

A home built next to the sea during high tide in India's financial capital Mumbai in September 2019. What is clear from recent studies is that the acceleration in sea levels will continue even if all countries hit their 2015 Paris climate accord targets by 2030, says the writer. PHOTO: AGENCE FRANCE-PRESSE



As sea levels rise, what happens to maritime rights?

Under the 1982 United Nations Convention on the Law of the Sea, the distinction between land features which are above water at high tide and those which are below water determines whether a feature can be subject to sovereignty claims and whether it can generate maritime entitlement. Rising seas have legal and geopolitical implications as well.

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For the Straits Times

The June 24, 2019, cover of *Time* magazine dramatically featured United Nations Secretary-General Antonio Guterres standing in knee-deep seawater, drawing attention to climate change and sea-level rise. That same year, the Intergovernmental Panel on Climate Change (IPCC) issued its report on accelerating rising sea levels as the world warms and ice sheets and glaciers from Greenland to Antarctica melt. The impact of rising seas is vast and wide-ranging. For instance, as seawater surges inland, freshwater sources needed for drinking and irrigation become saltier, putting large swathes of farmland in places such as Vietnam under threat. Displacement of persons is another serious consequence of

sea-level rise, considering that some one billion people – most of them in Asia – live in low-lying coastal regions. The loss of territory from erosion and flooding may force hundreds of millions of people to leave their homes in the coming years. Less discussed in the public domain but a matter of potentially vast consequence are the implications for maritime rights under international law. Small-island developing states with low-lying coastal areas, often barely above sea levels, such as in the South Pacific and Oceania regions, are at high risk of losing both land territory and ocean space – and in some extreme cases, possibly disappearing entirely. For example, 80 per cent of Maldives' 1,200 islands are just a metre above sea level, making them very vulnerable to sea-level rise. In response, the Maldives has constructed a new city on an

artificial island called Hulhumale, next to the capital Male, built at 2.1m above sea level. However, many developing countries are unable to afford the millions of dollars required for artificial measures to protect against rising sea levels. **WHEN AN ISLAND BECOMES A ROCK** Rising sea levels can alter existing maritime zones as islands become uninhabitable or disappear entirely. Under the 1982 United Nations Convention on the Law of the Sea (Unclos), an island capable of sustaining human habitation or an economic life of its own is entitled to all maritime zones, including an exclusive economic zone and continental shelf. However, an island that becomes uninhabitable because of sea-level rise could potentially legally be reclassified as a "rock" and lose these valuable maritime zones.

According to experts, a small island that could generate up to 431,014 sq km of maritime area may be limited to a territorial sea that would generate only a much smaller area of 1,550 sq km, if it were reduced to an uninhabitable "rock". For example, if Kapingamarangi, the southernmost island in the Federated States of Micronesia, were to be reclassified as a "rock", the Federated States of Micronesia would lose more than 30,000 square nautical miles of its exclusive economic zone. In South-east Asia, Indonesia and the Philippines are two large archipelagic states. They could lose important maritime space because of sea-level rise. Under Unclos, archipelagic states are allowed to enclose a large area of maritime space by drawing an archipelagic baseline around outlying islands and drying reefs so long as a complex quantitative and distance formula

is met. (The term "reef" refers to a mass of rock or coral which either reaches close to the sea surface or is exposed at low tide. That part of a reef which is above water at low tide but submerged at high tide is a "drying reef".) The loss of one outlying island of drying reef could alter their baselines and the maritime zones that can be claimed from them. The matter is not only of legal importance but also has geopolitical and strategic implications in view of the many South China Sea disputes. Climate change is principally regulated at the global level by the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement. While the ultimate objective is for states to mitigate the emission of greenhouse gases, adaptation responses to climate change are equally important. Physical defence measures, such as building dykes, sea walls or even

planting mangroves, are common methods of adaptation. But such measures can be expensive and may not always work.

NO CLEAR ANSWERS

One interesting question is whether adaptation to climate change also includes the legal preservation of maritime zones and entitlements? Can states be allowed to "legally" preserve their maritime zones without having to undertake costly physical measures? This issue is not directly addressed in the climate change regime. The 1982 Unclos was negotiated and adopted before climate change was an issue and does not provide a clear answer. Since the 1989 Male Declaration adopted at the Small States Conference, South Pacific island states have been key messengers of the dangers of climate change and sea-level rise. They are proactively taking action to legally preserve their maritime zones by concluding maritime boundary delimitation agreements that will expressly preserve their maritime entitlements against rising sea levels into the future. The United Nations is also looking into the legal consequences of climate change. In 2019, the International Law Commission, a subsidiary body of legal experts of the UN General Assembly, placed sea-level rise on its working agenda. Asean states are particularly vulnerable to sea-level rise and all the associated risks, including loss of existing maritime space, so it is important that they also examine this critically important matter. An important step was taken in 2018 by Indonesia with the establishment of the Archipelagic and Island States Forum, which provides a platform for governments to work with various stakeholders – the private sector, civil society, and academia – on climate change-related initiatives. The Centre for International Law and the National University of Singapore have held workshops to promote greater understanding of the impact of sea-level rise on the maritime rights of states. Once the current pandemic is under control, Asean should give high priority to finding solutions to address the physical, economic, social and legal consequences of sea-level rise. Time and tide wait for no man, so the saying goes, and there is little time to lose. Sea-level projections are complicated but what's clear from recent studies is that the acceleration in sea levels will continue even if all countries hit their 2015 Paris climate accord targets by 2030. Much is at stake, not least the implications for the framework for maritime rights and geopolitical stability. stopinion@sph.com.sg

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