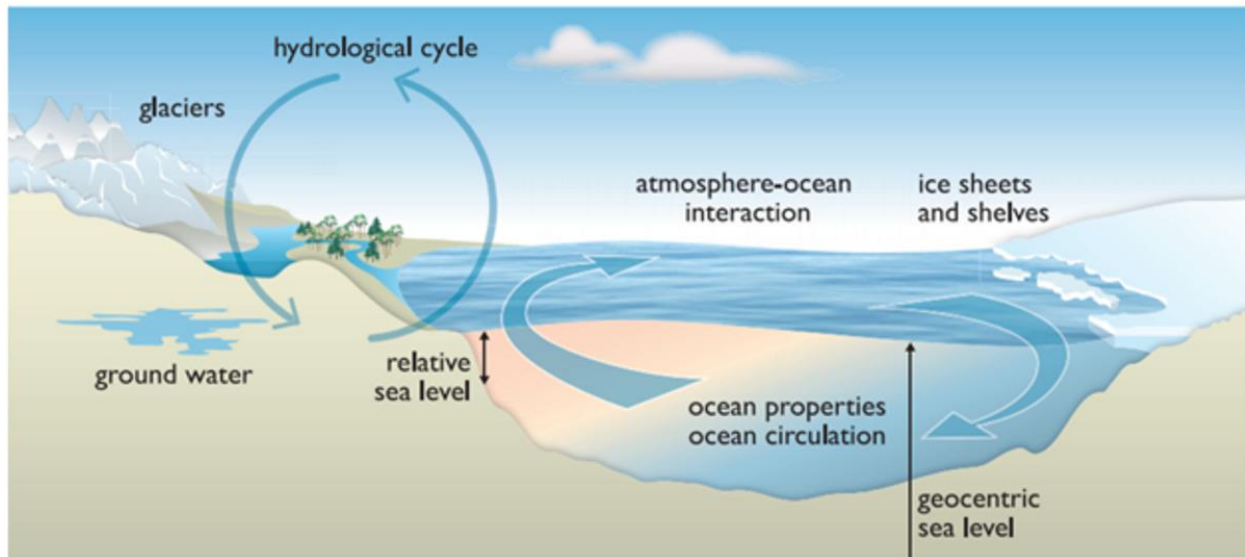


Sea Level Rise and the Future of Maldives



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While the growth of environmental refugees has been the most significant in sub-Saharan Africa, other areas are also at heavy risk. Areas at risk that have been identified include: Jordan^[1], Cape town^[2] Tuvalu^[3], Kiribati, Bangladesh, Maldives etc.^[4] Changes in sea level occur over a broad range of temporal and spatial scales, with the many contributing factors making it an integral measure of climate change^[5] The primary contributors to contemporary sea level change are the expansion of the ocean as it warms and the transfer of water currently stored on land to the ocean, particularly from land ice (glaciers and ice sheets).^[6] Observations indicate the largest increase in the storage of heat in the climate system over recent decades has been in the oceans and thus sea level rise from ocean warming is a central part of the Earth's response to increasing greenhouse gas (GHG) concentrations.

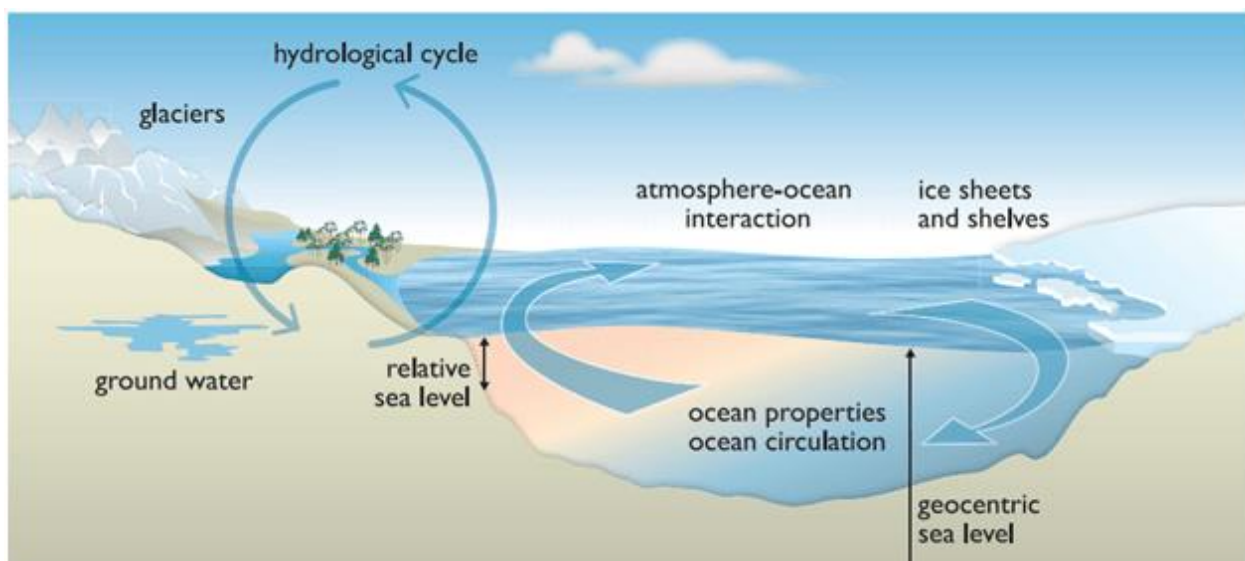


Figure depicts climate sensitive processes and components that can influence global and regional sea level. Changes in any one of the components or processes shown will result in a sea level change. The term 'ocean properties' refers to ocean temperature, salinity and density, which influence and are dependent on ocean circulation.^[7]

The First IPCC Assessment Report (FAR) laid the groundwork for much of our current understanding of sea level change[8] This included the recognition that sea level had risen during the 20th century, that the rate of rise had increased compared to the 19th century, that ocean thermal expansion and the mass loss from glaciers were the main contributors to the 20th century rise, that during the 21st century the rate of rise was projected to be faster than during the 20th century, that sea level will not rise uniformly around the world, and that sea level would continue to rise well after GHG emissions are reduced.[9]

Maldives is an archipelago of 25 low-lying coral atolls located in a north to south direction on the Laccadives-Chagos submarine ridge in the Indian Ocean. This chain is 860km long and the width varies between 80km to 120km. There are 1190 small tropical islands out of which 358 islands are being currently utilized mainly for human settlements, infrastructure and economic activities.[10] The largest island is Gan in Laamu Atoll which is barely 6km. Daily temperature varies between 31 C and 23 C. The mean daily maximum temperature is 30.4 C and the mean daily minimum temperature is 25.7 C. Humidity ranges from 73 to 85%.[11]

Maldives is one of lowest-lying countries in the world, with its entire population living a few meters above sea level and a sea level rise of just a few meters will put the nation further at risk, endangering its relative prosperity. With the melting of polar ice caps, the Maldives is also exposed to risks of sea-level rise. Future sea level is projected to rise within the range of 10 to 100 centimeters by the year 2100, which means the entire country could be submerged in the worst-case scenario.[12] Aiming for the attention of the world community, the Maldivian President Mohamed Nasheed signed a declaration during the first UN Climate Change meeting in the Maldives on October 17, 2009. The Maldivian president and ministers even held the world's first underwater cabinet meeting in a symbolic cry for help over rising sea levels that threatens its existence.[13]

The situation is so serious in Maldives that it is planning to divert a portion of country's billion-dollar annual tourist revenue into buying a new homeland-as an insurance policy against climate change that threatens to turn the 3000000 islanders into environmental refugees.[14]

The settlement of a country at a new place is something that we will experience for the first time. Consequently, it will give birth to so many legal and jurisprudential questions. For instance, Maldives is planning to buy land in Australia,[15] the question which may arise that whether Maldives will also exercise *sovereign power* over the land. It seems pretty obvious at first instance, but this purchase of land will not be piece of land for embassy or any base camp of a country, it will be whole new country itself, which will make Australia to think in all dimensions about it. Another question which triggers in mind is that whether Maldives will still be able to exercise its territorial jurisdiction and Exclusive Economic Zone over the sea after it has submerged under the sea? What should be the responsibility of neighboring countries like India and Bangladesh in such situation under international law? Whether global community should compulsorily be made liable to pay amount for such countries or Islands for their survival? These are the questions which may be further explored in upcoming research.

The issue on 'environmental refugees' is serious concern of all the member of the world community. Climate change and the forced migration consequently, is going to affect us all in one or the other way. In some places people have already left their lands and living life of '*unrecognized refugees*'. Most importantly, our focus should not only be on the 'climate refugees' but also we should strive to secure better and sustainable life for the people whose life is endangered because of climate change, such as the Maldivian. If proper action is taken at time then it's equally possible that Maldives with its limited resources can find a new homeland and we

can prevent a whole nation from forcibly converting into refugees. Since there is customary international law to protect the refugees, we need customary international law to prevent people from becoming refugees.

Another way for helping climate refugees is that the neighboring countries should bear some burden of accommodating climate refugees with mutual consent. For example, Tuvalu already has an agreement with New Zealand to accept its 11,600 citizens if needed.^[17] In 2010 Bangladesh created Bangladesh Climate Change Trust Fund (BCCTF), which is the first ever national climate fund established by a Least Developed Country (LDC) and is an example to other countries for institutionalizing national climate finance.^[18] Similarly, The European Union signed its first Financing Agreement of EUR 5 million with the Government of Maldives^[19], emphasizing the commitment to continue and strengthen cooperation on climate change. Thus, with similar kind of trust funds the governments in their respective jurisdictions and international organizations such as United Nations, contribute largely for the truly sustainable development goals that is facing serious challenges from climate change.

views expressed are personal.

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[5]

[6]

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[8]

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