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SEA LEVEL RISE: Will the Maldives disappear?

Sam Bateman

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Predictions of rising sea levels have fuelled speculation that the Republic of the Maldives might disappear beneath the sea. There is time, however, to plan against this eventuality and all may not be lost for the Maldives.

MOHAMED ‘ANNI’ Nasheed, the new President of the Republic of the Maldives, has said his government will start saving to buy a new homeland in case global warming and sea level rise cause the Maldives to disappear. This small Indian Ocean country comprises numerous atolls and small islands, which are only about 1.5 metres on average above sea level. If the predictions of the Intergovernmental Panel on Climate Change (IPCC) are correct and sea levels rise by up to 58 cm by 2100, significant parts of the Maldives could be submerged.

International lawyers are now consumed by the legal implications of a sovereign state disappearing beneath the sea. There are some vital questions: Will sea levels rise as predicted by the IPCC? Not everyone agrees with those predictions. But if they are correct, is the affected country gone for good? Can it, and how does it go about securing another homeland for itself? Can it retain statehood? And what are the implications for sovereignty, including the legal status of wide areas of submerged reefs remaining after land areas of the Maldives disappear?

It is not just the Maldives that are affected. Similar problems could confront low-lying atoll countries elsewhere, including Kiribati, Tuvalu and the Marshall Islands in the Pacific.

Will sea levels rise?

While few now doubt global warming is occurring, there is less certainty about sea level rise. Professor Nils-Axel Mörner of Stockholm University is one prominent critic of the IPCC's predictions. He has been studying sea levels for many years and argues there is no trend to support the IPCC's predictions.

Mörner bases his views partly on the difficulties of obtaining an adequate benchmark against which to assess sea level rise. He compares observations of sea level rise measured by tide gauges in particular locations with global measures of sea level obtained by satellite altimetry. He points out the IPCC based its predictions on tide gauge observations in Hong Kong, which is known by geologists to be subsiding, rather than on observations for the entire oceans. He argues the IPCC comprises mainly meteorologists; geologists may have been more alert to other causes and effects.

What might happen if sea levels do rise?

The Maldives constitute an archipelagic state and have claimed a system of archipelagic straight baselines. The large exclusive economic zone (EEZ) generated from those baselines is rich in marine living resources. Apart from fish, tourism is the major income earner for the Maldives. Even if current land areas of the Maldives disappear, large areas of submerged reefs would remain that would still have potential for resource exploitation and tourism.

Under international law, sovereignty over land is necessary to generate sovereignty and sovereign rights at sea. The legal dictum is that “the land dominates the sea”. Also, an island has to be of a certain size and nature (i.e. not just a rock above water at high tide) before it can generate an EEZ, and it is not acceptable to turn a rock into an island by constructing buildings upon it. As we have seen with Pedra Branca and the Spratly Islands, there can be much debate over whether a feature is a “rock” or an “island”.

If it does occur, sea level rise will proceed progressively. Some of the outermost islands and reefs now used as base points for the Maldives’ archipelagic baselines might disappear. Should that happen, the Maldives would either have to redraw its baselines (and thus lose some of its EEZ), or build up key islands with reclamation works and other structures. While it is not acceptable in international law to turn a “rock” into an “island” with man-made structures, it is a different situation if the structures are built to maintain or protect an existing island.

By 2100, if the IPCC’s predictions were correct, some of the present land area of the Maldives would be submerged. However, it might still be possible to preserve most, if not all, of its present archipelagic nature by judicious use of reclamation works and other man-made structures. It would still have sovereign rights over its rich EEZ, although it would be more vulnerable to storms and tsunamis.

In the longer term, if sea level rise continued past 2100, or if the rise becomes greater than the IPCC predicts, all present land areas of the Maldives might disappear. However, there would still be a large area of EEZ where the Maldives retain sovereign rights with numerous islands built up by reclamation and other structures, including possibly port facilities and tourist resorts. As Hollywood might have it, we could have a form of *Waterworld*.

Can a submerged state still have statehood?

It may be difficult over the longer-term to support the current population of the Maldives of nearly 400,000 in its existing homeland. The people would still have income from the EEZ and tourism, but many would have to live elsewhere. While President Nasheed did not speculate on the status of the land his fund might buy to provide an alternative home for his people, he could not expect sovereignty. No other country is likely to cede any territorial sovereignty over land purchased by the Maldives.

Australia is often mentioned as a country where the Maldives might purchase land. However, while Australia might grant civil title over land, this would not be sovereignty. Special joint citizenship arrangements would need to be developed for the Maldivians. Their situation might be similar to the

Cocos and Norfolk islanders, both of whom have a degree of independence as residents of self-governing territories of Australia. The Maldivians might be able to have dual nationality while living within the community of the host state.

The problems involved with relocating some of the current population of the Maldives are not impossible to solve. And they might not have difficulty in retaining statehood even over the longer-term. The greatest problem will be finding a suitable tract of land in Australia or elsewhere; but if President Nasheed's fund grows large enough, even that might not be insurmountable.

Is sea level rise a security threat?

In the longer term, sea level rise might become a security threat, though at present it has low priority. Other non-traditional security threats, such as food security, disease, loss of fishstocks, energy security, natural disasters and poverty, are clear and present dangers that rate more highly and require more urgent attention.

The adverse consequences of sea level rise will emerge slowly. Even with the IPCC's worst case scenario, much of the land area of the Maldives will still be above water in 2100. There is time, therefore, for effective policies to be developed to manage the phenomenon. It will not occur overnight with massive disruption of population and mass flows of people from affected areas to elsewhere. Meanwhile, many PhDs in international law will be written on the legal implications of sea level rise!

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