

Security Implications of Sea Level Rise: A Bangladesh Perspective

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Climate change is a growing threat to millions of lives, and currently, has become a critical global security concern effecting all states indiscriminately. Climate change poses numerous challenges to the world, including Bangladesh. Climate change can be a slow process that takes a massive toll on our environment, and such a crucial phenomenon can be witnessed in the rising sea level all over the world. Two hundred million lives will be put to risk by 2100, displaced, homeless and sick, all due to the rise in sea level. One hundred and sixty million more people might be affected by a significant rise in the level of flooding caused by sea-level rise. Eight countries in Asia will face most consequences: China, Bangladesh, India, Vietnam, Indonesia, Thailand, Philippines and Japan, all with major coastal cities and habitats, low lands, and some being clusters of islands. Being eighth in the list of most populated countries in the world, Bangladesh is bound to confront issues caused by sea-level rise. Colossal populace combined with a soaring demand for assets can contribute further to the problem. Consistent with prophecies, sea-level rise can reach the highest altitude of 38 inches by 2100 prompting catastrophic consequences for the world.

Due to sea-level rise, many island nations of the world face an exponential threat. Wetlands make the domain of those nations and losing them will eradicate the names of such countries from the world map. Another concern for such nations is whether or not living beings can reside in these nations. Sea-level rise will change the longitudes and latitudes of locations resulting in possibility of maritime boundary disputes. Resetting such boundaries will prompt inefficacy of the United Nations Convention on the Law of the Sea. Exclusive Economic Zones will be at the focal point of contention. Territorial seas and ocean resources will be the basis of dispute between nations.

The sea expanding will lead to disruptions in the lives of millions. Losing livelihood is anticipated to be enormous as practically 45% of the population leads their lives near the coast. Individuals will lose their homes, leaving millions homeless and displaced. Migration will occur within the countries and even past the outskirts causing undesirable demographic characteristics. According to Bangladesh National Strategy Paper on Climate Change, sea-level rise will cause massive internal displacement in the country, resulting in a climate refugee population of 25 million people in Bangladesh alone. Resources are going to be depleted resulting into aggravating tensions between the local communities and migrants. The escalating tensions can further intensify into a conflict causing the breakdown of states. Nations which are as of now undergoing sociopolitical strains will confront drastic challenges for overabundant inflow of migrants. The production process of different varieties of crops will be hampered; subsequently salinisation can likewise hurt the nature of harvests. Various species of marine lives will go extinct for the rising ocean temperatures, and many exotic terrestrial animals will lose their habitat, and might be endangered. Chemical particles and other ingredients of the water will likewise be altered. Rising sea-level will have a huge impact on the overall lifestyle of the sea creatures stemming from their metabolism, life expectancy and rate of growth to their functionality and aquatic system.

As indicated by the Global Climate Risk Index 2020, Bangladesh claimed the seventh spot in the rundown of most vulnerable countries due to extreme weather occasions. Bangladesh was additionally perceived as the third most affected nation as far as being hit by natural disasters. The country has gone through severe cyclones named Amphan, Aila and Sidr being the recent major hits. The nation has additionally observed consistent levels of flood. Historically, drought and tornado likewise had an immense impact upon the nation state. It is a low-lying country which is foreseen to lose a major part of its territory as a result of the sea-level rise. This may lead to huge displacement of people resulting into creation of climate refugees. The direst outcome imaginable would be the vanishing of certain island states, for example, Maldives. Continentally, climate change will for the most part influence East Asia, Middle East and North Africa. Sea-level rise will also have profound impacts on European nations, most strikingly on Netherlands, UK, Germany, Turkey, France and Italy. There is no suspicion on the

incontrovertible fact that the coastal areas will face drastic consequences for the sea-level rise. These areas incorporate world's biggest financial hubs, for instance, London, New York and Mumbai. Consequently, it is probable for the global economy to encounter economic shocks.

Sea-level rise will have a wide-ranging impact on the energy sector. Availability of water gracefully is an unquestionable requirement for operating the nuclear furnaces with no form of intrusion. That is a prime motivation why most of these furnaces are being built close to the coastlines. There will be a hamper in the process of operating the nuclear furnaces due to rising levels of flood. For instance, the Fukushima power station faced critical outcomes as a result of 2011's tsunami. The plant was overflowed with water and accordingly the electricity connection was hindered. Because of this, there was a release of radioactive particles into the water and air. Coastal infrastructures will also be destroyed for the sea-level rise. Magnitude of the impact on port resources, road and rail connectivity and transmission facilities will be immense. With a declining capacity of the coastal states, provision of basic necessities will face obstruction. Along these lines, the states are likely to become more fragile.

Food insecurity may arise as a consequence of the fall in the level of primary agricultural production attributable to the sea-level rise. Saline water intrusion will further question the quality of the leftover agricultural land. Process of irrigation will turn out to be progressively unpredictable on the grounds that salt water is polluted. Forecasted level of output will decline substantially. Considering the floodplains like Mekong and Red River being deluged, rice output will be lessened. The state of security within the country and beyond will be put on thin ice due to food insecurity. Increased saline levels of the water will create alarming scenarios for water security. Melting ice-sheets and glaciers will lead to fresh water disrupting the salt water equilibrium, which will lead to major changes in the sea currents.

In the wake of greater depth of the sea, marine wildlife will be at stake for the subsequent factors: inadequate sunlight, insufficient tidal energy and deficient oxygen. It will have an overwhelming impact on the marine ecosystem and will transform into a

real danger. Saltwater will alter the chemical molecules of soil affecting the lives of coastal plants.

Tourism sector will face pernicious economic impact ascribable to the sea-level rise. The epicentre of such an impression will be the Caribbean nations causing noteworthy losses worth millions of dollars alongside a potential capacity to impact 149 resorts. Value of property in the extravagant beaches will shoot up. There will be no match in the demand and supply of property, which will leave only a few people with access to home. These impacts are possible determinants of social unrest and conflict. Multiple dynamics of such insecurities are likely to make people vulnerable so as to settle on the trail of violence. Middle East saw the unprecedented Arab Spring thanks to the price hikes resulting from the drought in Russia which flared the primary set of protests in Tunisia. Sea-level rise can therefore have wide, unordered and dynamic ramifications. New potential sources of conflict can come to light, most notably for the scarcity of sweet water. If there is an involvement of two nuclear states, the circumstances can deteriorate to an entire new level. Both India and Pakistan had already experienced such a scenario with Indus Water Treaty. Many countries which are susceptible to climate change undergo limitations in the form of weak governance which can aggravate the internal turmoil.

Sea-level rise will have various inescapable implications. It is impossible to alter the nature's course concerned with the sea-level rise, but it cannot be ensured if our human errors and drastic aggression towards nature's equilibrium is not checked. Conclusively, the best course of action to mitigate the consequences of sea-level rise is to adhere to a pragmatic course of action together with the goal of averting the worst case scenario.

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