to ECE Governments on Environmental and Water Problems of the Economic Commission for Europe; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel, 22 March 1989. LNTS 1673, adopted by the Conference of Plenipotentiaries; Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Aarhus, 25 June 1998. LNTS 2161, adopted by the States members of the Economic Commission for Europe as well as States having consultative status with the Economic Commission for Europe, and by regional economic integration organizations constituted by sovereign States members of the Economic Commission for Europe; Kyoto Protocol to UNFCCC; Paris Agreement.

²⁴¹ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 135. See also, ITLOS, 1999, Southern Bluefin Tuna, §§ 73-80.

²⁴² UN Agenda 21 Rio Declaration; Principle 15 of the Rio Declaration.

²⁴³ ITLOS, 2011, Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area, Advisory Opinion, § 128.

²⁴⁴ 2012 Solomon Islands National Climate Change Policy 1.4, under Policy Guiding Principles.

taken with all precaution and sustainability in mind. This precautionary principle is fundamental in environmental law and has been restated as crucial by various courts.²⁴⁵

2.2.2.3. Polluters Pay Principle and Cooperation

When it comes to environmental law protection several principles come into play such as the principle of cooperation,²⁴⁶ and the principle of ‘polluters pay’.²⁴⁷ These are to ensure the share of the environment protection obligations. ITLOS has determined that the obligation of cooperation is fundamental for the prevention of pollution of the marine environment under general international law.²⁴⁸ This obligation of cooperation entails various obligations such as the exchange of information.²⁴⁹

It also recognises that cooperation ought to take into consideration the different levels of development of States parties to the environmental law conventions, and the various degrees of GHG emissions of the most polluting States. Therefore, the 2015 Paris Agreement puts environmental law obligations on all States parties. But it does so while taking into consideration different levels of contribution for the various levels of development, so as to not put an undue burden on some States which are already suffering from climate change impacts.²⁵⁰ This favours Pacific Island States that have argued for their particularly vulnerable situations and needs to be acknowledged.²⁵¹ The 2015 Paris Agreement recognises different obligations of cooperation such as in Article 7(7).²⁵² It is also the case of the IACtHR in its Advisory Opinion which details environmental obligations as being that of prevention,

²⁴⁵ Victorian Civil Administrative Tribunal (VCAT) Board v. South Gippsland Shire Council; Western Australian State Administrative Tribunal, *Riggs v Western Australian Planning Commission* [2017] WASAT 19; FCA, 2021, *Sharma case*, § 254-257; IACtHR, 2017, Advisory Opinion; Supreme Court of Netherlands, 2019, *Urgenda case*, § 5.3.1-5.3.2.

²⁴⁶ Paris Agreement, Article 7(7); Mid Term Review of the SAMOA Pathway High Level Political Declaration, §§ 1, 9; 2019, *Kainaki II Declaration for Urgent Climate Change Action Now*, § 9; IACtHR, 2017, Advisory Opinion, *Obligation of cooperation*, §§ 181-210; Supreme Court of the Netherlands, 2019, *Urgenda case*, §§ 7.1-7.6.2.

²⁴⁷ Market based instrument of the Kyoto Protocol (see Kyoto Protocol Articles 2, 3); David M Driesen, ‘Instrument of Choice’, in: Latanya Rajamani and Jacqueline Peel (eds.) *The Oxford Handbook of International Environmental Law* (2021), p 105.

²⁴⁸ *MOX Plant (Ireland v. The United Kingdom)*, Provisional Measures, Order of 3 December 2001, ITLOS Reports 2001, § 82 [hereinafter ITLOS, 2001, *MOX Plant case*].

²⁴⁹ ITLOS, 2001, *MOX Plant case*, §§ 84 and 89.

²⁵⁰ Paris Agreement, Articles 3-7, 9-11, 13.

²⁵¹ See also Inés de Águeda Corneloup and Arthur P. J. Mol, 2013. *Small island developing states and international climate change negotiations: the power of moral « leadership »*, p 290: « At the center of SIDS’ storyline was their small contribution to climate change, their large vulnerability regarding ecosystems and livelihoods, and the urgency of taking drastic measures. Small islands positioned themselves as victims of climate change, and hence, they claimed to have the moral right at Copenhagen to request strict targets - i.e., 1.5°C - to ask for assistance - i.e., funding for adaptation-and to demand immediate committed action from all countries- i.e., a legally binding agreement. ».

²⁵² Paris Agreement, Article 7(7); See also Paris Agreement, Articles 6-8, 10, 12, 14.

cooperation, precaution, and procedural.²⁵³ In line with international environmental law, Pacific Island States have taken various cooperation commitments,²⁵⁴ such as the adoption of the Pacific Plan by the Pacific Islands Forum aimed at supporting Pacific Island States « working closely together on areas requiring collective action in order to do more than they could separately, to manage shared resources, and to achieve the shared goal ». ²⁵⁵

The consideration of the differences in development and volume of GHG emissions in various States is also done through the polluter pay principle, which has been recognised by various environmental law instruments, the UNGA,²⁵⁶ and Pacific Island States.²⁵⁷ It ensures that the most polluting States compensate for their overly high GHG emissions, so as to meet their obligations of conservation of marine resources under the LOSC.²⁵⁸

2.2.3. Duty of Care

The last subsection of this section concludes the reasoning on the duty of care. It has been proven that the right to life, life with dignity, private life and right to a healthy environment give rise to States obligations. These rights are and will be impacted by sea level rise which will affect the enjoyment of this right to life and right to a healthy environment, if not violate them.²⁵⁹ Therefore States have obligations to fulfil these rights but also to protect them in the face of the adverse effects of sea level rise.

²⁵³ IACtHR, 2017, Advisory Opinion.

²⁵⁴ 2019 Tuvalu Climate Change Resilience Act; 2008 Tuvalu Marine Resources Act; 2008 Tuvalu Environment Protection Act; 2018 Marshall Islands Ministry of the Environment Act; 1997 Marshall Islands Marine Resources Act; 1987 Marshall Islands Disaster Assistance Act; 1984 Marshall Islands National Environmental Protection Act; 2021 Fiji Climate Change Bill.

²⁵⁵ The Pacific Plan for Strengthening Regional Cooperation and Integration (Annex and Background to the Framework for Pacific Regionalism) (as set out on the Forum Leaders' Vision, 2004).

²⁵⁶ Market based instrument of the Kyoto Protocol (see Kyoto Protocol Articles 2 and 3); UNGA 2019 Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment A/ 74/161, § 90; UNGA 2019 Issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment A/HRC/40/55, § 104; UNGA 2021 Human rights and the global water crisis: water pollution, water scarcity and water-related disasters A/HRC/46/28, § 67 and 89(f); UNGA 2018 Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, A/ 73/188, § 41.

²⁵⁷ 2010 Framework for a Pacific Oceanscape: a catalyst for implementation of ocean policy; See also 2012 Kiribati Integrated Environment Policy; 2014 Fiji Green Growth Framework, Thematic Area 2, 2(ii); Fiji 2018 Low Emission Development Strategy 2018-2050, § 4.7.6.; Tuvalu 2008 Environmental Protection Act, Article 23(2)(t).

²⁵⁸ LOSC, Article 118, see also Part XII Protection and Preservation of the Marine Environment Section 2 Global and Regional cooperation and Part XIV Development and Transfer of Marine Technology Section 2 International cooperation.

²⁵⁹ OHCHR, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, U.N. Doc. A/HRC/ 10/61 (Jan. 15, 2009); OHCHR, Report of the Office of the United Nation High Commissioner for Human Rights on Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, U.N. Doc. A/74/161 (July 15, 2019); see also John H. Knox, 2009. Linking Human Rights and Climate Change at the United Nations. *Harvard Environmental Law Review*, 33, p 478.

2.2.3.1. Common Law Neighbour Principle

The duty of care has first been established and detailed in the common law system before being used in environmental law cases.²⁶⁰ There are several stages to the duty of care, the harm which occurred must be a reasonable foreseeable result of the defendant's conduct; there must have been a sufficient relationship of proximity or neighbourhood existing between the alleged wrongdoer and the person who suffered damage; and it must be fair, just and reasonable to impose liability.²⁶¹

For Pacific Island States, reasonable foreseeable risk is fulfilled as the many IPCC Reports, OHCHR Reports, UNGA Resolutions, various instruments, and court cases demonstrate the knowledge of sea level rise.²⁶² The Supreme Court of the Netherlands analysed that States have « a duty [...] to take preventive measures to counter the danger, even if the materialisation of that danger is uncertain »,²⁶³ which is consistent with the precautionary principle. Indirectly referring to the risk being real and immediate,²⁶⁴ the Federal Court of Australia recognised the reasonably foreseeable probability of harm due to the defendant's conduct.²⁶⁵ For Pacific Island States, the criterion of control and knowledge are also fulfilled. As analysed by the Federal Court of Australia, the State has direct control over the foreseeable risk because of the « exercise of power upon which the creation of that risk depends ». ²⁶⁶ For Pacific Island States, the criterion of sufficient relationship of proximity is fulfilled as States are responsible for their population and the fulfilment of their human rights.²⁶⁷ For Pacific Island States, the criterion that it is fair, just and reasonable to impose liability is the most difficult one. Arguably all States parties have environmental law duties to reduce their GHG emissions.²⁶⁸ The Supreme Court of the Netherlands and Federal Court of Australia acknowledged that no matter how small the contribution to GHG emissions are, the one drop

²⁶⁰ Donoghue v Stevenson [1932] UKHL 100 (26 May 1932).

²⁶¹ UK Caparo Industries plc v Dickman.

²⁶² Declaration on Preserving Maritime Zones in the Face of Climate Change - related Sea Level Rise 50 Pacific Island Forum (1971-2021); 2014 SAMOA Pathway; Boe Declaration on Regional Security, Nauru, 2018; Fiftieth Pacific Islands Forum Funafuti, Tuvalu 13-16 August 2019 Forum Communiqué; See also 2015 The Polynesian P.A.C.T. (Polynesia Against Climate Threats) Taputapuātea Declaration on Climate Change.

²⁶³ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.3.2.

²⁶⁴ OHCHR, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, U.N. Doc. A/HRC/ 10/61 (January 15, 2009), at 23 n.104 (citing Aalbersberg v. The Netherlands, No. 1440/2005, Hum. Rts. Comm., 6.3, U.N. Doc. CCPR/C/87/D/1440/2005 (2006)).

²⁶⁵ FCA, 2021, Sharma case, §§ 247-257.

²⁶⁶ FCA, 2021, Sharma case, § 271, see also §§ 258-271.

²⁶⁷ FCA, 2021, Sharma case, §§ 490-491.

²⁶⁸ John H. Knox, 2009. Linking Human Rights and Climate Change at the United Nations. *Harvard Environmental Law Review*, 33, p 489.

defence does not stand in the face of environmental law obligations.²⁶⁹ However, imposing too high compensation damages may place a too high burden on Pacific Island States which are already suffering greatly from climate change consequences. As seen above, they have already taken commitments to reduce their GHG emissions. Imposing further liability may render the Pacific Island States unable to face such climate change mitigation and adaptation.

2.2.3.2. Positive Obligations towards Future Generations

Sea level rise is an onset consequence of climate change. Therefore, it has consequences for present and future generations, as it will affect the environment and the food supply, endanger health, and cause loss of territory and human lives.²⁷⁰ As recognised by the HRC « environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life ». ²⁷¹ This entails States obligations to ensure the rights of future generations.²⁷² This has been analysed by the Federal Court of Australia as the principle of intergenerational equity²⁷³ defined as « that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations ». ²⁷⁴ This is in line with the particular vulnerability of future generations, due to the risk of harm.²⁷⁵ This is expressed by the Federal Court of Australia: « [the] Children have no choice but to live in the environment which will be bequeathed to them ». ²⁷⁶ Thus, the actions and omissions to environmental protection and right to life protection will have consequences for future generations in the context of sea level rise, especially for Pacific Island States.

2.2.3.3. Obligation to Reduce GHG Emissions for all States

In line with the States' duty of care to their population and future generations, the obligation to reduce GHG emissions for all States concludes the reasoning. It is directly in line with the international environmental law obligation to limit the global warming average

²⁶⁹ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.7.7-7.5.3; FCA, 2021, Sharma case.

²⁷⁰ Supreme Court of the Netherlands, 2019, Urgenda case, § 4.2.

²⁷¹ HRC, Teitiota case, § 9.4 and HRC GC No 36, § 62.

²⁷² FCA, 2021, Sharma case, § 274.

²⁷³ FCA, 2021, Sharma case, § 273.

²⁷⁴ EPBC Act section 3A(c).

²⁷⁵ FCA, 2021, Sharma case, § 289-296, 312.

²⁷⁶ FCA, 2021, Sharma case, § 296.

temperature.²⁷⁷ Therefore, as has been analysed by various courts,²⁷⁸ no matter how small the States and their GHG emissions may be, they have a duty to reduce them. Article 3(3) of the UNFCCC puts on State parties « an obligation to take the necessary measures in accordance with its specific responsibilities and possibilities ».²⁷⁹ It also puts a responsibility on States to fulfil their individual responsibility to contribute to climate change mitigation.²⁸⁰ This is in line with the protection of the right to life and the right to a healthy environment of the population, under the State jurisdiction. The protection of those who are not under State jurisdiction and may be affected by sea level rise is a regional problem, particularly for Pacific Island States. Furthermore, it is also set to become a global one.²⁸¹ This calls for the widest cooperation in the duty of care of all States for human rights protection and environmental protection, as well as climate change mitigation and adaptation.

3. LEGAL EVOLUTIONS

As seen above, the current state of the law is not adequately equipped to protect the right to life and the right to a healthy environment in the context of sea level rise. Sea level rise affects the maritime zones entitlements of the State, the State capacity to exploit the resources therein, the marine environment, the right to life and the right to a healthy environment. All these aspects are intrinsically linked in the ecosystem approach, as within the law of the sea. Thus, the possible solutions to such issues need to also be linked together. Therefore, this chapter aims at analysing the different interpretations of the LOSC to best adapt maritime baselines definition to sea level rise, as to ensure Pacific Island States' retaining their rights and obligations. This chapter also aims at analysing the legal solutions to maintain the existence of Pacific Island States in the context of sea level rise.

There are different approaches to the legal solutions to such issues, as identified by the ILA in its 2018 report.²⁸² These include the development of customary international law,²⁸³ the

²⁷⁷ UNFCCC, Paris Agreement, see also IPCC 2007 Report.

²⁷⁸ FCA, 2021, Sharma case; Supreme Court of the Netherlands, 2019, Urgenda case, § 5.7.3, 5.7.7.

²⁷⁹ UNFCCC, Article 3(3).

²⁸⁰ Supreme Court of the Netherlands, 2019, Urgenda case, section (e) Joint responsibility of the states and partial responsibility of individual states (§ 5.7.1-5.8), in particular § 5.7.1.

²⁸¹ Supreme Court of the Netherlands, 2019, Urgenda case, § 5.7.2.

²⁸² ILA, 2018, International Law and Sea Level Rise, p 18.

²⁸³ *Ibid.*, Soons (supra 5), p 255.

amendment of the LOSC,²⁸⁴ a decision of the Meeting of the State Parties to the LOSC (SPLOS),²⁸⁵ a diplomatic conference open to non-parties to the LOSC, an agreement adopted by the UNGA, or lastly a protocol to the UNFCCC.²⁸⁶

The possibility to amend the LOSC and the convening of a new diplomatic conference to tackle the issue of sea level rise will not be analysed as they are highly unrealistic. Indeed, the LOSC is particularly difficult to amend.²⁸⁷ It is theoretically possible but has never been done before and is practically perilous when sea level rise is a current and future issue. The creation of a new international treaty may also be one of the solutions. However, since the LOSC took more than a decade before being fully drafted, it does not appear to be the most obvious and rapid solution to such an imminent issue. Moreover, the amendment process of the LOSC is difficult and has never been used, it is unlikely that it would happen.²⁸⁸ Thus these different means to adapt the law to sea level rise are exposed here for acknowledgement but will not be further analysed as it is not within the scope of this thesis.

The ILA also notes that there are several issues with the complexity of actually putting into place these measures. In the meantime, it acknowledges that the development of international customary law is one of the most plausible solutions. An evolution of the interpretation of the LOSC may ensure the protection of States' rights and obligations.

Evolutions of the law may also take place for the different criteria of statehood. For the territory criterion it can be done through land allocation, artificially enhancing land or State merger. Regarding the population, the extension of the duty of care to persons moving to another land may be the evolution for the population protection. Lastly, the State recognition criterion may be fulfilled by the continuation of the State recognition by other States.

Firstly, this chapter deals with two proposed interpretations of the LOSC to adapt to sea level rise, the fixed outer limit of maritime zones and fixed baselines. Secondly, this chapter deals with the sea level rise adaptation through the possible solution for State continuation.

²⁸⁴ See LOSC, Articles 311-316. For a discussion of the complexity of this procedure see, David Freestone and A.G. Oude Elferink, 2005. 'Flexibility and Innovation in the Law of the Sea: Will the LOS Convention Amendment Procedures Ever Be Used?' in A.G. Oude Elferink, (ed.), *Stability and Change in the Law of the Sea: The Role of the LOS Convention*, (Boston/Leiden, Nijhoff), pp 163-216 [hereinafter Freestone and Elferink].

²⁸⁵ Note that LOSC, Article 319(2)(e) appears to allocate only administrative roles to this meeting, e.g. under LOSC Annex II, art 293 and Annex VI, Articles 4(4), 18, 19, discussed in Freestone and Elferink (supra 284), pp 207-209.

²⁸⁶ David Freestone and John Pethick, 1994. 'Sea Level Rise and Maritime Boundaries: International Implications of Impacts and Responses', in: G. Blake (ed.) *International Boundaries: Fresh Perspectives*, 5 (Routledge), p 76.

²⁸⁷ LOSC, Article 312.

²⁸⁸ *Ibid.*, Busch (supra 16), p 180; see also LOSC, Article 312.

3.1. Reinterpretation of the LOSC to face Sea Level Rise Challenges

As seen previously, the dominant interpretation of the LOSC is that of the ambulatory baselines, meaning that baselines move according to sea level rise. It is problematic and raises questions of States' rights and obligations but also of statehood. The drafters did not take into consideration climate change nor sea level rise in their drafting of the LOSC, as can be seen in the absence of any provisions on sea level rise, ocean acidification, and other impacts of climate change on oceans space and environment.²⁸⁹ The assumptions when drafting the LOSC were also: « that the oceans will continue to provide a predictable and benign environment which allows clear jurisdictional boundaries to be drawn (from stable baselines along the coast), and that the oceans will carry on supporting a range of vital human uses (such as fishing) ». ²⁹⁰ But in the context of sea level rise, the assumptions that oceans will not change and therefore allow States to draw predictable baselines, provide predictable amounts of resources, and be a source of stability cannot continue to be a line of interpretation.

Therefore, an argument can be made for solutions to this issue, in the form of another interpretation of the LOSC. Such change in the interpretation of the LOSC may be achieved through the evolution of international customary law. International customary law is created through State practice and *opinio juris*. The ILA noted that there already exists a regional State practice in the Pacific Island States wishing to maintain their maritime zones entitlement.²⁹¹ The ILA also notes that according to Article 31(3)(b) of the 1969 Vienna Convention,²⁹² the fact that a convention can be dynamically interpreted is not contradictory to international law. In other words, the provisions of a convention ought to be interpreted in the light of the reader's context rather than in the light of the context in which the provisions were initially drafted.²⁹³

These other interpretations of the LOSC are namely in the fixed outer limit of maritime zones or fixed baselines, as identified by the Baselines Committee of the ILA.²⁹⁴ The ILA Singapore Intersessional Meeting of March 2018 concluded that the term of 'freezing' may be misleading and that the expression of 'maintaining existing entitlements' to maritime zones was more appropriate as it may refer to either solution of fixing baselines or the outer limit of

²⁸⁹ *Ibid.*, Stephens (supra 14), p 787.

²⁹⁰ *Ibid.*, Stephens (supra 14), p 778.

²⁹¹ ILA, 2018, International Law and Sea Level Rise, p 19.

²⁹² 1969 Vienna Convention, Article 31(3)(b): « any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation ».

²⁹³ ILA, 2018, International Law and Sea Level Rise, p 19.

²⁹⁴ ILA, 2018, International Law and Sea Level Rise, p 12.

maritime zones. It avoids ambulatory baselines and shifting maritime zones causing a decrease in the extent of coastal States' sovereignty and rights.²⁹⁵ This section will analyse such solutions and their impact on the rights and duties of States.

There are mainly two other interpretations of the LOSC which are striving towards the adaptation to climate change, they are the fixed outer limit of maritime zones, and the fixed baselines.²⁹⁶ To different degrees, they strive towards preserving stability and States retaining their rights and duties. These interpretations have been put forward because Pacific Island States suffer from climate change consequences such as ocean acidification,²⁹⁷ natural disasters,²⁹⁸ and sea level rise.²⁹⁹ It would not be equitable if the least polluting States suffered twice through sea level rise practical (losing land mass, relocation, etc) and legal (losing maritime zones, rights and duties) consequences.

3.1.1. Fixed Outer Limit of Maritime Zones

This different approach to baselines and maritime zones would require a change of interpretation of the current provisions of the LOSC. This approach defines that the outer limit of maritime zones would be fixed, but not the baselines. It will result in the baseline moving with sea level rise, while the outer limit of the territorial sea, contiguous zone and EEZ remain fixed. The breadth of maritime zones will no longer be calculated from the new baseline but the former baseline. Therefore, the maritime zones might exceed the maximum breadth provided by the LOSC.³⁰⁰

However, since the outer limits of maritime zones are fixed, the territorial sea will increase in breadth. The outer limit of internal waters cannot be fixed because there would be an alternation of two strips of territorial sea and one strip of internal waters. Even if certain coastal States could argue for internal water being fixed, it is unlikely that other States would

²⁹⁵ *Ibid.*, Busch (supra 16), p 177.

²⁹⁶ ILA, 2018, International Law and Sea Level Rise, p 12.

²⁹⁷ UNGA/74/161, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, §§ 6 and 34; UNGA//RES/69/15 Samoa Pathway, §§ 32, 58(e), 58(n), 63(f); Fiji 2021 Climate Change Bill, Part 13 Ocean and Climate Change, § 79 (c).

²⁹⁸ UNGA/74/161, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, §§ 6 and 8; UNGA//RES/69/15 Samoa Pathway, §§ 23, 62(f), 92; 2007 Tuvalu Natural Disaster Management Act, § 3; 2008 Tuvalu Environmental Protection Act, § 29(c); 2015 Tuvalu Climate change and Disaster Survival Fund Act, §§ 7, 11, 13, 14; 2019 Tuvalu Climate Change Resilience Act, § 25; 2018 Marshall Island Ministry of Environment Act, § 615(3); 1987 Marshall Islands Disaster Assistance Act, § 1003(a); 1993 Kiribati National Disaster Act, § 2; 1998 Fiji Natural Disaster Management Act, §§ 2, 39, 40; Fiji 2021 Climate Change Bill, §§ 41(h), 71(2).

²⁹⁹ UNGA//RES/69/15 Samoa Pathway, §§ 11, 23, 31, 32; 2019 Tuvalu Climate Change Resilience Act, § 8(f); 2018 Marshall Island Ministry of Environment Act, § 613(3)(F); Fiji 2021 Climate Change Bill, § 6(3) 80.

³⁰⁰ ILA, 2018, International Law and Sea Level Rise, p 15.

agree. This approach would result in an expansion of the territorial sea and the maintenance of other maritime zones. It would increase the jurisdiction and sovereignty of coastal States with the increase of territorial sea, but decrease it with the loss of internal waters. This approach creates a certain instability and disputes may arise from it. But in any case, there is inherent instability because of sea level rise, and the fact that sea level rise is not a steady and homogenous phenomenon worldwide.

3.1.1.1.States and Islands

Within the current predominant interpretation of the LOSC, there is a risk that the baselines would move and that maritime zones would too. It has been noted that: « International Courts have indicated that changes in the actual coastline of a State will affect the location of the baseline as defined by international law of the sea ».³⁰¹ The Arbitral Tribunal in the Bangladesh case seems to be taking a different approach, stating that settled maritime boundaries cannot be jeopardised by climate change nor its consequences.³⁰² This trend acknowledging the changes may be justified by climate change's consequences such as more disastrous natural disasters,³⁰³ the issue of stability of law of the sea and of the international community. One of the paramount principles of the United Nations (UN) is to preserve international peace and security. In the context of sea level rise, this means preserving stability, and long-established rights and obligations. The LOSC, like all conventions, was a compromise between States with different interests such as maritime powers and developing States. Therefore, States will argue either for the freedom of the sea or for Stat's rule over maritime expenses. This struggle is reflected in the question of sea level rise, particularly for vulnerable States, with low-lying coasts, and islands. Rights and obligations of States will mainly remain the same seawards as the outer limit of maritime zones will be fixed. However, landwards, rights and obligations of States will change substantially with sea level rise.

³⁰¹ Katherine J. Houghton, Athanasios Vafeidis, Barbara Neumann, Alexander Proelss, 2010. Maritime Boundaries in a rising sea. *Nature Geoscience*, 3(12), p 813.

³⁰² Arbitral Tribunal, 7 July 2014, In the Matter of the Bay of Bengal Maritime Boundary Arbitration, between The People's Republic of Bangladesh and The Republic of India, Award, §§ 216-217; In Bangladesh v. India the Arbitral Tribunal noted in its Award that: « maritime delimitations, like land boundaries, must be stable and definitive to ensure a peaceful relationship between the States concerned in the long term » and to say that: « [i]n the view of the Tribunal, neither the prospect of climate change nor its possible effects can jeopardise the large number of settled maritime boundaries throughout the world. This applies equally to maritime boundaries agreed between State and to those established through international adjudication ».

³⁰³ Nasa Earth Observatory, 11 November 11 2020.

On land and internal waters becoming territorial sea, this will lead to a change in the rights and obligations of States. Internal waters are an integral part of States' territory and under the sovereignty of the coastal State. This means that the coastal State enjoys almost absolute sovereignty over the area and other States must ask permission to enter it.³⁰⁴ On the contrary, in the territorial sea the right of innocent passage is recognised to other States' ships.³⁰⁵

On land and internal waters becoming contiguous zone, assuming that the State has declared one, the coastal State will have a more limited jurisdiction. The coastal State will only be able to prevent infringement of its fiscal, immigration, sanitary or custom regulations already enacted in its territory or territorial sea.³⁰⁶ This means that in the limited portion from the former baseline to the new baseline, the coastal State will have a decrease in sovereignty rights and jurisdiction, and will have to take into account the rights of other States.

There are several solutions to this issue. Firstly, a practical one would be to build seawalls or other constructions to prevent the rise of sea levels. However, this may not work in the long term. Most vulnerable coastal States tend to be developing States, which might not have the resources to invest in these constructions. Secondly, as explained by Schoefield, a legal solution would be to use Article 7(2) of the LOSC and claim straight baselines.³⁰⁷ These baselines are defined in Article 7 and have been recognised by the ICJ.³⁰⁸ However, the requirements for this are numerous, and scholars disagree on them and on whether they are cumulative or not.³⁰⁹ The ILA Baselines Committee also acknowledged that « there is no agreed single interpretation of Article 7 or a new rule of customary international law ».³¹⁰ Moreover, straight baselines are controversial among States.³¹¹

Through State practice, States could enter into an agreement to define all their baselines with neighbouring States. This would allow all opposite and adjacent coastal States to set their

³⁰⁴ LOSC, Article 8.

³⁰⁵ LOSC, Article 19.

³⁰⁶ LOSC, Article 33.

³⁰⁷ *Ibid.*, Schofield (supra 73), p 223.

³⁰⁸ LOSC, Article 7; United Kingdom v Norway (Anglo-Norwegian Fisheries case), [1951] International Court of Justice.

³⁰⁹ ICJ, 16 March 2001, Maritime Delimitation and Territorial Questions between Qatar and Bahrain (Qatar v. Bahrain), § 212; *ibid.*, Busch (supra 16), pp 174-194.

³¹⁰ International Law Association, Committee on Baselines under the International Law, Washington Conference (2014), § 60 [hereinafter ILA, Baselines Committee, 2014].

³¹¹ ICJ, 18 December 1951, Anglo-Norwegian Fisheries (United Kingdom v. Norway); LOSC, Article 7; Myres S. McDougal and William T. Burke, *The Public Order of the Oceans* (New Haven, New Haven Press, 1987, 1962 rep), p 387; Approximately 90 States use straight baselines to some extent for some or all of their baselines, Roach and Smith, *Excessive Maritime Claims*, 20, pp 74-82; Coalter G Lathrop, 2015. 'Baselines', in: Donal Rothwell, Alex G. Dude Elferink, Karen Nadine Scott, Tim Stephens (eds), *The Oxford Handbook of the Law of the Sea*, (Oxford University Press), p 87.

baselines and protect them from change, due to sea level rise. It would also decrease the chances of dispute and conflict arising. A certain stability would be established by the ratification of a treaty.³¹² Moreover, treaties establishing a boundary cannot become void.³¹³ Another solution could be to use declarations of baselines and maritime zones. These declarations would not be updated and remain fixed. The chart is recognised by other States and would not be questioned. As Schofield and Freestone pointed out, it seems to be suggested in Article 5 that « the coastal State can be the arbiter of its own baselines ».³¹⁴ This would be a potential solution for coastal States. The only drawback is that the chart would become more and more inaccurate over time, with sea level rise. But they suggest the solution of having a dual chart, one for navigation with the actual baselines and maritime zones, and one for States' rights and obligations with the fixed outer limit of maritime zones.³¹⁵ It is already the case in practice, navigational charts do not show maritime zones.

On the question of island that is part of a State, islands may be used by coastal States as basepoint to draw their baselines. As defined above, there are two methods to draw baselines either normal or straight. Straight baselines would be less likely to move due to sea level rise, unless the basepoints used to determine the baseline were to be submerged.³¹⁶

Unless there is a substantial change in the coast and its general direction, the LOSC can be interpreted as providing that straight baselines shall remain effective.³¹⁷ The question can be raised as to whether Article 7(2) of the LOSC should be understood independently or not.³¹⁸ The doctrine does not find a consensus on the matter and the issue seems to still be unsettled. The International Law Association (ILA)³¹⁹ analyses that sea level rise will impact islands and geographical features used to generate maritime zones³²⁰ or as basepoints to draw straight baselines.³²¹ One can argue that, since this provision was made for the specific situation of Bangladesh, it should only be used for the coastal State fulfilling the requirements of Article

³¹² *Ibid.* Schofield and Freestone (supra 19) p 161.

³¹³ 1969 Vienna Convention, Article 61.

³¹⁴ LOSC, Article 5; *ibid.*, Schofield and Freestone (supra 19), p 162.

³¹⁵ *Ibid.*, Schofield and Freestone (supra 19), p 162.

³¹⁶ LOSC, Article 7(4).

³¹⁷ LOSC, Article 7.

³¹⁸ LOSC, Article 7(2).

³¹⁹ As permitted by LOSC, Article 7.

³²⁰ LOSC, Part II.

³²¹ As permitted by LOSC, Article 7.

7(2).³²² One can also argue that since this provision was added in the LOSC, it means that it is to secure straight baselines and maritime zones. Scholars agreeing with the latter view argue that « other natural conditions » could encompass sea level rise due to climate change.³²³

Sea level rise could be a situation causing a change to the general direction of the coast and moving the baseline from the land domain, while Article 7(3) provides that « [t]he drawing of straight baselines must not depart to any appreciable extent from the general direction of the coast [...] ». ³²⁴ With the fixed outer limit of maritime zones, the land would be further away from the island, due to the sea level rise. It might be that the islands or rocks can no longer be used as basepoints because it would lead to a too great departure from the general direction of the coast. Coastal States would have to modify their straight baselines so as to still fulfil the requirements of Article 7 of the LOSC.³²⁵ The redrawing of straight baselines would result in considerable loss of maritime zones, thus sovereignty rights and jurisdiction of the States. This is because this approach fixes the outer limit of the maritime zones but not the baselines. Moreover, this approach would provide a certain stability and prevent States from spending millions to maintain an island. For example, it is the case of Okinotorishima, where: « [the] Japanese government has already spent \$600 million to keep the two barren islets in the western Pacific above water ». ³²⁶ The ILA noted that the fixing of the outer limit of maritime zones would « remove the perverse incentive to artificially maintain physical features to preserve maritime zones entitlements ». ³²⁷ This is because States would be able to preserve them within this fixing of the outer limit of maritime zones theory.

3.1.1.2. Island States

On island States, this approach can be more beneficial than the ambulatory baselines theory. This may be analysed with the question of partially and completely submerged islands. The baselines of partially submerged islands will shift landwards. But their maritime zones will

³²² LOSC, Article 7(2): « Where because of the presence of a delta and other natural conditions the coastline is highly unstable, the appropriate points may be selected along the furthest seaward extent of the low-water line and, notwithstanding subsequent regression of the low-water line, the straight baselines shall remain effective until changed by the coastal State in accordance with this Convention »; See also, Center for Oceans Law and Policy, University of Virginia School of Law, Satya N. Nandan and Shabtai Rosenne, 1993. United Nations Convention on the Law of the Sea 1982, A Commentary. Martinus Nijhoff Publishers (Dordrecht, Boston, London), Volume II, Articles 1 to 85, Annexes I and II, Final Act, Annex II.

³²³ LOSC, Article 7(2).

³²⁴ LOSC, Article 7(3).

³²⁵ LOSC, Article 7.

³²⁶ Norimitsu Onishi, 2005. Japan and China Dispute a Pacific Islet. *New York Times*, July 10, 2005.

³²⁷ ILA, 2018, International Law and Sea Level Rise, p 15.

remain because the outer limits of maritime zones are fixed. So, island States partially submerged will have a decrease of sovereignty as the newly submerged areas become part of the territorial sea. However, their contiguous zone and EEZ will remain the same. Also, their territorial sea will increase in breadth according to sea level rise. Fully submerged islands will no longer have a baseline. Without a baseline, no matter whether the outer limit of maritime zones is fixed or not, fully submerged island States will lose their maritime zones.

Pacific Island States are archipelagic States. They draw their baselines through islands and features.³²⁸ Sea level rise could potentially submerge these and this would result in the potential loss of maritime zones, and even the ability of the State to claim archipelagic status.³²⁹ This is because of the threat sea level rise poses to the capacity of the archipelagic State to fulfil the land to sea ratio between 1 to 1 and 9 to 1.³³⁰ Within Article 47 of the LOSC, the baselines for archipelagic States are straight archipelagic baselines. Currently, they are not interpreted as being as stable as straight baselines within Article 7 of the LOSC.³³¹ However, one interpretation could be made of archipelagic baselines in light of Article 7 of the LOSC.³³² The reason behind this argument is that archipelagic and straight baselines are functionally similar. The problem of basepoints disappearing remains, but the stability of the law and baselines is acquired through this interpretation. So the approach of fixed outer limit of maritime zones is less detrimental to the Pacific Island States than the ambulatory baselines theory, but still has major drawbacks. It can be argued that the fixation of the outer limit of maritime zones only cures the symptoms of sea level rise, but does not prevent it.

3.1.2. Fixed Baselines

As seen above, the ambulatory baselines theory is one interpretation of the LOSC, because the LOSC does not provide any rule regarding sea level rise. It is the most widely accepted view that baselines are ambulatory and move as land recedes, because the main principle of the law of the sea is that land dominates the sea.³³³ However, Purcell argues that baselines are not ambulatory and do not move automatically with sea level rise because there is a « clear

³²⁸ LOSC, Part IV; Article 46(b) lists examples of features: « islands, waters and other natural features form an intrinsic geographical, economic and political entity, or which historically have been regarded as such ».

³²⁹ *Ibid.*, Freestone and Schofield (supra 22), p 3.

³³⁰ LOSC, Article 47.

³³¹ LOSC, Article 7; *ibid.*, Stephens (supra 14), pp 790-791.

³³² LOSC, Article 7.

³³³ *Ibid.*, Rayfuse (supra 5), p 147; *ibid.*, Hayashi (supra 5), p 187; *ibid.*, Schofield (supra 5), p 405; *ibid.*, Freestone (supra 5), p 109; *ibid.*, Soons (supra 5), p 207; *ibid.*, Caron (supra 5), p 621; And the various view contained in ILA, Baselines Committee, 2012, Final Report.

priority given to coastal State control over national maritime space under the law of the sea ».³³⁴ If the priority is given to States to determine and control their national maritime zones and entitlements, baselines would not be automatically influenced by sea level rise. The latter interpretation seems to be that of the Pacific Island States, as some of these have agreed on the 2015 Taputapuātea Declaration on Climate Change.³³⁵ The ILA noted this Declaration as part of an emerging State practice.³³⁶ In this Declaration, States agreed that, within the LOSC, sea level rise threatens the territorial integrity, security and sovereignty and the very existence of some islands.³³⁷ In that context, the States agreed, under the LOSC, to « permanently establish the baselines in accordance with the LOSC, without taking into account sea level rise ».³³⁸ The Pacific Island Forum also encourages such an approach in its Declaration on Preserving Maritime Zones in the Face of Climate-Related Sea-Level Rise.³³⁹ This is how certain States in that region have taken legislative provisions to define archipelagic baselines, generally at the low-water line along the coast of each island. These islands include the Cook Islands, Fiji, Federated States of Micronesia (FSM), Kiribati, the Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.³⁴⁰ This is in line with the fixing baselines theory, even if it is not generally accepted academically, as seen before. There seems to be the development of a practice in this region. This is in addition to the previous declaration and legislations, cited by the Pacific Island Forum,³⁴¹ supporting the fixed baseline theory and urging its member States

³³⁴ *Ibid.*, Purcell (supra 67), p 731.

³³⁵ 2015 Taputapuātea Declaration on Climate Change: It states, inter alia, that « [T]he Polynesian Leaders Group call upon all States Parties to the [UNFCCC] to... With regard to the loss of territorial integrity: ... Accept that climate change and its adverse impacts are a threat to territorial integrity, security and sovereignty and in some cases to the very existence of some of our islands because of the submersion of existing land and the regression of our maritime heritage; Acknowledge, under the [LOSC], the importance of the [EEZ] for Polynesian Island States and Territories whose area is calculated according to emerged lands and permanently establish the baselines in accordance with the [LOSC], without taking into account sea level rise. » It was signed by the leaders of French Polynesia, Niue, Cook Islands, Samoa, Tokelau, Tonga, and Tuvalu.

³³⁶ ILA, 2018, International Law and Sea Level Rise, p 16.

³³⁷ 2015 Taputapuātea Declaration on Climate Change.

³³⁸ 2015 Taputapuātea Declaration on Climate Change.

³³⁹ Declaration on Preserving Maritime Zones in the Face of Climate-Related Sea-Level Rise.

³⁴⁰ 1977 Cook Islands Territorial Sea and Exclusive Economic Zone Act (Act No. 16/1977); 1977 Fiji Marine Spaces Act (Act No. 18); 1983 Federated States of Micronesia The Code of the Federated States of Micronesia, Territory, Title 18; Kiribati Marine Zones (Declaration) Act (Act No. 7); 1997 Marshall Islands Revises Code, Article 33, Chapter 1; Nauru Sea Boundaries Act (Act No. 16); 1996 Niue Territorial Sea and Exclusive Economic Zone Act (Act No. 220/1997); Palau National Code, Title 27, Chapter I, Subchapter III; 1978 Papua New Guinea National Seas Act (Act No. 7); 1999 Samoa Maritime Zones Act (Act No. 18); 1978 Solomon Islands Delimitation of Marine Waters Act (Act No. 32); 1977 Tokelau Territorial Sea and Exclusive Economic Zone Act (Act No. 125); 1978 Tonga Territorial Sea and Exclusive Economic Zone Act (Act No. 30); 1978 Tonga Territorial Sea and Exclusive Economic Zone Act (Act No. 30); 1983 Tuvalu Maritime Zones (Declaration) Act (Chapter 24A/1983); 1982 Vanuatu Maritime Zones Act (Act No. 23).

³⁴¹ Our Sea of Islands, Our Livelihoods, Our Oceania, Framework for a Pacific Oceanscape: a catalyst for implementation of ocean policy.

to declare their maritime zones and fulfil the due deposition, publication and publicity requirements. The ILA also noted these developments in the practice.³⁴² In the 1982 Nauru Agreement, State parties agreed upon a perpetual continuation of the baselines as currently defined.³⁴³ In 2015 and 2016, Republic of the Marshall Islands,³⁴⁴ Kiribati,³⁴⁵ and Tuvalu³⁴⁶ unilaterally declared maritime baselines and boundaries. The ILA noted this Nauru Agreement as part of an emerging State practice and the regional cooperation agreed upon.³⁴⁷

This is within the fixed baselines theory, according to which baselines would not move with sea level rise. This also entails that the maritime zones would remain the same, as they are calculated from the baselines. Thus maritime zones would be stable. Moreover, since baselines are fixed, it means that all water landwards of the baselines would be internal waters. This theory means that the only adaptation needed would be to define all the current baselines as historic and for them to be registered by States. Besides, this would encourage States which have not done so already to register their baselines and maritime zones. This theory may be seen as a crystallisation of baselines and maritime zones, such as to reinterpret the principle of land dominating the sea into the sea dominating the land. The latter principle does not appear in the LOSC and was called a « vestigial remnant of the naturalist position that the existence of land is the source of authority over the ocean »³⁴⁸ by Caron, a member of the Baselines Committee of the ILA, along with other members of the Committee determining that the principle is not necessarily relevant in the context of sea level rise.³⁴⁹

3.1.2.1.States and Islands

On the rights and jurisdiction that coastal States would enjoy, these would remain the same as they were before. The territorial sea, contiguous zone, EEZ and high seas remain as they were before sea level rise. The only change would be that the water landwards from the fixed baselines would be internal waters. This creates an increase of sovereignty rights and jurisdiction of the coastal States, but it could be argued that this is simply respecting the

³⁴² ILA, 2018, International Law and Sea Level Rise, p 17.

³⁴³ 2018 Delap Commitment; 1982 Nauru Agreement.

³⁴⁴ 2016 Republic of the Marshall Islands Maritime Zones Declaration Act; Discussed in detail by *ibid.*, Freestone and Schofield (supra 115), pp 720–746.

³⁴⁵ 2014 Baselines around the Archipelagos of Kiribati Regulations; Also 2014 Kiribati Exclusive Economic Zone Outer Limit Regulations; cited by Stuart Kaye, 2017. The Law of the Sea Convention and Sea Level Rise after the South China Sea Arbitration. *International Law Studies*, 93, p 444.

³⁴⁶ 2012 Tuvalu Maritime Zones Act; 2012 Declaration of Archipelagic Baselines, LN No. 7 of 2012.

³⁴⁷ ILA, 2018, International Law and Sea Level Rise, p 17.

³⁴⁸ *Ibid.*, Caron (supra 13), p 14.

³⁴⁹ *Ibid.*, Caron (supra 13), p 14.

LOSC provisions on internal waters. According to Hayashi: « the [fix baselines approach] is more justifiable since the newly submerged area was once part of the land territory of the coastal State and the submerging is caused with no fault of that State ».³⁵⁰ Overall, this approach provides stability and its implementation is relatively unchallenging. It would not be likely that disputes and conflicts would arise from this approach. Contrary to the previous approaches, the newly submerged areas would not suffer from a reduction of sovereignty and jurisdiction. Coastal States will virtually have equivalent rights in internal waters and have full sovereignty since internal waters are an integral part of the State's territory.

These may be tools of interpretation but cannot serve in and of themselves as the approach to effectively address sea level rise legally. As Stephens analysed quoting Schofield:³⁵¹ « Neither straight baselines, nor permanently described continental shelf limits, will address in a satisfactory or comprehensive way the challenge of sea level rise. It is highly unsightly that States will simply allow maritime space to be lost without a response. Coastal States may decide to declare unilaterally the continued applicability of their baselines to preserve the extent of the maritime estate under coastal State sovereignty and jurisdiction. In the absence of protest by other States this may be effective to maintain the status quo ».³⁵² The ILA recognised that there are possibilities for other States « to protest and object to maritime claims which are not in compliance with the LOSC ».³⁵³ However, the Baseline Committee took the view that its recommendations regarding the maintenance of existing entitlement were based on the premise that coastal States' existing maritime claims were in compliance with the requirements of the LOSC and have been duly published or notified to the UN Secretary-General (UNSG) as required by the relevant provisions of the LOSC.³⁵⁴ These are « charts of a scale or scales adequate for ascertaining their positions » or « [alternatively, a list of geographical coordinates of points specifying the geodetic datum] ».³⁵⁵ States have an obligation to give due publicity of either to the UNSG.³⁵⁶

In addressing sea level rise, it may be argued that fixing baselines is the best approach for the stability of the law, State sovereignty and preservation of their rights, duties and jurisdiction.

³⁵⁰ Moritaka Hayashi, 2009. *Sea Level Rise and the Law of the Sea: Legal and Policy Options. Proceedings of International Symposium on Islands and Oceans, Ocean Policy and Research Foundation, January 22 and 23 2009*, p 83.

³⁵¹ *Ibid.*, Schofield (supra 5), p 406.

³⁵² *Ibid.*, Stephens (supra 14), p 792.

³⁵³ ILA, 2018, *International Law and Sea Level Rise*, p 15.

³⁵⁴ ILA, 2018, *International Law and Sea Level Rise*, p 15; LOSC, Article 16.

³⁵⁵ LOSC, Article 16(1).

³⁵⁶ LOSC, Article 16(2)

This enables Pacific Island States to continue enjoying jurisdiction, sovereignty and sovereign rights they had prior to sea level rise. Caron argues that maintaining baselines and maritime zones is more equitable and avoids unfairness.³⁵⁷ Hayashi argues that for States to retain submerged land as internal waters over which it has complete sovereignty may be a fair compensation for the loss of sovereignty over land territory.³⁵⁸ Contrary to fixing baselines, Soons argues that baselines could shift while maritime zones could be retained. However, this approach would lead to increased instability in law.³⁵⁹

On the question of islands that are part of a State, the fixed baselines approach means that baselines used for the delimitation of maritime zones remain the same. Therefore, even if islands are partially or fully submerged they would still be able to claim maritime zones and serve as a basepoint. This is because, with the approach of fixed baselines, in the eyes of the law, islands are considered to not be submerged. Therefore, islands would not be reclassified as rocks nor become high seas, even if they were fully submerged.

There are two main issues with the approach of fixed baselines. The first relates to a contested maritime expanse. The second is about when to fix baselines. If there is a dispute, States can settle it through peaceful settlement, provided for in international law. Diplomatic peaceful settlements are negotiation, mediation, inquiry and conciliation. The legal methods to settle disputes are either through arbitration or judicial settlement.³⁶⁰ During the relevant settlement, it will be decided where the baselines and outer limits of maritime zones are.

Another question is when to freeze the baselines. Hayashi suggests two moments, either when the LOSC entered into force or when States publicised them on the relevant charts and deposited them with the UNSG.³⁶¹ One can argue in favour of the moment when the LOSC entered into force because it creates stability and a fixed date for all States. One can also argue in favour of the publication of charts, because it would be consistent with the obligation under the LOSC. Moreover, it would encourage States to publicise and register their baselines, if they have not already done so, as argued by Hayashi.³⁶²

³⁵⁷ *Ibid.*, Caron (supra 5), p 623.

³⁵⁸ *Ibid.*, Hayashi (supra 5), p 197.

³⁵⁹ *Ibid.*, Soons (supra 5), p 207.

³⁶⁰ LOSC, Part XV Settlement of Disputes.

³⁶¹ *Ibid.*, Hayashi (supra 5), pp 83-84; LOSC, Article 16 requires the publication of charts or list of geographical coordinates of points to the UNSG.

³⁶² *Ibid.*, Hayashi (supra 5), p 84.

On charts, the fixing of baselines means that States deposit or have deposited charts to the UNSG with their baselines, which due to sea level rise will no longer reflect the reality.³⁶³ The ILA further noted that a coastal State « might also find itself maintaining claims to offshore territorial sea areas for which the hitherto physical terrestrial justification had become submerged ».³⁶⁴ As noted by the ILA, coastal States would be maintaining a legal fiction.³⁶⁵ Furthermore, since the conclusion of the Baseline Committee is that baselines are ambulatory, it would be a breach of this LOSC rule.³⁶⁶ However, the ILA also noted the principle of the LOSC that coastal States are not required to update their declared charts to the UNSG.³⁶⁷ Furthermore, Article 16 of the LOSC does not require States to provide current maps and coordinates.³⁶⁸ This would benefit the Pacific Island States, which would simply have to declare their baselines and maritime zones to the UNSG once and not update them for the baselines to be fixed, unless other States were to question them. The argument that the charts could not be used for navigation³⁶⁹ can be countered by the possibility of « [a] dual charts system of official charts for maritime jurisdictional purposes and navigational charts ».³⁷⁰

3.1.2.2. Island States

One argument in favour of the fixed baselines theory noted by the ILA in its 2018 Report is that the Baselines Committee took the view that in face of sea level rise « its proposals as far as possible attempt to reduce legal uncertainties regarding maritime boundaries and the limits of maritime zones ».³⁷¹ The importance of legal certainty has also been highlighted by Pacific Island States in their Declaration, citing that the principles of legal stability, security, certainty and predictability underpin the LOSC.³⁷² This is because this theory of fixed baselines implies that States would retain their existing entitlements, obligations, sovereignty and sovereign rights thereupon, while also maintaining the stability of maritime zones.³⁷³

³⁶³ ILA, 2018, International Law and Sea Level Rise, p 14.

³⁶⁴ ILA, 2018, International Law and Sea Level Rise, p 14.

³⁶⁵ ILA, 2018, International Law and Sea Level Rise, p 14.

³⁶⁶ ILA, Baselines Committee, 2012, Final Report, pp 385–428.

³⁶⁷ ILA, 2018, International Law and Sea Level Rise, p 14.

³⁶⁸ LOSC, Article 16.

³⁶⁹ ILA, 2018, International Law and Sea Level Rise, p 14.

³⁷⁰ *Ibid.*, Schofield and Freestone (supra 19), pp 141-165.

³⁷¹ ILA, 2018, International Law and Sea Level Rise, p 13.

³⁷² 2021 Declaration on Preserving Maritime Zones in the Face of Climate Change-Related Sea Level Rise, Preamble.

³⁷³ ILA, 2018, International Law and Sea Level Rise, p 14.

As seen above, Pacific Island States are archipelagic States, meaning that they have straight archipelagic baselines. Within the fixed baselines theory, using Article 7(2) of the LOSC it is possible to argue that as long as they have declared their baselines their baselines shall remain the same.³⁷⁴ This has been the argumentation of Purcell, who stated that this article would even apply « in circumstances of significant coastal change ».³⁷⁵ Specifically Article 7(2) reads that straight baselines may be established in the case of « other natural conditions the coastline is highly unstable », ³⁷⁶ this may be interpreted as sea level rise. Article 7(2) continues that « notwithstanding subsequent regression of the low-water line », ³⁷⁷ meaning despite changes in the low water line, as those that can be seen with sea level rise, « the straight baselines shall remain effective until changed by the coastal State in accordance with this Convention ». ³⁷⁸ The subsequent part has been interpreted as entailing that the baselines would be fixed. The LOSC also provides the possibility of fixing baselines. Therefore, it would not be in contradiction of the rules provided by the LOSC. As Tim Stephens pointed out, that the first possibility of Article 7(2) of fixed baselines: « is to river deltas and other highly unstable coastlines where the coastal State may adopt fixed straight baselines ». ³⁷⁹ Lastly, the straight baselines have to be defined and declared by the coastal States to the UNSG, and will remain until they are changed by the coastal States. ³⁸⁰ This allows Pacific Island States to declare their baselines and change them and their discretion, in accordance with the LOSC. As argued by Purcell, maritime zones will not shift with sea level rise when baselines are declared. Furthermore, a failure by States to revise baselines in accordance with sea level rise may not give rise to valid protests by other States since there is no obligation to do so. ³⁸¹ This could also prevent the loss of archipelagic status in case of partial submersion of basepoints. Although, in case of total and permanent submersion and the impossibility to fulfil the land to water ratio requirement (1:9 and 9:1), ³⁸² States may not be able to maintain their archipelagic status. ³⁸³

³⁷⁴ LOSC, Article 7(2).

³⁷⁵ *Ibid.*, Purcell (supra 67), p 739.

³⁷⁶ LOSC, Article 7(2).

³⁷⁷ LOSC, Article 7(2).

³⁷⁸ LOSC, Article 7(2).

³⁷⁹ *Ibid.*, Stephens (supra 14), p 789.

³⁸⁰ *Ibid.*, Freestone and Schofield (supra 22), p 28.

³⁸¹ *Ibid.*, Purcell (supra 67), p 759.

³⁸² LOSC, Article 47; see also observation of the ILA, 2018, International Law and Sea Level Rise, p 13.

³⁸³ *Ibid.*, Stephens (supra 14), pp 790-791.

3.2. Sea Level Rise Adaptation - State continuation

If an island is partially submerged, the land will be rendered inhabitable, and the population will no longer be able to stay on the island. Whereas if an island is completely submerged, the territory will no longer exist in and of itself. The literature has explored theories in which the criteria of population and territory of the Montevideo Convention would be able to be satisfied in the eyes of the law.³⁸⁴ Regarding the territory criterion, there are exemptions and solutions to sea level rise. The exemptions can be found in the government in exile. Also, several solutions may be found in the literature such as land reallocation, artificially enhancing land, and state merger. Regarding the population criterion, Duursma cites the Vatican City as an exception to the population criterion, as it is recognised as a State by other States even though formally it would not fulfil the requirements to fulfil the permanent population criterion.³⁸⁵ Regarding the State recognition criterion, there are various theories of State recognition. Some of which would allow Pacific Island States to retain their statehood. In this section these theories will be analysed so as to determine which may allow Pacific Island States to retain statehood in the event of total submersion.

3.2.1. Territory Criterion

There exist various solutions to prevent and mitigate the effects of sea level rise, such as sea grasses planting to stabilise beach sediments, the construction of groynes and revetments,³⁸⁶ and the building of sea walls.³⁸⁷ However, these are not long-term solutions, and only help temporarily to preserve the environment on the islands. However, in the long run, the global ecosystem on land and water will be jeopardised by these modifications. As the islands have a natural capacity to resist sea level rise, these modifications to the natural terrain and structure of the coast will endanger it.³⁸⁸ Furthermore, these solutions are costly and Pacific Island

³⁸⁴ Montevideo Convention, Article 1

³⁸⁵ Jorri Duursma, 1996. *Fragmentation and the International Relations of micro-States: Self-determination and Statehood*, Cambridge University Press, p 411 [hereinafter Duursma].

³⁸⁶ *Ibid.*, Freestone (supra 5), p 109 and pp 117-118.

³⁸⁷ Ann Powers, 2010. Climate Change and pollution: Addressing intersecting threats to oceans, coasts and small island developing states, in David Leary and Balakrishna Pisupati (eds.), *The future of international environmental law*, Tokyo, United Nations University Press, p 33.

³⁸⁸ *Ibid.*, Schofield and Freestone (supra 19), p 148.

States may need to use these funds for other purposes.³⁸⁹ Besides, as sea level rise is unavoidable,³⁹⁰ these solutions are bound to be only temporary.

3.2.1.1.Land Allocation

In the case of complete land submersion, one of the possibilities for Pacific Island States to keep a land territory is to buy or lease land from another State. Although this solution has been used in the past by the USA to buy Alaska from Russia, there are no recent examples, even if it is theoretically permitted by international law. This option implies that Pacific Island States would have the funds necessary to do so. It is unlikely that this would be the case as they are already severely impacted by climate change and its consequences.

Another possibility to obtain land is through a treaty of cession. It is permitted by international law and theoretically feasible following the rules of States succession.³⁹¹ However, since all the land is occupied by States, it would mean that a State would have to relinquish part of its territory for the benefit of Pacific Island States. It seems highly improbable that a State would do so of its own free will.³⁹² It would also be improbable that States would be forced by stronger politically members of the international community to give land, as it would negate the fundamental principle of equality between States.³⁹³

It would also be possible for a State to lend part of its territory to Pacific Island States, should they become submerged. Australia, New Zealand, and Great Britain have already made such an offer to Nauru. The historic example of territorial lease dates back to the 1870s when Icelandic people fled Iceland for Canada following a volcanic eruption. Iceland and Canada ratified a bilateral agreement in which Canada provided Icelandic people with a piece of its land for their new colony.³⁹⁴ Canada fulfilled some of the State obligations to the Icelandic people by « providing them with funding and livestock to assist in their resettlement, and

³⁸⁹ Jenny Grote Stoutenburg, 2011. Implementing a new regime of stable maritime zones to ensure the (economic) survival of small island states threatened by sea-level rise. *The International Journal of marine and Coastal Law*, 26(2), (263), p 277.

³⁹⁰ Roda Verheyen and Peter Roderick, November 2008. Beyond adaptation: The legal duty to pay compensation for climate change damage, WWF-UK Climate Change Programme Discussion Paper, p 11.

³⁹¹ Vienna Convention on Succession of States in Respect of Treaties, Vienna, 23 August 1978. LNTS 1946, adopted by the United Nations Conference on the Succession of States in respect of Treaties; Vienna Convention on Succession of States in Respect of State Property, Archives and Debts, Vienna, 7 April 1983. Adopted by the United Nations Conference on Succession of States in respect of State Property, Archives and Debts.

³⁹² *Ibid.*, Rayfuse (supra 10), p 9.

³⁹³ *Ibid.*, Crawford (supra 106), pp 715-716

³⁹⁴ See series of Treaties between Canada and Iceland throughout 1870-1914; See also Ryan Christopher Eyford, 2010. *An Experiment in Immigrant Colonization: Canada and the Icelandic Reserve, 1875-1897*, Doctor of Philosophy Thesis of The University of Manitoba.

guaranteeing their rights both as citizens of Canada and of Iceland for themselves and their descendants ». ³⁹⁵ The colony had its own government committee, and the population of the colony was eventually fully integrated into Canada. ³⁹⁶ The issues posed by this solution are pointed out in Nauru's various refusals of similar Australia's offer. These relate to concerns over the loss of culture, independence and the obligation to obtain the host State's nationality.

3.2.1.2. Artificially Enhancing Land

Regarding the solution of artificially enhancing land, it is theoretically possible and recognised in international law. It is also practically possible as it has been done previously by Singapore. ³⁹⁷ However, it seems highly difficult and unpractical for Pacific Island States as it is financially perilous with varied chances of success. ³⁹⁸

The two main solutions are artificially elevating points the territory and seasteading. ³⁹⁹ The first solution implies the enhancing of the coastal line as was done by the Netherlands. ⁴⁰⁰ It also means the creation of artificial islands such as what was done by the Maldives with the creation of the island Hulhumalé in its territorial sea. ⁴⁰¹ Theoretically, this may be a viable solution for the Pacific Island States if the artificial islands are built within the maritime zones of the States. The issue of practical fundings would be an issue for Pacific Island States.

The second solution implies that the artificial islands are to be built in the high seas. However, it must be noted that the Arbitral Tribunal in the South China Sea case did not recognise

³⁹⁵ *Ibid.*, Rayfuse (supra 10), pp 8-9.

³⁹⁶ See Elva Simundsson, 1981. *Icelandic Settlers in North America* (Winnipeg: Queenstown House Publishing); Thorstina Walters, 1953. *Modern Sagas* (North Dakota Institute for Regional Studies); Nelson S. Gerrard, 1985. *Icelandic River Saga - A History of the Icelandic River and Ísafold Settlements of New Iceland* (Winnipeg); Wilhelm Kristjánsson, 1965. *The Icelandic People in Manitoba* (Winnipeg); Walter Jacobson Lindal, 1998. *The Icelanders in Canada* (Ottawa/Winnipeg) National Publishers; Sigtyggur Jónasson, 1901. *The Early Icelandic Settlements in Canada*. Historical Society of Manitoba: Transaction No 59 (Winnipeg).

³⁹⁷ Singapore Ministry of the Environment and Water Resources and Ministry of National Development, 2016, *A Climate-Resilient Singapore, For a Sustainable Future*; See also Miles Alexander Powell, 2021. *Singapore's Lost Coast: Land Reclamation, National Development and the Erasure of Human and Ecological Communities, 1822-Present*. *Environment and History*, 27(4), pp 635-663; Anita Lundberg and Jasmin Thamima Peer, 2020. *Singapore 'A Land Imagined': Rising Seas, Land Reclamation and the Tropical Film-Noir City*. *eTropic: electronic journal of studies in the tropics*, 19(2), Special Issue: Sustainable Tropical Urbanism, pp 201-227.

³⁹⁸ See the example of the Palm Islands and Hulhumalé, Richard Spencer, 20 January 2011. *The World is sinking: Dubai islands 'falling into the sea'*. *The Telegraph*.

³⁹⁹ Dario Mutabdzija and Max Borders, 2011. *Charting the course: toward a seasteading legal strategy*, unpublished paper for The Seasteading Institute, p 3.

⁴⁰⁰ *Ibid.*, Schofield and Freestone (supra 19), p 156.

⁴⁰¹ Grigoris Tsaltas, Tilemachos Bourtzis and Gerasimos Rodotheatos, 2010. *Artificial islands and structures as a means of safeguarding state sovereignty against sea level rise. A law of the sea perspective*. Document in preparation of the 6th ABLOS Conference "Contentious Issues in LOSC - Surely Not?", International Hydrographic Bureau, Monaco, 25-27 October 2010, p 5.

artificial islands as legally giving rise to maritime zones entitlements.⁴⁰² Therefore, this seems to not be a possible solution as it would not be in accordance with international law.

3.2.1.3.State Merger

There are several ways for States to merge,⁴⁰³ the underpinning idea being that Pacific Island States would bring something to the State they would merge with. The main bargaining tool of Pacific Island States is their fruitful maritime zones.⁴⁰⁴ The State merger only works if the fixed baselines approach is retained and Pacific Island States retain their maritime zones, in accordance with the principles of equity, fairness and justice which underpin the LOSC, as recalled by Pacific Island States.⁴⁰⁵

The exploitation of archipelagic zones by third States is not permitted by the LOSC.⁴⁰⁶ However, Article 311(3) of the LOSC allows States to ratify a bilateral treaty « modifying or suspending the operation of provisions of this Convention, applicable solely to the relations between them, provided that such agreements do not relate to a provision derogation from which is incompatible with the effective execution of the object and purpose of this Convention ». ⁴⁰⁷ Therefore, the host State could provide the territory and public services for human rights protection of the Pacific Island States population, which the Pacific Island States cannot provide. In exchange for this, Pacific Island States would allow for the host State to exploit their maritime zones, as noted by Rayfuse: « disappeared state would basically have purchased its relocation with its maritime zones ». ⁴⁰⁸

States' status may be twofold, either the host State and the Pacific Island State are of equal status or the two States are independent. In the latter case, the State merging with the host State will still have a legal entity and be able to enter into treaties, such as in accordance with Article 311(3) LOSC.⁴⁰⁹ It seems to be the most viable option for Pacific Island States to be

⁴⁰² Arbitral Tribunal, *The Republic of Philippines v. The People's Republic of China*, 2016; See also LOSC, Articles 60, 80, 121.

⁴⁰³ *Ibid.*, Soete (supra 103), p 38.

⁴⁰⁴ *Ibid.*, Caron (supra 5), p 638.

⁴⁰⁵ Declaration on Preserving Maritime Zones in the Face of Climate Change - related Sea Level Rise, 50 Pacific Island Forum (1971-2021), Preamble.

⁴⁰⁶ LOSC, Article 59 (1): « 1. Without prejudice to article 49, an archipelagic State shall respect existing agreements with other States and shall recognize traditional fishing rights and other legitimate activities of the immediately adjacent neighbouring States in certain areas falling within archipelagic waters. The terms and conditions for the exercise of such rights and activities, including the nature, the extent and the areas to which they apply, shall, at the request of any of the States concerned, be regulated by bilateral agreements between them. Such rights shall not be transferred to or shared with third States or their nationals ».

⁴⁰⁷ LOSC, Article 311(3).

⁴⁰⁸ *Ibid.*, Rayfuse (supra 10), p 9.

⁴⁰⁹ LOSC, Article 311.

able to retain their legal entity as States, retaining some domestic rights and obligations while the host State would be responsible for the questions of defence and international relations, such as in the free association mechanism between New Zealand and the Cook Islands.⁴¹⁰ Two main issues arise from this State merger possibility, the integration of Pacific Island States within the host State, losing its culture and rich heritage; and the relinquishing of jurisdiction and control over vast and lucrative maritime zones.⁴¹¹ This poses the question of equity and fairness for Pacific Island States which are amongst the least to blame for climate change. These principles are at the basis of the argumentation of Pacific Island States.⁴¹² It also seems that Australia and Fiji could be on the way to having closer relations in this sense as they have concluded the Fiji-Australia Vuvale Partnership 2019, in which Australia invested in the population from Fiji.⁴¹³ This is through the facilitation of commercial relations, cooperation within the region and cooperation in fulfilling the Paris Agreement commitments.

3.2.2. Population Criterion to Protect the Right to Life

3.2.2.1. Human Rights as Foreigners

As seen above, sea level rise threatens the enjoyment of various human rights, especially the right to life. This is because of the effects of sea level rise on the land territory, the possibility to have agricultural land and access to drinkable water, the capacity of the State to exploit the resources and generate economic activity from it. Consequently, Pacific Island States become more vulnerable to natural disaster,⁴¹⁴ and the population may not be able to stay on their land either temporarily or permanently. The 2018 Sydney Declaration on Principles on the Protection of Persons Displaced in the Context of Sea Level Rise lists the various types of movement such as displacement, evacuation, human mobility, migration, and planned

⁴¹⁰ UNGA Resolution 1541 (XV) (15 December 1960), UN Doc. A/4651 (1960); *ibid.*, Soete (supra 103), p 38.

⁴¹¹ *Ibid.*, Rayfuse (supra 10), p 10.

⁴¹² Declaration on Preserving Maritime Zones in the Face of Climate Change - related Sea Level Rise 50 Pacific Island Forum (1971-2021).

⁴¹³ 2019 Fiji-Australia Vuvale Partnership, Pillar Three: Deepening our economic relationship, Pillar Four: Cooperating on regional and international issues, Pillar Five: Fostering closer institutional linkages in support of strong and inclusive societies.

⁴¹⁴ Defined by the 2018 Sydney Declaration on Principles on the Protection of Persons Displaced in the Context of Sea Level Rise as « (a) 'disaster' means a serious disruption of the functioning of a community or a society at any scale, due to climatic events interacting with conditions of exposure, vulnerability, and capacity, leading to human, material, economic, and/or environmental losses and impact » [hereinafter 2018 Sydney Declaration].

relocation.⁴¹⁵ Each of these scenarios presents risks for human rights. Displacement is one of the most perilous moments in which human rights are likely to be affected.⁴¹⁶ The 2018 Sydney Declaration demonstrates that the origin State, transit State, and destination State have duties to protect the human rights of the persons within their jurisdictions.⁴¹⁷ It must be noted that there is not one binding international law agreement on the issue. It must also be noted that to clarify the legal duties of States in this context, the 2018 Sydney Declaration uses different principles of international law, human rights, refugee law and other various branches of law. Hence, the second principle on the duty to respect the human rights of affected persons and sets a minimum standard of treatment, with the underpinning principle of inherent human dignity.⁴¹⁸ The ILA in its commentary refers to several international and regional conventions to further this principle, such as the ICCPR, ICESCR, American Convention on Human Rights, African Charter on Human and People's Rights, and Convention for the Protection of Human Rights and Fundamental Freedoms.⁴¹⁹

The third principle on the duty to take positive action is especially relevant for the right to life. States have to take measures to « reduce disaster risks and adapt to the advert effects of climate change ».⁴²⁰ The principle also places on States the obligation to create and fund institutions to « avert, mitigate, and address displacement ». This has been addressed to some

⁴¹⁵ 2018 Sydney Declaration, Definitions; UN Economic and Social Council, Commission on Human Rights, Report of the Representative of the Secretary-General, Mr. Francis M. Deng, submitted pursuant to Commission Resolution 1997/39: Guiding Principles on Internal Displacement, UN Doc. E/CN.4/1998/53/Add.2 (11 February 1998) Introductory Note, § 2; Camp Coordination and Camp Management Cluster, 'The MEND Guide: Comprehensive Guide for Planning Mass Evacuations in Natural Disasters: Pilot Document', §§ 16-17; New York Declaration for Refugees and Migrants, UNGA res 71/1 of 19 September 2016 (3 October 2016) § 3; 'Sendai Framework for Disaster Risk Reduction 2015–2030' UNGA res 69/283 (23 June 2015) § 30(l); The Nansen Initiative, Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change (Vol. I, December 2015), § 20; Brookings/Georgetown University/UNHCR, 'Guidance on Protecting People from Disasters and Environmental Change through Planned Relocation' (7 October 2015), § 9 (Guidance on Planned Relocation).

⁴¹⁶ 2018 Sydney Declaration, Definitions; See also Convention relating to the Status of Refugees, 28 July 1951. LNTS 189, adopted by the United Nations Conference of Plenipotentiaries on the Status of Refugees and Stateless Persons, Article 1 A(1)(2) [hereinafter Refugee Convention]; Protocol relating to the Status of Refugees, New York, 31 January 1967. LNTS 606 [hereinafter Refugee Protocol].

⁴¹⁷ 2018 Sydney Declaration, Principle 1 - The Primary Duty and Responsibility of States to Protect and Assist Affected Persons.

⁴¹⁸ 2018 Sydney Declaration, Principle 2 - The Duty to Respect the Human Rights of Affected Persons.

⁴¹⁹ ICCPR; ICESCR; Inter-American Convention on Human Rights 'Pact of San José, Costa Rica', 22 November 1969. LNTS 1144, adopted by the Organization of American States; African Charter; ECHR, as amended by Protocols Nos 11 and 14, supplemented by Protocols Nos 1, 4, 6, 7, 12, 13.

⁴²⁰ 2018 Sydney Declaration, Principle 3(1)(a) - The Duty to Take Positive Action.

extent by Pacific Island States.⁴²¹ These duties and obligations of the States are especially important for the protection of the right to life as, if it is lost, it is not restorable. Thus Article 4 of the ICCPR provides that States have the obligation to protect the right to life which is non-derogable, even in times of a « public emergency which threatens the life of the nation ». ⁴²² The HRC also recognised in its general comment that a natural catastrophe could amount to such a public emergency.⁴²³ It is possible to go further in the analysis and see the link with sea level rise, especially as the European Court on Human Rights noted that such « duty to protect also applies to situations where a natural hazard is imminent and clearly identifiable », ⁴²⁴ and especially « where it concern[s] a recurring calamity affecting a distinct area developed for human habitation or use ». ⁴²⁵

It must also be noted that these States have duties. However, these are not to create a « disproportionate or abnormal burden » ⁴²⁶ on States. Therefore, it must be within their capacity, as was established in the UNFCCC and the ECtHR Budayeva case.⁴²⁷

Within the present international law and regional law, States have duties and obligations to protect the right to life of the persons under their jurisdiction, who are especially vulnerable to human rights violations. This is with special consideration to the most fundamental human rights which is the right to life, to avoid the loss of the Pacific Island States population.

3.2.2.2. Evolution of Refugee Law

The state of the refugee law is presently encompassed in the 1951 Convention relating to the Status of Refugee, 1967 Protocol relating to the Status of Refugee,⁴²⁸ and subsequent practice. Refugee status may only be given to those who have suffered from persecution in their home

⁴²¹ 1993 Kiribati National Disaster Act; 1987 Marshall Islands Disaster Assistance Act; 1998 Fiji Natural Disaster Management Act; 2021 Fiji Climate change Bill; 2007 Tuvalu National Disaster Management Act; 2012 Kiribati National Disaster Risk Management Plan; 2013 Kiribati National Framework for Climate Change and Climate Change Adaptation; 2018 Kiribati Climate Change Policy; 2017 Fiji 5 Year and 20 Year National Development Plan; 2018 Fiji National Adaptation Plan; 2018 Fiji National Climate Change Policy 2018-2030; 2012 Tuvalu National Strategic Action Plan for Climate Change Adaptation and Disaster Risk Management 2012-2016; 2012 Tuvalu Te Kaniva Tuvalu Climate Change Policy; 2016 Tuvalu Te Kakeega III National Strategy for Sustainable Development 2016-2020; 2016 Solomon Islands National Development Strategy 2016-2035.

⁴²² ICCPR, Article 4.

⁴²³ UN Human Rights Committee General Comment No 29 (2001) ‘Article 4: Derogations during a state of emergency’, UN Doc. CCPR/C/21/Rev.1/Add.11 (31 August 2001) § 5.

⁴²⁴ ILA, 2018, International Law and Sea Level Rise, p 31.

⁴²⁵ ECtHR, 2008, Budayeva, § 137.

⁴²⁶ UNFCCC, Article 3(2).

⁴²⁷ ECtHR, 2008, Budayeva §§ 134-135. Similarly, see the New Zealand jurisprudence, e.g., AC (Tuvalu) [2014] NZIPT 800517-520, § 75.

⁴²⁸ Refugee Protocol.

country or may face persecution upon return.⁴²⁹ The ILA has noted that the current state of the refugee law is not fit to address the migration crisis that could unfold due to sea level rise.⁴³⁰ Within the 1951 Convention and 1967 Protocol, refugee status may not be granted to those moving due to climate change. However, one of the main principles of refugee law is the principle of non-refoulement. The international customary obligation of non-refoulement placed on the destination State is defined in the 1951 Convention Article 33(1): « No Contracting State shall expel or return [...] a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened »⁴³¹ based on the refugee status conditions. This ensures that the destination State will not endanger refugees under its jurisdiction and will be responsible for their human rights protection.⁴³²

The question of these « territories » has been analysed above. The Teitiota case recognised that: « [the] obligation not to extradite, deport or otherwise transfer, pursuant to article 6 of the Covenant, may be broader than the scope of the principle of non-refoulement under international refugee law, since it may also require the protection of aliens not entitled to refugee status ».⁴³³ Arguably the obligation of non-refoulement under the 1951 Convention is too narrow to encompass the situation of people who are not under the scope of the refugee status. However, even if these are narrow, they may imply great responsibility for certain States. Thus these States are unlikely to accept an absolute non-refoulement obligation.⁴³⁴ At the regional level, the ECtHR has recognized an absolute principle of non-refoulement under Article 3 ECHR,⁴³⁵ and its extra-territorial applicability.⁴³⁶ A non-binding resolution of the Council of Europe Parliamentary Assembly further extended the non-refoulement principle by including a responsibility for States to allow climate refugees to seek asylum.⁴³⁷ As proved above, the enjoyment of the right to life and the right to life itself may be threatened due to sea level rise. Therefore, the refoulement of persons back to Pacific Island States while there are threats to human rights would be contrary to the protection afforded by the non-

⁴²⁹ Refugee Convention, Article 1 A(1)(2); see also ILA Commentary on Sydney Declaration Purpose.

⁴³⁰ ILA, 2018, International Law and Sea Level Rise, p 27.

⁴³¹ Refugee Convention, Article 33(1).

⁴³² See also United Nations Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, New York, 10 December 1984. LNTS 1465, Article 3.

⁴³³ HRC, Teitiota Case, § 9.3; See also HRC GC No 36, § 30, 55, 57.

⁴³⁴ ILC Draft Articles on Crimes Against Humanity, Article 5.

⁴³⁵ ECHR, Article 3; ECtHR, 1989, Soering v UK, Application 14038/88; ECtHR, 1991; Vilvarajah and Others v. The United Kingdom, Application No 13163/87; ECtHR, 1996, Chahal v UK (1996), Application 22414/93.

⁴³⁶ ECtHR, 2012, Hirsi Jamaa v. Italy (2012), Application 27765/09.

⁴³⁷ Resolution 2307 (2019) of the Council of Europe Parliamentary Assembly on A legal status for “climate refugees”, provision 5.4.

refoulement principle under international refugee law. Moreover, this could prove that because of the threats sustained by Pacific Island States, the population could qualify for climate refugee status under subsequent and consistent State practice. This has been recognised by the 2018 Sydney Declaration Principle 9 on cross-border displacement of affected persons, second paragraph: « States of refuge should not return persons to territories where they face a serious risk to their life or safety or serious hardship, in particular due to the fact that they cannot access necessary humanitarian assistance or protection [...] ».⁴³⁸

Destination States have an international customary obligation to protect the human rights of individuals under their jurisdiction, including refugees.⁴³⁹ As analysed by the UN High Commissioner for Refugees: « States are already committed to protecting the human rights of refugees through their human rights obligations, not least the right to live in security and with dignity ».⁴⁴⁰ The host State, if there is a State merger, would recognise rights to the population and ensure their human rights, along with the Pacific Island States if this is what the negotiation of the bilateral treaty between the two States results in. The host State would recognise the climate refugee status of the displaced population. If, after some years, the population was unable to return to its home State, it would be granted the nationality of the host State. The consequence would be that the Pacific Island States would no longer have a population since it would virtually merge into the host State after acceding to the nationality of the host State.

This does not seem to be in accordance with the current views of the Pacific Island States, which are advocating to find solutions to sea level rise and to stay on their territory.⁴⁴¹ However, to prevent a migration crisis and prepare for all possibilities, as it is the States duty to protect the right to life, they ought to take into consideration the possibility of a climate refugee status. Therefore, the 2018 Declaration takes into consideration the consent of the population and seeks to include them in the decision-making process, and obtain their informed consent.⁴⁴² This is done through the duty of States to respect people's « right to be informed and consulted, and to participate in decisions affecting them »,⁴⁴³ and States having to take into consideration whether the planned relocation was « so requested by affected

⁴³⁸ 2018 Sydney Declaration, Principle 9(2).

⁴³⁹ HRC GC No 36.

⁴⁴⁰ A Personal appeal from the UN High Commissioner for Refugees.

⁴⁴¹ Ms Brianna Fruean in her opening Statement at the COP26 in Glasgow, November 2, 2021.

⁴⁴² 2018 Sydney Declaration, Principle 2 - The Duty to respect the Human Rights of Affected Persons and Principle 6 - Planned Relocations of Affected Persons.

⁴⁴³ 2018 Sydney Declaration, Principle 2(d) - The Duty to respect the Human Rights of Affected Persons.

persons and communities, or when conducted with their full, free, and informed consent ».⁴⁴⁴ Having in mind the protection of the right to life being the utmost important human right, the 2018 Sydney Declaration analyses that States may have the possibility to organise evacuation to protect the right to life.⁴⁴⁵

3.2.3. State Recognition Criterion

There are various interpretations of State recognition, whether declaratory or constitutive of statehood. The former does not impact statehood and the latter makes it a necessary requirement of statehood. As analysed by Matthew Craven and Rose Parfitt,⁴⁴⁶ the constitutive theory seeks to make State recognition a legal act, or at least with legal effects, but there is no ‘duty to recognise’⁴⁴⁷ nor any jurisdiction competent to adjudicate State recognition.⁴⁴⁸ It is the decision of the recognising State to recognise or not an entity.

A criterion of the Montevideo Convention is the capacity to enter into relation with other States. In the constitutive theory of State recognition, State recognition is a prerequisite for States to enter into legal relations. State A needs recognition by State B to have the capacity to enter into legal relations with it. As analysed by the Badinter Commission, State recognition is a « discretionary act that other States may perform when they choose and in the manner of their own choosing ».⁴⁴⁹ In this theory, it is a legal act, but it may be difficult to separate the political reasonings behind it.⁴⁵⁰

Therefore, recognition can be made while considering the State’s special circumstances. As Soete demonstrated using the Vatican City’s example citing Duursma,⁴⁵¹ the entity may not fulfil the Montevideo Convention population criterion, nevertheless, it is recognised as a State

⁴⁴⁴ 2018 Sydney Declaration, Principle 6 - Planned Relocations of Affected Persons.

⁴⁴⁵ 2018 Sydney Declaration, Principle 5 Evacuation of Affected Persons.

⁴⁴⁶ Matthew Craven and Rose Parfitt, 2018. ‘Statehood, Self-Determination, and Recognition’, in Malcom D. Evans (ed), *International Law*, Oxford University Press, Fifth Edition p 205.

⁴⁴⁷ Sir Hersch Lauterpacht, 1947. *Recognition in International Law* (Cambridge: Cambridge University Press).

⁴⁴⁸ John Dugard, 1987. *Recognition and the United Nations* (Cambridge: Cambridge University Press).

⁴⁴⁹ Badinter Commission, Opinion No 10 of 1992, 92 ILR 206, p 208.

⁴⁵⁰ Colin Warbrick, 1997. ‘Recognition of States: Recent European Practices’, in Malcom D Evans (ed), *Aspects of Statehood and Institutionalism in Contemporary Europe* (Aldershot: Dartmouth Publishers), pp 10-11: « (1) We take no decision, one way or another, about recognizing X [in A’s eyes, X may or may not be a State]; (2) We have chose not to recognize X (although we could do) for political reasons not related to X’s status [by implication, A does consider X to be a State];

(3) We do not recognize X because it would be unlawful/premature for us to do so [A does not regard X as legally a State];

(4) We do not recognize X, although it might (apple to) be a State, because there are customary law obligations or specific treaty obligations which prohibit us from doing so;

(5) We do not recognize X, although it might (apple to) be a State, because there is a specific obligation imposed by the Security Council not to do so ».

⁴⁵¹ *Ibid.*, Duursma (supra 385), p 411.

by others: « This demonstrates the great role recognition can play when it deems statehood ought to be granted to an entity, based on special circumstances ». ⁴⁵² Pacific Island States recognition is less problematic than for a new State, because there is no question of a new entity created. Pacific Islands are States which are existing and have already been recognised. State extinction cannot be lightly presumed. ⁴⁵³

In an adaptive interpretation of climate change, if Pacific Island States did fulfil the Montevideo Convention requirements for statehood, then States recognition is simply continuous, irrelevant of the declaratory or constitutive theories. If Pacific Island States do not fulfil such criteria, States can maintain their recognition, which would provide strong grounds for the continued existence of Pacific Island States. However, in the scenario where States withdraw their recognition, the two theories must be analysed. In the declaratory theory, withdrawal is not relevant as the entity is already deprived of its statehood because it no longer fulfills the Montevideo Convention criteria. ⁴⁵⁴ In the constitutive theory, withdrawal is more significant. This is because if State recognition is constitutive of the obtention of statehood, it is also constitutive of the deprivation of statehood. Hence, the argumentation in favour of the continuation of Pacific Island States recognition by the international community. Even though it can be argued that there is a positive obligation not to harm the sovereignty of other States, ⁴⁵⁵ it is generally recognised that States have no obligation to recognise or keep recognising a State. This could lead to a difficult and unsatisfactory result. Pacific Island States could lose State recognition because they are essentially climate change victims. Therefore, since it is the continuation of recognition and not an active act of other States, it could be argued that inaction and continuation of Pacific Island States recognition would be more satisfactory, it would be an exception to the Montevideo Convention.

It depends on the international community's interpretation and willingness to interpret the Montevideo Convention in the light of the present day to fulfil the statehood criteria. Since the UNSC deals with climate change because it strives to maintain international peace and security, it could encourage the international community to continue recognising Pacific Island States. As Khadem noted, sea level rise could lead to disputes and conflicts for it is a

⁴⁵² *Ibid.*, Soete (supra 103), p 25.

⁴⁵³ *Ibid.*, Rayfuse (supra 112) p 177.

⁴⁵⁴ Montevideo Convention, Article 1.

⁴⁵⁵ Jon Barnett and William Neil Adger, 2003. Climate Dangers and Atoll Countries. *Climatic change*, 61(3), p 333.

source of instability: « changes of this magnitude could provide a fertile source of inter-State conflict and spark disputes over navigation rights and, more particularly, sovereignty rights to living and non-living resources ». ⁴⁵⁶ The International Law Commission acknowledges that sea level rise impacts all States, low-lying States, directly and other States, indirectly. ⁴⁵⁷ The UNGA recognises the threats that climate change poses. ⁴⁵⁸

In the end, it depends on the goodwill of the international community to recognise Pacific Island States' claims to statehood. The rules of international law are dynamic. They can evolve to take into consideration new arising issues and guarantee the rights and duties of « disappearing States », notwithstanding the potential claims that neighbouring States could gain from it. The nature of international law is to apply the rules in good faith, this is the case through the guarantee of States claims to their statehood.

Conclusion

Sea level rise impacts Pacific Island States' maritime entitlements. These are crucial for States to exploit the marine resources and generate economic activity. Stemming from this, these maritime zones are crucial for Pacific Island States to be recognised as islands and have the capacity to fulfil and protect human rights, especially the right to life and the right to a healthy environment. Furthermore, if Pacific Island States were to lose their maritime zones, these could be exploited by other States and the protection of the environment would not be as strict as it currently is under Pacific Island States jurisdiction.

Sea level rise also threatens Pacific Island States' claim to statehood. Sea level rise threatens the territory of these States by partially or even potentially completely submerging it. It also threatens the population which may have to flee before the territory is completely submerged, because of the threat that sea level rise represents to the right to life.

In this thesis, the principle of dignity and the ecosystem theory were used to address the threats that sea level rise represents for the enjoyment of the right to life and the right to a healthy environment. For that purpose, States have several obligations and duties to protect such rights, such as climate change mitigation and adaptation, the obligations under the

⁴⁵⁶ *Ibid.*, Khadem (supra 50); see also *ibid.*, Lusthaus (supra 20) p 113.

⁴⁵⁷ The ILC defends this position because they will be the first to experience climate migration as well as difficulties to access resources. ILA on Sea Level Rise Annex B, A/73/10 Report of the ILA, Seventieth session (30 April-1 June and 2 July-10 August 2018).

⁴⁵⁸ 2030 Agenda for Sustainable Development, § 14.

precautionary principle, the duty of cooperation, and the duty of care. The latter recognises that States have the duty to ensure that the human rights of the people under their jurisdiction are protected. This duty extends both to present and future generations, and includes environmental protection.

Following the definition of the environment crafted by Pacific Island States, this thesis considered the right to life and the right to a healthy environment as inextricably linked. In the context of sea level rise, the protection of the right to a healthy environment and of the right to life with dignity plays an instrumental role in the protection of the right to life.

To most effectively address sea level rise issues, different interpretations of the law, through the creation of international customary law, seem to be necessary. This is the case of the two theories of the LOSC interpretation, the fixed outer limit of maritime zones theory and the fixed of maritime baselines theory. They both aim to protect the current maritime entitlement of the Pacific Island States. Nevertheless, Pacific Island States seem to have adopted the fixed baselines approach through their domestic law and regional agreement to declare and publicise their current maritime baselines, prior to major changes due to sea level rise.

In case of partial land submersion, these theories of LOSC interpretation ensure the possibility to use the solutions of artificially enhancing land. These are artificially elevating points of the territory and sea steading. However, they require considerable resources and are only temporary solutions to a long term threat.

In case of total land submersion, these theories of LOSC interpretation ensure the possibility to use the solutions of land allocation through lease or purchase, and the solution of state merger. The theories of LOSC interpretations ensure that Pacific Island States retain their maritime entitlements which they could later use as a bargaining tool to obtain a territory in exchange and thus both maintain their statehood and ensure that the population has a land to live on. However, these options are rather theoretical and would find many obstacles in practice. It seems therefore unlikely that they could be implemented.

International refugee law may also witness an evolution of its interpretation in order to protect the right to life of the population which will have to change location. This evolution recognises that human rights are inherent rather than recognised to individuals and are to be protected by the States which have jurisdiction over them. Such evolution may be protected through the recognition of the status of climate refugees to best protect such displaced populations.

Lastly, another potential evolution of international law regards the element of State recognition. It recognises the role of the international community in ensuring the continuity of Pacific Island States.

All the approaches and theories analysed in this thesis include the crucial role of all States at all levels towards the fulfilment and protection of the right to life in the context of sea level rise. The current state of the law is not adapted to adequately answer sea level rise. Therefore, this thesis has strived to analyse different adaptations of the law of the sea and human rights in order to best answer it. Life is impacted by sea level rise and ought to be protected using the different means examined in this thesis. As Pacific Island States have analysed regarding the precautionary principle, the lack of scientific certainty may not be an obstacle to act. In line with the 'no regret approach',⁴⁵⁹ timely action is needed to prevent dramatic losses of lives and the environment.

This thesis has not explored the issue of sea level rise through the lenses of the right of nature. This doctrinal approach asserts that the environment has rights in and of itself and ought to be protected. Concerning Pacific Island States, this paradigm may entail that archipelagic waters have the right to be protected. This approach is closely related to the Pacific Island States approach to the environment in including people in the environment definition. Therefore, both could be used to further enhance the protection of the rights of life and a healthy environment.

⁴⁵⁹ 2012 Solomon Islands National Climate Change Policy 1.4, under Policy Guiding Principles.

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