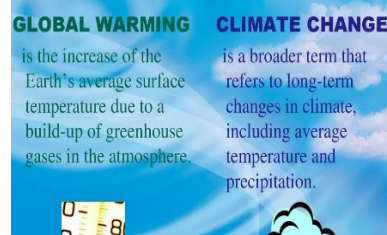


## Rising Seas Threaten the Sovereignty of Pacific Island Nations

*THE PRME PLATFORM AT JHBC raises three urgent issues this month: 1) when sea levels rise and submerge an island nation, ipso facto, the nation is lost forever.<sup>1</sup> 2) Who are the major perpetrators of global warming which led to the demise? 3) Who will provide Compensatory Justice to the sovereign citizens who are now displaced? The PRME Platform encourages JHBC faculty and students to engage in classroom and research discussions on this issue.*

### OCEANS, SEAS AND COASTAL REGIONS OF SMALL ISLAND



**NATIONS** are an integral and vital part of the Earth's ecosystem and are critical to sustainable development. These islands cover more than two-thirds of the earth's surface. Sea level rise for small island nations is one of the most dramatic and concrete effects of **global warming and climate change.**<sup>2</sup>



With the disappearance of their land mass, the sovereign nations, with all their human rights, privileges and obligations also disappear. Climate change, caused primarily by wealthy nations, creates harms for poorer ones. This document examines the rise of sea levels and its impacts on Pacific island nations. (Image above Left: Waeth.com; Images Above Right: ABC; Ahram online)

**SEA LEVEL UP-SURGES:** The sea level rises for three reasons. First, there is the “**thermal expansion**” of water—and as the ocean warms it takes up more space. Second, the melting of glaciers and polar ice caps, has overtaken thermal expansion as the primary cause of

<sup>1</sup> PBS, World (2022) “Amid Rising Seas Island Nations Push for Legal Protection”.

<sup>2</sup> “**Climate change**” encompasses **global warming**, but differs in that it refers to the broader range of changes that are happening to our planet. These include rising sea levels; shrinking mountain glaciers; accelerating ice melt in Greenland, Antarctica and the Arctic.

rising seas. Third, the melting of the ice sheets on West Antarctica and Greenland, is also speeding sea level rise. Scientists predict that this driver will have the most severe long-term impact. Many small islands with low-lying atolls, are already losing significant amounts of territory due to the rising seas. And because the coastal areas are often the most densely populated regions this loss of territory will have a profound impact on small island. SIDS society and culture. In extreme cases resettling populations, may be a solution of last resort.



(Image Left: World Atlas).

Relocation will not be easy. The publication, *Environment Research Letters* in 2016<sup>3</sup> has shown that relocation poses a particular problem for these societies, who are steeped in **cultural traditions**—which impact all facets of human lives--such as respect for ancestors, and the preservation of grave sites, etc. The “*Rising Nations Heritage Project*,” is a repository for the conservation of the cultural heritage of island nations and their global importance.

The net effect of global warming has induced, in particular, the very existence of the nation of the Solomon Islands.<sup>4</sup> Research shows that here the sea has been rising at a rate three times higher than the global average. These islands of Oceania are known as the “**sinking islands**” of the 21st century. Six islands in the Pacific archipelago of the Solomon Islands completely vanished by 2014. (Image Right: Mapsland.com)



**PROTECTING NATIONAL SOVEREIGNTY:** This is an issue that is a constant topic of discussion for Pacific Island leaders, who see the widespread use of fossil fuels in wealthier nations as an existential threat to poorer countries, such as themselves, and they point to how this has impacted the sovereignty of small island populations. Some directly called out the key polluters responsible for global warming. “*We all know that the People's Republic of China, India - they're major polluters, and the polluter must pay,*” Prime Minister Gaston Browne of Antigua and Barbuda, said: “*I don't think that there's any free pass for any country and I don't say this with any acrimony.*”<sup>5</sup>

<sup>3</sup> Environment Research Letters (2016.)

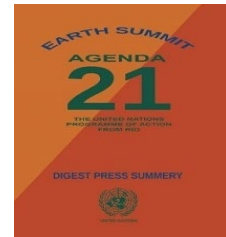
<sup>4</sup> Solomon Islands is an island country consisting of six major islands and over 900 smaller islands in Oceania.

<sup>5</sup> Words from Prime Minister Gaston Browne, speaking on behalf of the Association of Small Island States (AOSIS) negotiating bloc, at the UNCOP 27, Sharm-el-Sheikh, November 2022.



After the U.S., the countries that caused most damage since 1990,<sup>6</sup> are China (\$1.8 trillion), India (\$809 billion). Just the United States and China together caused about one-third of the world’s climate damage. It is known now that human activities have been the principal cause of global warming resulting in the submerging of island nations. (Image: Visual Capitalist).

The United Nations Conference on Environment & Development in Rio de Janeiro, Brazil, in June 1992 created AGENDA 21. Chapter 17—“Protection of the Oceans, and All kinds of Seas.” This document included enclosed and semi-enclosed seas and coastal areas, as well as the rational use and development of their living resources, was approved by the world communities. The agenda set forth rights and obligations of Nation-States and provided the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources. It was reaffirmed in Barbados in 1994 at the first UN Global Conference on Small Islands Developing States (SIDS), and again in Mauritius in 2005 at the second SIDS Conference. (Image: U.N.)



During the UN Rio + 20 Conference in 2012, the “special case” of the small island nations was re-emphasized, and this formed the basis of the call for a Third International Conference on SIDS entitled, “Trends in Sustainable Development - Small Islands Developing States.”

Given the scientific evidence that has been accumulating since the UN Rio de Janeiro Conference in 1992, it begs the questions: *what becomes of the citizens of the region; and what is the responsibility of the global community to the problem many of them have created for SIDS?*

## PREVAILING ETHICS PRINCIPLES RELATED TO SIDS:

**Deontology:** This is the obligations<sup>7</sup> principle (from the Greek *deontos*) which provides us with a lens view the SIDS issue and how to hold people and governments to doing what is morally right. In the case of SIDS it would be finding a way for the international community, and especially the world’s major polluters to compensate SIDS for their actions that created global warming.

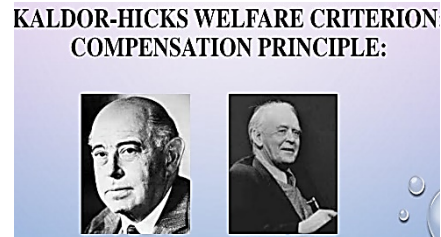


<sup>6</sup> 1990 is the year that nations no longer had a pretext for claiming that they were ignorant of global warming—caused mainly due to their own actions.

<sup>7</sup> Deontology is also called duty and the obligations to do what is morally right based on rules and principles

**Teleology**<sup>8</sup>: Holds that human actions should be judged by their outcomes or goals, rather than by their intrinsic nature or rules. This principle of ethics is the foundation of **utilitarianism** and consequentialism. It provides for the greatest happiness for the greatest number. In the case of SIDS it would be finding a way for the international community, and especially the major polluters to compensate for their actions.

**Kaldor-Hicks Criterion of Justice:** The **compensation principle** as developed by Kaldor and Hicks, has been a theme of debate in welfare economics since 1939. For economists, public agencies and non-profit agencies, a policy/program/project is justifiable in terms of public interest, and contributes to social welfare if the benefits, to whomever they accrue, outweigh the estimated costs.



The **Kaldor-Hicks Principle** is accepted as a variation of the **Pareto Criterion of Justice**. (Pareto efficiency is achieved when it is not possible to make some people better off without making others worse off). The Kaldor-Hicks principle only requires that the net gains from an action are positive. If society as a whole gains and if it is possible to transfer some of the gains the losers, then the project is considered in the interest of the public.<sup>9</sup> In welfare economics, the compensation principle refers to a decision rule used to select between pairs of alternative feasible social states.

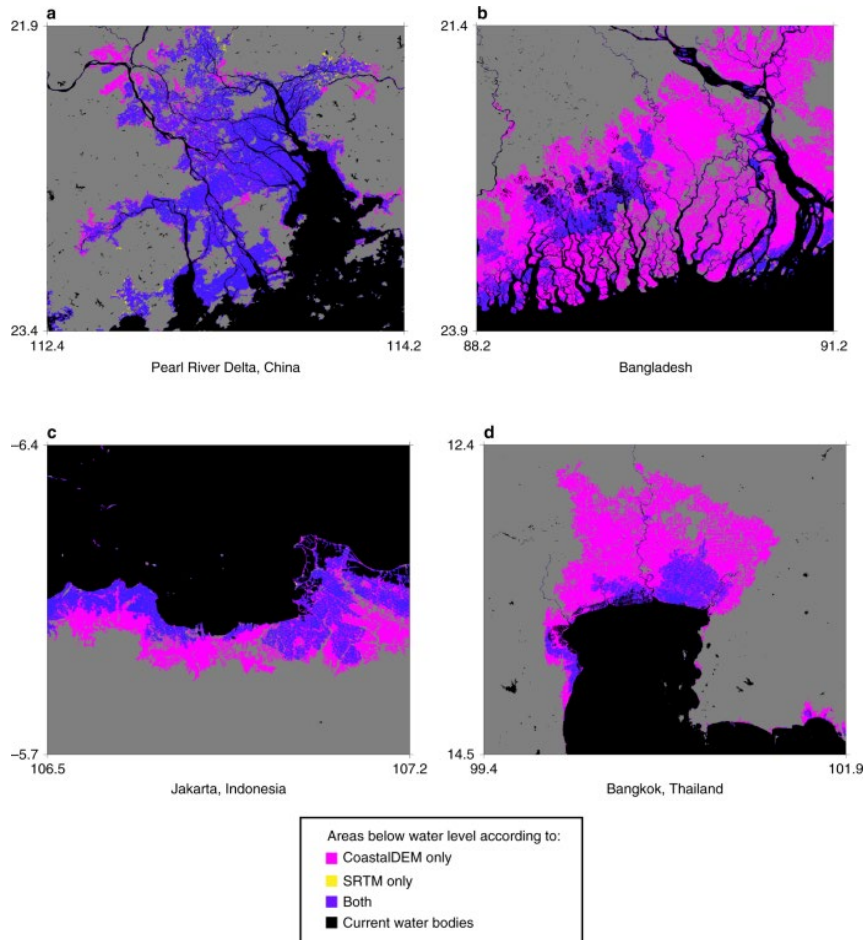
## OTHER SCIENTIFIC DATA & PREDICTIONS ON RISING SEA LEVELS:

As many as 250 million people, spanning all continents, could be "directly affected" by 2100, according to a 2019 study In the journal *Nature Communications* by Kulp and Strauss show new data on triple estimates of global vulnerability to sea-level rise and coastal flooding.<sup>10</sup> Scott and Kulp show the following Figures a,b,c,d:

<sup>8</sup> Teleology comes from the Greek—*telos* which means “end” and *logos* which means science.

<sup>9</sup> Linked to this is Scitovsky’s Paradox (1941): The paradox occurs when the gainer from the change of allocation **A** to allocation **B** can compensate the loser for making the change, but the loser could also then compensate the gainer for going back to the original position.

<sup>10</sup>Kulp, S. and N. Strauss (2019) “New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding,” *Nature Communications*, Vol. 10, Article # 4844.



**VULNERABLE AREAS**

profound impact on SIDS societies and cultures. In extreme cases, SIDS are exploring options in other countries for resettling populations or for bolstering food security threatened by the encroaching salt water.<sup>17</sup>

**THE LAW OF THE SEA:** International law, as reflected in the provisions of the United Nations Convention on the Law of the Sea (1981) referred to in chapter of Agenda 21, sets forth rights and obligations of States and provides the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources.



**Section 17.3.** The coastal area contains varied and valuable areas that are essential for human communities, development and local existence. More than

half the world's populace resides within 60 km of the coastline, and this could escalate ¾'s by 2020. Many of the world's poor are clogged in coastal zones. Coastal assets important for many local inhabitants and native communities. The exclusive economic zone (EEZ) is also a marine asset where the States manage the improvement and protection of environmental resources. people. For small island States or countries, these are the areas most available for development activities.

**Section 17.4.** Despite national, sub regional, regional and global efforts, current approaches to the management of marine and coastal resources have not always proved capable of achieving sustainable development, and coastal resources and the coastal environment are being rapidly degraded and eroded in many parts of the world. 17.5. Coastal States commit themselves integrated management and sustainable development of coastal areas and the marine environment under their national jurisdiction. To this end, it is necessary to, inter alia: a. Provide for an integrated policy and decision-making process, including all involved sectors, to promote compatibility and a balance of uses.

**Section 17.6.** Each coastal State should consider establishing, or where necessary strengthening, appropriate coordinating mechanisms (such as a high-level policy planning body) for integrated management and sustainable development of coastal and marine areas and their resources, at both the local and national levels. Such mechanisms should include consultation, as appropriate, with the academic and private sectors, non-governmental organizations, local communities, resource user groups, and indigenous people.

**THE UN SUSTAINABLE DEVELOPMENT GOAL #14:** SDG #14 is in-tandem with other UN policies on the sea, marine and coastal regions, shown above. Goal #14 states:

*“SDG 14 targets seek to prevent and reduce marine pollution; further the sustainable management and protection of marine and coastal ecosystems; address the impacts of ocean acidification; regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices; conserve coastal and marine areas; increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources; and strengthen the means of implementation, including increasing scientific knowledge, the transfer of marine technology and implementation of international law as reflected in the 1982 United Nations Convention on the Law of the Sea (UNCLOS)”*



Researched, Developed, and Written for the JHBC PRME Platform by Professor Emerita Breena E. Coates, in partial fulfillment of 2012 CSUSB-JHBC obligations to UN-PRME

