

Intergovernmental Panel on Climate Change

TOPIC A: Islands disappearing in Indonesia

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INTRODUCTION

The global mean sea level (GMSL) has been increasing rapidly and will continue to do so during the next few years. This, in addition to changes in temperature, wavelength, and air speed, is a direct result of global warming, causing glaciers and ice to melt in the polar regions. Low-lying coastal areas are at greater risk due to their reduced elevation; in the face of natural disasters, these become more vulnerable to experiencing major floods, harsh damage in their general infrastructure and swept away crops near their coasts. Indonesia is one of the countries exposed to this alarming situation.

BACKGROUND RESEARCH

Indonesia is home to more than 273,523,615 people. It is also the world's largest archipelago and has a coastal area of 81,000 kilometers. Most of its islands are not inhabited, but they contain a variety of rich flora and fauna that are scarce in other parts of the world. In 2019, two islands that were part of Sumatra, Betet, and Gundul submerged completely - currently standing 1 and 3 meters below water respectively. One of these islands belonged to a world biosphere declared by UNESCO in 2018, the Berbak-Sembilang National Park where unique species like the Sumatran tiger lived. The sinking of these islands and many others not only impose a threat to rare species and plants, but to the ecosystem and its inhabitants, both human and wildlife.

Coastal areas in Indonesia are highly populated, and most of the people rely on near-shore crops and fishing for a living. Due to the increase in sea level, families are losing their land in islands with little terrain, and they are not able to move their homes further inland for protection, which leaves them exposed to natural disasters. Left without a home or land for agriculture, they have to find somewhere else to live and harvest their crops.

Out of the many islands susceptible for sinking, Jakarta and Sumatra - both megacities, the former serving as the capital of the country - are predicted to disappear entirely by 2050. Jakarta is located in a swampy area, and frequently experiences floods, tsunamis and earthquakes that are becoming increasingly devastating every day; the capital, for example, "...is sinking by an average of 1-15cm a year and almost half the city now sits below sea level" (Lin, 2018). The alarming rate at which the city is submerging has encouraged the current president, Joko Widodo, to announce the moving of the capital to another island. However, "Plans for the new capital city only accommodate 1.5 million of the 10 million people currently living in the capital" (Arsac, 2020). The remaining people will most likely be left to deal on their own with flooding and land subsiding, among many other issues alone.

It's estimated that by 2050, two thousand islands will be gone, and 46 million people will be forced out of their homes (Zikra, 2014). Should there be no significant efforts to address this situation or take action, the sea level will continue to increase and the consequences will be irreversible.

UNITED NATIONS INTERVENTION

During the United Nations Climate Change Conference in Copenhagen that took place in 2009, the UN determined that "The post-industrial age of mass fossil fuel consumption has dramatically accelerated the amount of carbon dioxide (CO2) to dangerous levels, damaging the environment and infrastructure of many SIDS (Small Island Developing States) and other low-lying regions" (Sadat, nd), creating massive tides, flooding, damaged crops, increased disease rates, the inundation of coastal areas, and the loss of freshwater supplies.

Forty-three of the world's smallest islands and low-lying coastal countries forged a coalition called the Alliance of Small Island States (AOSIS), which emphasises the importance of new climate policies that ensure economic growth and sustainable development in all regions of the world. The IPCC has done numerous reports that point out that "A diversity of adaptation responses to coastal impacts and risks have been implemented around the world, but mostly as a reaction to current coastal risk or experienced disasters" (Sadat,2013), meaning that further preventive action should be taken; high-income neighbouring countries should implement tactics in order to reduce their greenhouse gas emissions, joined by affected countries like Indonesia, who should start an emergency plan foreseeing any scenario that may arise in the near future.

POINTS TO CONSIDER

- The limited resources that Indonesia has in order to come up with solutions.
- IPCC only serves as a body that provides information about overall Climate change, and does not act as an organization itself.
- Small communities inside of Indonesia have religious and ancient traditions that attach them to their homelands.
- Plantations and crops will have to be transported to a suitable place in order for them to endure, which is not an easy task.

QUESTIONNAIRE

- A. What is my country's position?
- B. What are my country's policies?
- C. What can my country do to solve this issue?
- D. Which countries can my delegation work with?
- E. What are three possible solutions?
- F. What has been done to solve the problem?

USEFUL LINKS

Indonesia: Rising sea 'threatens 1,500 islands' https://www.bbc.com/news/blogs-news-from-elsewhere-26337723 Rising Sea Levels Force Relocation of Indonesian Capital. <u>https://earth.org/deep-dive-rising-sea-levels-force-relocation-of-indonesian-capital/</u>

Jakarta, the fastest-sinking city in the world. https://www.bbc.com/news/world-asia-44636934

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