# Topic 1: Mitigating the Impact of Climate Change on Small Island Developing States (SIDS) in the Indian Ocean Region

February 29th - March 2nd, 2024

**Kuwait International Model United Nations** 

Written by: Joseph Youssef and Yahya Arafa

# **Table of Contents**

<u>Introduction</u>

Topics of Discussion

**Key Words** 

**Key Actors** 

**Background Information** 

**Timeline** 

**Previous Attempts** 

**Potential Solutions** 

Work Cited

### **Introduction:**

Small island developing nations (SIDS) are struggling with the escalating effects of climate change in the vast territories of the Indian Ocean. scattered over the ocean, these nations are exposed to increasing sea levels, variable weather patterns, and changing ocean currents. Because islands in the Indian Ocean area heavily rely on sectors like tourism, agriculture, and fishing, all of which are closely related to the environment, the economic effects of climate change on these regions are severe. Now that these countries' fragile economic balance is in threat, swift and decisive action is needed to mitigate the consequences and ensure the sustained growth of these island populations.

The effects of climate change on the Indian Ocean Islands are complicated from an economic perspective. Hurricanes and cyclones, which are becoming more regular and severe weather occurrences, pose a direct danger to infrastructure and can cause problems to trade and tourism. Moreover, the expansion of sea levels into coastal regions diminishes the amount of land that may be used for habitation and farming. In order to lessen the economic effects of climate change on small island developing states in the Indian Ocean region, comprehensive strategies to increase resilience, promote sustainable practices, and foster international cooperation are urgently needed. These challenges are compounded by the vulnerability of important economic sectors.

# **Topics of Discussion:**

- Renewable energy transition: dive into the different ways renewable energy could be used.
- Adaptive agriculture practices: sustainable and adaptive agricultural techniques tailored to the specific challenges faced by SIDS in the Indian Ocean
- Costal and infrastructure protection: measures to protect coastal areas and critical infrastructure from the impacts of rising sea levels and extreme weather events.
- Climate resilient tourism: Sustainable tourist practices, with engaging activities.
- International Collaboration and Funding: the importance of global partnerships and financial support for climate change mitigation.

# **Key Words:**

**SIDS:** Small Island Developing States (Bahamas, Marshall Islands, Soloman Islands...)

Climate Change Mitigation: measures and tactics designed to reduce or stop the release of greenhouse gases and other elements that contribute to climate change. Limiting the severity of climate change's effects and promoting environmentally friendly, sustainable behaviors are the main objectives.

**Renewable Energy:** Renewable energy refers to energy derived from natural resources that are continually replenished, such as sunlight, wind, rain, tides, waves, and geothermal heat. The use of renewable energy sources aims to reduce reliance on finite fossil fuels, decrease carbon emissions, and promote sustainable energy practices.

**Adaptive Agriculture:** Using farming techniques that are resistant to the effects of climate change is known as adaptive agriculture. Promote food security in the face of environmental difficulties, this involves the adoption of kinds of crops that can tolerate changing climatic conditions, enhanced water management techniques, and soil conservation approaches.

**Coastal Resilience:** Enhancing coastal regions' capacity to resist and recover from the effects of natural catastrophes and climate change is the main goal of coastal resilience. To lessen exposure to increasing sea levels and extreme weather events involves actions like developing resilient infrastructure, putting nature-based solutions into practice, and involving local people.

**Community Based Approaches:** Community based approaches involve engaging local communities in the design and implementation of climate change mitigation and adaptation strategies. This participatory approach empowers communities to contribute their knowledge, priorities, and resources, fostering a sense of ownership and sustainability in climate action.

### **Key Actors:**

#### Australia

Being a major nation in the Asia-Pacific area, Australia plays a part in helping its surrounding small island nations, especially those in the Indian Ocean, with their resilience plans and climate change activities.

#### Japan

Japan has actively participated in global efforts to combat climate change and has given SIDS financial and technological help. Its participation is essential to the creation of sustainable infrastructure and activities.

#### • France

Reunion and Mayotte are two of France's overseas territories in the Indian Ocean, therefore addressing the effects of climate change is directly in their interest. The French government supports SIDS projects and takes part in international debates.

#### • World Wide Fund for Nature (WWF)

Global conservation group WWF tackles a range of environmental problems, including climate change. It takes part in programs that support biodiversity preservation, climate resilience, and sustainable development in areas like the Indian Ocean. In order to carry out programs that address the effects of climate change on ecosystems and populations in SIDS, WWF frequently works in partnership with regional administrations, local communities, and other stakeholders. The organization's emphasis on research, advocacy, and practical initiatives helps with larger efforts to minimize the effects of and adapt to the effects of climate change in vulnerable areas such as the Indian Ocean SIDS.

### **Background Information:**

For the Small Island Developing States (SIDS) throughout the Indian Ocean, climate change is causing major problems. These nations are more exposed to the adverse effects of climate change since they are made up of small islands surrounded by huge oceans. Their very survival is in danger due to rising sea levels, stronger storms, and erratic weather patterns. These nations depend heavily on the Indian Ocean for their survival, especially in industries like tourism, agriculture, and fishing.

These island nations are experiencing severe disruptions due to climate change. It is becoming more difficult for people to live there and raise food because of the increasing water levels that are submerging portions of their property. Coastal communities face threats to not just their housing stock but also their crucial infrastructure. The increased frequency and intensity of storms, such as hurricanes, and cyclones, which may damage houses and other significant structures, offer a constant concern. Significant economic sectors are impacted by this, such as tourism, where people may get discouraged by uncertain weather.

On the topic of effectively managing the consequences of climate change on SIDS in the Indian Ocean these challenges, and discussions are still ongoing. Global debates focus on moving toward more sustainable renewable energy sources, such as solar and wind power, in an attempt to lower harmful emissions. Appropriate farming methods are being researched to preserve food security in the face of changing climates. Strategies for protecting sensitive places from the approaching sea are being studied. Crucially, international cooperation is becoming more and more important, with nations cooperating to exchange information, offer support, and come up with solutions as a group to enable small island countries to adapt to and prosper from climate change.

In addition, the difficulties Small Island Developing States in the Indian Ocean face go beyond direct environmental consequences. These countries' natural environments are tightly integrated into their economic structures. A community's ability to support itself is indirectly impacted by agricultural disruptions, which also have an impact on local food production. When natural attractions are threatened or when severe weather occurrences deter tourists, the tourism sector—which is a significant source of earnings for many of these islands—suffers. There is an urgent need for comprehensive programs that not only address immediate environmental problems but also promote sustainable economic growth as these countries struggle with the complex effects of climate change.

### Timeline:

**Dec. 26, 2004:** The Indian Ocean tsunami serves as a stark reminder of the vulnerability of coastal areas, prompting increased attention to the resilience needs of small island nations in the region.

**2007**: The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) is released, offering scientific proof of the effects of climate change. During global climate talks, small island states in the Indian Ocean area highlight their particular difficulties.

**Dec. 2015:** Little island nations push for high goals and more funding for adaptation and mitigation initiatives, and the Paris Agreement is ratified.

**June 2017:** The "Oceans Conference," organized by the UN, aims to address issues that tiny island nations confront, such as the effects of climate change on the seas and coastal regions.

**Sept. 2019**: Climate change is receiving more attention thanks to the UN Climate Action Summit. Small island states emphasize how urgent their circumstances are and need greater international collaboration.

**Jan. 2020**: The COVID-19 pandemic affects international agendas, including conversations on climate change. The connection between the health issue and climatic vulnerability is emphasized by small island nations.

**Nov. 2021:** In order to have meaningful climate talks, the 26th UN Conference of the Parties (COP26) is necessary. Small island states want more concrete help and greater pledges to climate resilience and adaptation.

**Jan. 2023** Ongoing efforts focus on the implementation of climate resilience projects in small island nations in the Indian Ocean. Progress is tracked, and international partnerships continue to evolve to address the unique challenges posed by climate change in these regions.

# **Previous Attempts:**

- 1. A key incident that brought attention to the vulnerability of coastal communities was **the Indian**Ocean tsunami that happened in December 2004, which was a response to the growing issues that Small Island Developing States (SIDS) faced in the Indian Ocean. This incident marked a turning point in global discourse on the resilience demands placed on small island states. The incident brought attention to this issue.
- 2. The Paris Agreement's approval in December of 2015 was an important moment in the year. Small island states strongly promoted aggressive climate goals and more funding for attempts to mitigate the effects of climate change. In addition to addressing the particular difficulties faced by SIDS in the Indian Ocean, the agreement demonstrated a worldwide commitment to preventing global warming.
- 3. Representatives from small island authorities in the Indian Ocean gathered in Mauritius in 2016 for a historic gathering hosted by the Alliance of Small Island States (AOSIS). The countries debated and created a regional strategy to lessen the effects of climate change during the summit. The occasion highlighted the value of regional unity and collaboration in tackling the common issues these island countries encounter.

### **Potential Solutions:**

- 1. Blue economy development
- 2. Integrated water resource management
- 3. Community led climate adaptation initiatives

- 4. International climate finance
- 5. Eco tourism promotion
- 6. **Renewable energy transition**: The shift to renewable energy involves less reliance on fossil fuels and more use of wind and solar electricity.
- 7. Climate resilient agriculture: agricultural methods that are resilient to shifting weather trends.
- 8. **Coastal protection and nature based defenses:** Constructing solid structures beside coasts and integrating protections derived from nature, including restoring mangroves and safeguarding coral reefs

### **Work Cited:**

UNFCC. "Small Island Developing States - UNFCCC." *Climate Change Small Island Developing States*, unfccc.int/resource/docs/publications/cc\_sids.pdf. Accessed 26 Jan. 2024.

library, the commonwealth. "Climate Change and Small Island Developing States." Climate Change and Small Island Developing States\*,

www.thecommonwealth-ilibrary.org/index.php/comsec/catalog/download/254/251/1891?inl ine=1. Accessed 26 Jan. 2024.

library, the commonwealth. "Climate Change and Small Island Developing States." Climate Change and Small Island Developing States\*,

www.thecommonwealth-ilibrary.org/index.php/comsec/catalog/download/254/251/1891?inl ine=1. Accessed 26 Jan. 2024.