

Forum: SPC 1

Issue: Sea-level rise in relation to international law

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Introduction

As humanity continues to pollute and exploit the planet, pouring billions upon billions of tons of greenhouse gasses into the atmosphere, Earth's global temperature and climate are taking a toll. The years 2016 and 2020 have statistically tied as the hottest years on record, as Earth's temperature has warmed by at least 1.1 C° each year since 1880 ("World of Change: Global Temperatures"). In 2023 alone, there were 38 days measured that were 1.5 C° hotter than the temperature average ("Climate Change Reaching Unprecedented Levels as Records Tumble").

More specifically, however, considering it covers over 70% of the Earth's surface, and has a very high heat capacity, the globe's oceans have absorbed approximately 90% of the trapped heat from

greenhouse gasses (NASA). As a result, global sea levels are rising, and on average, they have risen by over 23 cm (8 inches) since 1880, a trend displayed in the graph to the right. With no sign of global warming coming to a halt, sea levels continue to rise by another 3.2 mm (0.13 inches) each year (Nunez and National Geographic Staff). Over half of the sea level rise that has occurred over the past 25 years can be attributed to the fact that as oceans become warmer, they expand and take up more space, a phenomenon known as "thermal expansion". Global warming has also contributed to the rapid and alarming loss of glacial ice and the melting of large ice caps in Greenland and Antarctica. Consequently, inland ice flows become more able to flow into the ocean, rising sea levels and ocean water volumes.

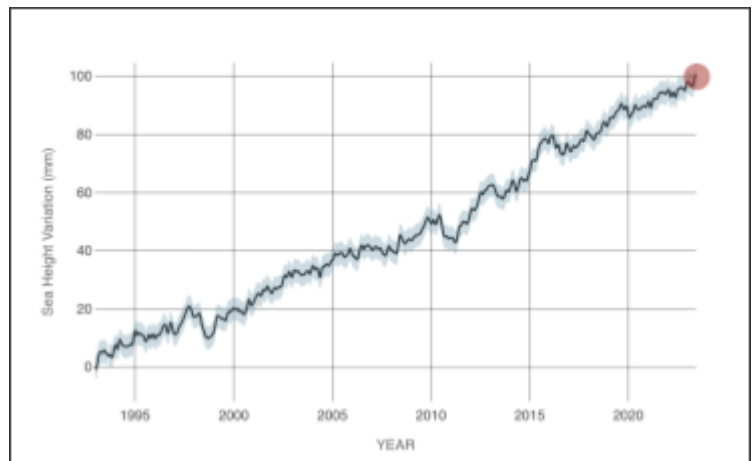


Figure 1: Satellite data depicting rising global sea levels and sea height variations (mm) over time (NASA).

If all the glaciers and ice caps on the globe were to melt, sea levels would rise by more than 60 meters ("NASA Sea Level Change Portal: Ice Melt"). However, some scientists note that sea levels have risen and fallen throughout Earth's 4.6 billion-year history. Nevertheless, at the current rate at which global sea levels are rising, they have already deviated from the average sea level rise from the past 2000-3000 years, and pose great threats to Earth's livelihood.

In particular, this rapid rise in global sea levels will and already has been having detrimental

effects on Earth's geography and environmental well-being. For instance, encroaching sea levels can drastically alter and erode coastlines, increasing the risk of coastal flooding. In fact, eight of the ten largest cities lie near a coast and thus are threatened by the potential of coastal flooding. This coastal erosion also threatens flora and fauna and risks the destruction of coastal habitats and the loss of coastal biodiversity. Rising sea levels have also been associated with an increase in tropical storms, hurricanes, and typhoons, which risk the loss of life, property, and infrastructure of various coastal communities (Nunez and National Geographic Staff). Regarding these at-risk coastal areas, it is predicted that low-lying coastal areas and islands are most vulnerable to the effects of rising sea levels, namely Asia, the Pacific, and most notably, Small Island Developing States (SIDS) like the Maldives or the Marshall Islands.

Most relevant to the committee issue at hand, however, is how sea levels endanger the livelihood of humanity, in particular relating to international law. For instance, rising sea levels could jeopardize water security, as intruding saltwater contaminates freshwater reserves. Saltwater flooding could also contaminate and render vital agricultural soil unusable, therefore threatening food security for at-risk regions. If sea levels rise to a critical point, not only are millions of people at risk of the threat of flooding but various coastal populations could also be forced to migrate to higher ground or relocate completely, causing a mass migration and relocation crisis (Nunez and National Geographic Staff).

In terms of international law, rising sea levels as a result of global warming also threaten the statehood and maritime jurisdiction of various coastal and/or island nations. As sea levels rise, they alter the Exclusive Economic Zones (EEZs) that entitle nations to maritime economic rights. Rising sea levels also create disputes regarding the differentiation between islands and rocks, the various benefits entitled to each of them, and the manners in which these differences can be exploited.

A landmark in the history of marine international law was the ratification of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, a convention that established a comprehensive legal framework for the regulation of the ocean and its resources ("International Tribunal for the Law of the Sea: UNCLOS"). However, as global warming accelerates the rising of global sea levels, the relevance of the Convention and its frameworks, and its suitability to the current international legal climate comes into question. Therefore, revising legal frameworks, such as the UNCLOS, becomes crucial in the effort to uphold international law in relation to climate-mediated rising sea levels, to overall ensure global peace, law, and justice.

Definition of Key Terms

Sea Level

Sea level can be defined as the baseline for measuring depth and elevation on Earth and is measured in relation to adjacent land. However, various environmental interferences, such as currents, winds, and gravitational and temperature changes make it so the sea surface is never truly level. As

such, sea level is measured using the concept of local mean sea level, which is the average height of the ocean's surface at a specific place, measured over a certain period of time ("Sea Level").

United Nations Convention on the Law of the Sea (UNCLOS)

The United Nations Convention on the Law of the Sea, abbreviated as UNCLOS, was ratified in 1982 and is an international legal agreement and framework that outlines regulations for the governing of the ocean and its resources, as well as defining maritime jurisdictions. The collection and body of treaties and agreements regarding the jurisdiction of the sea, established by the Convention, is called the Law of the Sea.

Exclusive Economic Zones

Exclusive economic zones, or EEZs, extend 200 nautical miles from the coastline of a nation's terrestrial territory and are coastal regions in which a country can claim legal rights for fishing, drilling, and other similar economic activities. The definition of these EEZs was prescribed during the 1982 United Nations Convention on the Law of the Sea.

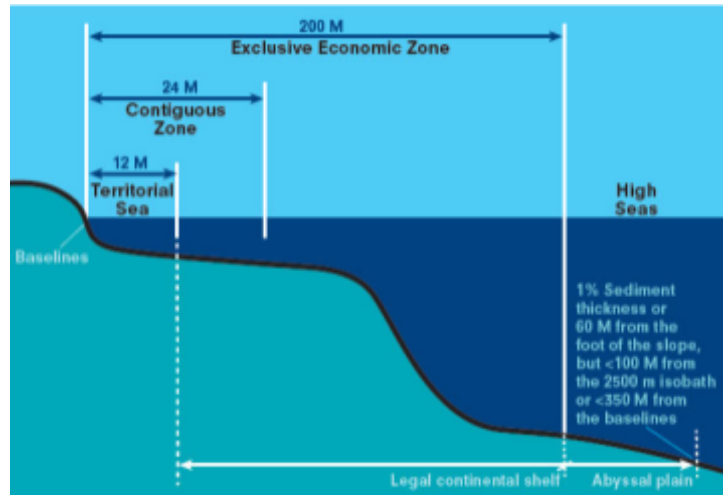


Figure 2: Depicts sections and regions of an Exclusive Economic Zone (EEZ)

Climate Displacement

Climate displacement is the movement and migration of people within countries or across borders, due to climate change-related disasters. Those who are displaced due to climate-related disasters are referred to as "persons displaced in the context of disasters and climate change", as indicated by the United Nations High Commissioner for Refugees (UNHCR) ("Climate Change and Disaster Displacement | UNHCR"). Climate displacement usually results in internal displacement, before it escalates into displacing people across borders.

Small Island Developing States (SIDS)

Small Island Developing States, or SIDS, as their name indicates, is a group of 39 States and 18 Associate Members of United Nations regional commissions concentrated in 3 main geographical regions: the Caribbean, the Pacific, and the Atlantic, Indian Ocean, and South China Sea (AIS). Although they only make up less than 1% of the world's population, SIDS face a unique combination of economic, environmental, social, and political vulnerabilities and challenges, particularly in terms of climate change and its consequence, such as sea level rise ("About Small Island Developing States | Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States").

Background Information

The issue of support and aid for Small Island Developing States (SIDS) and other nations whose statehood and sovereignty are jeopardized by rising sea levels.

As human activity triggers climate change and consequently global warming, Arctic ice caps are melting, resulting in a gradual global rise in sea level. This rise in sea levels poses great risks to the livelihood and sovereignty of nations across the globe. Yet, it particularly threatens the statehood of island nations considered Small Island Developing States or SIDS, such as the Marshall Islands, the Maldives, and Tonga, just to name a few (“About Small Island Developing States | Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States”).

As developing LEDCs with a unique geography, not only are SIDS challenged by economic and social struggles, but, with the onset of global warming, these nations are also particularly vulnerable to the detrimental consequences of rapidly rising sea levels. For instance, as sea levels rise, these small island nations face the risk of increased coastal flooding. In turn, this saltwater flooding eroded coastlines and also has the potential to contaminate freshwater reserves and fertile agricultural soil (Nunez and National Geographic Staff). This threatens the water and food availability and security on these islands, imperiling the livelihood of the island’s residents. Most obviously, however, if sea levels rise unchecked, multiple SIDS across the globe run the risk of permanent land submersion.

This also begs the question of how the statehood and sovereignty of these island nations will be protected as sea levels rise, considering past agreements on the topic, namely, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) are vague and outdated in their distinction between an “island” versus a “rock”, and the consequent entitlements and rights of each. Per the Convention, islands can claim maritime territory and benefits as compared to rocks, yet, if said island is not capable of sustaining human or economic life on its own without aid, it is considered simply a rock. Seeing as though UNCLOS has not yet adapted to the current situation of rising sea levels, small island nations that slowly become uninhabitable, due to seawater contamination and flooding, are at risk of losing their island status prematurely, along with the vital maritime entitlements that accompany it. Considering many SIDS rely heavily on their surrounding oceans and their resources for economic prosperity, this lack of distinction and clarity in UNCLOS can be detrimental to these developing island nations.

This issue must also recognize the accompanying humanitarian issues that follow the potential relocation and migration efforts if the worst-case scenario of full permanent inundation of these small islands were to occur as sea levels rise.

The issue of welfare and establishing relocation protocols for those displaced due to rising sea levels.

With sea levels rising, nations across the globe are experiencing various second-hand impacts of this detrimental environmental consequence. As mentioned earlier, these effects include a wide range of impacts including erosion, extreme weather, and flooding. As a result, more and more people will become victims of “climate displacement” as they find their homes and security threatened by rising sea levels, and are forced to flee and migrate. Specifically, these refugees and migrants lack sufficient resources to adapt and acclimate to an environment that becomes increasingly more hostile to climate change, and as such become displaced.

Since 2010, the number of those displaced globally due to climate-related factors has increased to 21.5 million people (Owen-Burge). Regarding rising sea levels in particular, it is estimated approximately 260 million people living in coastal areas are at a very high risk of rising sea levels, 90% of which are from developing nations and/or SIDS. In Bangladesh, for example, it is predicted that by 2050, 17% of the country will be submerged by rising sea levels, and 20 million people will lose their homes and be forced to flee - becoming victims of climate displacement.

As the prospect and threat of mass displacement increases, nations are faced with the question of how to mitigate such a humanitarian crisis and relocation effort. In Indonesia, for instance, mass relocation efforts for the country’s capital, Jakarta, home to 10.5 million, are already underway, as the city is threatened not only by rising sea levels but also by increased flooding, the risk of sinking, and various social and urban issues.

Evidently, the organized and lawful relocation and proper reintegration of climate-displaced persons around the globe, who are entitled to migrant rights under the UN Declaration of Human Rights, becomes a critical task in the effort to mitigate the consequences of the rising sea levels and global warming, to overall ensure stability and global peace.

The issue of rising sea levels threatening and altering the maritime jurisdiction and Exclusive Economic Zones of nations.

Ratified in 1982, the United Nations Convention on the Law of the Sea (UNCLOS) was effective at the time of its implementation, as it allowed the international community to determine the jurisdiction and “borders” of the once undefined sea. Yet, as rising sea levels change these “borders” of the sea, it may be necessary to redefine the outlining of the UNCLOS.

For instance, island nations are entitled to an Exclusive Economic Zone (EEZ), which extends 200 nautical miles from the coastline of a nation's terrestrial territory, called the “baseline”. These EEZs are crucial for the economic prosperity of nations, as they protect coastal regions in which a country can claim legal rights for fishing, drilling, and other similar economic activities. However, as sea levels rise, they also alter the baseline of these EEZs, redefining nations' entitlement to maritime territory and

jurisdiction. This proves to be particularly threatening for nations, often developing, who depend on the profitability of maritime resources within their EEZs to bolster their economies.

Some countries have found loopholes in the Convention's definition of an EEZ and attempted to take advantage of maritime economic jurisdiction laws. This was evident with the "Great Wall of Sand", a name given to the various land-reclamation projects headed by the People's Republic of China, in which the country constructed artificial islands in the Spratly Island area by dredging sand onto reefs (By doing so, China hoped to expand their territorial waters and maritime jurisdiction, despite these locations being considered under UNCLOS as sea beds in international water with no territorial affiliation (Marcus). Closing these loopholes and the potential for the misconstruction of the Convention is crucial to address, to ensure the lawful and just distribution of maritime territory.

A changing geopolitical climate as a result of rising sea levels also opens the door to disputes for shared or valuable maritime resources and territory, raising the concern and risk of international conflict, overall jeopardizing global peace. As such, finding strategies to update the frameworks of the UNCLOS, as well as protect the stability of maritime geopolitics, is crucial for upholding international law as sea levels rise.

Major Countries and Organizations Involved

International Tribunal for the Law of the Sea

Established in 1982 by the UN Convention on the Law of the Sea (UNCLOS), the International Tribunal for the Law of the Sea, abbreviated as ITLOS, is an independent judicial body. Composed of 21 ITLOS is responsible for adjudicating and settling disputes regarding the interpretation of the UNCLOS, that is, regarding maritime international law. Regarding the issue of rising sea levels, the ITLOS has become extremely relevant as nations, such as Tuvalu, for example, submit petitions to the Tribunal in regards to the implication of climate change, sea level rise, and international law.

Tonga

Forming part of the Polynesian Kingdom, the small developing island country of Tonga is one of the most vulnerable countries in terms of sea level rise and its consequences. Tonga's sea level has been rising by 6 mm each year, which is double the average global rate in terms of sea level rise. This dramatic rise in sea level is in part because the island country sits in warmer waters, increasing variability in sea levels compared to the poles of the planet. The country of Tonga will also be relevant to the issue at hand, considering the island's EEZs and maritime jurisdictions, as well as its general statehood and sovereignty, will be altered and threatened by rising sea levels.

The Maldives

Similarly to Tonga, being a Small Island Developing State (SIDS), The Maldives faces some unique and pressing issues regarding rising sea levels. The Maldives is a low-lying island and also the flattest country on the globe, which increases its risk of flooding and coastal erosion in the case of rising

sea levels. The island country is predicted to experience a sea level rise of 1.5 feet, and consequently lose over 77% of its land area by the year 2100. As such, nations like The Maldives are at risk of mass population displacement, loss of economic maritime jurisdiction, and overall face threats to their statehood and sovereignty.

Indonesia

Indonesia, an island country with more than 17,000 islands that stretch over 80,000 kilometers of coastline, is particularly threatened by rising sea levels as a consequence of global warming. Recent research shows that by 2100, 115 of Indonesia's islands will be submerged underwater, and even sooner, by 2050, it is estimated that a third of the country's capital, Jakarta, could be underwater. This rise in sea levels and consequent land submersion poses great humanitarian risks for Indonesia, considering it is the fourth most populous country in the world, with a population of around 279 million people. As such, Indonesia is likely to experience a mass displacement of its population as sea levels continue to encroach, a relocation the country is already experiencing as it attempts to relocate its capital by 2045.

Timeline of Events

Date (start - end)	Name	Description
1863	Sea levels are first measured to be rising.	Since 1863, a group of researchers from Rutgers University has observed a rise in global sea levels, consistent with the onset of early global warming and consequent glacier melt from around that time.
December, 10th, 1982	Signing of the United Nations Convention on the Law of the Sea	In late 1982, the United Nations Convention on the Law of the Sea was signed, a pivotal movement in establishing legal frameworks for the regulation of the ocean, its resources, and its jurisdiction.
December 2013 - October 2015	The People's Republic of China embarks on the "Great Wall of Sand" project.	From December 2013 to October 2015, China attempted to build various artificial islands in the Spratly Island area in the South China Sea, by dredging up sand on reefs - a means of securing territorial water and maritime entitlements.
August, 29th, 2019	Indonesia announces plans for the relocation of its capital.	In 2019, Indonesia's president, Joko Widodo, announced that the country's capital, Jakarta, which is located on the island of Java, would be relocated

		to East Kalimantan, on Borneo. These relocation plans came about as a result of various social and environmental factors, namely the fact that the capital is sinking and has a high risk of flooding from rising sea levels.
April, 1, 2022	The resolution “Sea-level rise in relation to international law” was approved.	On April 1, 2022, a resolution titled “Sea-level rise in relation to international law” was approved, outlining various frameworks, guidelines, and protocols for mitigating the effects of rising sea levels in regard to international law.

Relevant UN Treaties and Events

- Possible adverse effects of sea-level rise on islands and coastal areas, particularly low-lying coastal areas, 22 December 1989 (**A/RES/44/206**).
- United Nations Convention on the Law of the Sea, 16 November 1994 (**No. 31363**)
- Sea-level rise in relation to international law, 1 April 2022 (**A/CN.4/752**)
- Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, 19 June 2023 (**C.N.203.2023**)

Possible Solutions

The issue of support and aid for Small Island Developing States (SIDS) and other nations whose statehood and sovereignty are jeopardized by rising sea levels.

Regarding the dozens of Small Island Developing States (SIDS) around the globe, the unique and specific challenges they face as isolated and oftentimes economically developing nations is crucial to recognize. As such, they will be most significantly and particularly impacted by the effects of rising sea levels, not just due to their proximity to the sea, but also due to their economic, social, and political climates. For instance, with rising sea levels, the likelihood and occurrence of natural disasters, namely hurricanes and detrimental tropical storms, is increasing, which has negatively affected various SIDS. Therefore, it would be imperative that delegates consider methods to support and aid SIDS experiencing natural disasters and increase their post-disaster resilience. This could include establishing or improving already present emergency response programs and services, potentially aided by third parties such as international organizations or non-governmental organizations (NGOs). SIDS will also face threats to their freshwater reserves and water availability, as well as agricultural soil, as saltwater encroaches onto

the territorial land of these islands. Delegates can focus on encouraging the development of novel technology to prevent saltwater flooding or mitigate the effects of freshwater or agricultural soil contamination. Methods to avoid water and food scarcity on these islands, and prevent uninhabitability, such as bolstering international trade relations, are also possible solutions. This would, in turn, bolster the often-times struggling economies of these SIDS and reduce their common dependency on tourism. Concerning the Law of the Sea, delegates could focus on making possible reforms or alterations to the frameworks outlined in the Convention, particularly concerning the distinction between entitled islands and rocks, as SIDS begin to lose their “island status” and as a consequence, lose their entitlement to maritime jurisdictions, economic zones, and continental shelves.

The issue of welfare and establishing relocation protocols for those displaced due to rising sea levels.

As rising sea levels endanger infrastructure and property, and ultimately render land uninhabitable, particularly in small island nations, there will be a rise in displaced persons due to mass relocations. Therefore, delegates should be mindful of the implications of such relocations, and consider methods to ensure the proper, humane, and lawful treatment of these displaced persons. For instance, delegates could consider establishing designated and temporary relocation refugee camps and housing facilities, aided by NGOs and other humanitarian aid organizations. This could prove to be especially helpful in nations experiencing an influx of internally displaced persons within their borders, displaced due to rising sea levels. However, the long-term relocation of these individuals must be taken into account, and thus delegates are advised to consider methods of reintegration for these climate-displaced persons such as methods for cultural, financial, and legal reintegration into host nations. Lastly, the citizenship of these displaced persons cannot be overlooked, and delegates are encouraged to brainstorm legal frameworks and politics that protect the nationality and citizenship of displaced persons, in the case that the legal statehood of their home nations is changed due to rising sea levels.

The issue of rising sea levels threatening and altering the maritime jurisdiction and Exclusive Economic Zones of nations.

One of the most pressing threats posed by rising sea levels is its threat to the maritime jurisdiction and economic entitlements of various nations. Particularly, the inflexible definition of nations’ Exclusive Economic Zones (EEZs) is most detrimental to the economic health of nations. As such, delegates are encouraged to suggest alterations to the Law of the Sea to ensure that EEZs can become adaptive, keeping up to speed with the fast-changing geography of the sea, therefore protecting the valuable maritime entitlements and jurisdictions of nations. Regarding the Law of the Sea, delegates should also work to fix potential loopholes within the Conventions that allow nations to manipulate the Law of the Sea to gain entitlements to maritime resources, such as by extending their EEZs. Speaking of

marine resources, delegates should also be considerate of the potential risk of conflict that contention for valuable resources and maritime area poses, and as such consider methods to prevent or de-escalate this conflict. This could include strengthening the role of judicial third parties in this matter, such as the International Tribunal for the Law of the Sea. As such, global peace and justice will be ensured throughout the land, and most importantly, the seas.

Bibliography

- Marcus, Jonathan. "US-China Tensions Rise over Beijing's 'Great Wall of Sand.'" BBC News, BBC News, 29 May 2015, www.bbc.com/news/world-asia-32913899. Accessed 9 Dec. 2023.
- "World of Change: Global Temperatures." Nasa.gov, NASA Earth Observatory, 29 Jan. 2020, earthobservatory.nasa.gov/world-of-change/global-temperatures. Accessed 9 Dec. 2023.
- "Climate Change and Disaster Displacement | UNHCR." UNHCR, 2023, www.unhcr.org/what-we-do/build-better-futures/environment-disasters-and-climate-change/climate-change-and. Accessed 9 Dec. 2023.
- "Climate Change Reaching Unprecedented Levels as Records Tumble." Nhm.ac.uk, 2023, www.nhm.ac.uk/discover/news/2023/october/climate-change-reaching-unprecedented-levels-records-tumble.html#:~:text=2023%3A%20A%20record%2Dbreaking%20year&text=There%20have%20been%20over%2038.any%20other%20year%20on%20record. Accessed 9 Dec. 2023.
- "International Tribunal for the Law of the Sea: UNCLOS." Itlos.org, 2023, www.itlos.org/en/main/the-tribunal/unclos/. Accessed 9 Dec. 2023.
- "NASA Sea Level Change Portal: Ice Melt." NASA Sea Level Change Portal, 27 Jan. 2021, sealevel.nasa.gov/understanding-sea-level/global-sea-level/ice-melt. Accessed 9 Dec. 2023.
- NASA. "Ocean Heat Content | NASA Global Climate Change." Climate Change: Vital Signs of the Planet, 27 Nov. 2023, climate.nasa.gov/vital-signs/ocean-warming/#:~:text=Covering%20more%20than%2070%25%20of,heat%20as%20Earth%27s%20entire%20atmosphere. Accessed 9 Dec. 2023.

Nunez, Christina, and National Geographic Staff. "Sea Levels Are Rising at an Extraordinary Pace. Here's What to Know." Environment, National Geographic, 10 Apr. 2023, www.nationalgeographic.com/environment/article/sea-level-rise-1. Accessed 9 Dec. 2023.

"About Small Island Developing States | Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States." Un.org, 2023, www.un.org/ohrills/content/about-small-island-developing-states. Accessed 9 Dec. 2023.

Owen-Burge, Charlotte. "Climate Refugees – the World's Forgotten Victims - Climate Champions." Climate Champions, 21 June 2021, racezero.unfccc.int/climate-refugees-the-worlds-forgotten-victims/. Accessed 9 Dec. 2023.

"Sea Level." Nationalgeographic.org, 2023, education.nationalgeographic.org/resource/sea-level/. Accessed 9 Dec. 2023.

"US Patrol in India's EEZ." *Drishti IAS*, 2023, www.drishtiiias.com/daily-news-analysis/us-patrol-in-indias-eez. Accessed 14 Dec. 2023.