



Email: info@imuna.org

Phone: +1 (212) 652-9992

Web: www.nhsmun.nyc

Secretary-General Terry Wang

**Director-General** Jordan Baker

Delegate Experience Nastasja Vásquez

Global Partnerships
Daniela Maciel
Sebastian Jimenez

Under-Secretaries-General
Nachiketh Anand
Alina Castillo
Seonghyun Chang
Naina Dhawan
Ximena Faz
Kellie Fernandez
Grace Harb
Adiva Ara Khan
Anshul Magal
Analucia Tello
Sofia Velasco
Renata Venzor Dear Delegates,

I am very excited to welcome you to NHSMUN 2024! This year marks the 51st conference of NHSMUN, over half a century of education through simulation for delegates worldwide. My name is Mackenzie Boilard, and I am this year's Session 1 Director of the United Nations Educational, Scientific and Cultural Organization (UNESCO)! This background guide marks months of research, and I cannot be more excited to see your own hard work come to fruition in March.

I am in my fourth year of involvement in Model United Nations. Previously, I have been a delegate for UNHRC and SOCHUM. Last year, I served as the Assistant Director for UNTOC. MUN conferences have allowed me to find some of my closest friends and explore relevant world issues that I otherwise may not know about. Through researching the topics in this guide, allow yourself to view perspectives different from your own. In my opinion, being open to new or contrasting perspectives is a great way to engage with any topic, and to fully understand your own perspective. Take full advantage of this conference to challenge your own assumptions and learn as much as you can!

I currently study at the University of Alberta, pursuing my degree in Environmental Economics and Policy. Although I am from Canada, I have had the opportunity to live in both Barbados and Trinidad and Tobago. Each of these Small Island Developing States has helped to shape me into the person that I am today. The love I have for these islands and the impacts of climate change that I have witnessed firsthand inspired Topic A. From living and traveling in the area, I have developed a passion for marine conservation, especially through my love for scuba diving and surfing! I love to travel and am always looking to learn about new perspectives and hearing stories. Along with this, I have had opportunities to work with diplomatic missions across the Caribbean in different capacities. This work only deepened my love for MUN and all the good that can come from participation in conferences like NHSMUN!

Mariana and I hope to make this year memorable for everyone involved, especially for you, the delegates. Even if your assigned country does not directly feel the burden of issues described in this guide, I challenge you to find a way that it is indirectly affected. Outcomes from your research can make a big difference on the quality of life for many. NHSMUN takes pride in our quality of research, and outcomes, so please take full advantage. If you have any questions, comments, or concerns, I am more than happy to chat. Please feel free to reach out to Mariana and me for clarification. I cannot wait to see all your hard work!

Mackenzie Boilard

United Nations Educational, Scientific, and Cultural Organization Director

Session I

nhsmun.unesco@imuna.org





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Sofia Velasco
Renata Venzor Dear Delegates,

My name is Mariana Rodríguez, and I will be your Session II director for the United Nations Educational, Scientific and Cultural Organization (UNESCO) in NHSMUN 2025! I am thrilled to meet you all in March and have the most enhancing experience possible.

I have been part of Model United Nations for what will soon become 10 years and am very happy to continue this trajectory with NHSMUN being a director for the second year in a row. Back in 2015, I entered my first of what would become many MUNs. I can still recall the feeling of pulling up to my school in what felt like a very formal dress with my position paper in a folder and many confusing feelings (excitement). Even after many years, this feeling never goes away when participating in another Model United Nations.

I am currently a law student at Universidad de Monterrey and have been working as Assistant Investigator at my university's Institute of Human Rights and Business for over a year now, all because of the Model United Nations. Alongside being an investigator, I currently also work in the legal department of a multinational record label as an intern, growing a deep understanding of how culture is represented through music and the diversity and reach cultural music has.

The topics for future discussion (Topic A "Fostering Climate Resilience in Small Island Developing States" and Topic B "Sustainability within Cultural Events") have been thoroughly chosen and worked on for your debate by my Co-Director Mackenzie Boilard, for whom I am very grateful, and myself. These topics have had big impacts around the world and need to be approached with the best of intentions.

In this background guide you will find information that will help you with the research of the topic regarding your country's relation to the topic. When investigating, I would like for you to go beyond your normal limits of searching but be careful with the information you choose. Think smart. I would also recommend, when making your proposals, to envision the impact your proposal would make if being carried out. Think of the method of execution, and most importantly, think with inclusion.

I look forward to meeting with you soon, but most importantly hearing from you in NHSMUN. I hope these next few months will be in your favor for preparations regarding your work. If in need of help or doubts regarding the topics, committee, session or NHSMUN in general, Mackenzie and I will be more than happy to assist you!

See you in March!

Mariana Rodríguez

United Nations Educational, Scientific, and Cultural Organization Director

Session II

nhsmun.unesco@imuna.org





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#### A Note on the NHSMUN Difference

Esteemed Faculty and Delegates,

Welcome to NHSMUN 2025! We are Terry Wang and Jordan Baker, and we are this year's Secretary-General and Director-General. Thank you for choosing to attend NHSMUN, the world's largest and most diverse Model United Nations conference for secondary school students. We are thrilled to welcome you to New York City in March.

As a space for collaboration, consensus, and compromise, NHSMUN strives to transform today's brightest thinkers, speakers, and collaborators into tomorrow's leaders. Our organization provides a uniquely tailored experience for all through innovative and accessible programming. We believe that an emphasis on education through simulation is paramount to the Model UN experience, and this idea permeates throughout numerous aspects of the conference:

Realism and accuracy: Although a perfect simulation of the UN is never possible, we believe that one of the core educational responsibilities of MUN conferences is to educate students about how the UN System works. Each NHSMUN committee is a simulation of a real deliberative body so that delegates can research what their country has said in the committee. Our topics are chosen from the issues currently on the agenda of that committee (except historical committees, which take topics from the appropriate time period). We also strive to invite real UN, NGO, and field experts into each committee through our committee speakers program. Moreover, we arrange meetings between students and the actual UN Permanent Mission of the country they are representing. Our delegates have the incredible opportunity to conduct first-hand research, asking thought-provoking questions to current UN representatives and experts in their respective fields of study. These exclusive resources are only available due to IMUNA's formal association with the United Nations Department of Global Communications and consultative status with the Economic and Social Council. No other conference goes so far to deeply immerse students into the UN System.

Educational emphasis, even for awards: At the heart of NHSMUN lies education and compromise. Part of what makes NHSMUN so special is its diverse delegate base. As such, when NHSMUN distributes awards, we strongly de-emphasize their importance in comparison to the educational value of Model UN as an activity. NHSMUN seeks to reward students who excel in the arts of compromise and diplomacy. More importantly, we seek to develop an environment in which delegates can employ their critical thought processes and share ideas with their counterparts from around the world. Given our delegates' plurality of perspectives and experiences, we center our programming around the values of diplomacy and teamwork. In particular, our daises look for and promote constructive leadership that strives towards consensus, as real ambassadors do in the United Nations.

Debate founded on strong knowledge and accessibility: With knowledgeable staff members and delegates from over 70 countries, NHSMUN can facilitate an enriching experience reliant on substantively rigorous debate. To ensure this high quality of debate, our staff members produce detailed, accessible, and comprehensive topic guides (like the one below) to prepare delegates for the nuances inherent in each global issue. This process takes over six months, during which the Directors who lead our committees develop their topics with the valuable input of expert contributors. Because these topics are always changing and evolving, NHSMUN also produces update papers intended to bridge the gap of time between when the background guides are published and when committee starts in March. As such, this guide is designed to be a launching point from which delegates should delve further into their topics. The detailed knowledge that our Directors provide in this background guide through diligent research aims to increase critical thinking within delegates at NHSMUN.

**Extremely engaged staff:** At NHSMUN, our staffers care deeply about delegates' experiences and what they take away from their time at NHSMUN. Before the conference, our Directors and Assistant Directors are trained rigorously through hours of workshops and exercises both virtual and in-person to provide the best conference experience possible. At the conference,

delegates will have the opportunity to meet their dais members prior to the first committee session, where they may engage oneon-one to discuss their committees and topics. Our Directors and Assistant Directors are trained and empowered to be experts on their topics and they are always available to rapidly answer any questions delegates may have prior to the conference. Our Directors and Assistant Directors read every position paper submitted to NHSMUN and provide thoughtful comments on those submitted by the feedback deadline. Our staff aims not only to tailor the committee experience to delegates' reflections and research but also to facilitate an environment where all delegates' thoughts can be heard.

Empowering participation: The UN relies on the voices of all of its member states to create resolutions most likely to make a meaningful impact on the world. That is our philosophy at NHSMUN too. We believe that to properly delve into an issue and produce fruitful debate, it is crucial to focus the entire energy and attention of the room on the topic at hand. Our Rules of Procedure and our staff focus on making every voice in the committee heard, regardless of each delegate's country assignment or skill level. Additionally, unlike many other conferences, we also emphasize delegate participation after the conference. MUN delegates are well researched and aware of the UN's priorities, and they can serve as the vanguard for action on the Sustainable Development Goals (SDGs). Therefore, we are proud to connect students with other action-oriented organizations to encourage further work on the topics.

<u>Focused committee time:</u> We feel strongly that face-to-face interpersonal connections during debate are critical to producing superior committee experiences and allow for the free flow of ideas. Ensuring policies based on equality and inclusion is one way in which NHSMUN guarantees that every delegate has an equal opportunity to succeed in committee. In order to allow communication and collaboration to be maximized during committee, we have a very dedicated administrative team who work throughout the conference to type up, format, and print draft resolutions and working papers.

As always, we welcome any questions or concerns about the substantive program at NHSMUN 2025 and would be happy to discuss NHSMUN pedagogy with faculty or delegates.

Delegates, it is our sincerest hope that your time at NHSMUN will be thought-provoking and stimulating. NHSMUN is an incredible time to learn, grow, and embrace new opportunities. We look forward to seeing you work both as students and global citizens at the conference.

Best,

Terry Wang Jordan Baker Secretary-General Director-General

## A Note on Research and Preparation

Delegate research and preparation is a critical element of attending NHSMUN and enjoying the debate experience. We have provided this Background Guide to introduce the topics that will be discussed in your committee. We encourage and expect each of you to critically explore the selected topics and be able to identify and analyze their intricacies upon arrival to NHSMUN in March.

The task of preparing for the conference can be challenging, but to assist delegates, we have updated our <u>Beginner Delegate</u> <u>Guide</u> and <u>Advanced Delegate Guide</u>. In particular, these guides contain more detailed instructions on how to prepare a position paper and excellent sources that delegates can use for research. Use these resources to your advantage. They can help transform a sometimes overwhelming task into what it should be: an engaging, interesting, and rewarding experience.

To accurately represent a country, delegates must be able to articulate its policies. Accordingly, NHSMUN requires each delegation (the one or two delegates representing a country in a committee) to write a position paper for each topic on the committee's agenda. In delegations with two students, we strongly encourage each student to research each topic to ensure that they are prepared to debate no matter which topic is selected first. More information about how to write and format position papers can be found in the NHSMUN Research Guide. To summarize, position papers should be structured into three sections:

**I: Topic Background** – This section should describe the history of the topic as it would be described by the delegate's country. Delegates do not need to give an exhaustive account of the topic, but rather focus on the details that are most important to the delegation's policy and proposed solutions.

**II: Country Policy** – This section should discuss the delegation's policy regarding the topic. Each paper should state the policy in plain terms and include the relevant statements, statistics, and research that support the effectiveness of the policy. Comparisons with other global issues are also appropriate here.

**III. Proposed Solutions** – This section should detail the delegation's proposed solutions to address the topic. Descriptions of each solution should be thorough. Each idea should clearly connect to the specific problem it aims to solve and identify potential obstacles to implementation and how they can be avoided. The solution should be a natural extension of the country's policy.

Each topic's position paper should be **no more than 10 pages** long double-spaced with standard margins and font size. **We recommend 3–5 pages per topic as a suitable length.** The paper must be written from the perspective of your assigned country and should articulate the policies you will espouse at the conference.

Each delegation is responsible for sending a copy of its papers to their committee Directors via <a href="myDais">myDais</a> on or before **February** 21, 2025. If a delegate wishes to receive detailed feedback from the committee's dais, a position must be submitted on or before **January 31, 2025**. The papers received by this earlier deadline will be reviewed by the dais of each committee and returned prior to your arrival at the conference.

Complete instructions for how to submit position papers will be sent to faculty advisers via email. If delegations are unable to submit their position papers on time, please contact us at <a href="mailto:info@imuna.org">info@imuna.org</a>.

## **Committee History**

The idea of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) was outlined in a constitution signed on November 16, 1945 and implemented in 1946. Since then, the organization has focused on maintaining peace and intercultural dialogue through the promotion of education, science, and culture.<sup>2</sup> After World War II, UNESCO's original goals included the reestablishment of schools as well as other hubs for education and art that were demolished.<sup>3</sup> As of July 2024, there are 194 member states and 12 associate members (the latter are members that can participate and propose but without voting rights<sup>4</sup>) within UNESCO, and the course of action of the committee is decided upon each country's singular vote.<sup>5</sup> There are many offices located worldwide and its headquarters is stationed in Paris, France.<sup>6</sup> Today, UNESCO strives to achieve the Sustainable Development Goals through the promotion of inclusivity, quality education, protection of the environment, and understanding the ethical usage of technology.7 UNESCO Member States and Associate Members meet once every two years to set a budget for the committee and elect members of leadership. Alongside them are the observers for non-Member States, as well as inter and non-governmental organizations.8 UNESCO is guided by its Constitution and regulations from the General Conference in which the Executive Board receives specific tasks. Further, the Director-General and their staff fall under the Secretariat and Executive Branch of UNESCO.9

UNESCO has set many guidelines, campaigns, conventions, and declarations.<sup>10</sup> These initiatives have fostered a widespread understanding of diverse cultures, environmental concerns, and the need for education throughout the world.<sup>11</sup> Major accomplishments from UNESCO include; The Man and the Biosphere (Mab) Programme of 1971, The Convention Concerning the Protection of the World Cultural and Natural Heritage in 1972, and The Convention for Safeguarding of the Intangible Cultural Heritage of 2003. UNESCO acts through three main instruments: conventions, recommendations and declarations. Through conventions, the States undertake commitments under international law that are only binding when ratified.<sup>12</sup> Recommendations consist of principles and norms that have significant authority since they intend to shape other national laws. However, this instrument is not binding in any way; rather, it is required for the Member States to submit them to their competent authorities. Finally, declarations are a non-binding but a formal instrument for specific occasions when long lasting principles want to be established.<sup>13</sup> UNESCO's mandate has restrictions in terms of the law-making process as it can only recommend and encourage rather than enforce and implement binding agreements. 14 Nonetheless, these limitations do not prevent the impact that the organization has at a worldwide rate. UNESCO's mission is clear; through education, science, and culture, peace and global understanding can be achieved.

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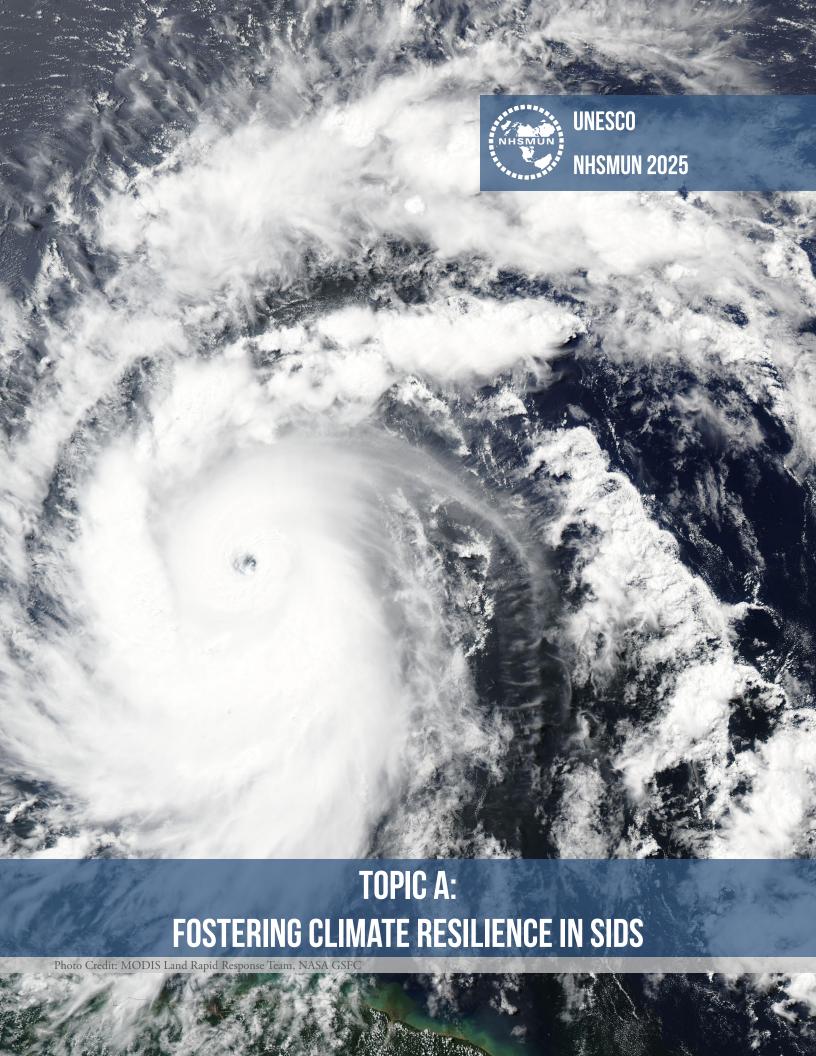
2 UNESCO. n.d. "75 years of history in the service of peace." UNESCO. Accessed September 29, 2024. https://www.unesco.org/en/75th-

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UNESCO. "UNESCO's standard-setting. An Overview." UNESCO. last modified June 19, 2024. https://www.unesco.org/en/legal-affairs/standard-setting/overview.</sup> 

affairs/standard-setting/overview.

13 UNESCO. "UNESCO's standard-setting. An Overview."

14 UNESCO "UNESCO's standard-setting. An Overview."



#### Introduction

By 2017, over one million people living in Small Island Developing States (SIDS) were already threatened by sea level rise. 1 The loss of land and livelihoods at risk because of climate change disproportionately affects SIDS. Small Islands Developing States (SIDS) are a group of island states that face distinct vulnerabilities based on social, economic, and environmental challenges.<sup>2</sup> These challenges affect millions of people across the Atlantic, Pacific, and Indian oceans.<sup>3</sup> SIDS were originally recognized at the 1992 Earth Summit.<sup>4</sup> Years later, the UN Partnerships and Toolbox for SIDS was released.<sup>5</sup> This toolbox was meant to encourage self-sufficiency within SIDS. Global efforts for the preservation of SIDS are not new, but the imminent risks posed by climate change are.

Burning fossil fuels have caused an acceleration in global warming. Global warming leads to higher sea temperatures, which can cause rising sea levels and more intense storms. In the ocean, climate change is impacting coral reefs, water temperatures, quality of drinking water, and melting ice caps further north are contributing to rising sea levels. These issues cause further damage through the erosion of shorelines, high tides polluting fresh water, and damaging infrastructure built along coasts.6 SIDS often take the burden of these effects. Because of this, their disaster mortality rate is nearly double the world's average.7 This is a direct indicator of several challenges. One key issue is a lack of emergency preparedness. Emergency preparedness can be grouped into several categories of vulnerability including economic preparedness and proper infrastructure. Properly building resilience to climate change in SIDS means addressing all of these factors.

UNESCO views climate change as a threat to global heritage, access to education, and scientific development across the world.8 International cooperation is necessary to mitigate these issues. What sets UNESCO apart from other organizations working for the improvement of SIDS is how it specifically values cultural heritage and intangible values. The value of cultural heritage globally can often be overlooked, especially in times of crisis. However, preserving cultural integrity is increasingly important.

SIDS are home to 35 World Heritage Sites.9 This is a testament to the richness of culture in SIDS and the need to protect this culture. The World Heritage Sites have created many economic opportunities through tourism across SIDS. Unfortunately, climate change is very destructive to tourism, causing problems for SIDS relying on the industry. Drop-in economic activity further prohibits SIDS from developing proper infrastructure to protect against climate disasters.

SIDS are no stranger to the effects of climate change and are often forced to choose between their environment, health, and economy. This decision can often lead to intense social ills and political tension.

To protect SIDS, UNESCO must create diverse solutions. Only by collaborating across developed and developing countries and uplifting the voices of those most at risk, is resilience possible.

2 Small Island Developing States (SIDS) UNER, accessed August 31, 2024, https://www.unep.org/topics/occair-scas-and-coasts/small island-developing-states.

3 UNEP, "Small Island Developing States (SIDS)."

4 "UNCED, Earth Summit: Sustainable Development Knowledge Platform," UN Department of Economic and Social Affairs, 2022, https://sustainabledevelopment.un.org/milestones/unced.

5 UN Department of Economic and Social Affairs, "UNCED, Earth Summit: Sustainable Development Knowledge Platform."

6 "Sea Level Rise Risks and Societal Adaptation in Low Lying Coastal Areas" Scientific Journal, June 23, 2022 https://doi.org/10.1038/e41598\_072\_14303\_w s41598-022-14303-w.

7 "Disaster Risk Reduction in Action- Small Island Developing States," UN Office for Disaster Risk Reduction, accessed August 31, 2024, https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/small-island-developing-states#.

8 "Small Island Developing States - Taking Stock, Looking Forward," UNESCO, accessed August 31, 2024, https://www.unesco.org/en/

sids.
9 "World Heritage Programme for Small Island Developing States (SIDS)" UNESCO, accessed August 31, 2024, https://whc.unesco.org/ en/sids/.

Teven at 1.5°C Warming, Small Island Developing States Risk Flooding From Sea Level Rise" European Commission Joint Research Center, December 5, 2023, https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/even-15degc-warming-small-island-developing-states-risk-flooding-sea-level-rise-2023-12-05\_en.

2 "Small Island Developing States (SIDS)" UNEP, accessed August 31, 2024, https://www.unep.org/topics/ocean-seas-and-coasts/small-

## **History and Description of the Issue**

#### **UN Actions for Small Island Developing States**

Geographically, island states are masses of land surrounded by water, sitting directly at or slightly above sea level. 10 SIDS are generally distinguished from other island states by their growing populations and small-scale economies. These factors make SIDS face unique challenges that most of the world does not.11 They have made SIDS extra sensitive to the damages of climate change including rising sea levels, warmer water, and unpredictable weather patterns.<sup>12</sup> For almost three decades, the UN has been working to improve the state of SIDS.

SIDS were first recognized at the 1992 Earth Summit.<sup>13</sup> Two years later, the UN adopted the Barbados Programme of Action (BPOA). The BPOA is a 14-point plan that lists priorities and actions to support SIDS. This list includes capacity building, resource development, and regional cooperation. It set out goals for short, medium, and long-term development on both regional and international levels to support sustainable development in SIDS. The program also highlighted major setbacks to the development of SIDS.14Some notable setbacks are that their small size and isolation prevents large economic growth and creates reliance on international trade. Additionally, high population density causes resources like freshwater to be more limited. However, after the BPOA was adopted, there was still limited action taken to properly support SIDS.

In 2005, the UN finished its 10-year review of the BPOA during the Mauritius International Meeting. During the meeting, the UN adopted the Mauritius Strategy (MSI) to support the

BPOA. This strategy established 19 new development goals for SIDS. These goals focused on sustainable production, culture, knowledge, management, and trade.<sup>15</sup> In 2010, the UN conducted a follow up 5-year review of the MSI focused on SIDS located in the Pacific. The review process found that the vulnerabilities continued to exist, but much progress had been made to implement the MSI.<sup>16</sup> Some successes included increased production of renewable energy and decreased reliance on fossil fuels. An example of a conservation initiative inspired by the MSI is the Micronesia Challenge. It was started in 2006 by the Federated States of Micronesia, Palau, the Marshall Islands, Guam, and the Northern Marianas Islands. The SIDS agreed to collaborate to conserve at least 30 percent of marine resources and 20 percent of terrestrial resources on the islands. Seeing success over the last 20 years, the challenge has set new targets for 2030.17

In 2014, the UN held the third conference on SIDS.<sup>18</sup> From this conference, the SAMOA Pathway was created and the UN dedicated 2014 to the year of SIDS. This pathway expanded the mandate of the United Nations Office of the High Representative for Least Developed Countries (UN OHRLLS) to include SIDS. The change acknowledged that SIDS belonged within Least Developed Countries. It recognized the significance of rising sea levels, and the urgent action needed to protect SIDS against climate change. It also released a stakeholder partnership program and framework meant to track the development of SIDS. This plan was reviewed in the September 2019 High-Level Midterm Review at the UN Headquarters in New York City.

Through this review, some key areas were identified as needing more attention. These include social inclusion, health

Threats to Small Island Developing States (SIDS) - Vulnerable Coastlines – WJEC - GCSE Geography Revision - WJEC - BBC Bitesize, BBC Bitesize, January 16, 2018), https://www.bbc.co.uk/bitesize/guides/z3qhxfr/revision/2.

11 "Small Island Developing States | Department of Economic and Social Affairs," Un.org, 2021, https://sdgs.un.org/topics/small-island-

<sup>11 &</sup>quot;Small Island Developing States | Department of Economic and Social Affairs," Un.org, 2021, https://sdgs.un.org/topics/small-island developing-states#description.
12 "Threats to Small Island Developing States (SIDS)", January 16 2018
13 "UNCED, Earth Summit: Sustainable Development Knowledge Platform," UN Department of Economic and Social Affairs, 2022, https://sustainabledevelopment.un.org/milestones/unced.
14 "BPOA (1994) - Barbados Programme of Action, Sustainable Development Knowledge Platform," Un.org, 2022, https://sustainabledevelopment.un.org/conferences/bpoa1994.
15 "MSI (2005): Mauritius Strategy of Implementation ... Sustainable Development Knowledge Platform," Un.org, 2022, https://sustainabledevelopment.un.org/conferences/msi2005.
16 UN Department of Economic and Social Affairs "Five-Year Review of the Mauritius Strategy for the Further Implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States: Pacific High-level Dialogue PORT VILA OUTCOME STATEMENT" Committee of Sustainable Development, 2010, https://www.un.org/esa/dsd/resources/res\_pdfs/csd-18/csd18 2010 bp10.pdf. 18/csd18\_2010\_bp10.pdf.
17 "Our Challenge," Micronesia Challenge, accessed October 13, 2024, https://www.mc2030.org/.
18 United Nations, "Small Island Developing States."

technology, and data collection.<sup>19</sup> The review found that Pacific regions performed well, having the highest number of registered partnerships, and the largest increase since 2014.<sup>20</sup> A major focal point of SIDS in the Pacific and Atlantic/Indian Ocean regions were partnerships for marine conservation and climate change. SIDS the Caribbean focused more on sustainable economic development and energy.<sup>21</sup>

Currently, the SIDS are supported by 3 main organizations: The Caribbean Community (CARICOM), The Pacific Islands Forum (PIF), and The Indian Ocean Commission (IOC).<sup>22</sup> These agencies are intergovernmental, meaning they are a product of collaboration between state leaders and ministers. All these organizations have non-SIDS that are also heavily involved. This helps in the development and support of more at-risk states. Intergovernmental organizations are good for SIDS, as they help support between islands and help stimulate economies through trade agreements.

To measure the development of SIDS, the UN created the multidimensional vulnerability index (MVI). The MVI is meant to identify a country's main sources of vulnerability and help it develop strategies to build resilience.<sup>23</sup> This index uses quantitative data that can be measured easily. By keeping the index simple, it helps countries that fall within the MVI map out a path for growth. The MVI uses 3 main categories of the Sustainable Development Goals (SDGs); Economic, Environmental, and Social. Countries are measured within each of these sections, and compared with their income group, as assigned by the World Bank.<sup>24</sup> Through this process, the MVI has become a fair measure of development among SIDS and other developing states. It breaks down state rankings into nine different charts, each highlighting a different aspect of sustainable development and resilience. On average, the score for SIDS is 56.2, which is much higher than the non-SIDS less developed countries that fall at 48.7.25 This increase in score is based on factors like cost of living, income disparity, poverty levels, and international cooperation. <sup>26</sup> This is why the MVI is important to highlight the vulnerability of SIDS and act as tangible proof of their risks.

By aligning the needs of SIDS with UNESCO's mission, the committee can have a large impact on improving the state of SIDs. Overall, a combination of vulnerabilities leaves SIDS at a greater risk of the impacts of climate change. Building resilience requires a diverse approach and tools to solve underlying issues within impacted communities. By working to address a variety of factors that impact SIDS, there is an opportunity to create long-lasting solutions for an urgent problem that impacts millions of people.

#### **Tourism and Economic Diversification**

Because of SIDS' location, many of them are gifted with stunning beaches, clear waters and fascinating marine life that garners tourism from around the world. This allows foreign companies to invest in property development and build infrastructure to host large amounts of visitors. Because of this, many SIDS have built their economies based on tourism. The industry becomes a main source of income and employment, bringing about 30 percent of SIDS Gross Domestic Products (GDP). In some states like the Maldives and Grenada, tourism makes up as much as 50 percent of the GDP.27 This is a delicate means of income, since any event that deters tourism will negatively impact the island. A drop in income that may seem small to some countries, can have

Mid-Term Review of the SAMOA Pathway High Level Political Declaration, "Progress, Gaps and Challenges" Un.org, 2019, https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/08/SAMOA-MTR-FINAL.pdf.

Ola Goransson, Marjo Vierros, Camilla Borrevik "Partnerships for Small Island Developing States" United Nations Department of Economic and Social Affairs (April 2019).

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"MVI - Preliminary Country Scores | Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States," Un.org, 2024, https://www.un.org/ohrlls/content/mvi-preliminary-country-scores.

Wilkinson, Emily, Vikrant Panwar, "Why Small Island Nations Need a Multidimensional Vulnerability Index," ODI: Think change, November 16, 2023, https://odi.org/en/insights/small-island-nations-need-a-multidimensional-vulnerability-index/.

"Why the Multi Vulnerability Index Matters" Un.org, 2022 https://www.un.org/en/desa/why-multidimensional-vulnerability-index-mvi-matters.

mvi-matters.

27 "Impact of COVID-19 on Tourism in Small Island Developing States," UNCTAD, April 24, 2020, https://unctad.org/news/impact-covid-19-tourism-small-island-developing-states.

massive negative impacts on SIDS. In addition, due to their geographic isolation and small-size, SIDS must import many of their goods. There is a clear need for SIDS to diversify their economy to promote economic growth and become more resilient to global changes.

A major example of how economically vulnerable SIDS are is the COVID-19 pandemic. Because travel was restricted, the pandemic caused a 20 to 30 percent decline in tourism across SIDS.<sup>28</sup> It is estimated that SIDS lost USD 90 billion in tourism export revenues from 2020 to 2022.29 Furthermore, worldwide economic turmoil caused export prices to drop drastically. 57 percent of SIDS are considered "exportcommodity-dependent."30 This means that these countries rely heavily on income from exporting commodities (raw materials or agricultural products such as ores or seafood). For instance, seafood accounts for almost three-fourths of all exports in Cabo Verde, Kiribati, Maldives, Micronesia, and Tuvalu.<sup>31</sup> When global commodity prices dropped, so did the incomes of many SIDS.

Beyond COVID-19, climate change is presenting a large economic threat to SIDS. UNCTAD has estimated that climate-based damage to the Caribbean alone is worth USD 12.6 Billion per year.<sup>32</sup> Despite being responsible for a tiny fraction of global carbon emissions, UN pledged funding only designates USD one point five out of 100 billion in climate financing.33 Based on this, SIDS are not only underfunded for disaster relief, but also for preparedness. Building resilience requires preparedness, and recovery plans. SIDS are lacking on both ends and need change to build a stronger future. A strong, adaptable economy is necessary to consider when building resilience on the frontlines of climate change.

However, reliance on tourism often prevents the economy from growing.

The United Nations Environmental Program (UNEP) predicts that only 5 percent of money spent in a developing country stays in the host community.<sup>34</sup> This is what is commonly referred to as 'Tourism Leakage', a concept where most money invested into communities in need ends up in the pockets of foreign investors and developers outside of the country. This is especially troubling in SIDS, where that money is the only income for many people. Use of transnational hotel chains, cruise companies and travel agencies, are examples where tourists are paying a foreign company to travel to a certain country. This means that SIDS are not reaping the full benefits of a tourist industry. Side effects of being a popular destination include price inflation for profits, and overcrowding. If money spent by these tourists is not kept within the community, locals are forced to put up with inflated, unsustainable costs of living, and overcrowded spaces, whilst feeling very minimal benefits.35

In the Maldives, the cost of living has risen two to three percent each year on top of inflation.<sup>36</sup> Overtourisim and business competition has increased the prices of food, gas, and other necessities. Unfortunately, wages have not increased to compensate for these increases. An inflated cost of living without increased wages to match only adds to the vulnerability of the local population. This puts more money into the pockets of international forces, and acts as a barricade towards resilience on several fronts. By having money exchanged within a state kept internationally, tax collection is difficult. The main purpose of taxes is for governments to invest in welfare, infrastructure, and social services.<sup>37</sup> If a government

<sup>Katherine R. Jackson, "Small Island Developing States: Looking Past the COVID-19 Pandemic," Harvard International Review, July 25, 2022, https://hir.harvard.edu/small-island-developing-states-covid19/.
Jackson, "Small Island Developing States."
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"Climate Finance for SIDS Is Shockingly Low: Why This Needs to Change," UNCTAD, May 24, 2022, https://unctad.org/news/blog-climate-finance-sids-shockingly-low-why-needs-change.
UNCTAD "Climate Finance for SIDS is Shockingly Low: Why This Needs to Change" Unctad, 2022 https://unctad.org/news/blog-climate-finance-sids-shockingly-low-why-needs-change.</sup> 

climate-finance-sids-shockingly-low-why-needs-change
34 UNEP "Tourism towards a green economy: Pathway to Sustainable Development and Poverty Eradication" (November 2011) https://www.researchgate.net/publication/306107494\_Tourism\_in\_UNEP\_2011\_Towards\_a\_Green\_Economy\_Pathways\_to\_Sustainable\_Development\_and\_Poverty\_Eradication
35 Stuart Kenney, "What is Tourism Leakage and How Does It Impact Travel?" Muchbetteradventures, 2023 https://www.muchbetteradventures.com/magazine/tourism-leakage/.
36 "CONSUMER PRICE INDEX MALDIVES," January 2024 https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/03/CPI-Annual-2023 pdf

Annual-2023.pdf

<sup>37</sup> Reuven Avi-Yonah, "The Three Goals of Taxation the Three Goals of Taxation," 2006, https://repository.law.umich.edu/cgi/

is unable to fund these, societal tensions are bound to erupt.

Reliance on tourism can also create risks for cultural landmarks within SIDS. This is because large amounts of human activity can degrade the local environment and culture.<sup>38</sup> For example, construction of resorts can permanently damage fragile sand dunes and coral reefs.<sup>39</sup> Additionally, waste created by tourism is difficult to get rid of on isolated islands, causing harm to local habitats. 40 Complete rejection of tourism is not necessarily better. Instead, UNESCO focuses on supporting sustainability and cultural development alongside tourism.

Sustainable tourism is a concept to advance the tourism industry while protecting the natural and cultural environment. UNESCO has worked on promoting biodiversity, encouraging respect to host cultures, and ensuring viable, fair payment for services. 41 The Pacific Sustainable Tourism Policy Framework was published in 2021 to provide steps for Pacific countries, including SIDS, to develop sustainable tourism.<sup>42</sup> Some of its recommendations are to use more renewable energy and improve waste management. Partnerships are also crucial to promoting sustainable tourism. In 2014, the UN partnered with several NGOS to promote sustainable travel as an engine of longevity within SIDS. Some of these included The Global Travel Association Coalition, and National Geographic. These partnerships focused primarily on the cruise industry and introduced a new system to promote sustainable tourism globally. The Certificate of Sustainable Tourism (CST) became a voluntary commitment to support the SDGS.<sup>43</sup> This certificate may be granted to states that are recognized for promoting sustainability within their tourism sector. However, because it is voluntary, motivation to earn this certificate is low. More needs to be done to bolster sustainable tourism

within SIDS.

UN Trade and Development (UNCTAD) believes that SIDS need about 5.5 billion US dollars in extra funds to offset already existing damages done by climate change to the tourism industry and relieve their debts. Currently, the only funds available to protect SIDS come from the Catastrophe Relief Containment Trust (CCRT)<sup>44</sup> The trust provides grants to countries that are in debt and have been hit by natural disasters. To qualify for this trust, the natural disaster must impact at least one third of the population, or cause damage exceeding 100 percent of the GDP of the state.<sup>45</sup> It was established in 2015 after the Ebola outbreak and adapted in March of 2020 in response to the global pandemic. This system alone is not significant enough to protect all assets and make up for damages caused by natural disasters. The criteria to qualify for debt relief are subjective and the fund only holds roughly USD one billion from donors. It falls short of what is necessary to offset the pre-existing and incoming damage from the disaster. If sea levels continue to rise as projected, the International Monetary Fund (IMF) is not currently equipped to provide enough grants to support the extent of these issues.46 A shortage in funding creates challenges for SIDS ability to rebuild after natural disasters. Because fundraising to repair damages will take substantial time, the quality and preparation needed for an intense hurricane season is made very difficult.

Despite these challenges, there are opportunities for economic diversification. The Exclusive Economic Zone (EEZ) of SIDS, or the ocean in their control, is on average almost 30 times larger than the mass of the island(s).<sup>47</sup> The EEZ is an area beyond the territorial sea of a state where they are still able

viewcontent.cgi?article=1039&context=articles.
38 "What is Sustainable Tourism?" GSTC, 2018 https://www.gstcouncil.org/what-is-sustainable-tourism/.
39 Yujie Sun, et al., "Tourism in Small Developing States," SSRN (December 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4634270.

<sup>40</sup> Yujie Sun, et al., "Tourism in Small Developing States."
41 UNTWO, "Sustainable Development," accessed August 25, 2024, https://www.unwto.org/sustainable-development.
42 Yujie Sun, et al., "Tourism in Small Developing States."
43 "SIDS GBN - Thematic Areas - Sustainable Tourism | Office of the High Representative for the Least Developed Countries,
Landlocked Developing Countries and Small Island Developing States," Un.org, 2014, https://www.un.org/ohrlls/sids-gbn-thematic-areas-

Landlocked Developing Countries and Small Island Developing States, Cli.org, 2011, https://www.imf.org/en/About/Factsheets/Sheets/2023/44 "Impact of COVID-19 on Tourism in Small Island Developing States"
45 "Catastrophe Containment and Relief Trust (CCRT)," IMF, March 15, 2023, https://www.imf.org/en/About/Factsheets/Sheets/2023/Catastrophe-containment-relief-trust-CCRT.
46 "Catastrophe Containment and Relief Trust (CCRT)," IMF
47 United Nations, "About Small Island Developing States (SIDS)."

to control movement and activity. It extends 200 nautical miles from the shore.<sup>48</sup> This means that the amount of marine resources SIDS have is often larger than inland. This could be an opportunity for development and self sufficiency. Some potential avenues for growth are research and development in fishing and aquaculture. UNCTAD suggests that SIDS take advantage of their large EEZs and invest in growing industries like subsea mining, water desalination, renewable energy, and marine genetics.<sup>49</sup> however many SIDS lack the power to maintain a large enough coastguard. Because of this, their territory for fishing can often be exploited by more developed states, removing a source of food and income. <sup>50</sup>

### **World Heritage Programme for SIDS**

World Heritage Sites and Biosphere Reserves serve as important locations for scientific observation and help to raise awareness of the impact of climate change on their sites. Unfortunately, World Heritage Sites are often threatened by overtourism and unsustainable practices. Protecting these areas are important to promote local biodiversity and stimulate the local economy. UNESCO's World Heritage Programme is designed to promote conservation and management practices on designated sites. In 2005, the World Heritage Committee adopted a World Heritage Programme for SIDS.<sup>51</sup> There are 35 World Heritage Sites in the 39 SIDS that are UNESCO member states.<sup>52</sup> This plan put SIDS as a focal point for UNESCO. It breaks down regional action plans, and roadmaps to develop world heritage activities for SIDS. It also lists out a set of priorities

for the development of SIDS for cultural heritage based on the SAMOA Pathway.<sup>53</sup>

Natural heritage is the natural resources and biodiversity that make up a landscape. It includes ecosystems, plants, animals, and the geology of the land, all which impact human communities living in the area.<sup>54</sup> SIDS are all made up of either coral, seamounts, or volcanic bases.<sup>55</sup> Therefore, a large part of their natural heritage is based on underwater heritage, fossils, and adaptations to heat. However, the natural heritage of these islands is at risk because of climate change. Aggressive storms and warm water is shortening the lifespan of underwater plants and animals. They also cause losses of arable land. Arable land is the amount of land that has the capacity to grow plants and agriculture.<sup>56</sup> Cultural heritage is the inherited values and beliefs by a community or individual.<sup>57</sup> Natural and cultural heritage are heavily interconnected. Protecting one can protect the other. World Heritage Sites are a key part of connecting culture and sustainable development. The protection of these sites promotes intercultural dialogue. Increasing understanding of different cultures across the globe can lead to more international collaboration. For sustainable development, this collaboration can stimulate support between states to help with the oncoming climate crisis and help develop areas at risk.<sup>58</sup>

In 2022, UNESCO released a three-year project to protect living heritage in SIDS.<sup>59</sup> Living heritage is also sometimes called intangible cultural heritage. It is inherited, and then passed on through generations, often adapting to environmental

57 "The Concept and History of Cultural Heritage" Ceu.edu, 2024 https://culturalheritagestudies.ceu.edu/concept-and-history-culturalheritage

<sup>48</sup> United Nations Convention on the Law of the Sea, "Preamble Part V; Exclusive Economic Zone" Un.org, 2024 https://www.un.org/

<sup>48</sup> United Nations Convention on the Law of the Sea, "Preamble Part V; Exclusive Economic Zone" Un.org, 2024 https://www.un.org/depts/los/convention\_agreements/texts/unclos/part5.htm
49 Jackson, "Small Island Developing States."
50 Jim Leape, "How to End Illegal Fishing in the Pacific Ocean," World Economic Forum, November 12, 2019, https://www.weforum.org/agenda/2019/11/illegal-fishing-pacific-ocean-apec/.
51 World Heritage Convention "World Heritage Convention for SIDS" Unesco, 2018 https://whc.unesco.org/en/sids/
52 UNESCO, "World Heritage Programme for SIDS" Unesco.org, 2018 https://whc.unesco.org/en/sids/.
53 UNESCO "SIDS - Culture," Unesco.org, 2023, https://www.unesco.org/en/sids/culture?hub=394.
54 Woodland Trust "Natural and Cultural Heritage" (2015) 2-5 https://www.woodlandtrust.org.uk/media/1772/wood-wise-natural-and-cultural-heritage pdf

cultural-heritage.pdf
55 Britannica, "Geomorphology | Landforms, Processes, Erosion | Britannica," Encyclopædia Britannica, 2024, https://www.britannica.com/science/

geomorphology.

56 Sharissa Anderson, "The Difference Between Arable Land and Marginal Land, and how Cattle Use Each" UC Davis Clear Center, January 17 2023, https://clear.ucdavis.edu/toexplainers/cattle-and-land-use-differences-between-arable-land-and-marginal-land-and-howcattle-use.

heritage
58 Mitja Bervar "Importance of Culture for Sustainable Development," Managing Global Transitions 17, no. 3 (September 30, 2019) 197200, https://doi.org/10.26493/1854-6935.17.195-209.
59 UNESCO "Launch of a three-year project for safeguarding living heritage during emergencies in Small Island Developing States (SIDS)
In the Pacific and the Caribbean" Unesco Intangible Cultural Heritage, April 2022 https://ich.unesco.org/en/news/launch-of-a-three-yearproject-for-safeguarding-living-heritage-during-emergencies-in-small-island-developing-states-sids-in-the-pacific-and-the-caribbean-13395

changes.<sup>60</sup> This took a capacity building approach to solving the problem, aiming to encourage tolerance and incorporate living heritage into risk reduction. This means that the plan considered the loss of culture to be a pressing issue. The meeting focused on five main states: Belize, the Bahamas, Fiji, Tonga and Vanuatu. These SIDS each represent different regions and cultural values, contributing to valuable dialogue on this topic. Some main goals that came out of this event focused on preventing the commercialization of culture, and intersectional cooperation.<sup>61</sup> However, both goals stayed vague, and needed development to be properly executed.

The World Heritage Programme also recommends that states include risk preparedness in their plans for heritage sites. They encourage public security plans, warning systems, and widely available emergency supplies.<sup>62</sup> This can look like developed infrastructure, and planned escape routes on sites. Despite this, most sites worldwide do not have management, or

risk preparedness plans in place. This is very dangerous for the future of SIDS, and their cultural heritage. As climate change worsens, these sites are at risk of being destroyed if not properly looked after. So far, two properties have been identified on the list of World Heritage in Danger: Nal Majol in the Federated State of Micronesia and East Renell in the Solomon Islands.<sup>63</sup> With this, 13 have been looked at under the state of conservation initiative.<sup>64</sup> In total, that is 16 out of 35 world heritage sites in SIDS that are at a high risk of climate change-based destruction. World Heritage Sites within SIDS represent a vast part of history. These sites range from indigenous stories to scientific discovery and nuclear testing during times of conflict.65

In 2011, the Trinidad and Tobago National Commission submitted La Brea Pitch Lake for inclusion in the World Heritage List. The lake is the largest natural reserve of asphalt in the world at over 70 meters deep.66 The site is one of few

60 UNESCO "Living Heritage and Education" The Convention for the Safeguarding of Intangible Cultural Heritage, 2019 https://ich.unesco.org/doc/src/46212-EN.pdf
61 UNESCO "Decision of the Intergovernmental Committee: 18.COM 12," Unesco.org, 2024, https://ich.unesco.org/en/decisions/18.

COM/12.

COM/12.
62 UNESCO, "Caribbean Capacity Building Programme for World Heritage; Module 3, Risk Preparedness" Un.org 2006 https://whc. unesco.org/uploads/activities/documents/activity-475-7.pdf
63 UNESCO World Heritage Convention, "List of World Heritage in Danger." Unesco.org, 2024 https://whc.unesco.org/en/danger/
64 UNESCO "SIDS Capacity Building" Centre Du Patrimoine Mondial, 2018 https://whc.unesco.org/fr/activites/902/.
65 Anita Smith, "World Heritage in Small Island Developing States: Culture as the Fourth Pillar of Sustainable Development,"
ResearchGate (February 2013), 11 (PDF) World heritage in small island developing states: culture as the fourth pillar of sustainable

66 UNESCO World Heritage Site "La Brea Pitch Lake for World Travellers" Unesco.org, 2023 https://www.worldheritagesite.org/ tentative/id/5645.



tourist attractions in Trinidad in comparison to other islands in the region. Pitch Lake is also significant to indigenous culture in Trinidad and Tobago, considered sacred amongst some groups.<sup>67</sup> Unfortunately, the site is also a point of contention amongst the local population. In 2013, through the "Belt and Road Initiative", a government funded Chinese construction company was granted the long-term rights to this site. Meaning that any profits from the lake that would be going to Trinidadians are now going externally. The asphalt is also available to buy online in Chinese markets. This is controversial for the local population, as many people believe that the income from this lake should be benefiting locals, and not expatriates. 68 Within UNESCO, this disparity is a point of debate over if the site should be accepted as an official World Heritage Site or kept tentative.<sup>69</sup> Global politics are keeping this site from being officially protected. This is the case for many sites across SIDS, where a need for economic growth is suppressing cultural value. This relationship exists in many SIDS and can present issues of autonomy when boundaries are not well established or overstepped.

This is an example of the development of SIDS being progressed for the benefit of other countries. In the long term, it is not sustainable and fails to properly equip the islands to stand alone in the face of climate change. Foreign aid can be very good for SIDS, but also risks having the opposite effects. If done in excess, it can kill local industry, and trap SIDS into dependency.<sup>70</sup> In many cases, this can deepen corruption in governance by supporting unfair practices. By connection, heritage and culture in these states is at risk, and cannot properly develop. Overall, World Heritage in SIDS is a key focal point for UNESCO. The changing nature of each location, especially as climate change worsens should be considered, and current actions should be revised when

building solutions.

Strong regional collaboration between the Caribbean is a pillar of the Caribbean identity. The shared culture and history between islands are a testament to their strong cultural heritage.<sup>71</sup> UNESCO recognizes this strength, and the importance of preserving this through the World Heritage Programme.<sup>72</sup> Shared identity between islands and a betterrounded sense of community can help to foster long term resilience between SIDS. Through collaboration, the islands are better equipped to recover from disasters inflicted by climate change. This intangible culture is an important part of economic resilience in the face of climate change. As disasters make some parts of the Caribbean less desirable, the richness of culture can help to preserve some income.<sup>73</sup>

### **Education and Youth Engagement**

In May 2024 the Fourth International Conference on SIDS took place in Antigua and Barbuda. This conference saw high level meetings with delegations from across the world. A new focal point within this conference was the SIDS Youth Summit. Following the theme "Small Islands, Big Dreams: Youth for Resilience", it aimed to empower youth to address pressing issues within SIDS.74 The conference saw youth consultations and negotiations, finishing with an important call to action declaration. This call to action aimed to put youth at the forefront of policy making in relation to climate change.<sup>75</sup> Throughout sessions, the sharing of knowledge and youth advocacy was discussed. Young people oversaw the discussion of topics being held throughout the conference. This was massive progress towards youth engagement, where youth not only had a seat at the table but played a key role. The sessions oversaw four key topics: resilient recovery, safe and prosperous, secure future, and environmental integrity

UNESCO "La Brea Pitch Lake - UNESCO World Heritage Centre," Unesco.org, 2018, https://whc.unesco.org/en/tentativelists/5645/. Melanie Waithe, "China Belts TT" Trinidad and Tobago Newsday, June 21, 2018, https://newsday.co.tt/2018/06/21/china-belts-tt/. UNESCO "La Brea Pitch Lake - UNESCO World Heritage Centre"

"Foreign Aid Pros and Cons" The World Counts, 2024 https://www.theworldcounts.com/challenges/trade-and-poverty/foreign-aid-

<sup>70 &</sup>quot;Foreign Aid Pros and Cons" The World Counts, 2024 https://www.theworldcounts.com/challenges/trade-and-poverty/foreign-aid-pros-and-cons
71 Ralph R Premdas, "Ethnicity and Identity in the Caribbean; Decentering a Myth" Helen Kellog Institute for International Studies,
Working Paper 234, 1996 https://kellogg.nd.edu/sites/default/files/old\_files/documents/234.pdf
72 "UNESCO Study Identifies Cultural Resources in the Caribbean" Transcultura, 2023 https://www.unesco.org/en/articles/unesco-study-identifies-cultural-resources-caribbean-boost-sustainable-tourism
73 "UNESCO Study Identifies Cultural Resources in the Caribbean"
74 SIDS Youth Action Summit, "Revised Concept Note" Sdgs.un.org, May 2024 https://sdgs.un.org/sites/default/files/2024-05/SIDS%20
Youth%20Action%20Summit%20-%20Revised%20Concept%20note%20May%202024.pdf
75 SIDS Youth Action Summit, "Revised Concept Note"

and planetary sustainability.76 Each of these are important points of development within SIDS and build off the progress from past summits.

Access to education is constantly displaced within populations most impacted by climate change. This can look like forced evacuation, school closures, and limited funding towards education. In many cases, schools are used as emergency shelters during climate disasters. If a school is well built, it can serve as a shelter for the surrounding community in times of need. This disrupts the continuity of education during the aftermath of extreme weather.<sup>77</sup> Along with this, access to technology acts as a barricade for many students within SIDS. With a high cost of living, the option of being able to learn remotely, or from home is very difficult. This is because of access to the internet in some remote areas, and the cost of technology. The UN Agency for Digital Technologies (ITU) found that as of 2023, only 43 percent of people in SIDS have access to 4G signals.78 Meaning that in the event of climate emergencies forcing evacuation, school is forced to a halt for students across several regions of the world.

In the case of forced migration because of an island becoming unlivable, the scale of access to quality education drastically. The UN High Commissioner for Refugees (UNHRC) has recognized climate change as a root cause of displacement.<sup>79</sup> International protection entitlement rules are still limited for climate change refugees, and do not currently grant the same rights as human rights-based refugees in many states. This means that immediate access to education is not guaranteed. UNESCO has recognized patterns of how education has been affected within regions of the world impacted by climate change. The first way in which it is affected is when it directly destroys schools and learning materials.80 High levels of flooding that come with major tropical storms put materials within schools at risk. Along with this, school buildings that are not resistant to extreme weather become unusable for many months of the year.<sup>81</sup> The destruction of school and materials needed for learning directly affects students. Damage done to schools can offset education for weeks or months. A higher frequency of climate disasters will only extend this.

It is also important to consider that using schools as emergency shelters prevent the continuation of education.<sup>82</sup> Physical damage to infrastructure in SIDS is a barricade to education. If the school can withstand the forces of the event, it may be used as an emergency shelter. In the Pacific, circular displacement is common.83 Circular displacement is the moving around of communities seasonally with weather patterns. Some professionals have suggested adopting this as a permanent strategy as climate change worsens. However, this can have consequences for education.<sup>84</sup> The mental toll of forcing children to adapt to new learning environments is large. Adapting between environments for learning, especially in times of climate devastation. Many regions have noticed a sharp incline in dropout rates related to this pattern.85 Granted that access to online learning is limited in many SIDS, continuing education during these pauses is an ongoing

<sup>76</sup> SIDS Youth Action Summit "Key Summit Activities" sidsyouthsummit.com, 2024 https://sidsyouthsummit.com/
77 UNU, "Climate Change Displacement and the Right to Education in Small Island Developing States" Policy Brief no. 43. United Nations Institute for the Advanced Study Of Sustainability, Pages 2-8, 2023 https://unu.edu/sites/default/files/2023-10/UNU-IAS-PB-

Angela Smith, "Data Report Tracks SIDS Connectivity Success and Challenges" Itu.int, March 2024, https://www.itu.int/hub/2024/03/data-report-tracks-sids-connectivity-successes-and-challenges/.

79 UNHCR, "Climate Change and Displacement," UNHCR.org, 2024, https://www.unhcr.org/what-we-do/build-better-futures/climate-change-and-

displacement.

80 UNESCO "How Climate Change and Displacement Affect the Right to Education" Unesco.org, 2022 https://www.unesco.org/en/right-education/climate-change-displacement.

81 UNDP "Climate Change and Human Development; Towards Building a Resilient Climate Nation" Zimbabwe Human Development Report, 2017. https://www.undp.org/sites/g/files/zskgke326/files/migration/zw/UNDP\_ZW\_2017ZHDR\_Briefs---Climate-Change-and-

Report, 2017. https://www.undp.org/sites/g/files/zskgke326/files/migration/zw/UNDP\_ZW\_2017ZHDR\_Briefs---Climate-Change-and-Education.pdf
82 UNESCO "How Climate Change and Displacement Affect the Right to Education"
83 UNESCO, "The Impact of Climate Change on the Right to Education." Working Paper, Unesco.org 2020 https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef\_0000374966&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach\_import\_63e9f9b1-e0d7-47db-90ee-758c3230147f93F\_%3D374966eng.pdf&locale=en&multi=true&ark=/ark:/48223/pf0000374966/PDF/374966eng.pdf#870\_20%20Working%20Paper%20-%20climate%20displacement\_int.indd%3A.151880%3A1091
84 Adele Thomas, Lisa Benjamin "Policies and mechanisms to address climate-induced migration and displacement in Pacific and Caribbean small island developing states" Emerald Publishing, September 2017 (Pages 88-104) https://www.sciencedirect.com/org/science/article/pii/S1756869217000102#sec002
85 Brendan Chen, "What Climate Change Means for Schools and Students" Housing Matters, 2023, https://housingmatters.urban.org/articles/what-climate-change-means-schools-and-students

concern.

As climate disasters lead to more poverty, this creates even more barriers to education.86 In the Asia-Pacific region, climate change has been found to exacerbate pre-existing inequalities for education. For example, families in lower income areas are often more likely to live in areas at high risk for disaster. 87 This means that often, recovery from disasters is more difficult. In situations of poverty, education tends to be prioritized less. Instead, emphasis will be placed on work and helping families to recover from disaster. Girls and women, people with disabilities, rural communities and the financially disadvantaged are also highly affected.<sup>88</sup> In many SIDS, these factors are on the lower end of priorities for development. Unfortunately, the impacts of climate change make this worse. In some cases, hard situations can force social development backwards.<sup>89</sup> Access to education for the financially disadvantaged has been an issue globally for a long

time. As poverty worsens, communities are forced to prioritize survival and can often lead to education being neglected. In many developing states, children are made to leave school at a younger age to work and support their families. A higher dropout rate leads to lower levels of literacy across the state.<sup>90</sup> Climate change exacerbated poverty will only increase this issue and can lead to many others.

As climate destroys livelihoods, much of economic migration is climate-driven displacement.<sup>91</sup> Within SIDS, common economic losses from climate change involve mostly agricultural and touristic jobs. Each of these drives most of the population's income, and do not require high levels of education to pursue. 92 When climate change takes away many of these opportunities, people are forced to move to find new work. Unfortunately, language barriers and other issues can force refugees to work lower skilled, lower paying jobs. Manual labor, like farm and factory work are common. 93 This

minancially disadvantaged has been an issue globally for a long Manual labor, like farm and factory work are common."

Manual labor, like farm and factory work are common. Inis Work and Climate Change and Displacement Affect the Right to Education. Brendan Chen, "What Climate Change Means for Schools and Students"

Brendan Chen, "What Climate Change Means for Schools and Students"

WUNESCO "New UNESCO study highlights impact of climate change on the right to education in Asia-Pacific region" Unesco.org, May 16 2023, https://www.unesco.org/en/articles/new-unesco-study-highlights-impact-climate-change-right-education-asia-pacific-region Oxfam, "Climate Change and Inequality" Oxfam America, 2024 https://www.oxfamamerica.org/explore/issues/climate-action/climate-change-and-inequality/

Ocaitlin Prentice, Francis Vergunst, Helen Louise Berry, Kelton Minor. "How Climate Change is Badly Affecting Children's Education." Alliance for Science, April 2024 https://allianceforscience.org/blog/2024/04/how-climate-change-is-badly-affecting-childrens-education/

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Mike Scott, "Climate Change; Implications for Employment" University of Cambridge, May 2014 https://www.cisl.cam.ac.uk/system/files/documents/IPCC%20AR5\_Employment\_Briefing\_WEB\_EN.pdf

Michael Clemens, Ethan Lewis, "THE EFFECT OF LOW-SKILL IMMIGRATION RESTRICTIONS ON US FIRMS AND WORKERS: EVIDENCE FROM A RANDOMIZED LOTTERY" Working Paper 30589, NBER, 2024, https://www.nber.org/system/files/working\_papers/w30589/w30589.pdf

Primary school in Antigua, Antigua and Barbuda



type of economic migration is largely influenced by climate change. This is due to the cause of a lack of job opportunities being a result of climate change.

UNESCO Youth Ambassador Tyesha Emmanuel participated in the fourth SIDS conference. She is a representative of the youth advisory group for Barbados and the eastern Caribbean. Her and her team pushed for further attention to be placed into addressing food insecurity within SIDS. Along with this, attention should be placed on debt relief and mitigating the long-term impacts of the Covid-19 pandemic. This includes sing debt, and social fallouts. Finally, she noticed a strong push for protecting education globally. From her experience at the conference, young world leaders from SIDS showed a strong level of collaboration and innovation. This is a positive step forward in the realm of youth engagement. Motivated young people are the future, and incorporation of their ideas is important. Through her work as an advisor, she was able to push the importance of education for building climate resilience.94

Another event in the conference focused on higher education. The Higher Education Sustainability Initiative (HESI) aims to integrate sustainability into education. They accomplish this by partnering with several UN, and postsecondary institutions. Specifically, this event focused on seven key features within SIDS that needed development. (1) Enhancing collaborative research initiatives. (2) Fostering partnerships within higher education institutions in SIDS. (3) Strengthening the sciencepolicy interface to support the implementation of the Antigua and Barbuda Agenda for SIDS (ABAS). (4) Promoting teaching and curriculum development for sustainable development within SIDS. (5) Providing capacity building to higher education institutions. (6) Advocating for increased investments for higher education initiatives in SIDS and mobilizing resources to support sustainability projects in the region. (7) Advocating for mobility through staff sharing.

95 Each feature is focused on the long-term development within SIDS, especially postsecondary education and access to higher education. The importance of this access cannot be overstated and is a key feature to the long-term development and economic growth of SIDS.

Each of these have different applications within SIDS, focusing on quality and accessibility to higher education. As it stands, most SIDS suffer with a concept known as 'Brain Drain'. This is when a state sees a significant level of emigration of highly educated individuals. This usually happens because of more favorable opportunities in other states. 96 SIDS are more likely to experience this because of their small population and other vulnerabilities. Each of which contribute to a lack of upward mobility, and minimal postsecondary opportunities. Because of this, many university-aged students who leave to pursue higher education will stay abroad. In the Caribbean, brain drain can impact as much as 74.9 percent of the population, and 50.8 percent in the pacific region. On average across all SIDS, this number is 42.4 percent. 97 This is problematic because it can dampen development. Climate change will only worsen this issue, as it begins to destroy infrastructure and take away more opportunities. The gaps left behind by professionals who leave can often be hard to fill. This is especially true in highly educated fields of work, like doctors and lawyers. This goes hand in hand with youth engagement, as SIDS may begin to see their skilled youth populations seeking other states for more opportunities.

The educational challenges caused by climate change is a growing issue in SIDS. To properly foster climate resilience, the negative effects on education must be addressed. Long term growth connects directly to education. Youth empowerment is a key asset to resilience in SIDS.

## **Incoming Climate Disasters Preparedness**

Over the past 50 years, SIDS are predicted to have lost USD

<sup>94</sup> UNESCO "#SIDS4YOUTH: Tyesha, Leading the Caribbean into a Sustainable Future." Unesco.org, 2024 https://www.unesco.org/en/articles/sids4-youth-tyeisha-leading-caribbean-sustainable-future
95 UN Department of Economic and Social Affairs, "Enhancing Higher Education for Sustainable Development in Small Island Developing States" Un.org, 2024 https://sdgs.un.org/events/enhancing-higher-education-sustainable-development-small-island-developing-states-55651
96 Julie Young, "Brain Drain; Definition, Causes, Effects and Examples" Investopedia, 2024 https://www.investopedia.com/terms/b/

brain\_drain.asp

97 Michele Beine, Frederic Docquier, Maurice Schiff, "Brain Drain and Its Determinants; an Issue for Small States" Leibniz Center for Economics, 2008 https://www.econstor.eu/bitstream/10419/35103/1/560862032.pdf

150 billion because of climate and water related hazards. 98 As the effects of climate change worsen, the level of preparedness for disaster needs to increase for states to sustain themselves. Currently, the UN Office for Disaster and Risk Reduction (UNDRR) has several partnerships with private and public investments and States. The goal of these partnerships is to build resiliency in governance and business. This plan falls under the Sendai Framework, a plan focusing on the adoption of measures for different areas of disaster risk. Within SIDS, the framework is divided into 4 priorities: understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction, enhancing preparedness for response and building back better. 99 Each of these steps is aligned with the Samoa Pathway. They support a call to action encouraging the maintenance of resilient prosperity. The Samoa Pathway aims to target challenges from SIDS and support their development.<sup>100</sup> From a UN perspective, this call involves political commitments from other states, and support for the implementation of risk reduction measures. Generally, these measures fall into four approaches: mitigation to reduce emissions, adaptation, increasing ability to cope with changes of climate, manipulation of earth systems, and knowledgebased expansion.<sup>101</sup>

Each of these approaches follow broad lines of proactivity. However, specific protocols are dependent on each government. International regulation isn't well developed. Each of these measures are equally important as climate change worsens. Applications to each may appear differently, but they act as guidelines for preparedness. Resilience, in this context, can be determined by a state's ability to properly prepare for incoming disasters, and recovery time. In the best-case scenario, a storm would pass with little to no damage. Power may be lost temporarily, but no lives are put at risk. In a worst-case scenario, preparedness could also involve evacuation plans. If people were to be evicted, they would be considered climate refugees. The concept of a climate refugee is relatively new but increasing in popularity. Currently, people displaced because of climate change are guided through the 1951 Refugee Convention.<sup>102</sup> However, climate refugees are not officially recognized in international law. By UNHCR standards, most people that are displaced because of climate change can stay within their own borders. 103 This leaves the populations of SIDS exposed if they need to seek refuge because of climate change.

Disaster preparedness is defined as the set of measures undertaken in advance to best respond and cope with the aftermath of a disaster. Essentially, reduce the loss of life and livelihoods. 104 On an international stage, this involves supporting other states, advising local governments, and helping to coordinate emergency evacuation. Although there is no uniform plan that will help all people within SIDS on the frontlines of climate change, preparedness is always important.<sup>105</sup> For example, Global Affairs Canada (GAC) has an ongoing program called the Resilience Facility. 106 This plan works to achieve informed climate preparedness and recovery for nine Caribbean islands. Their work includes capacity assessments, a form of qualitative information to measure progress within these islands. UNESCO currently aims to help member states to adapt to climate change and educate for sustainable development in this context. They also work to monitor the impacts of climate change on given areas through world heritage sites and promote low carbon economies. 107 This support helps to foster preparedness through awareness.

UNDRR, "Sendai Framework, UNDRR Focus Area In Action - Small Island Developing States (SIDS)" Undrr.org, 2024 https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/small-island-developing-states
UNDRR, "Sendai Framework, UNDRR Focus Area In Action - Small Island Developing States (SIDS)"
UNDRR, "Sendai Framework, UNDRR Focus Area In Action - Small Island Developing States (SIDS)"
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UNHCR "Law and Policy for Protection and Climate Action" Unhcr.org, 2024 https://www.unhcr.org/what-we-do/build-better-futures/climate-change-and-displacement/law-and-policy-protection
UNHCR, "Law and Policy for Protection and Climate Action"
UNHCR, "Law and Policy for Protection and Climate Action"
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US "Planning for Climate Change Resilience and Adaptation." Environmental Resilience Institute, 2018 https://eri.iu.edu/erit/planning/index.html

<sup>106</sup> Global Facility for Disaster Reduction and Recovery, "Canada-Caribbean Resilience Facility" World Bank Group, 2019v https://www. gfdrr.org/en/crf 107 UNESCO's Action on Climate Change" Unesco.org, 2022 https://www.unesco.org/en/climate-change.



Land Reclamation project against rising sea levels Credit: Gazjo

International climate disaster preparedness is not up to par with the urgency of this issue. From a UNESCO perspective, this displacement is a barricade to education. 108 As of 2021, this issue was considered as a need for social transformation and became included in the Management of Social Transformation (MOST) program. 109 This program was designed to bridge research and knowledge gaps with policy and action amongst UNESCO member states. The program has meetings to tackle social inequality, and science-based sustainability. 110 Through this project, cooperating states can share information, and work to untangle inequalities. This means that states most in need can access some degree of support from others. However, there is no specific regulation of this program designed for SIDS, or climate-based migration. The acknowledgement of this issue is an important step in the right direction but does not equal protection. The MOST program provides scientific support to states that may not have access. They aim to support interstate collaboration through the creation of national committees that relate global issues at a national level.111

As water temperatures increase, the intensity and frequency of intense storms will also increase. This is because warmer water can carry more energy, which causes faster wind speeds. A warmer atmosphere also creates a more humid environment, meaning more rainfall. In 2017, climate change was predicted to have caused the extreme rainfall from hurricane Harvey to be three times more intense.112 In 2024, the intensity of these storm surges will only worsen. Storm surges are defined by short term rises in sea level, which causes flooding and widespread damage. SIDS need to be properly equipped for the inevitable increase in frequency of these events, and their intensity. The beginning of the 2024 hurricane season has seen extreme humidity, and early major hurricanes, classified as category three or above. Generally, hurricanes that are considered extreme will take place later in the season, from June to November. 113 An intense beginning to this time is extremely concerning for the long-term impacts to islands most at risk. If the season starts this strong, and the strength will only increase, SIDS will face disastrous later seasons.

Another important factor to consider is the increase in storms.

In many SIDS, land reclamation is a common practice. This is

<sup>108</sup> UNESCO, "How Climate Change and Displacement Affect the Right to Education"
109 UNESCO, "UNESCO Joins UN Call for Recognition of the Right to a Healthy Environment." Unesco Webarchive, 2021 https://webarchive.unesco.org/20230704065844/https://en.unesco.org/news/unesco-joins-call-recognition-right-healthy-environment
110 UNESCO, "Management Of Social Transformation (MUST) Forum" Unesco.org, 2023 https://www.unesco.org/en/articles/management-social-transformations-most-forum.
111 UNESCO, "Management Of Social Transformation (MUST) Programme"
112 Mark Poynting, "How is Climate Change Affecting Hurricanes, Typhogna and Cyclones?" BBC, 2024 https://www.bbc.com/news/world-us-canada-42251921
113 Mark Poynting "How is Climate Change Affecting Hurricanes, Typhogna and Cyclones?" BBC

<sup>113</sup> Mark Poynting, "How is Climate Change Affecting Hurricanes, Typhoons and Cyclones?" BBC

a process where states create new land from the sea, generally using rocks, waste materials, or soil.114 Reclaimed land is vulnerable to instability, and erosion. As sea levels rise, both issues are bound to increase. This risks significant loss of land for many SIDS. Along with this, the collapse of reclaimed land risks causing significant damage to the local marine life and coral systems. This can speed the process of climate change by releasing stored carbon from these plants into the atmosphere.115 In Singapore, this technique has been used for the large-scale expansion of their eastern coast. This project involved the creation of freshwater reserves, air and seaports, and housing.<sup>116</sup> In the past 60 years, Singapore has managed to expand their space by almost 25 percent through land reclamation. 117 To cope with long term sea ride, the government of Singapore created a minimum height requirement for all reclaimed land to be four meters. This is based on a significant amount of research and climate-based predictions. 118 Other measures to protect reclaimed land involve sea walls, and the planting of mangroves. 119 This is an example of a SIDS taking measures to prepare for oncoming disasters and preserve their development. So far, the reclamation has seen two main outcomes. Environmentally, marine life has decreased because of a loss of habitat. However, the project has also boosted development in Singapore, benefiting many the population. 120

The Island of Tuvalu, in the Pacific Ocean is projected to be completely underwater by 2050. As they currently stand, the island is only one meter above high tide levels. 121 In a

statement made to the UN General Assembly in September of 2023, the prime minister demanded a change: "We need not call for Sympathy, rather we call for Solutions"122 He argued that climate change needs to be addressed urgently to support the people most at risk.<sup>123</sup> This statement marked the beginning of their land reclamation project. Currently, the project is undergoing evaluations of security, with the final report to be made public later this year. 124 This project involves planting local oceanic plants, civil development, and awareness campaigns. It is funded mainly by the government of Tuvalu, and the Green Climate Fund. The Green Climate Fund is an international group that is working to ensure access to climate funding for developing states.<sup>125</sup> Despite this effort, there are still many skeptics. If the island can offset the impacts of rising sea levels, other impacts of climate change risk causing significant resource scarcity. This includes food shortages, emerging disease, and agricultural issues. The government of Australia agreed to host large amounts of climate refugees from Tuvalu as the island sinks. The deal extended acceptance of permanent residence for 280 Tuvaluans per year. 126 However, there are still many concerns about the adaptation of Tuvaluans into Australian society, coming from unique cultural backgrounds with rich history. Adaptation into a new social climate can be traumatic for many people, and risks bringing new ills into the host country. 127

Each of these cases are examples of SIDS acting against the impacts of climate change. SIDS often find themselves on the

J.L. Stauber, A. Chariton, S. Apte, "Marine Toxicology- Chapter 10; Global Change" Sciencedirect, 2016 https://www.sciencedirect.com/topics/earth-and-planetary-sciences/land-reclamation.

115 Makasi Kitazume, "Sustainable Land Reclamation" Revue Francaise De Geoteques, 2022, https://www.geotechnique-journal.org/articles/geotech/full\_html/2022/01/geotech210033s/geotech210033s.html

116 Government of Singapore, "Land Reclamation in Singapore" SG101, 2022 https://www.sg101.gov.sg/resources/connexionsg/landreclamationinsingapore/

117 Ry-Anne Lime, "Land reclamation plan to create 800-ha 'Long Island' along Singapore's east coast" Business Times, November 2023 https://www.businesstimes.com.sg/singapore/land-reclamation-plan-create-800-ha-long-island-along-singapores-east-coast

118 Government of Singapore, "Land Reclamation in Singapore"

119 Strategy Group Prime Minister's Office, "Coastal Protection" NCSS, 2024 https://www.nccs.gov.sg/singapores-climate-action/coastal-protection/

protection/
120 Miles Powell, "Singapore's Lost Coast: Land Reclamation, Natural Development, and the Erasure of Human and Ecological Communities, 1822-present." Nanyang Technological University of Singapore, 2021, https://dr.ntu.edu.sg/bitstream/10356/157063/2/Singapore%E2%80%99s%20lost%20coast%20Land%20reclamation%2C%20national%20development%20and%20the%20erasure%20 of%20human%20and%20ecological%20communities%2C%201822%E2%80%93present.pdf
121 UNDP "A Landmark Moment; Tuvalu is Lifted Above Sea Level." Undp CCA, November 2023, https://www.adaptation-undp.org/landmark-moment-tuvalu-lifted-above-sea-level
122 UNDP "A Landmark Moment; Tuvalu is Lifted Above Sea Level." Undp CCA,
123 UNDP "A Landmark Moment; Tuvalu is Lifted Above Sea Level." Undp CCA,
124 Tuvalu Coastal Adaptation Project, "Project Timeline" TCAP, 2017 https://tcap.tv/timeline
125 Green Climate Fund, "Access Funding" GCF, 2024 https://www.greenclimate.fund/projects/access-funding
126 Earth.org, "Tuvalu's Sinking Reality; How Climate Change is Threatening the Small Island Nation" Earth.org, 2024 https://earth.org/tuvalus-sinking-reality-how-climate-change-is-threatening-a-small-island-nation/
127 Stefanie Schmidta, Elke van der Meera, Stefan Tydecks, Thomas Bliesener, "How Culture and Migration Affect Risk Assessment" The European Journal Of Psychology Applied to a Legal Context, 2017 https://journals.copmadrid.org/ejpalc/art/ejpalc2018a7

frontlines of activism against climate change, bringing forth concerns to the UN. 128 Humanitarian issues that present if a state is completely wiped out are becoming more relevant as time progresses and climate disasters worsen. For example, if an entire island becomes unlivable all people from that island become stateless. The culture and history of the state are at risk of being forgotten. To combat this issue, global cooperation is necessary. Negotiations to build resilience within SIDS most at risk and support them through the inevitable are not easy. If their attempts to avoid the impacts of rising sea levels are successful, the problem does not stop. If they are not successful, the world is faced with an entirely new and complex crisis very quickly.<sup>129</sup> Adaptability is hard. Many people within SIDS hold strong cultural connections to their land, and offering quick migration would not work. Climate mobility is a reality for many of these people, especially in the Pacific. Cooperation to help this transition for the many lives at stake is necessary.

Developing emergency preparedness is a key asset to fostering resilience. Protecting the livelihoods and culture of people on islands if conservation is no longer possible should be a high priority for UNESCO. By focusing on alleviating the burdens of climate disasters from people most at risk, devastation can be offset.

#### **Access to Key Resources**

Key resources are the resources that are essential to the minimum economic and government operations. 130 This includes basic infrastructure, access to food and water, and some financial stimulation. The global poverty line is measured by access to these resources.<sup>131</sup> This problem is

exacerbated by climate change. This is because damage done by climate change can take away these resources, and force poverty onto a big demographic. 132 As of 2019, a quarter of the population of SIDS in the Pacific was living below the basic needs poverty line. 133 This means that climate change has caused so much damage that decades of development are being undone. Access to clean water, sanitation and healthy food is becoming increasingly hard. This also creates health concerns for these states, as poor living conditions can make illness more prevalent.

Food poverty is a concern in SIDS. A person is only considered to be in food poverty if they only have access to at most two out of eight food groups.<sup>134</sup> This is problematic, especially for young people. Food poverty caused by climate change is especially concerning. This happens when storms, and other climate disasters damage local agriculture. Extreme weather can also affect imports of food to remote islands. 135 This means that in SIDS, access to healthy food is barely possible. This can lead to malnutrition, and related illness that can be life threatening. 136 Food insecurity can also be connected to poor mental health. A lack of proper nutrition impairs development, and has been linked to increased anxiety, and depression in youth.<sup>137</sup> An increase in both physical and mental illness in youth is a significant concern for the future of SIDS. Improper access to food as a key resource cannot be overlooked as it drives SIDS deeper into vulnerability.

Climate change can impact access to key resources in a few ways. The first thing it can impact is agriculture. Climate induced famine is a stressor for many SIDS. Fluctuations in weather between heavy rain and periods of drought cause issues with harvesting season. 138 Diversity in crops within SIDS is

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Wey Resources Law and Legal Definition" USLegal.com, 2024 https://definitions.uslegal.com/k/key-resources/
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hardship-inequity-and hardship-inequity-and
Joaquin Reyes, "Climate Change Comes to Piedras Gordas; Why are Small Farmers in Trouble?" Sustainable Harvest Interational,
2015 https://www.sustainableharvest.org/blog/climatechangecomestopiedrasgordas?gad\_source=1&gclid=CjwKCAjwzIK1BhAuEiwAHQm
U3hnR6G7tmj6mnVTryqsPJgqJzH31E0D3-pPpz55CmJTomoRnyNP\_zBoCoiMQAvD\_BwE
136 UNICEF, "1 in 6 Children in the Pacific Region Live in Severe Child Food Poverty Due to Hardship, Inequity, and Climate Crises"
137 Julia A Wolfson, Travertine Garcia, and Cindy W Leung, "Food Insecurity Is Associated with Depression, Anxiety, and Stress" Health
Equity 5, no. 1, 2021, https://doi.org/10.1089/heq.2020.0059.
138 Thomas W. Hertel, Ismahane Elouafi, Frank Ewert and Morakot Tanticharoen, "Building Resilience to Vulnerabilities, Shocks, and

often limited because of size and weather-based constraints. This makes growing a large variety of foods locally difficult. Often, the crops that are being grown aren't resilient to extreme shifts in climate and cannot produce a large amount of nutrients on them. Some of the main agricultural products coming from SIDS are sugar cane, root crops, cocoa, bananas, and coconuts. 139 None of these foods are overly nutritious, or profitable. This has caused a reliance on imported food. The overreliance on imported food can be detrimental to local farmers, discouraging production of other foods. 140 In times of extreme weather when crop production is impaired, food scarcity can negatively impact local economies and nutrition.

Following this is the overreliance on imports. In the instance of long-lasting bad weather patterns, shipments to islands can be delayed for safety. Interconnected states and globalization can often be beneficial, but this is when overdependence creates issues. The global supply chain is heavily impacted by climate change.<sup>141</sup> Marine infrastructure is threatened by sea rising. Not only this, but the cost of transport is increasing drastically. Since 2019, the cost of shipping a container across the ocean has skyrocketed from USD 2,000 to roughly USD 15,000.<sup>142</sup> This forces the cost of food to increase in importing countries to accommodate for this increase. In doing so, affordability becomes a challenge. Commodities are also impacted by climate change in their country of export. Not only is the destruction of infrastructure within SIDS an issue, but their reliance on other states become problematic when other states are unable to assist. Disruptions of food chains outside of the control of SIDS presents a large issue, especially in times of need. This can become a large point of vulnerability if not

properly managed.

Poor access to water can also leave large amounts of people at risk. This is called water insecurity. Within SIDS, there are three main ways to measure access to water. First is resource protection. Resource protection focuses on keeping water sources, like rivers and freshwater lakes accessible. 143 Following is distribution infrastructure. This includes plumbing, sanitation, and wastewater treatment. UNCTAD recognizes distribution infrastructure as a barricade to development.<sup>144</sup> Third is environmental properties. This focused on preventing pollution within water systems. Wastewater, and chemical leakage into freshwater makes it undrinkable, and can create health issues if consumed. 145 All of these factors have potential to increase vulnerability. They can contribute to a state's high MVI score. 146 Risk management of water systems is a key part of fostering resilience within SIDS. Without having safe access to water, preparing for disaster is very hard.

Water availability impacts sanitation systems, and human health. Potable water access is a challenge in many SIDS. Ocean water is not considered potable water, as it is not clean and drinkable.<sup>147</sup> Pollution contaminating freshwater supply is a direct inhibitor to drinkable water. Rising sea levels cause saltwater intrusion. This is when sea levels rise, and salt water from the ocean makes its way into freshwater streams.148 Because of SIDS' relatively small land area, access to freshwater streams is already small compared to continental states. This means that threats to freshwater supply that may seem insignificant can present large issues for communities dependent on that access.

Stresses"United Nations Food Systems Summit. 2021 https://sc-fss2021.org/wp-content/uploads/2021/04/Action\_Track\_5\_paper\_

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139 UN, "SIDS GBN-Sustainable Agriculture" Un.org, 2014 https://www.un.org/ohrlls/sids-gbn-thematic-areas-sustainable-agriculture.
140 UN, "SIDS GBN-Sustainable Agriculture"
141 Jaqueline Leslie, "How Climate Change is Disrupting the Global Supply Chain." Yale Environment, 2022 https://e360.yale.edu/features/how-climate-change-is-disrupting-the-global-supply-chain
142 Jaqueline Leslie, "How Climate Change is Disrupting the Global Supply Chain."
143 Stephanie Yolan Parker, Kimalie Fabian Parchment, Georgiana Marie Gordon-Strachan, "The Burden of Water Insecurity; a review of the challenges to water resource management and connected health risks associated with water stress in small island developing states" Journal of Water and Climate Change, 2023. https://iwaponline.com/jwcc/article/14/12/4404/98608/The-burden-of-water-insecurity-a-review-of-the

review-of-the
144 Adeoti T, Fantini C, Morgan G, Thacker S, Ceppi P, Bhikhoo N, Kumar S, Crosskey S & O'Regan N, "Infrastructure for Small Island
Developing States." UNOPS, 2020 https://content.unops.org/publications/Infrastructure\_SIDS\_EN.pdf
145 Adeoti T, Fantini C, Morgan G, Thacker S, Ceppi P, Bhikhoo N, Kumar S, Crosskey S & O'Regan N, "Infrastructure for Small Island
Developing States."
146 "United Nations High Level Panel on the Multi-Dimensional Vulnerability Index Technical Presentation"
147 Water Education Foundation, "Potable Water" Aquapedia, 2020 https://www.watereducation.org/aquapedia-background/potable-

<sup>148</sup> Yolan Parker, Fabian Parchment, and Marie Gordon-Strachan, "The Burden of Water Insecurity."

Poor access to clean water can also cause an influx of disease. Region specific illness, such as dengue fever. Dengue is a mosquito borne disease that can present itself in several ways and can be life threatening. There is currently no cure for dengue fever, only ways to mitigate the symptoms. 149 Poor access to flowing, clean water has been found to be linked to the severity of dengue symptoms, and prevalence within a community.<sup>150</sup> This means that if access to water is threatened, disease such as dengue is bound to increase. Along with this, health implications of dehydration are similar, if not worse than malnutrition, and come with many issues. Poor health can cause a chain reaction of other vulnerabilities. An overcrowded healthcare system is difficult in the face of climate disaster. Expenses related to treating many of these diseases can be very expensive. In a private healthcare system, it can drive individuals into poverty. In a public system, it can place a strain on other public sectors and infrastructure. 151

Strain on basic living conditions also sets back economic development and employment rates. If an island state has developed a portion of their economy based on the export of a select crop, they are at risk. One example is cyclone Pam, a storm that hit Vanuatu in 2015. From this, 96 percent of food crops were destroyed. This negatively impacted an overwhelming majority of the population, 60 percent. 152 This level of disaster is a humanitarian crisis. Not only did this cause food shortage but took away key sources of income for many people across the many small islands impacted. This loss of income made recovery from the cyclone challenging, as the people within Vanuatu found themselves extremely dependent on foreign assistance. 153 This is an example of a climate crisis that caused key resource shortages, impairing government

function and quality of life for many people in SIDS.

Struggles to meet basic living conditions is also a threat to peace. UNESCO's current focus for safeguarding resources in SIDS is to build sustainable peace through science, education, culture, and communication.<sup>154</sup> There is a strong pattern that connects hunger and conflict. The displacement of farmers and destruction of agricultural assets can raise prices, and hurt income.<sup>155</sup> All of these factors have potential to raise tensions within communities, driving conflict. In times of crisis, unity is important. So, any factors that could break this unity are barricades towards UNESCO's goal of sustainable peace. 156

Altogether, access to key resources within SIDS is threatened by climate change. This disrupts the physical environment, wellbeing, and governance of a state. To foster resilience based on climate change, basic living conditions must be met, including basic nutrition, sanitation and water.

#### **Current Status**

#### Case Study: Hurricane Beryl and the **Future of Caribbean Tourism**

In the summer of 2024, Hurricane Beryl made history. Beginning as a category three hurricane, it quickly escalated into a category five as it passed through the Caribbean.<sup>157</sup> Hurricane categories are measured using the Saffir-Simpson Index from one to five. Anything at or above a score of three is major, with wind gusts surpassing 111 kilometers per hour. 158 Beryl became the earliest category four and five Atlantic hurricane on record, ever. Many Caribbean islands took the

World Health Organization, "Dengue and Severe Dengue" WHO, 2024 https://www.who.int/news-room/fact-sheets/detail/dengue-

and-severe-dengue
150 "Poor Access to Tap Water Linked to Dengue Risk." Nature.com, 2021 https://www.nature.com/articles/nindia.2021.27
151 Office of Disease Prevention and Health Promotion, "Poverty-Healthy People 2030" heath.gov, 2021 https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/poverty
152 UN International, "Climate Change Vanuatu" Permanent Mission of the Republic of Vanuatu to the United Nations, 2015. https://www.un.int/vanuatu/vanuatu/climate-change
153 World Food Programme, "The Impact of Cyclone Pam" Food Security Cluster, 2016 https://moet.gov.vu/docs/press-releases/tc-pam/Cyclone%20Pam%20Impact%20Map%20and%20Analysis%20(Food%20Cluster).pdf
154 UNESCO, "Safeguarding Precious Resources for Island Communities" World Heritage Center, Issue 38, 2014 https://whc.unesco.org/en/series/38/
155 UN, "Breaking the Vicious Cycle of Hunger and Conflict" Food Security Cluster, 2016 https://whc.unesco.

org/en/series/30/
155 UN, "Breaking the Vicious Cycle of Hunger and Conflict" Food Systems Summit, 2021, https://www.un.org/en/food-systems-summit/news/breaking-vicious-circle-hunger-and-conflict.
156 UNESCO, "Safeguarding Precious Resources for Island Communities"
157 "Hurricane Beryl is a Historic Storm. Here's Why" CBS, 2024 https://www.cbsnews.com/news/hurricane-beryl-caribbean-multiple-

<sup>158</sup> National Hurricane Center, "Saffir-Simpson Hurricane Wind Scale" National Oceanic and Atmospheric Administration, 2024, https://www.nhc.noaa.gov/aboutsshws.php.

brunt of this damage. The storm killed at least 10 people and damaged infrastructure across the region.<sup>159</sup> While this had bad impacts in the short term, it has also raised concerns for the long-term impacts, and what the rest of the season might bring.

Traditionally, hurricanes tend to worsen as the season goes on from June to November. With a hurricane this powerful this early, the rest of the season will likely be intense. The United Nations Intergovernmental Panel on Climate Change (IPCC) has noted emerging proof for a global increase of category four and five hurricanes.<sup>160</sup> This means that moving forward, the intensity of hurricanes will be more intense than ever before and more frequent. Climate experts have forecasted the 2024-2025 hurricane season to be the most intense of all time, with up to 25 tropical storms and 13 hurricanes. 161 Hurricane Beryl is proof of past concerns raised by climate scientists becoming reality.

Directly following this hurricane, UNESCO supported the SIDS affected by developing their communication systems. 162 To do this, they partnered with the Caribbean Broadcasting Union (CBU). The CBU focuses on media coverage in Barbados, and Turks and Caicos. 163 Together, they plan to strengthen radio systems. Communication as a pillar of emergency preparedness, and relief, because communication between relief crews, and people on the islands can be lifesaving in situations of short notice.<sup>164</sup> For example, the Jamaican government reported that their disaster emergency

communication system was a large contributor to the island's preparedness leading up to the storm. 165 The island of Jamaica was still left with many side effects of Beryl. However, there was only one reported death. In comparison, St Vincent and the Grenadines reported six deaths and Grenada reported three as of July 11, 2024.166

In addition to communication support, the United Nations helped islands in many ways. The UN Central Emergency Response Fund (CERF) made USD four million available for relief to the islands affected.<sup>167</sup> CERF gets support from all UN member states based on donations. Their donors each year are made publicly available, encouraging more states and organizations to donate. 168 The funding was dispersed between Caribbean islands at risk, used to provide several measures of emergency assistance depending on need. Along with this, UN humanitarian aid was mobilized in Jamaica, Barbados, Belize, St Vincent and the Grenadines, and Grenada. 169 The aid workers helped build emergency shelters and provide medical assistance.<sup>170</sup> The UN Children's Fund deployed the Rapid Needs Assessment Teams (RNAT). These teams analyzed the state of countries most affected by Beryl and helped to guide international assistance. 171

Furthermore, the United Nations Climate Fund released USD four million for relief in the Caribbean. 172 This money was used to support urgent needs as identified by the local governments. 173 St. Vincent and the Grenadines was identified as one of the states most affected by this disaster. Therefore,

<sup>&</sup>quot;Hurricane Beryl Leaves Jamaican Homes Without Power" BBC.com, 2024 https://www.bbc.com/news/articles/ckdg7rp7vk9o
160 "Technical Summary for Policymakers" IPCC.Ch, TS.6, 2023 https://www.ipcc.ch/srocc/chapter/technical-summary/
161 Jodi Leese Glusco and Aimee Wilmoth, "Hurricane Season 2024: NOAA Forecast Is Highest Number of Storms Ever Predicted,"
WRAL.com (WRAL, May 23, 2024), https://www.ural.com/story/hurricane-season-2024-noaa-forecast-is-highest-number-of-storms-everpredicted/21446798/.
162 "Enhancing Disaster Preparendess and Response for Caribbean Media; UNESCO Teams up With the Caribbean Broadcasting Union"
Unesco.org, 2024 https://www.unesco.org/en/articles/enhancing-disaster-preparedness-and-response-caribbean-media-unesco-teamscaribbean-broadcasting
163 UNESCO, "Enhancing Disaster Preparedness and Response for Caribbean Media."
164 UNESCO, "Enhancing Disaster Preparedness and Response for Caribbean Media."
165 Rochelle Williams, "Emergency Communication System Proves Effective During Hurricane Beryl" Jamaica Information Service, 2024
https://jis.gov.jm/emergency-communication-system-proves-effective-during-hurricane-beryl/
166 Trinidad and Tobago Weather Center "Hurricane Beryl Death Toll Now at 33" ttweather, 2024 https://ttweathercenter.
com/2024/07/11/hurricane-beryl-death-toll-now-ar-33/
167 "CERF Allocation" cerf.un.org, 2024 https://cerf.un.org/our-donors/contributions
169 "Paid Contribution Data" cerf.un.org, 2024, https://cerf.un.org/our-donors/contributions
169 "UN mobilizes \$4 million for Hurricane Beryl response in the Caribbean Resv.un.org, 2024 https://news.un.org/en/
story/2024/07/1151786
170 "UNICEF Eastern Caribbean Area Office Hurricane BERYL Situation Report." Releif Web, 2024 https://news.un.org/en/
story/2024/07/1151786
171 "UNICEF Eastern Caribbean Area Office Hurricane BERYL Situation Report." Releif Web, 2024, https://news.un.org/en/
story/2024/07/1151786
173 "Caribbean Resilience and Solidarity After Hurricane Beryl" undco.org, 2024 https://un-dco.org/stories/caribbean-

significant amounts of money from this fund went towards reestablishing communication, and basic life needs across the islands. 174 Along with this, other islands in the region banded together to support SIDS. The World Food Programme (WFP) designated Barbados to be a hub for support to other affected islands. This means that they accepted money, and other essential items as donations to be delivered by boat to St Vincent and the Grenadines. 175 The boating community across the Caribbean stepped forward to offer support. Several crowdfunding campaigns were established to raise money to help rebuild the local fishing industry and buy basic living resources.176

After Beryl, The Emergency Appeal Operational Strategy was created to describe the impacts of the hurricane. 177 This strategy focuses on four SIDS: Barbados, Grenada, Jamaica, and St Vincent and the Grenadines. 178 The appeal describes the impacts of Hurricane Beryl on each state based on three main factors. The first factor is the impact on accessibility, availability, quality, use, and awareness of goods and services. This measures the main industries that have been impacted by hurricane Beryl. Currently, it is predicted that the most impacted sectors will be fishing and agriculture, but the longterm impacts are still unknown. 179 Second is the impact on physical and mental wellbeing. This is predicted to mostly see a long-term spike in mental health issues, like anxiety and PTSD. To assist with this, several governments have activated trauma therapy support programs and raised social support. 180 From a health perspective, the elderly, children, and people with disabilities are most at risk. Resilience involves supporting all members of the community, especially vulnerable groups. Finally, risks and vulnerabilities. This is assessed based on

economic changes, recovery efforts, and humanitarian needs. To evaluate this, the Red Cross will need to measure long term growth of the affected SIDS and assess their damage based on pre-existing vulnerabilities. 181

The impacts on the tourism sector because of this year's hurricane system are still unknown. However, it is predicted that hurricane Beryl will have similar, if not worse, impacts than past significant hurricanes like hurricane Ivan in 2004.<sup>182</sup> This hurricane decreased tourist arrivals across the Caribbean by over 20 percent in some SIDS. 183 Tourist arrivals are mostly impacted by canceled flights, and access to accommodation that may be compromised. Granted that hurricane Beryl has made history for its early onset intensity; the effects are projected to be worse. Negative impacts on tourism have potential to cause very serious long-term problems in SIDS. This is because of their dependency on tourism, and foreign income.<sup>184</sup> The impacts of worsening hurricane seasons in the Caribbean are deeply concerning.

The damages caused by hurricane Beryl acted as a harsh awakening to the impacts of climate change in the Caribbean, and the need to foster resilience. By analyzing the impacts of this hurricane, predictions can be made for how to better prepare for the future. Along with this, the ability to recover from this hurricane will be a good indicator of resilience for years to come. As the season develops, SIDS will continue to be tested on this and forced to adapt.

#### Case Study: Marine Heatwaves in the **Indian and Pacific Oceans**

In the Pacific and Indian oceans, the frequency of marine

solidarity-after-hurricane-beryl

<sup>&#</sup>x27;Caribbean Resilience and Solidarity After Hurricane Beryl"

<sup>&</sup>quot;Caribbean Resilience and Solidarity After Hurricane Beryl"
"NonProfits that Support Saint Vincent and the Grenadines" Project World Impact, 2024 https://projectworldimpact.com/country/

<sup>&</sup>quot;NonProfits that Support Saint Vincent and the Grenadines" Project World Impact, 2024 https://projectworldimpact.com/country/saint-vincent-and-the-grenadines
International Red Cross" Barbados, Grenada, Jamaica, and Saint Vincent and the Grenadines | Hurricane Beryl - Emergency Appeal Operational Strategy" Appeal No. MDRS2001, Relief Web, 2024 https://reliefweb.int/report/grenada/barbados-grenada-jamaica-and-saint-vincent-and-grenadines-hurricane-beryl-emergency-appeal-operational-strategy-appeal-no-mdrs2001? gl=1\*8yxrox\*\_ga\*MjU4MzU4MTg wLjE3MjE4ODA1OTI.\*\_ga\_E60ZNX2F68\*MTcyMTg4MDU5Mi4xLjEuMTcyMTg4MTA1OS42MC4wLjA.
Relief Web, "Hurricane Beryl - Emergency Appeal Operational Strategy."
Relief Web, "Hurricane Beryl - Emergency Appeal Operational Strategy."
International Red Cross, "Barbados, Grenada, Jamaica, and Saint Vincent and the Grenadines | Hurricane Beryl - Emergency Appeal Operational Strategy."
Charley Granvorka, Eric Strobl, "The Impact of Hurricane Strikes on Tourist Arrivals on the Caribbean" University of the West Indies.

Charley Granvorka, Eric Strobl, "The Impact of Hurricane Strikes on Tourist Arrivals on the Caribbean" University of the West Indies, 2013 https://caribbeanhotelandtourism.com/wp-content/uploads/data\_center/environmental/ToursimEconomics2013.pdf
Charley Granvorka, Eric Strobl, "The Impact of Hurricane Strikes on Tourist Arrivals on the Caribbean"

"About Small Island Developing States (SIDS)" Un.org, 2024

heat waves is increasing. Marine heat waves happen when the temperature of the ocean is 90 percent warmer than usual temperature averages for the region. 185 It is currently predicted that the Indian and Pacific oceans will experience up to 250 days of marine heat waves per year. 186 This can have significant negative effects on marine life, coral reefs, algae blooms, and weather patterns.<sup>187</sup> Most consequences of marine heat waves can lead to larger problems long term that will worsen threats to SIDS. These damages will eventually cause serious harm to already existing vulnerabilities. Examples include rising sea levels, damage to industry, and more intense storms.

Marine heat waves are known to interrupt food webs in the ocean.<sup>188</sup> As of March 2024, the amount of available bio nutrition in the Pacific had decreased in comparison to a few years before. This means that at the bottom of the food chain, the amount of available food has gone down. 189 Climate scientists have predicted that for every two degrees Celsius the water warms, biomass decreases by 14.9 percent. 190 This happens because higher temperatures create less favorable conditions for marine organisms living there. An increase in heat will kill off marine life at the bottom of the food chain. This can eventually threaten the lives of marine animals at higher levels of the food chain, like bigger fish. This is problematic because it can disrupt fishing industries in SIDS. A significant loss of fish can negatively affect the overall economy. By being unable to sell fish, a significant part of the economy in SIDS across the Pacific will struggle. This can cause an increase in social tensions, and poverty.

Large amounts of death in oceans can create an environment

for the growth of algae blooms.<sup>191</sup> As of July 2024, record amounts of algae bloom were observed in the pacific. 192 Algae bloom is a blanket of algae that develops in the ocean, often surfacing or floating below the surface. 193 This can harbor toxic bacteria for marine life, and humans. It also reduces oxygen flow into the ocean, which will also kill off more marine life. 194 Algal toxins can hurt human life and be dangerous when consumed. If a fish is exposed to algae, and then is eaten, there are large health risks. 195 Fishers are forced to adapt and change their strategies not only to still catch fish, but to ensure that it is still safe for consumption. This can hurt the local economy and create food shortages.

In many regions, influxes of algae will result in fishing bans for several weeks or months. In some states, these fishermen are offered incentive to stop fishing for their own safety. This can cause significant harm to the local population, both in terms of the fishermen, and people dependent on their fish. Sources of income, and nutrition are lost for several weeks at a time. If these fish are consumed, it could cause serious illness and strain local health systems. For example, in the Indian Ocean, bans come into effect from the 15th of April to 14 June, or 1st of June until July 15th, depending on the exact location. 196 Although this is for the safety of the population, many vulnerabilities are worsened through the bans. So, the navigation of human health and economic development remains a point of contention across SIDS. To properly foster resilience, a balance should be found.

From an economic perspective this has negative consequences. The collapse of some fish species and lack of diversity creates

<sup>&</sup>quot;In Hot Water: Exploring Marine Heatwaves" NOAA research, 2024 https://research.noaa.gov/2024/05/22/in-hot-water-exploring-

In Hot Water: Exploring Marine Fleatwaves NOAN research, 2024 https://icsearch.noaa.gov/2024/07/22/in-incr-water-exploring-marine-heatwaves/

186 Nihdi Jamwal, "Indian Ocean Headed for a Near Permanent State of Marine Heat Wave" Mongobay, 2024 https://india.mongabay.

com/2024/04/indian-ocean-headed-for-a-near-permanent-state-of-marine-heatwave-cyclones-to-intensify-fisheries-at-risk/

187 "In Hot Water: Exploring Marine Heatwaves"

188 Michelle Kampe, "Marine Heatwaves Disrupt the Food Web in the Northern Pacific" Oregon State University, 2024 https://today.

oregonstate.edu/news/marine-heat-waves-disrupt-ocean-food-web-northeast-pacific-ocean

189 Michelle Kampe, "Marine Heatwaves Disrupt the Food Web in the Northern Pacific"

190 Michelle Kampe, "Marine Heatwaves Disrupt the Food Web in the Northern Pacific"

191 Arno Coblentz, Anaïs Deprez, Sarah Palazot, Niagara Poulain, "Consequences of Climate Change, Marine Heatwaves Pose Enduring Threats Both at Sea and on Land" Ocean and Climate Platform, 2024 https://ocean-climate.org/en/consequences-of-climate-change-marine-heatwaves-pose-enduring-threats-both-at-sea-and-on-land/

192 Tom Di Liberto, "Record-Breaking Algal Bloom Expands Across North Pacific"

193 Tom Di Liberto, "Record-Breaking Algal Bloom Expands Across North Pacific"

194 Arno Coblentz, Anaïs Deprez, Sarah Palazot, Niagara Poulain, "Consequences of Climate Change, Marine Heatwaves Pose Enduring Threats Both at Sea and on Land" Ocean and Climate Platform, 2024

Tom Di Liberto, "Record-Breaking Algal Bloom Expands Across North Pacific"

195 Tom Di Liberto, "Record-Breaking Algal Bloom Expands Across North Pacific"

196 Nihdi Jamwal, "Indian Ocean Headed for a Near Permanent State of Marine Heat Wave"



Marine Heatwaves causing damage to coastline Credit: MODIS Land Rapid Response Team, NASA

challenges for local fisheries. 197 This leads to less opportunities for fishers. Globally, it is expected that marine heat waves can cost up to USD 800 million in direct losses for surrounding islands. 198 This has led to recent discussion about increasing the sustainability of fisheries across SIDS. Better preparedness through sustainable fisheries can make an entire state more adaptable to climate change. A call for the improvement of monitoring and management systems was recently released by the Marine Stewardship Council. This council is an international organization that helps governments to reduce overfishing and make fishing more sustainable for generations to come. To do this, they focus on developing scientific infrastructure across the world. This looks like monitoring systems, data collection, and water analysis. They recognize the dangers of a warming climate on oceanic systems and the trickle-down impacts that it can have on the socioeconomic development of coastal communities. 199

Another significant impact of marine heat waves is the intensity, and frequency of tropical storms, cyclones, and hurricanes. As of April 2024, heat waves in the ocean are lasting up to 20 days at a time. This plays a key role in the intensity of cyclones. Between 1980 and 2020, 90 percent of cyclones in this area were following large marine heat waves. All cyclones following the heat waves intensified much quicker than normal.<sup>200</sup> This is alarming because of the rise in frequency of heat waves, and its potential to worsen the state of SIDS because of climate emergencies. This is a significant risk to SIDS especially, which are already on the frontlines of climate change. An increase in intensity of storms can cause many problems for SIDS, and act as a barricade to development.

One state that is affected by this issue is the Solomon Islands. In these islands, rising water levels are a significant threat. The Solomon Islands have already had five islands sink.<sup>201</sup> These islands had Indigenous populations and were hubs for agriculture and fishing. Increasing marine heat waves amplifies rising sea levels and continues to threaten the Solomon Islands. They are identified as the second most at-risk country for natural disasters. This is based on their lack of elevation, and high amount of population living within one kilometer of the sea.<sup>202</sup> These islands are also located along the Pacific Ring

<sup>197</sup> Arno Coblentz, Anaïs Deprez, Sarah Palazot, Niagara Poulain, "Consequences of Climate Change, Marine Heatwaves Pose Enduring Threats Both at Sea and on Land" Ocean and Climate Platform, 2024
198 Will Little, "Marine Heatwaves and Sustainable Fishing" Marine Stewardship Council, 2023 https://www.msc.org/what-we-are-doing/oceans-at-risk/climate-change-and-fishing/marine-heatwaves
199 Will Little, "Marine Heatwaves and Sustainable Fishing"
200 Nihdi Jamwal, "Indian Ocean Headed for a Near Permanent State of Marine Heat Wave"
201 Hugo Hodge, "The Story of Teonimenu, A Lost Island in the Pacific" ABCNews, May 7 2024, https://www.abc.net.au/news/2024-05-08/the-long-lost-island-still-visible-from-space/103740538
202 United Nations Institute of Peace, "Climate Change and Conflict in the Solomon Islands." unip.org, 2023 https://www.usip.org/

of Fire. This is a region in the Pacific Ocean that is extra prone to earthquakes and volcanic activity.<sup>203</sup> Already aggravated ocean patterns are only worsened in marine heat waves. This means that the Solomon Islands are at extra risk of climate change based on their geographic location, a factor beyond their control.

Currently, the government of the Solomon Islands is working on developing their own monitoring system for climate change. This project uses funding and training from the United Nations Development Programme (UNDP). They have assembled a team of scientists, government officials, and various sector representatives to develop Integrated Monitoring Reporting and Verification (iMRV) systems. 204 They ran a training course with over 30 participants to learn how to use and maintain the software. 205 This project is expected to increase their capacity to respond to climate change and build self-sufficiency in scientific development.

Marine heat waves are officially recognized as a major threat to marine ecosystems.<sup>206</sup> This means that there is significant research that has proven the urgency of this issue globally. A key statistic is that 87 percent of heatwaves are attributed to being forces of the current climate. 207 This means that there is a direct connection between marine heat waves and global warming. Not only does the threat of warming waters impact biodiversity, but also human livelihoods for people across SIDS. If proper action is not taken, this problem will worsen. Socioeconomic progress is directly impacted by this and creates barricades to education. Proper monitoring tools, and development of strategies is necessary for the future of SIDS and fostering their resilience on the frontlines of climate change.

### **Sustainable Development Goals**

The 2015 Sustainable Development Goals (SDGs) set by the United Nations are aimed to create a more sustainable world. All conferences within the UN General Assembly's focus to some degree on these goals, and their achievement by 2030.<sup>208</sup> Progress on each goal is monitored differently and appears different depending on the state and region. UNESCO's actions to achieve the SDGs focuses especially on SGDs that address education, science and culture. This is directly aligned with UNESCO's mandate and committee mission.<sup>209</sup>

The SIDS Partnership Framework was established shortly after the SDGs were set in 2015.210 The plan addresses resource development, social ills, and intergovernmental collaboration.<sup>211</sup> This plan of sustainability for SIDS mainly focused on nine SDGs. When discussing resilience in SIDS in relation to sustainable development, all goals should be kept in mind, however three main goals should be considered. These goals reflect the main needs to foster resilience on the frontlines of climate change and ensure long term sustainability for all states involved.

First is SDG number eight: decent work and economic growth.<sup>212</sup> This goal is oriented towards sustainable tourism, and green economies. It breaks down educational imbalances, access to banks, and social protection.<sup>213</sup> By accounting for these needs within SIDS, inequalities can be addressed, and long-term growth can be fostered. Building resilience for the long-term growth of the SIDS economy is very important. By being able to provide the population of islands at risk with stable income, they can be better prepared for climate emergencies. This encompasses proper access to education, and

publications/2023/11/climate-change-and-conflict-solomon-islands
203 Hugo Hodge, "The Story of Teonimenu, A Lost Island in the Pacific"
204 "Training on Integrated Monitoring Reporting and Verification (iMRV) Bolsters Solomon Islands Capacity to Respond to Climate Change' Solomon.gov.sb, 2024 https://solomons.gov.sb/training-on-integrated-monitoring-reporting-and-verification-imrv-bolsters-solomon-islands-capacity-to-respond-to-climate-change/
205 "Training on Integrated Monitoring Reporting and Verification (iMRV) Bolsters Solomon Islands Capacity to Respond to Climate

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206 Laura Rogers-Bennet, "Marine Heatwaves-An Overview" ScienceDirect, 2024 https://www.sciencedirect.com/topics/earth-and-planetary-sciences/marine-heatwave
207 Laura Rogers-Bennet, "Marine Heatwaves-An Overview"
208 "THE 17 GOALS" sdgs.org, 2015 https://sdgs.un.org/goals
209 "UNESCO and Sustainable Development Goals" unesco.org, 2024 https://www.unesco.org/en/sdgs
210 "Small Island Developing States Milestones" sdgs.org, 2015 https://sdgs.un.org/topics/small-island-developing-states#milestones
211 UN Department of Economic and Social Affairs, "Small Island Developing States Milestones"
212 UNESCO, "UNESCO and Sustainable Development Goals"
213 "Goal 8; Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" sdg. un.org, 2023 https://sdgs.un.org/goals/goal8

long-term career development. By focusing on the economies in SIDS, tools for resilience can be developed and maintained. Currently, progress for SDG eight is challenged because of the 2020 Covid-19 Pandemic. In SIDS, recovery from the pandemic is generally slower than many other countries. This is because of their small size, and little infrastructure for healthcare. Current trends show an increase of people not in education, employment or training by 21.7 percent.<sup>214</sup> If not properly addressed, this trend will only progress. The need for advancements in education, and employment opportunities in SIDS is obvious. This can be achieved by ensuring that SIDS are able to reach a high standard of education, so that global job opportunities become easier.

Following is SDG number 12: responsible consumption and production.<sup>215</sup> This goal highlights the need for collaboration towards the work of SDGs. Along with this, the need for corporate sustainability, and the imbalance of environmental footprints between high income and low-income states.<sup>216</sup> This goal pushes an obligation on states to be conscious of their consumption patterns, and to look out for states that are on the brunt of these impacts, like SIDS. SDG 12 is designed to protect the cultural integrity of producing countries. Currently, only one third of UN member states have established policy related to this goal.<sup>217</sup>Along with this, fossil fuel subsidies are at an all-time high. Unfortunately, this means that progress towards this goal is falling short. With an already imbalanced amount of sustainability impacting SIDS, serious action must be taken. This goal works in cohesion with SDG eight, because both aim to provide economic development and opportunities for SIDS especially. So, by focusing on a balance between accountability and preparedness, global solutions can be created.

Finally, SDG number 13: climate change.<sup>218</sup> SDG 13 is aimed to take urgent action to combat climate change and its impacts. This goal is concerned with global warming, climate finance, and sea level rise. All three of these factors heavily affect SIDS and need to be prioritized when building solutions for resilience. The year 2023 broke every single climate indicator, and was the warmest year ever recorded.<sup>219</sup> However, it is important to note that global climate funding is slowly increasing. Taking urgent action to combat climate change is ultimately the key solution to providing resilience for SIDS. By actively working towards reducing emissions, and collaborating to build solutions, this is possible.

UNESCO's most recent input towards the development of SDGs and SIDS was in the 77th General Assembly. This was documented in a report and followed the theme of "Towards the sustainable development of the Caribbean Sea for present and future generations"220 This review outlined a list of priorities regarding SDG 13 and climate change. It included addressing algal blooms and sargassum. Both are building ups of plants that can harbor harmful bacteria and kill marine life. Following this is capacity development for climate change. Essentially, this is developing scientific methods of monitoring climate change to develop better strategies.<sup>221</sup> Although this focuses on the Caribbean region, these priorities can be applied to all SIDS in the advancement of SDG 13.

# **Bloc Analysis**

#### **Points of Division**

The debate of resilience in SIDS has several points of contention. The extent of support that states are willing to provide or receive will change based on their bloc. Bias based on experience, and number of vulnerabilities is also a big influence. This can involve access to funding, cultural perspectives, and vulnerabilities that relate them to SIDS. A large point of debate is expected to be the extent of support and protection given to SIDS. Another important thing to consider will be cultural values and belief in the importance of

<sup>&</sup>quot;Goal 8; Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all"
UNESCO, "UNESCO and Sustainable Development Goals"
16 "Goal 12; Ensuring Sustainable Production and Consumption Patterns" sdg.un.org, 2023 https://sdgs.un.org/goals/goal12#overview
17 "Goal 12; Ensuring Sustainable Production and Consumption Patterns"
18 "UNESCO and Sustainable Development Goals"
19 "Goal 13; Take Urgent Action to Combat Climate Change and Its Impacts" sdgs.org, 2023, https://sdgs.un.org/goals/goal13
220 "Towards the sustainable development of the Caribbean Sea for present and future generations". sdgs.org 2024 https://sdgs.un.org/sites/default/files/2024-07/UNESCO\_Inputs\_SG-Report-Caribbean-Sea\_2024.pdf
18 "Towards the sustainable development of the Caribbean Sea for present and future generations"

heritage. This could be indicated by participation in the World Heritage Committees.

Like this, the number of resources available to build resilience is highly affected by the resources available to the state. This can be reflected through the Multidimensional Vulnerabilities Index (MVI).222 The MVI for SIDS is designed to amplify the crises faced by SIDS. It breaks down vulnerabilities on several fronts and gives all states a score. The vulnerabilities include income groups, structural vulnerability, and lack of economic, environmental and social resilience.<sup>223</sup> Each of these scores are assessed through quantitative data. This information is then broken down into nine different charts, breaking down the meaning of all three categories into smaller subsections. For example, lack of resilience is broken down into nine different concepts.<sup>224</sup> All states are rated for each of these concepts, and then given a combined score. This is repeated for all three categories. A lower score is indicative of good development and low vulnerability. A high score is indicative of less development and higher vulnerabilities. For this debate, most attention should be given to scores of structural vulnerabilities and lack of economic, environmental and social resilience. This is because states that are comparable in terms of resilience and vulnerability often have similar capacities to foster resilience and experience in overcoming or succumbing to vulnerabilities.

All indicators of the MVI were designed to be universally available through UN data. MVI scores have correlation between factors. For example, countries with high structural vulnerability are more likely to have low resilience. This correlation is also connected to sustainable development. The High-Level Political Forum (HLPF) is the governing body of the MVI assessments. They view structural vulnerability as a direct constraint to sustainable development.<sup>225</sup> This means that the level of exposure to shocks and stressors, which tests a country's resilience, also contributes to vulnerability. This index was chosen because the main principles are easily

measured across all states and can be applied in several contexts. From this, it is expected that three different blocs will emerge through committees.

### States With A Low Average MVI (<50)

Countries that belong to this bloc are those with an average under 50. They are generally well developed and can play a large role in foreign assistance to other countries. To have a score at or below 50, states must have high amounts of resilience, and low vulnerability to climate events. This can be proven by historical events and infrastructure, along with emergency preparedness plans. The policy enforced for climate refugees is largely a reflection on states preexisting stances about migration and refugee acceptance. This is determined by states past policy and experience dealing with large amounts of refugees related to natural disasters. This bloc will unite states over similar experiences, however, may still find division and need to find middle ground in some policy. Estimating scores within this bloc can be done by analyzing a state's ability to recover from shocks and stressors.<sup>226</sup>

States aligned with this group that also demonstrate high levels of development, and low vulnerability would fall into this bloc. The flow of information between states within this bloc regarding the topic also will help in the shaping of policy related to educational development. They are all generally aligned in terms of development and global values. Educational partnerships and scholarship opportunities for students in SIDS could be an indicator of being in this bloc. Signs of high resilience, and minimal vulnerability could appear in different ways. Powerful global economies, and overall dominance on a global scale are both good indicators.<sup>227</sup> Delegates in this bloc should consider past actions taken to support SIDS and climate refugees.

Falling into the bloc would be countries like the United States of America, Switzerland, and Singapore. Each of these countries fits because of their strong economic progression, and

<sup>&</sup>quot;MultiDimensional Vulnerability Index for SIDS" SDGs.un.org, 2020 https://sdgs.un.org/topics/small-island-developing-states/mvi "MultiDimensional Vulnerability Index for SIDS" SDGs.un.org, 2020 "MIV- Preliminary Country Scores" OHRLLS, 2024 https://www.un.org/ohrlls/content/mvi-preliminary-country-scores "High Level Panel on the Development of Multidimensional Vulnerability Index." UN HLPF, February 2024 https://sdgs.un.org/sites/default/files/2024-02/Final\_MVI\_report.pdf "High Level Panel on the Development of Multidimensional Vulnerability Index." "High Level Panel on the Development of Multidimensional Vulnerability Index."

overall achievement at limiting vulnerabilities. Their resilience to climate events, both because geography and government accomplishment is what makes their numbers on the MVI so small. Alliances like the Five Eyes would also fit into this bloc. The Five Eyes Alliance is a group of states that work together to collaborate on global issues.<sup>228</sup> The alliance also expands into 14 Eyes. These are 14 states across North America, Oceania and Europe. Analyzing past success and failures can help to shape the framework on an international stage.

Generally, outcomes from this bloc would be oriented in providing support systems and training programs for the scientific and economic development of SIDS. Along with this, this bloc may focus on evacuation and developing legislation for climate-based refugees.

### Countries With a Moderate Average MVI (50-70)

Countries on this bloc are those that have an average score of 50-70 on the MVI. This bloc refers to states that have made some progress in resilience and vulnerability, but still have some factors interfering with development. Such factors include geographic location, and cultural values. 70 percent of SIDS have scores above 50 on the MVI.<sup>229</sup> This means that many states within this category, and the next have similar experiences to SIDS, but are generally furthering their progress. Perspectives emerging from this bloc may be more focused on developing resources and informing other states. It is known that climate disasters hinder resilience and create vulnerabilities. So, states that fall within this category may be prone to coastal disasters, drought, or other problems caused by climate change. This relation helps to create sympathy. However, access to resources will be a point of contention within this bloc. Monetary donations, and many forms of help that might be provided by countries with a lower average is harder to access in this range. So, assistance from this group may take shape in different ways.

Countries that fall into this bloc would be like India, Lebanon,

and Kenya. Each of these countries have shown progress towards climate resilience in recent years, despite other challenges. The beginnings of defeating vulnerability through international aid, and internal development are models of what could be followed by many SIDS. For example, Kenya has shown significant progress in economic growth since 2010.<sup>230</sup> This growth is extremely significant and has benefited many people in the country. However, cultural divides still exist that could be blocking progression. Women's rights, and corruption are still deeply engraved into Kenyan society, and will largely shape their stance on resilience for SIDS.

The shared experiences within this group shape the perspectives of their governments and will inform the extent to which they are motivated to help in this issue. Granted that many SIDS will fall into this category, their identified needs could shape the resolutions formed. On average, states that fall into this category are considered lower to middle income countries. So, experience-based policy on escaping vulnerability will be a strong point within this bloc. Vulnerability resistance is a strong marker of analysis within the MVI for SIDS. 231 This means that states currently working on building this resistance will play a key role in the development of international frameworks. Countries in this bloc should focus on internal developments towards resilience. For example, significant progress out of poverty, or social ills could be a key determinant of policy. Expected outcomes will mirror past projects that have aided in the development of these states. Foreign investment policy, and internal changes are likely to be recommended.

## Countries With a High Average MVI (70+)

Countries on this bloc are those that have an average score of 70 or more on the MVI. States that fall into this category are ranked very high for a lack of resilience and vulnerability.<sup>232</sup> Often, it is these states that need international aid. Many SIDS should fall into this category. Their dependence on foreign assistance is likely to inform the policy taken by this bloc. Considering the barricades to development faced by

Katherine Haan, "What is the Five Eyes Alliance?" Forbes List, 2024 https://www.forbes.com/advisor/business/what-is-five-eyes/.
"High Level Panel on the Development of Multidimensional Vulnerability Index."
"Economic Growth and Trade- Kenya" US Agency for International Development, 2023 https://www.usaid.gov/kenya/economic-

growth-and-trade.
231 "High Level Panel on the Development of Multidimensional Vulnerability Index."
232 "High Level Panel on the Development of Multidimensional Vulnerability Index."

these countries will shape the ideas and concepts needed to build resilience across SIDS.

A good example of this is recent advocacy coming from Antigua and Barbuda. Antigua and Barbuda has recently hosted the SIDS4 conference. This conference acted as a follow up for past conferences and attempted to shape a political declaration for the betterment of SIDS. The theme of this conference was "Charting the Course Towards Resilient Prosperity."233 As a country with a high MVI, Antigua and Barbuda used this conference to draw attention to concerns impacting the people of their islands. By hosting the conference, they were able to extend their scope of connections across SIDS and supporting governments. The development of infrastructure in Antigua and Barbuda was also very beneficial for their population, allowing them to spread their advocacy into other SIDS on the frontlines of climate change.

Many SIDS, and adjacent states will find themselves in this bloc. The voices represented through resolutions should reflect advocacy, and international awareness. By addressing the reasons that these states have high averages, aid from lower average states could be made easier. Countries in this bloc will take the strongest stances about climate change preparedness. They will be inclined to protect their own assets and call on more developed states to support their growth. Countries in this bloc should review past support given by lower average countries. This information can be used to shape international plans for support based on past successes and failures. Some countries included in this will be from the global south, and low-lying coastal states that face similar challenges to SIDS. States subject to other major climate change impacts also generally fall into this category. Famine, drought, and extreme cold snaps expand the scope of this bloc. The relationship between related states, and experience with resilience will largely influence the policies suggested in this bloc.

#### **Committee Mission**

UNESCO's vision is to contribute to peace and security by promoting international cooperation in education, sciences, culture, communication and information.<sup>234</sup> Often, this is accomplished through mixed dialogue that focuses on UNESCO's namesakes; Education, Science, and Culture. Such discussions are often used to create guidelines for international action and development. Past successes include the World Heritage Programme. It has brought awareness and forwarded scientific development within the islands. Delegates should aim to collaborate with as many other states as possible to improve resilience and tools for success in SIDS. This should be done with a focus on developments in education, science and culture. Delegates in UNESCO will discuss the role of the international community for accountability, and support of SIDS. In this committee, delegates need to focus on the mandate of UNESCO, and its five core functions. The five functions can be split into two topics, research and discussion.

The first point of research involves scientific, and social development. It is broken into the first 3 core functions. First is to serve as a laboratory of ideas and generate innovative proposals and policy advice in the field of competence. Followed by developing and reinforcing the global agenda in its field of competence through policy analysis. Finally, to set norms and standards in the field of competence and support and monitor the implementation.<sup>235</sup>

The next point of discussion involves international attention and placing focus on communities in need. In this committee, delegates will drive discussion on the topic of resilience in SIDS. First is to strengthen international and regional cooperation in its field of competence. It includes fostering alliances, intellectual cooperation, knowledge-sharing and operational partnerships. Next is to provide advice for policy development

<sup>&</sup>quot;4th International Conference on Small Island Developing States" SDG.UN, 2024 https://sdgs.un.org/conferences/sids2024 "UNESCO in Brief" UNESCO.org, Accessed August 4 2024. https://www.unesco.org/en/brief "Guidebook for Members of UNESCO's International and Intergovernmental Policies" Unesdoc.unesco.org, 2019 https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef\_0000368533&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach\_import\_2fb17858-50b3-46d3-9cb6-8c6120cdb046%3F\_%3D368533eng.pdf&locale=en&multi=true&ark=/ark:/48223/pf0000368533/PDF/368533eng.pdf#801\_19\_Guidebook%20IIBs\_int.indd%3A.43333%3A215

and implementation. Also to develop institutional and human capacities.<sup>236</sup> For the purpose of this debate, the field of competence is funding, and policy for SIDS.

Delegates should aim to improve the socioeconomic conditions within SIDS, and work towards the sharing of knowledge between states. Following UNESCO's mandate, debate should focus on sharing information globally. Delegates must work together to build new strategies. Although some repercussions are inevitable, building the proper resources has the potential to save millions of lives.



### Introduction

With 195 countries recognized by the United Nations, a lot of cultural diversity exists among states. With different events, traditions, and annual celebrations, communities have developed culture to distinguish themselves. There are many ways in which communities celebrate their culture. One of the most popular ones is cultural events. However, the sustainability of those practices has been questioned.

Cultural events are traditional celebrations that represent any cultural aspect. They can be done to represent art, music, food, religion, or other aspects shared by the community.1 Examples of cultural events can be festivals, fairs, exhibitions, and other similar activities.<sup>2</sup> While they are done to celebrate the culture itself, it is also a great opportunity to spread the culture. Celebrations such as Brazil's Carnival, India's Holi, and Germany's Oktoberfest are some of the most visited festivals worldwide, attracting millions of people around the world.3 Many festivals have combined distinct cultural elements like the Carnival, which is made up of African, European, and indigenous cultures.<sup>4</sup> They strengthen the cultural understanding and appreciation of foreigners through the celebrations. This spikes an interest in the purpose and traditions of the communities that celebrate their heritage. 5 However, some of these celebrations have not coexisted with sustainability.

Sustainability can be defined as "meeting our present needs without compromising the ability of future generations to meet their own needs."6 Considering this, cultural events in the present should not hinder the ability to celebrate them in the future. The relationship between culture and sustainability has been long studied and considered. In 2013, UNESCO adopted the Hangzhou Declaration entitled "Placing Culture

at the Heart of Sustainable Development Policies." These aim to show the need to have policies to achieve sustainability while celebrating culture.<sup>7</sup> This is especially important considering the 2030 Agenda for Sustainable Development and the goals that relate to cultural practices and preservation.

From large carbon footprints to waste generated by traditional practices, cultural events continue to have large environmental effects. A common denominator among all of them is the lack of adequate culturally sustainable policies. A call to action was made in 2022 during UNESCO's Mondiacult for substantial public policies. These policies aim to emphasize cultural rights such as the right to protection and promotion of cultural heritage.8 With increasing challenges such as climate change, cultures are put at risk. The urgency to promote sustainability within cultural events is evident. The disappearance of cultural heritage not only damages its native community but also means a big loss in the world's history.

However, sustainability within cultural events goes beyond environmental concerns. Equally as important to consider are the economic and social implications that they might have. A special focus should be placed on the well-being of the communities that host the events. This can be done by connecting with communities, ensuring fair trade practices, or even supporting local artisans. 9

<sup>1 &</sup>quot;Role Of Cultural Events In Our Lives," Eventpod, accessed August 7, 2024, https://eventpod.com.au/blog/role-of-cultural-events-in-

<sup>2</sup> Eventpod, "Role Of Cultural Events In Our Lives."
3 Visacent, "Top 10 most visited festivals Worldwide," Online Visa News, July 21, 2023, https://visa-to-travel.com/news/top-10-most-visited-festivals-worldwide.

visited-lestivals-worldwide.

4 Visacent, "Top 10 most visited festivals Worldwide."

5 Eventpod, "Role Of Cultural Events In Our Lives."

6 "Sustainability," United Nations, accessed August 7, 2024, https://www.un.org/en/academic-impact/sustainability.

7 United Nations Educational, Cultural, and Scientific Organization, Resolution CLT-2013/WS/16, The Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies, CLT-2013/WS/16 (May, 2013), https://unesdoc.unesco.org/ark:/48223/pf0000221238.

8 Lucia Jelasias Kinger "MONDIACHT 2022 Second July 1997 (May, 2013) (May, 2013))

<sup>8</sup> Lucía Iglesias Kuntz, "MONDIACULT 2022: States adopt historic Declaration for Culture," press release, September 30, 2022, https://www.unesco.org/en/articles/mondiacult-2022-states-adopt-historic-declaration-culture?hub=758.

9 Sabbas Joseph, "Shaping the future of cultural events and festivals with sustainability," The Times of India, January 5, 2024, https://timesofindia.indiatimes.com/blogs/voices/shaping-the-future-of-cultural-events-and-festivals-with-sustainability/.



# **History and Description of the Issue**

### **Performance and Cultural Celebrations** as a Form of Environmental Pollution

In the past few years, the world has seen a significant increase in pollution levels. While many factors contribute to it, celebrations are one of the main contributors. 10 According to National Geographic, pollution is the introduction of harmful materials into the environment.11 These materials do not belong in the area they are being introduced to, which produces a negative effect. From carbon emissions to light pollution, cultural traditions are likely to harm the environment if not handled properly. While the celebration of culture is important, if not handled correctly, the environmental impacts can be huge.

Greenhouse gasses are a major contributor to climate change. 12 It damages the Earth's ozone layer which harms humans and living things. As of 2022, atmospheric concentrations of greenhouse gasses have been the highest seen in the last 800,000 years. This puts quality of life in danger for the future.<sup>13</sup> Considering the different ways of celebrating, it is not rare to identify some of these celebrations as contributing to air pollution. One example can be seen with fireworks. From independence celebrations to music festivals around the world, fireworks have made their way into cultural celebrations. As entertaining and beautiful as they may seem, the effect on the environment is remarkable. Their constant use in celebrations has left a carbon footprint on the atmosphere.<sup>14</sup> They are without a doubt one of the biggest and most known forms of visual entertainment. After gunpowder was invented, Chinese people were one of the first to manufacture fireworks. They did it by firing bamboo up with the powder to scare away evil spirits and celebrate weddings and births.<sup>15</sup> Thanks to chemistry, pyrotechnics have become more entertaining by adding mineral elements to have a sparkly reaction with different colors. Once fireworks explode, the elements that

<sup>10</sup> Francisco Ramírez, Yago Cordón, Diego García, Airam Rodríguez, Marta Coll, Lloyd S. Davis, Andre Chiaradia, Josep L. Carrasco, "Large-scale human celebrations increase global light pollution," British Ecological Society 5, no. 5 (August 2023): 1553, https://doi. org/10.1002/pan3.10520.

11 Diane Boudreou, Mellisa McDaniel, Erin Sprout and Andrew Turgeon, "Pollution," National Geographic Education, last modified March, 6, 2024, https://education.nationalgeographic.org/resource/pollution/.

12 "Causes and Effects of Climate Change," United Nations, accessed August 22, 2024, https://www.un.org/en/climatechange/science/

Causes and Effects of Climate Change, 'Onted Nations, accessed August 22, 2024, https://www.un.org/en/climatechange/science/causes-effects-climate-change.

13 Jeff Turrentine, "What Are the Causes of Climate Change?" NRDC, September 12, 2022, https://www.nrdc.org/stories/what-are-causes-climate-change#human.

14 Joe Hernandez, "The explosive history of fireworks, from ancient China to Revolutionary America," WUNC, published July 4, 2024, https://www.wunc.org/2024-07-04/the-explosive-history-of-fireworks-from-ancient-china-to-revolutionary-america.

15 Hernandez, "The explosive history of fireworks, from ancient China to Revolutionary America."

make up the pyrotechnics go through a chemical reaction called "combustion". 16 Combustion produces toxic atmospheric pollutants that remain in the oxygen we breathe, harming not only our heart and lungs but also the environment.<sup>17</sup> In addition to contributing to air pollution, the transportation of fireworks also largely contributes to the carbon footprint. However, the transportation of fireworks is not the only thing contributing to the carbon footprint. Another example can be seen with music festivals. In 2023, A Greener Future released a report discussing the carbon footprint they have. Between 18 percent to 79 percent of the carbon footprint from music festivals is made up of only audience traveling. 18 This depends on different factors such as place and scale. These high percentages show how carbon emissions are related to cultural celebrations with travel alone.

While air pollution is a major threat to the environment, other forms of pollution are also present during cultural events. Light pollution has seen a major increase, contributing to climate change.<sup>19</sup> Light pollution can be defined as the change of the nightscape by the increase in light levels. This is associated with the poor or excessive use of artificial outdoor lights.<sup>20</sup> This can have negative consequences on human life, such as disrupting sleeping cycles. For animals, this problem contributes to disrupting the natural patterns of wildlife. Other consequences also include an increase in carbon dioxide.<sup>21</sup> Some cultural celebrations that use light decorations contribute to this issue. Research has shown that a peak in light pollution is linked to some of the larger worldwide

celebrations.<sup>22</sup> It was found that from December through January, the countries that celebrate Christmas contribute to this. On a similar time frame, celebrations of the Chinese New Year also contributed to the issue. From April through June, countries that celebrate Ramadan contributed the most. During October through November celebrations of Diwali contributed the most.<sup>23</sup>

Another major issue to be considered is waste. As of 2024, waste is the eighth most polluting industry in the world.<sup>24</sup> Waste is defined as the unintended byproduct that is left from consuming and producing goods in an unsustainable waste.<sup>25</sup> Music festivals are not only a way to celebrate culture but also one of the main contributors to this problem. From fast fashion to materials used in festivals, waste is massively produced in these types of celebrations. It is estimated that major music festivals in the US generate around 100 tonnes of solid waste every day. A similar situation can be seen in the UK, with an estimated 23,500 tonnes of waste generated each vear.26

Single-use plastic is one of the main contributors to the amount of waste generated. Typically used for food, singleuse plastics are rarely correctly disposed of. In the long term, these plastics will end up in landfills, creating toxins that affect the environment.<sup>27</sup> Plastic tents are also a huge contributor, as they are often marketed as disposable. They are made from Polyvinyl chloride (PVC). This material is versatile and durable, making suppliers interested in its production. As much as it

Kruti Davda, "Top 10 Most Polluting Industries in the World (2024)," Oizom, published February 6, 2024, https://oizom.com/most-

polluting-industries. 25 "Waste Pollution 101," UN Environmental Programme, accessed August 22, 2024, https://www.unep.org/interactives/beat-waste-

<sup>16</sup> Jessica Han, "Crowd-Pleasing Fireworks Are Not So Pleasing to the Planet," Earth.org, April 19, 2023, https://earth.org/environmentalimpact-of-fireworks/.

<sup>&#</sup>x27;How air pollution is destroying our health," World Health Organization, accessed July 10, 2024, https://www.who.int/news-room/

<sup>17 &</sup>quot;How air pollution is destroying our health," World Health Organization, accessed July 10, 2024, https://www.who.int/news-room/spotlight/how-air-pollution-is-destroying-our-health.

18 "Festival Carbon Footprints," A Greener Future, accessed July 10, 2024, https://www.agreenerfuture.com/carbonimpactsassessment.

19 Elaina Zachos, "Too Much Light at Night Causes Spring to Come Early,"National Geographic, published June 28, 2016, https://www.nationalgeographic.com/science/article/light-pollution-early-spring-budbursts.

20 National Geographic Society, "Light Pollution," National Geographic Education, last modified April 1, 2024, https://education.nationalgeographic.org/resource/light-pollution/.

21 National Geographic Society, "Light Pollution."

22 Ramírez, Cordón, García, Rodríguez, Coll, S. Davis, Chiaradia, Carrasco, "Large-scale human celebrations increase global light pollution," 1553-1555.

23 Ramírez, Cordón, García, Rodríguez, Coll, S. Davis, Chiaradia, Carrasco, "Large-scale human celebrations increase global light pollution," 1553-1555.

24 Kruti Davda, "Top 10 Most Polluting Industries in the World (2024)" Oizom, published February 6, 2024, https://eioarg.com/scale-scale/light-pollution.

<sup>26</sup> Richard Gray, "The people fighting the war on waste at music festivals," June 27, 2019, https://www.bbc.com/culture/article/20190627-the-people-fighting-the-war-on-waste-at-music-festivals.

27 Gray, "The people fighting the war on waste at music festivals."

is convenient to use, PVC contains toxic materials that are resistant to breakdown, harming humans and the ecosystem.<sup>28</sup> It is estimated that 250,000 tents are abandoned at the UK's festivals yearly. This highly contributes to the amount of waste and the negative effects that it has.<sup>29</sup>

However, many steps have been taken to reduce the amount of waste. One example can be seen in Denmark's Roskilde festival, in which no single-use plastics were used to serve drinks. They used reusable plastic cups that could be brought back for refills. Each cup was reused 25 times on average. Additionally, those who returned the cup at the end got a partial refund. The return rate was approximately 92 percent.<sup>30</sup>

The lack of sustainable practices in cultural celebrations has damaged the environment and living things. While efforts have been made to make cultural celebrations more sustainable, more practices are needed. While some events may contribute to more pollution than others, there is an evident need to start celebrating sustainably.

#### **Traditional** Cultural Preservation Craftsmanship **Endangered** Languages

Visual arts and crafts are considered important parts of culture. From tools, jewelry, and clothing to costumes and props for festivals, crafts are pieces that portray a culture through objects.<sup>31</sup> With the passing of the years and new advancements in the world, craftsmanship practices have been increasingly abandoned. This creates a concern for the disappearance of teaching local traditions, leading to a vanishing future of local craftsmanship. Many factors can be linked to the extinction

of traditional craftsmanship such as the industrialized process and social constraints. These feed the loss of craftsmanship continuation and prevent the sustainable development of these practices. While efforts have been or can be made to preserve traditions, it is essential to seek their preservation sustainably.

One of the main things that has endangered craftsmanship is the industrialization process. When discussing the industrialization process, we refer to the procedure done to obtain items on a large scale. This is done with the help of chemical, physical, electrical, or mechanical steps.<sup>32</sup> This process is very helpful for economic growth, as it provides a quick way to finish products. However, this also leads to losing interest in the damage the process has on natural resources.<sup>33</sup> This process has led to damage to traditional craftsmanship by changing the way cultural objects are produced. Additionally, it also affects the economic and cultural future of all craftsmen. Newer generations of craftsmen have shown less interest in working in the craftsmanship area.<sup>34</sup> Mass production of cultural crafts in the industrial sector has made the handicraft job more complicated than before.<sup>35</sup> Craftsmen cannot keep up with industrial processes, as their work is far more detailed and handmade.<sup>36</sup> There is a large demand to buy handicrafts in a larger, faster, and cheaper way. This leads to buyers purchasing the crafts from companies that make them in mass production. This leaves craftsmen with their work and the inability to sell their products. As necessary as it is, crafts practitioners do not tend to train their successors in fear of the disappearance of craft markets.<sup>37</sup>

Heritage Craft is a non-governmental organization accredited by UNESCO for craftsmanship in the United Kingdom. They

<sup>28</sup> Lindsey Schmidt, "Addressing the Impacts of Concerts and Music Festivals on the Environment," WMEAC BLOG, May 31, 2023, https://wmeac.org/2023/05/addressing-the-impacts-of-concerts-and-music-festivals-on-the-environment/.
29 "This is how music festivals are tackling plastic waste," World Economic Forum, August 28, 2019, https://www.weforum.org/agenda/2019/08/3-ways-music-festivals-are-tackling-plastic-waste/.
30 World Economic Forum, "This is how music festivals are tackling plastic waste."
31 "Traditional craftsmanship," UNESCO, accessed July 21, 2024, https://ich.unesco.org/en/traditional-craftsmanship-00057#.
32 Warstila, s.v. "Industrial processes," accessed July 21, 2024, https://www.wartsila.com/encyclopedia/term/industrial-processes .
33 Nicolas B. Verger, Raffi Duymedjian, Charlotte Wegener, Vlad P. Gläveanu, "Creating Preservation: A Framework of Creativity in Support of Degrowth," SageJournals (June 2024), https://doi.org/10.1177/10892680241256312 .
34 Nan Yang, Xiaoge Zanf, Cong Chen, "Inheritance Patterns under Cultural Ecology Theory for the Sustainable Development of Traditional Handicrafts," MDPI, 14 NO. 22: 14719 (2022): 3-4, https://doi.org/10.3390/su142214719 .
35 Liang Zhu, "How can traditional folk crafts be protected? Rethinking the "Productive Approach to Safeguarding" Traditional Intangible Cultural Heritage," Journal of Design Service and Social Innovation 1, no. 1 (March 2023): 28, https://www.michelangelo-scholar.com/upload/JDSSI-NO\_00004A-20230606.pdf .
36 Jazmina W. Arriffin, Syed Shahfiw, Fazil Ahmad, Asmawi Ibrahim, Farah Syazrah Ghazalli, "Handicraft Innovations: A Strategic Approach to Preserving Intangible Cultural Heritage of Malaysia," ISVS 10, no. 7 (July 2023): 137, https://isvshome.com/pdf/ISVS\_10-7/ISVSej\_10.7.9 Jazmina.pdf .
37 Heritage Crafts skills under threat with 17 additions to the Red List of Endangered Crafts," Heritage Crafts, May 11, 2023, https://www.heritagecrafts.org.uk/wp-content/uploads/2023/05/NEWS-RELEASE-Red-List-2023-EMBARGOED-11-May-2023-v4.pdf .

develop a list that ranks traditional crafts by their likelihood of going extinct, joining other already listed crafts.<sup>38</sup> In 2023, the list revealed that 17 heritage crafts were now on their "red list of endangered crafts" of traditional skills. It means that they are facing extinction in the UK.<sup>39</sup> At least five of them have become extinct in the past generation. 40 Examples include hand-stitched cricket ball making, mouth-blown sheet glass making, and gold beating. From the list, 63 crafts were considered "critically endangered" while 82 have been classified as "endangered" crafts.

Language is another important part of culture that is at some risk of extinction. Language is a spoken, signed, or written way of communication in which human beings express themselves.<sup>41</sup> It is one of the most used ways of communication humans have been using for centuries. According to UNESCO's World Atlas of Languages, there are a total of 8,234 spoken or signed

languages. 42 However, only 7,000 of those are still in use. 43

As of 2024, there are only 65 safe languages recognized by UNESCO's World of Atlas.44 Moreover, there are 2,362 languages categorized as definitely endangered speeches.<sup>45</sup> Some examples are Balaesang, Dupaninan Agta, and Irish. There are 463 Severely Endangered languages, and 383 Critically Endangered languages. Some of them only have nine speakers, showing the evident risk of extinction.<sup>46</sup>

With the evolution of society, the maintenance and learning of heritage language has been declining. A big problem in teaching languages is the obtaining of cultural language materials for such purposes. Finding original texts or recordings of the usage of the language is hard. This makes it even harder to teach native languages.<sup>47</sup> Not only is the teaching of these languages difficult, but also the maintenance among immigrant children and teens faces significant challenges.

The Red List of Endangered Crafts," Heritage Crafts, accessed July 21, 2024, https://www.heritagecrafts.org.uk/skills/redlist/. Rosie Stagg, "These 17 heritage crafts are now considered 'critically endangered'," Country Living, May 20, 2023, https://www.countryliving.com/uk/news/a43917684/heritage-crafts-critically-endangered/. Categories of Risk: The Heritage Crafts Red List," Heritage Crafts, accessed July 21, 2024, https://www.heritagecrafts.org.uk/

categories of-risk/.

41 Britannica, s.v. "Language," last modified june 17, 2024, https://www.britannica.com/topic/language .

42 "The World Atlas of Languages," UNESCO, accessed July 21, 2024, https://en.wal.unesco.org/world-atlas-languages .

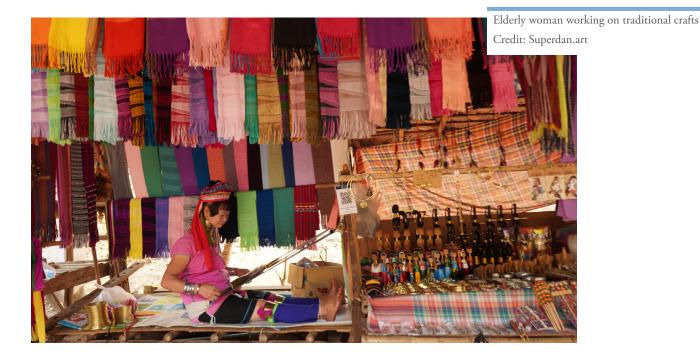
43 UNESCO, "The World Atlas of Language."

44 "Languages," UNESCO, accessed July 21, 2024, https://en.wal.unesco.org/discover/languages?text=&sort\_by=title&f%5B0%5D=language\_situation\_language\_facet%3A5 .

45 UNESCO, "Languages."

46 UNESCO, "Languages."

47 Daniel J. Villa, "INTEGRATING TECHNOLOGY INTO MINORITY LANGUAGE PRESERVATION AND TEACHING EFFORTS: AN INSIDE JOB," Language Learning & Technology 6, no. 2 (May 2002): 92-101, https://scholarspace.manoa.hawaii.edu/server/api/core/bitstreams/6a565cdc-3768-46f5-a5f3-f41d42590816/content .



As for the present, it is predicted that 6,000 languages will face extinction by the end of the century. This can be prevented with a sustainable approach, such as linguistic sustainability.<sup>48</sup> Linguistic sustainability seeks the continuity of human linguistic groups while supporting intercommunication among groups.<sup>49</sup> With the help of linguistic sustainability, members of distinct communities have shared international cultural dialogue. This decreases the risk of language endangerment, securing a sustainable future for language heritage and cultural domains.

It is of great importance to seek and understand the preservation of craftsmanship and languages around the world. As forms of intangible heritage culture, these domains transmit a deeper message of understanding and appreciation. They also help establish great values for generations to come. These forms of cultural domains are the main reason cultural diversity can be maintained for ages and guarantee sustainable development.<sup>50</sup>

#### Supporting Indigenous Local and Communities **Development**

According to National Geographic, a territory is a particular area of land that is ruled by a person or group of people.<sup>51</sup> The size of them will be different and with that territorial divisions come into place. Territorial divisions help separate the territorial space into separate units. This is primarily due to political disputes or ethnic tensions. 52 From those divisions, citizens create a community, which is a group of citizens that interact with each other and share the same environment.<sup>53</sup> However, not all communities have been formed due to the

territorial divisions made by rulers. Indigenous communities have long existed before the naming and ruling of certain territories. They are considered descendants of those who previously lived in a geographical region at the time of other people's arrival which became dominant over the land.<sup>54</sup> With an estimated 370 million Indigenous people living in over 90 countries. Each Indigenous community has its own traditions, practices, characteristics, and way of life. 55 The UN has pointed out the following characteristics of what makes an Indigenous community. The first one is acceptance by the community members and self-identification as indigenous people. The next one is pre-colonial societal history, strong bonds with specific territories, and their surrounding natural resources. Another characteristic is having a specific and clear social, economic or political system and a definite language, culture and beliefs. They should also have groups of society without dominance. Finally, they should seek for maintenance and reproduction of their ancestral environments and systems as distinctive communities.

As discussed earlier, each country has its own culture made up of different traditions. This can include either local or indigenous communities. Indigenous communities have been the custodians of many World Heritage sites.<sup>56</sup> While these diversities of cultures have made the countries and lands we know today, the history Indigenous populations have faced is a lot more complex. The past faced by multiple rural communities is filled with historical racism and discrimination among other ways of oppression, managing to affect its members' wellbeing and traditions.<sup>57</sup> Many communities have suffered from

<sup>48</sup> Balazs Huszka, Alexander Stark, Indah Aini, "Linguistic Sustainability: Challenges and Strategies of Preserving Minority and Indigenous Languages - The Case of Indonesia," International Journal of Arts and Social Science 7, no. 6 (June 2024), https://www.ijassjournal.com/2024/V716/41466639488.pdf.
49 Albert Bastardas-Boada, "LINGUISTIC SUSTAINABILITY FOR A MULTILINGUAL HUMANITY," University of Barcelona, Spain (June 2007): 134-163, https://philarchive.org/archive/BASLSF.
50 Ozlem Karakul, "The Effects of Tourism on Traditional Craftsmanship for The Sustainable Development of Historic Environments," European Journal of Sustainable Development (2019): 380-390, https://10.14207/ejsd.2019.v8n5p380.
51 "Territorial Divisions," National Geographic, accessed July 21, 2024, https://education.nationalgeographic.org/resource/resource-library-territorial-divisions/.
52 Fiveable, s.v. "Territorial Division," last accessed July 21, 2024, https://library.fiveable.me/key-terms/ap-hug/territorial-division.
53 Ipbes, s.v. "Local Community," last accessed July 21, 2024, https://www.ipbes.net/glossary-tag/local-community#:-:text=Definition,influences%20in%20their%20daily%20life.
54 UNESCO, Indigenous peoples, indigenous voices, https://www.norg/esa/socdev/unpfii/documents/5session\_factsheet1.pdf.
55 "Indigenous populations," Health Poverty Action, accessed July 21, 2024, https://www.healthpovertyaction.org/how-poverty-is-created/indigenous-populations/.
56 "Engaging Local Communities the Stewardship of World Heritage (COMPACT)," UNESCO, accessed July 21, 2024, https://whc. unesco.org/en/activities/745/.
57 Milgris B. Gonzalez, Kelly J. Sittner, Melissa L. Walls, "Cultural efficacy as a novel component of understanding linkages between culture and mental health in Indigenous communities," Wiley Online Library 70, no. 1 (March 2022): 191-201, https://onlinelibrary.wiley.com/doi/full/10.1002/ajcp.12594.

colonization, bringing historical trauma and challenges to regain their traditions.<sup>58</sup> Not only is the land stolen, but also traditions and culture.<sup>59</sup> Nowadays governments and NGOs have been working on decolonizing indigenous populations. They support their members in reclaiming their culture, traditions, practices, history, and land that were taken away during colonization.<sup>60</sup>

While some communities prefer to continue their preservation through isolation like most Native American groups, other communities welcome other people into their culturally rich world.<sup>61</sup> In recent years, indigenous communities have faced multiple issues, especially on how to preserve or bring back to life the culture of the community, including traditional events and other practices, as well as their socioeconomic status. 62 As of April of 2023, Indigenous people represented 19 percent of the extremely poor communities. 63 Though 80 percent of the world's remaining biodiversity is taken care of and preserved

by these populations, these groups are the last considered by federal authorities for public investments, such as basic services of water and infrastructure.<sup>64</sup> With governments recognizing only a small portion of the land as Indigenous territory, the land on which they depend is strongly related to their identity and culture as a whole. Such small recognition not only limits the rights they have over their land but also their physical and spiritual well-being.65 Not only are these communities financially poor, but also educationally and health-related scarce.

Rural populations continue to suffer from exclusion by their own governments, creating a need to support local and indigenous communities. Because local communities place important attention on the preservation of their natural environment and surroundings, the beauty of their land has been kept for years, attracting people from all around the world to pay a visit. Not only do people visit the land for its

58 Jenn Cusick, Post-Secondary Peer Support Training Curriculum, 1st ed. (2022), https://opentextbc.ca/peersupport/chapter/impact-of-colonization-on-indigenous-peoples-culture/#:~:text=Colonization%20is%20when%20a%20country,of%20the%20indigenous%20

ot-colonization-on-indigenous-peoples-culture/#:~:text=Colonization%20is%20when%20a%20country,of%20the%20indigenous%20 people's%20culture.

59 Cusick, Jenn, Post-Secondary Peer Support Training Curriculum.

60 Cusick, Jenn, Post-Secondary Peer Support Training Curriculum.

61 Hilary N. Weaver, "Indigenous People in a Multicultural Society: Unique Issues for Human Services," Oxford Academic 43, no. 3, (May 1998): 203-211, https://doi.org/10.1093/sw/43.3.203.

62 Victoria R. Williams, Indigenous peoples: An Encyclopedia of Culture, History, and Threats to Survival, 1st ed. (Colorado: Denver, 2020), 23, https://books.google.com.mx/books?hl=en&lr=&id=TxjOEAAAQBAJ&oi=fnd&pg=PR3&dq=history+of+indigenous+people&ot=057Q\_YNZgx&sig=CYH2UJsPiVSSZbtx3gnRLwFfAYs&redir\_esc=y#v=onepage&q=history%20of%20indigenous%20 people&f=false.

63 "Indigenous Peoples" Worldbank, pagested India 21, 2024 Jan. "Indigenous Peoples" Worldbank, pagested India 21, 202

63 "Indigenous Peoples," Worldbank, accessed July 21, 2024, https://www.worldbank.org/en/topic/indigenouspeoples .
64 Worldbank, "Indigenous Peoples."
65 Worldbank, "Indigenous Peoples."



landscape and beautiful environment, but also to experience the traditional celebrations and events the communities have to offer for others to enjoy. According to UN Tourism, tourism is a social, cultural, and economic event in which visitors from around the world travel to places outside of their environment for personal or external purposes. 66 Cultural tourism is known as travel that is motivated by wanting to learn or discover a new culture.<sup>67</sup> Cultural events often promote cultural tourism, as they provide an opportunity to experience culture firsthand. There are many advantages and positive impacts that come from cultural tourism motivated by cultural events. They increase the popularity of the city, create new jobs, encourage the building of new infrastructure, and strengthen traditions and values.68

Even though tourism is an evident way a community can increase its income and financial status, it also comes with some disadvantages. Tourism increases the need for natural resources such as water and food, as well as the local land use which if mistreated can come to a greater loss than expected.<sup>69</sup> Alongside the necessity of natural resources, a loss of cultural identity may be seen. Visitors admiring and finding themselves fond of cultures, lifestyles, and traditions can be adapted back to their homeland, resulting in a loss of cultural diversity and identity. It is with this in mind that support is needed in an environmentally developed and sustainable way. Ecotourism is a form of visitation that links ecological sustainability with tourism, having a sole focus on educational visits with an economic and nature-like approach.70 With ecotourism, visitors get a more inclusive approach to natural sight-seeing, cultural education, recreation, and relaxation from a more modern ambiance.<sup>71</sup> Not only are the visitors needed to carry

out ecotourism, but also the participation of locals to carry out active participation in the teaching and transmission of local cultures and traditions.<sup>72</sup> The support of locals to participate in ecotourism activities is what makes ecotourism the ideal approach for awareness travel and communities' sustainability.

A case study done of the Tanoboase Sacred Natural Site in the Brong Ahafo Region of Ghana in 2019 shows the importance of an inclusive, respectful, and inviting environment to cultural heritage sites. As stated by members of the Brong Ahafo Region, it is a strong identity that fully represents preservation from all forms of degradation.<sup>73</sup> Members of the region also pointed out that the right marketing that shows the full identity and culture of a community attracts visitors and engages with possible tourists.74

With the help of a sustainable approach to supporting local and indigenous communities such as ecotourism, rural populations may be presented with environmental development. The right approach to a rich topic such as this one might result in lifechanging experiences for present and future generations to

### **Promoting Ethical Responsibility During Cultural Celebrations**

With the number of cultures that exist around the world, there is curiosity about traditions, celebrations, and all of the elements that give identity to the practices. With 193 countries, there are many variations of culture.<sup>75</sup> However, it is not uncommon to see many cultures share practices like religious celebrations.

Religion can be defined as the belief in a supernatural

<sup>66</sup> UN Tourism, s.v. "Tourism," accessed July 21, 2024, https://www.unwto.org/glossary-tourism-terms .
67 Rowland Lopes and Dr. Apoorva Hiray, "Impacts Of Cultural Events And Festivals On Cultural Tourism," Journal of Advanced Zoology, 2024, https://jazindia.com/index.php/jaz/article/view/4177/3664
68 Rowland Lopes and Dr. Apoorva Hiray, "Impacts Of Cultural Events And Festivals On Cultural Tourism,"
69 Steve Russel, "The Pros and Cons of Tourism," Environment, February 7, 2022, https://environment.co/the-pros-and-cons-of-tourism/

Dickson Adom, "The place and voice of local people, culture, and traditions: A catalyst for ecotourism development in rural communities in Ghana," ScienceDirect 6 (2019): 1-11, https://doi.org/10.1016/j.sciaf.2019.e00184.

71 Dickson, "The place and voice of local people, culture, and traditions: A catalyst for ecotourism development in rural communities in Ghana," 1-11.

<sup>72</sup> Dickson, "The place and voice of local people, culture, and traditions: A catalyst for ecotourism development in rural communities in

Ghana," 1-11.

73 Dickson, "The place and voice of local people, culture, and traditions: A catalyst for ecotourism development in rural communities in

<sup>74</sup> Dickson, "The place and voice of local people, culture, and traditions: A catalyst for ecotourism development in rural communities in Ghana," 1-11.

<sup>75 &</sup>quot;Member States," United Nations, accessed July 21, 2024, https://www.un.org/en/about-us/member-states.

power manifested through gods, spirits, or other forms of manifestation.<sup>76</sup> Through religion, believers manifest their beliefs, attitudes, or practices through a series of activities that worship their deity. There is a diverse group of religious beliefs that can be classified as follows.<sup>77</sup> Animism that believes in spirits. High gods consist of beliefs in spirits who are said to create all reality, making them the ultimate ruler. Spirits and gods, with spirits being of once-human supernatural forces while gods of non-human origin. Ancestor worship believes in spiritual beings who are related to their believers. The afterlife which is a part of an individual's personal identity continues to exist after their death. Finally, there is reincarnation, which believes that once a person dies, they are reincarnated and are brought back to the world through another human form.

Even though there is an existing variation of religious beliefs, many religions and their practices are shared around the world. For example, beliefs in high gods are very popular, as they can be seen in three main religions: Judaism, Christianity, and Islam.<sup>78</sup> High gods religions are those that believe in a higher deity that has transcended from the world they created and is associated with the sky, and they are present in every community.<sup>79</sup> These religions have become some of the most remarkable religions in history.

While some countries have built their culture around certain varieties of religious beliefs, others have naturally believed in their deities or traditions even before a variation of religions was considered. A clear example of this is Mexican culture. Mexican holidays are one of the most diverse celebrations in the world. These include Christmas holidays celebrated by 77.7 percent of catholic Mexicans to ancestral traditions like the Day of the Dead. This is a holiday that celebrates death as part of the cycle of life and Mexican identity.<sup>80</sup> These celebrations are all acknowledged in the country and represent the culture

Mexico has to offer. Both celebrations are categorized into different variations of religious beliefs. Christmas holidays to high gods while Day of the Dead to the afterlife. However, they both manage to coexist and represent the diversity of Mexican culture.

Celebrations are often made popular because of cultural productions such as movies, music, art, and clothing. Social processes are generated for the spreading and acknowledgment of practices, cultural forms, values, and understandings.81 People who are not familiar or not participants begin to become more interested and indulge themselves in the variety of cultural events. Religious or not, celebrations tend to invite others to the commemoration, creating a festive environment for others to join. UNESCO's Convention on the Protection and Promotion of the Diversity of Cultural Expressions highlights this. It states that cultural interactions nurture cultural expressions and help the progress of society at a large scale.<sup>82</sup> It is necessary to promote cultural interactions and cultural inclusion. However, avoiding misunderstandings of the cultural significance of celebrations is an important thing to consider. There should be caution around cultural production, feeding stereotypes, and damaging the image of distinct cultures.83

Cultural production has done a lot for the spread of cultural celebrations. With the inclusion of productional arts that are of interest to people around the world, they allow for the sharing of a variety of cultural events. However, they have also harmed the practices and identities of the communities that celebrate them. Media consumption has taken a toll on cultural understanding. With access to quick information, people all over the world can quickly read articles, consume productions, or listen to audio regarding a certain cultural topic. While this allows for available information, it is also

<sup>76</sup> Stephen D. Glazier, Carol R. Ember, "Religion," Explaining Human Culture, November 28, 2018, https://hraf.yale.edu/ehc/summaries/religion#what-is-religion.
77 Glazier, Ember, "Religion."
78 Glazier, Ember, "Religion."
79 Britannica, s.v. "High God," accessed August 10, 2024, https://www.britannica.com/topic/High-God.
80 Cat Rainsford, "Mexico in Numbers: Religion," Mexico News Daily, December 7, 2023, https://mexiconewsdaily.com/culture/mexico-in-numbers: religion/

in-numbers-religion/.

81 Oxford Reference, s..v. "Cultural production," accessed July 21, 2024, https://www.oxfordreference.com/display/10.1093/oi/authority.2
0110803095652897#:~:text=1.,Dictionary%20of%20Media%20and%20Communication%20%C2%BB.
82 UNESCO, "Convention on the Protection and Promotion of the Diversity of Cultural Expressions," accessed July 21, 2024, https://www.unesco.org/en/legal-affairs/convention-protection-and-promotion-diversity-cultural-expressions.
83 Azadeh Eriss, Massod Khoshsaligheh, "Stereotypes in a Multilingual Film: A Case Study on Issues of Social Injustice," MDPI (2023): 1-13, https://www.mdpi.com/2226-471X/8/3/174.

a way to promote misinformation. Stereotypes are popular social beliefs about specific groups or types of people.84 From racial stereotypes to ethnic beliefs, all manage to affect the way these groups are viewed. Although stereotypes can be traced to thousands of years ago, media consumption has fed into the wrongful beliefs of these groups.85

In recent years media consumption has fed the stereotypes associated with communities. Stereotypes can be positive or negative, but the assumption of thinking a group is a certain way still impacts their community. To put into perspective, audiovisual texts such as movies and television shows tend to be built around social constructs. These are ideas created by the people behind the production. 86 Not only are social constructs portrayed through these forms of entertainment, but also the ideologies behind them feed the ideas that influence people's vision of the communities. When such productions include multilingual interactions, a contrast between cultures can be seen. This feeds into the disempowerment of cultural diversity and reinforces stereotypes.87

With the inclusion of culture in productions, an application

of these cultural elements can be seen by people outside of the communities. This can damage the identity of the origin groups and their message. Cultural appropriation is the usage or adaptation of clothing, mannerisms, traditions, or language of a social group disrespectfully or stereotypically.<sup>88</sup> These have been present for a long time, for example with big artists like Pablo Picasso appropriating designs and patterns that originated from African carvers. It can also be seen in present-day fast-fashion clothing designs containing cultural patterns. This form of appropriation has long become very diverse, manifesting itself through different activities. 89 The first way of classifying this can be material appropriation. This happens when tangible objects like paintings, sculptures, or other physical objects are transferred from one culture to another. Another way of classifying it can be non-material appropriation. This implies the reproduction of non-tangible works of art produced by another culture. Another classification is stylistic appropriation. Ir refers to works produced with stylistic elements from another culture. Motif appropriation is another classification. It is related to stylistic appropriation of the usage of basic ideas, designs, or patterns from another

Dolores E. Battle, "Stereotyping," ScienceDirect (2005), https://www.sciencedirect.com/topics/medicine-and-dentistry/stereotyping .

Azadeh Eriss, Massod Khoshsaligheh, "Stereotypes in a Multilingual Film: A Case Study on Issues of Social Injustice."

Khoshsaligheh, "Stereotypes in a Multilingual Film: A Case Study on Issues of Social Injustice," 1-13.

Eriss, Khoshsaligheh, "Stereotypes in a Multilingual Film: A Case Study on Issues of Social Injustice," 1-13.

Emily Kendall, "Cultural Appropriation," Britannica, June 12, 2024, https://www.britannica.com/topic/cultural-appropriation .

James O. Young, The Ethics of Cultural Appropriation, 1st ed. (February 2012), 301-316, https://dalspace.library.dal.ca/bitstream/handle/10222/63438/dalrev\_vol80\_iss3\_pp301\_316.pdf .



culture. Lastly, subject appropriation is the classification that occurs when a non-member of a culture represents members or aspects of another culture.

It is evident that cultural education around the world needs to be improved. The appropriation of cultures continues to prevail in the modern world. With the use of social media, especially regarding music and clothing, it has become common for people to use other cultures' identities for "aesthetic" reasons. While wanting to acknowledge the beauty and support for a culture is not harmful, the actions done to "support" said culture are the ones that may lead to stereotypes or discrimination.

When talking about celebrating and appreciating other cultures, this can be done without appropriation. Cultural appreciation is the opposite of appropriation. It favors looking to learn, understand, and honor a culture without the necessity of benefiting oneself.90 With cultural appreciation, a sustainable cultural approach is accomplished. It allows for respect and acknowledgment of the existence of other cultures' traditions and practices without making them our own. An example of cultural appreciation is the learning of a culture through a direct member of the community. Learning about traditional practices such as craftsmanship, festivals, or dances from a direct member of the culture not only shows support but also interest and creates intercultural dialogue. Being conscious of the cultural heritage and history behind culture and understanding the important meaning each practice, belief, and tradition has been the way of leading cultural ethics and morals into our lives.

# **Current Status**

## Case Study: Diwali Celebrations in Delhi, India

A particular cultural celebration can become the largest of its holidays through the years in a specific country. Some countries' biggest holidays are to commemorate their independence or important revolutions. For other countries, their biggest celebration is related to profound cultural connection. One example is India, which hosts one of the most well-known holidays in the world: Diwali.

Diwali is the biggest festival in India. This celebration is known as the "festival of lights" and has particular significance depending on the region and religion. It shows a different story with the same basis: good over evil. Based on the Hindu calendar, this event is celebrated during the last days of October and the first days of November.<sup>91</sup> The festival is named after the row of lamps (Deepavali) in Sanskrit. It represents the protection of inner lights from outer darkness in their homes.92

Due to the holiday being celebrated among different religions, a particular origin of it is not identified. Under Hindu values, Diwali also has different versions of the story depending on geographical locations. 93 The most famous stories are the ones of Ramayana and Mahabharata, which come from important Hindu texts. Ramayana tells the story of Rama, a prince from Ayodhya city located in the North of India. After being exiled for 14 years by his father King Dasharatha, Rama's Stepmother requested him, his wife Sita and his brother Laxmana to travel through forests to return to Ayodhya. This would allow Rama to be crowned king. To welcome the travelers from this significant story, the people of Ayodhya cleaned their houses and lit up oil lamps to illuminate the path.<sup>94</sup>

<sup>&</sup>quot;Cultural Appreciation vs. Appropriation," University of Wisconsin-Madison, accessed July 21, 2024, https://4h.extension.wisc.edu/opportunities/projects/arts-communication/cultural-appreciation/#:~:text=Cultural%20Appreciation%5B1%5D&text=If%20your%20 goal%20is%20to,by%20someone%20from%20that%20culture.

91 Deepa Barath, "What is Diwali, and how is it celebrated in India and the diaspora?," PBS, November 10, 2023, https://www.pbs.org/newshour/world/what-is-diwali-and-how-is-it-celebrated-in-india-and-the-diaspora.

92 "Diwali: Festival of Lights," National Geographic Kids, accessed August 4, 2024, https://kids.nationalgeographic.com/pages/article/diwali.

<sup>93</sup> Amy Mckeever, "Diwali is India's most important holiday—and a celebration of good over evil," National Geographic, October 11, 2022, https://www.nationalgeographic.com/history/article/diwali-history-customs-indian-festival-of-lights.
94 Salar Jung Museum, "Ramayana in Art," Google Arts & Culture, accessed August 4, 2024, https://artsandculture.google.com/story/8gWB7ABpntvssA.



A woman lighting the candles for the Festival of Lights (Diwali, Deepavali) in India

On the other hand, Diwali is celebrated in Mahabharata due to the story of five Pandava brothers who lost their possessions because of a game of dice against Kauravas. After hard work is done by the brothers, they then return with their wife Draupadi to their kingdom on the night of Kartika Amasavya, the night of the lunar phase of the new moon. Happy with their return, the loyal people lit lamps to welcome them. 95

Diwali is very special to Hindus, but they are not the only ones who celebrate the holiday. Religions such as Jainism, Sikhism, and Buddhism also commemorate Diwali in their own way. In Jainism, Diwali indicates the beginning of the spiritual awakening of Lord Mahavira in which the Earth and heavens were illuminated with lamps to reflect Lord Mahavira's enlightenment, reaching what is known as "nirvana." 96 Jains refer to this celebration as a moment of light leaving the body. In Sikhism, it celebrates the day Guru Hargobind and 52 prisoners were released and freed. 97 For Buddhism, it represents the day Hindu Emperor Ashoka converted to Buddhism.98 All celebrations have a different story, but the meaning stays

the same: the victory of good over evil, the representation of freedom and light in life.

India's Diwali is celebrated for five days, each having a different purpose. The first day is called Dhanteras. For this day people clean their homes and buy either silver or gold jewelry or utensils to welcome Lakshmi in the representation of attracting wealth.99 The second day is called Naraka Chaturdashi. For this day people commemorate Lord Krishna's win over King Narakasura with festive foods. In the northern part of India, this day is recognized as "Chhoti Diwali", a day in which people buy new clothes and visit friends and relatives. 100 Day 3 is called Diwali, and it is the most important day of the festival. On this day feasts are made, houses are decorated, and families exchange gifts. The third day is when oil lamps called diyas are lightened up, which is what makes Diwali a festival known for its bright lights.<sup>101</sup> The fourth day is called Govardhan Puhja. The help of Lord Krishna is commemorated due to the protection brought to villagers of Vrindavan against the rains and floods led by Lord Indra's anger. 102 The last and final

The Many Legends of Diwali," Google Arts & Culture, accessed August 4, 2024, https://artsandculture.google.com/story/the-many-legends-of-diwali/0QVxpSl4NnfrEQ?hl=en .

Mckeever, "Diwali is India's most important holiday—and a celebration of good over evil."

Google Arts & Culture, "The Many Legends of Diwali."

Mckeever, "Diwali is India's most important holiday—and a celebration of good over evil,"

Harmeet Kaur, "What to know about Diwali, the Festival of Lights," CNN, November 11, 2023, https://edition.cnn.com/travel/diwali-festival-of-lights-explained-cec/index.html .

Google Arts & Culture, "The Many Legends of Diwali."

Google Arts & Culture, "The Many Legends of Diwali."

Kaur, "What to know about Diwali, the Festival of Lights."

day is called Bhai Dooj. This day celebrates sisterhood and brotherhood based either on two popular legends: the bond between Lord Yama and his sister Yami, or the welcoming made by Subhadra of Lord Krishna after he defeated Narakasura. 103

As for today, not only do traditional forms of celebration continue in India for Diwali, but the use of new materials for the festival has been made. Fireworks, music, oil baths in rivers, and other forms of celebration have been added to the annual celebrations.<sup>104</sup> With Diwali being a well-known and practiced custom, millions of Indians gather around to celebrate the festivity. 105 While this festival commemorates important history and religious practices, in recent years it has been a threat to the environment.

India hosts worldwide important festivals such as Holi and Diwali, which are a form of embracing tradition, as well as transmitting happiness and joy through entertainment. With many ways of entertainment, these festivals have given identity to themselves and have distinguished themselves from other celebrations. For Diwali, oil lamps, fireworks, and firecrackers are some of the characteristic elements that define the festival, but these are also damaging pollutants to the environment. 106

In 2022, India was ranked last in the Environmental Performance Index, a summary which provides performance indicators of sustainability of different States. 107 As of 2024, the country has only sustainably developed enough to be ranked 176th out of 180 countries analyzed for environmentally aware States. 108 Ranking 170th on the Ecosystem Vitality rank, 177th on

Environmental Health, and 133th on Climate Change, India has yet to show progress on sustainable practices. 109 While these numbers are not completely attributed to festivities and cultural activities, these do contribute to the unsustainable practices the country has.

With the explosion of fireworks and the usage of oil lamps, the Diwali festival has become one of the most pollutant factors in India's capital Delhi. In 2023 after the festival, the air quality in Delhi rose to 400-500 level on the Air Quality Index (AQI) after burst crackers were exploded for the celebrations. For this event fireworks were banned due to high pollution levels. 110 Because of this citizens faced the possibility of lung clogs and other respiratory diseases. 111 Breathing such poor air quality is similar to smoking 25 to 30 cigarettes in a day. 112 This series of air pollution events is not uncommon in Delhi for Diwali since it has been noted from previous research that the burning of crackers is one of the main reasons for poor air quality in the city. 113 Once fired, they release an excessive amount of pollutants which are then in the air and putting people's health at risk. 114

Not only did the explosion of illicit fireworks contribute to poor levels of air quality, but the exceeding quantity of oil lamps lit up and their carbon dioxide emissions too. Setting a record, over 2.22 million lamps were lit and kept lit for more than 45 minutes. 1.5 million lamps used the previous year, resulting in almost doubling in quantity. 115 Days before the festival, Minister Gopal Rai had asked schools to remain

Google Arts & Culture, "The Many Legends of Diwali."

104 Shivani Dave, "When celebrations also mean bad air, deafening noise and waste mounds," Question of Cities, accessed August 4, 2024, https://questionofcities.org/when-celebrations-also-mean-bad-air-deafening-noise-and-waste-mounds/.

105 Biswajeet Banerjee, "Diwali celebrations in India set a world record amid rising concerns about air quality," PBS, November 12, 2023, https://www.pbs.org/newshour/world/diwali-celebrations-in-india-set-a-world-record-amid-rising-concerns-about-air-quality.

106 "Delhi AQI: Toxic haze in India capital after Diwali festival," BBC, November 13, 2023, https://www.bbc.com/news/world-asia-india-67400426.

<sup>107</sup> Jimlee Patowary, Subrat Kishore Dutta, Anjishnu Mahanta, and Tara Tripura Mantha, "A Closer Look at the Air Pollution Dynamics during Diwali Festival in India," EGUsphere, (June 2024): 1-18, https://doi.org/10.5194/egusphere-2024-1594.

108 "Environmental Performance Index," Environmental Performance Index, accessed August 4, 2024, https://epi.yale.edu/measure/2024/

EPI.

<sup>&</sup>quot;India," Environmental Performance Index, accessed August 4, 2024, https://epi.yale.edu/country/2024/IND.

BBC, "Delhi AQI: Toxic haze in India capital after Diwali festival."

BBC, "Delhi AQI: Toxic haze in India capital after Diwali festival."

BBC, "Delhi AQI: Toxic haze in India capital after Diwali festival."

BBC, "Delhi AQI: Toxic haze in India capital after Diwali festival."

Jyoti Bhola, Anudeepti Bajpai, Saiyam Jain, Daksh Jain and Monika Koul, Insights into the Air Quality Indices and its Linkage with Diwali Festival Celebrations in Delhi, India in November 2023: A Case Study, (2023), https://ijplantenviro.com/index.php/IJPE/article/ view/1862/958.

<sup>114</sup> Bhola, Bajpai, Jain, Jain, Koul, Insights into the Air Quality Indices and its Linkage with Diwali Festival Celebrations in Delhi, India in November 2023: A Case Study.

Banerjee, "Diwali celebrations in India set a world record amid rising concerns about air quality."

shut until the festivity because of concerns about rising air pollution.<sup>116</sup> Not only was this asked in 2023, but also for the past five years. 117 According to Shariq Ahmad, principal of a government school in Kalkaji, South Delhi, the number of shut school days is at least five to six days. 118 The quality of air Delhi residents breathe is concerning. Multiple health risks can lead up and continue to prevail unless environmentally aware actions and practices are preached and done.

It has been observed and proved for years now that India has been battling with strong air pollution and poor Air Quality Indexes, not only in Delhi but in the country. Given the rank in the Environmental Performance Index and the increasing emissions of carbon dioxide, the Asian country needs to take further action into environmentally sustainable practices. Diwali being one of the main celebrations practiced by Indians regardless of their religion can be a great way to start with sustainable practices. Preaching the use of eco-friendly diyas and promoting environmentally friendly celebrations can lead to a great change in activities while respecting said traditions.

### Case Study: Impacts of the Transilvania **International Film Festival**

As previously discussed, culture can be manifested in many ways. Films are considered a way to showcase culture, as they show and can even influence social norms with the content they are portraying. 119 In addition to being an important industry that promotes economic development, films are also considered a form of art and a way to portray different identities. Since the 20th century, film festivals have been a way to further promote the art itself and the positive effects it brings. 120 They promote a broader understanding of ideas and values that can translate into a broader understanding of culture. To boost this, UNESCO created "Cities of Film". This project was created with the objective of "placing creativity and cultural industries at the heart of local engagement and prioritizing cross-border cultural collaboration". 121 There are 26 cities that are part of this project, and all of them host important film festivals to achieve UNESCO's objective. 122

One of the host cities is Cluj-Napoca in Romania, which joined the Cities of Film in 2021. 123 This has allowed for the development of culture in the city in several ways. One of them is by collaborating and sharing good practices with cities that have similar ideas. 124 Another way is by emphasizing the importance of culture and community in society, especially in the way it is transforming and regenerating itself.  $^{125}$  It has also provided the necessary framework to create a regional creative audiovisual hub that will allow the growth of local talent. 126

One of the things that makes Cluj-Napoca a City of Film is the Transilvania International Film Festival (TIFF) that they have hosted since 2002.<sup>127</sup> The TIFF was not only the first film festival in the country, but it is also considered as the largest and most important of the region. Each year, the festival brings together over 100,000 participants from all around the world. In addition to the showcase of Romanian cinema, the TIFF also hosts two international competitions, which help promote not only the understanding of their own culture but also the acceptance of other cultures around the world. 128 While this festival greatly helps in the promotion of culture, the sustainability of this event has been questioned, especially by residents of the host city.

Since 2019, the TIFF has been focused on promoting sustainability within the event. They have been working on applying an integrated sustainability strategy. The focus of

The Cherylann Mollan, "Delhi pollution: No school, no play for city's children," BBC, November 6, 2023, https://www.bbc.com/news/world-asia-india-67330016.

world-asia-india-6/330016.

117 Mollan, "Delhi pollution: No school, no play for city's children."

118 Mollan, "Delhi pollution: No school, no play for city's children."

119 "Film Culture: An Overview of the Influence and Importance of Film in Society," Sassy, Accessed September 16, 2024, https://sassy.si/en/film-culture-an-overview-of-the-influence-and-importance-of-film-in-society/

120 "Film Culture: An Overview of the Influence and Importance of Film in Society,"

121 "Cities of Film" UNESCO Cities of Film, Accessed September 16, 2024, https://citiesoffilm.org/.

122 "Cities of Film"

<sup>&</sup>quot;Cities of Film" 122

<sup>&</sup>quot;Cities of Film: Cluj Napoca," UNESCO Cities of Film, Accessed September 16, 2024, https://citiesoffilm.org/cluj-napoca/
"Cities of Film: Cluj Napoca,"
"Cities of Film: Cluj Napoca,"
"Cities of Film: Cluj Napoca," 123

<sup>124</sup> 

<sup>125</sup> 

<sup>126</sup> 

<sup>&</sup>quot;Cities of Film: Cluj Napoca,"
"Cities of Film: Cluj Napoca,"
"About the Festival," Transilvania International Film Festival, Accessed September 16, 2024, https://tiff.ro/en/despre-festival
"About the Festival," 127

this strategy has been regarding the content that is showcased in the festival, the team members that work on the festival, resource consumption, and partnerships to bring the festival to life.129

For the content part, the efforts to promote sustainability can be seen on the selection of films. They have been focused on the relationship between men and nature, and the effects this relationship has. 130 They have developed a section in the festival called EcoTIFF. For this section, the films to be showcased must tell a story of ecology and protecting the planet. This is done on the framework of the International Environment Day. One example of a film that has been showcased in this section includes Into Eternity which is a documentary that talks about the issue of nuclear power plants. Another example is Chasing Ice which is a documentary about the effect of global warming on the ice cap.<sup>131</sup> In 2021, they showcased the travel documentary Wild Romania, which showed about nature and wildlife in the country. 132 This was important not only to show the culture of the host country but also to show how it can be done sustainably. This documentary was filmed transparently and ethically. 133

Another big effort to promote sustainability made by the festival is regarding the amount of waste it produces. Starting with something simple, they have worked on eliminating printed tickets. For the 2021 edition of the festival, over 90 percent of the tickets were bought online through their mobile app. 134 Additionally, all the orientation materials including schedules, maps, and brochures were available in digital form to avoid waste of paper. 135 As for merchandise, the festival stopped the production of bags and backpacks. As a replacement, they offered tote bags made from environmentally friendly materials and reusable water bottles. 136 One interesting initiative that was implemented was the "EcoTIFF: recycle and get a film ticket." For EcoTIFF film showcases, free tickets were given to the first 100 spectators with at least one object to recycle. 137 This not only helped promote the sustainability-focused content but also put into practice some of the ideas that they were trying to share. Alongside the same line, plastics have been banned from the event since 2019. All single use items such as straws, plates, and cutlery are made from biodegradable or ceramic materials. 138

Partnerships to make the event possible are also important actors to ensure the event's sustainability. For the last three editions, Mercedes-Benz has been the mobility partner of the TIFF. They have replaced the vehicles used in their transportation fleet with hybrid and electric vehicles. 139 This allows for a reduction in the number of emissions that contribute to a decrease in climate change. With the same purpose in mind, TIFF and the Cluj Transport Company prepared a campaign to promote the use of public transportation, scooters, and bicycles to travel between festival venues. 140

The perception of society on the sustainability of the event is an important thing to consider. A study of perceptions on TIFF sustainability was made to understand the perception of locals on the economic, socio-cultural, and environmental impacts of the festival. For the economic effects, the festival is deemed as positive. They believe that it promotes the creation of jobs and increases the economical capacity of the city, which provides the opportunity for sustainable development. 141 On the environmental side, they generally consider that there are some positive and negative effects. For the positive effects, they considered that the festival raises awareness towards

<sup>&</sup>quot;Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival," Transilvania International Film Festival, April 19, 2022, https://tiff.ro/en/tiff/stiri/sustainable-tiff-social-responsibility-strategy-most-important-romanian-film-festival "Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

Dan Dinu, "Wild Romania," Jacob Burns Film Center, 2021, https://burnsfilmcenter.org/booking/wild-romania/

Dan Dinu, "Wild Romania,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

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"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

Ecoliff: Recycle and get a film ticket, Transilvania International Film Festival, June 4, 2013, https://tiff.ro/en/tiff/stiri/ecotiff-recycle-and-get-film-ticket

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

"Sustainable TIFF: The social responsibility strategy of the most important Romanian film festival,"

141 Adina Letitia Negrusa, Valentin Toader, Rozalia Veronica Rus, and Smaranda Adina Cosma, "Study of Perceptions on Cultural Events' Sustainability," Paradigm Changes in Contemporary Sustainable Hospitality Entrepreneurship, December 6, 2016, https://www.mdpi.com/2071-1050/8/12/1269

environmental issues and promotes long-term conservation of the area. For the negative effects, they are mainly concerned about traffic congestion created by the open projections, noise pollution, and additional energy consumption.<sup>142</sup> The sociocultural effects are perceived as the most positive things that result from the festival. They consider that the festival allows for a space to create shared experiences and exchange of ideas, the opportunity to extend their cultural horizons and experiences, and develops community pride and social cohesion.<sup>143</sup> The TIFF provides a great example of how cultural events can achieve sustainability while having a positive impact on society.

# **Sustainable Development Goals**

The Sustainable Development Goals (SDGs) are the 17 goals established by the 2030 Agenda for Sustainable Development adopted by all Member States of the United Nations. 144 These goals serve as a call for action to promote sustainability amongst member states.<sup>145</sup> The 17 goals are of great diversity, each having a variety of targets and focusing on a specific vulnerable area that needs to be addressed. Some of the goals include gender equality, climate action, no poverty, and zero hunger. While all of them are crucial, some of these goals pertain more to achieving sustainability within cultural celebrations.

The SDG's approach to sustainable culture can be seen in goals eight and eleven. SDG 8 looks to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all". 146 This goal aims to achieve economic growth and productivity through diversification, as well as creating decent jobs for future generations. This shall be done with the help of innovation in the consumption market for sustainable environmental

productions. Target 8.9 seeks to promote sustainable tourism that creates jobs and promotes local culture through policies by 2030.147 This target is especially important for this topic, as a lot of tourism comes from people traveling to cultural events worldwide. Two aspects should be considered. The first one is ensuring that the tourism that comes from it remains sustainable. The second one is that the jobs that the cultural events generate because of the tourism that cities receive provide decent conditions.

Goal 11 calls to "make cities and human settlements inclusive, safe, resilient and sustainable". 148 By 2030, this goal seeks to achieve environmental access to green and inclusive spaces. Regarding cultural sustainability, target 11.4 strives to strengthen efforts to protect and safeguard the world's natural and cultural heritage. 149 To make sure this is being achieved, indicator 11.4.1 asks for expenditure for preservation by private or public funds. The expenditure for natural or cultural heritage concerning a specific level of government (national, regional, or local) is expected. 150 When looking for preservation, the aim is to protect the deterioration of cultural heritage from environmental damage caused by climate change or other damaging agents. 151

Both SDGs eight and eleven seek to achieve financial support for cultural traditions, as well as their preservation and protection from possible challenges to come. With international dialogue and cooperation, tied with understanding and respect, a positive outcome on sustainable cultural practices can be achieved.

<sup>142</sup> Adina Letitia Negrusa, Valentin Toader, Rozalia Veronica Rus, and Smaranda Adina Cosma, "Study of Perceptions on Cultural Events' Sustainability,

<sup>143</sup> Adina Letitia Negrusa, Valentin Toader, Rozalia Veronica Rus, and Smaranda Adina Cosma, "Study of Perceptions on Cultural Events' Sustainability,"
144 "The 17 Goals," United Nations, accessed August 4, 2024, https://sdgs.un.org/goals. .
145 United Nations, "The 17 Goals."

<sup>146 &</sup>quot;8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all," United Nations, accessed August 4, 2024, https://sdgs.un.org/goals/goal8#targets\_and\_indicators.

147 United Nations, "8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work

for all,"
148 "11. Make cities and human settlements inclusive, safe, resilient and sustainable," United Nations, accessed August 4, 2024, https://sdgs.un.org/goals/goals11#targets\_and\_indicators. .
149 United Nations, "11. Make cities and human settlements inclusive, safe, resilient and sustainable."
150 United Nations, "11. Make cities and human settlements inclusive, safe, resilient and sustainable."
151 "SDG Indicator Metadata," UNESCO Institute for Statistics (UIS), December 15, 2023, https://unstats.un.org/sdgs/metadata/files/

# **Bloc Analysis**

#### **Points of Division**

In 2013, Erkan Gören released "Economic Effects of Domestic and Neighboring Countries' Cultural Diversity." This is a study based on the amount of cultural diversity in 180 countries. By measuring factors such as ethnicity and language, Gören concluded which countries were the most diverse. 152 To his reasoning, a group of people who share the same language had a high possibility to also share other cultural aspects. <sup>153</sup> On the other hand, people with different languages shared few cultural values. The list does not determine the most racially diverse countries, but the most culturally diverse states, prioritizing cultural differences between groups. 154 The comparison done between countries was meticulous work, keeping an eye on cultures that had merged with other cultures thanks to cultural evolution within countries. 155 While many countries may have a diversity of races, states with high indigenous populations and local languages stood out for their cultural diversity. 156

The creation of the following blocs was made with the help of the Environmental Performance Index (EPI), a data summary that incorporates a variety of indicators such as climate change mitigation, sustainability, and biodiversity protection among others.<sup>157</sup> EPIs annual summary scores states based on performances on: Ecosystem Vitality (biodiversity & habitat, forests, fisheries, air pollution, agriculture and water resources), Environmental Health (air quality, sanitation & drinking water, heavy metals and waste management) and Climate Change (climate change mitigation).<sup>158</sup> The indicators help show how many countries have established environmental policy targets, as well as to highlight opportunity areas for nations to ensure environmental protection. 159

The scores shown on the Environmental Performance Index and the rank countries have on Gören's study have helped classified UN member states into 4 blocs: States with high cultural diversity and a high EPI score, States with low cultural diversity and high an EPI score, States with high cultural diversity and a low EPI score, and States with a low cultural diversity and a low EPI score.

# **High Diversity/High EPI**

States belonging to this bloc have some of the highest performances on the Environmental Performance Index, as well as a high cultural diversity. Countries that belong to the list ensure environmental health practices and prevention of harming activity through policy targets focused on the preservation of their land. While countries might not have similar scores in all the indicators, their overall performance is of high rank.

Countries in this bloc have both a score higher than 50 on the Environmental Performance Index and in the Gören study. Scores above 50 represent a high cultural linguistic diversity as well as developed policies on the protection of the natural environment. Countries like Switzerland have shown high scores on both indices due to the diversity in cultural practices. With the highest rank in adjusted emissions growth rate for nitrous oxides, sulfur dioxide, and black carbon, as well as Controlled Solid Waste and Waste Recovery Rate, Switzerland has positioned itself on the 9th place on the EPIs. They have maintained their rank from the 2022 summary of the same index.<sup>160</sup> Continuous contributions have been noted from the country on seeking a more environmentally aware performance while maintaining and respecting cultural diversity and traditions. Scoring 54.41 percent on the linguistic fractionalization evaluation from Gören's study, Switzerland has established and recognized diversity in its linguistic complexion with the help of its four national languages (German, French, Italian and Romansh).161

<sup>&</sup>quot;Most Diverse Countries 2024," World Population Review, accessed August 4, 2024, https://worldpopulationreview.com/country-"Most Diverse Countries 2024," World Population Review, accessed August 4, 2024, nttps://worldpopulationreview.com rankings/most-diverse-countries .
World Population Review, "Most Diverse Countries 2024."
Environmental Performance Index, "Environmental Performance Index."
Environmental Performance Index, "Environmental Performance Index."
Environmental Performance Index, "Environmental Performance Index."
"Switzerland," Environmental Performance Index, accessed August 5, 2024, https://epi.yale.edu/country/2024/CHE.
"Languages in Switzerland," Swissinfo.ch, accessed August 5, 2024, https://www.swissinfo.ch/eng/culture/languages-in-

With four multilingual cantons (Bern, Fribourg, Valais and Graubünden), and as well as the city of Biel, the Swiss country has made note of its national languages and performance. 162 Not only do Swiss citizens contribute to the linguistic diversity, but also foreign nationals living in the country. Most of them speak English, Portuguese and Albanian. 163 With diversity and protection such as Switzerland, countries familiarized with the same distinctions can identify in this bloc.

# **High Diversity/Low EPI**

Countries pertaining to this bloc are those with a high linguistic diversity but a low rank in the Environmental Performance Index. States in this bloc have a score higher than 50 on the Gören study with a variety of linguistic variations in their country, but also have a low EPI performance of scores below 50. The member States of this bloc have shown a linguistic diversity in their country, with multilingual speakers and a range in local languages. While these States represent high cultural diversity, their performance on the Environmental Performance Index show weak links to sustainable political practices. Countries in this bloc do not have sustainability or environmental health as a priority, focusing on other areas to cover.

The Republic of Chad has the highest diversity score with an 86.35 percent of linguistic fractionalization in the country. With French and Arabic as the country's official languages, Chad has a high percentage of French speakers. Around two million people have it as their second language.<sup>164</sup> Though these two languages prevail, the local dialect of Arabic "Chadian Arabic" is spoken by one million individuals. They consider it as their native language. 165 Factors such as the "Chadian Arabic" have made the African country a linguistically diverse country. On the other hand, Chad's score on the EPI has shown a lack of environmental protection policies. They scored 49.4 on Ecosystem Vitality, 26.4 on Environmental Health and 21.0

on Climate Change. The lack of policies in marine, forests and fisheries protection have made the unsustainable practices of the country notability aware. However, it is important to highlight that efforts on other areas such as Biodiversity & Habitat have been made. The lack of policies for other environmental areas has placed Chad on the 156th place of the Environmental Performance Index. 166 States having similar numbers in linguistic fractionalization and EPI performance may fit into this bloc.

# Low Culture/High EPI

This set of countries, though having high performances on the preservation and protection of their country's environment, have a low linguistic fractionalization. With high scores on the Environmental Performance Index, States have continuously worked on seeking a better future for their country's environment. They have implemented environmental policies that ensure protection, as well as respecting their lands and natural resources. These states continue to strive for a greener future, with high scores for policies in Biodiversity & Habitat, Forests, Fisheries, Air Pollution, Agriculture, Water Resources, and other EPI classifications.<sup>167</sup> While having a high score on the EPI, the linguistic diversity they have is not strong enough to reach a 50+ score on the Gören study for linguistic fractionalization.

Countries like Estonia are one of the many countries that have low linguistic diversity but a high Environmental Performance Index. Ranked #1 on the EPI, Estonia has shown increasing and proactive work on settling sustainable practices, applying and creating environmental policies and projects. With #1 ranks on Climate Change Mitigation, adjusted emissions growth rate for carbon dioxide, methane and black carbon, as well as Growth rate adjusted by emissions intensity. The European country has set an example for the rest of the nations in terms of environmental protection and preservation. With

switzerland/29177618.

<sup>162 &</sup>quot;Language," AboutSwitzerland, accessed August 5, 2024, https://www.eda.admin.ch/aboutswitzerland/en/home/gesellschaft/sprachen.

ntmi.
163 AboutSwitzerland, "Language."
164 "What Languages Are Spoken In Chad?," WorldAtlas, accessed August 5, 2024, https://www.worldatlas.com/articles/what-languages-are-spoken-in-chad.html.
165 WorldAtlas, "What Languages Are Spoken In Chad?."
166 "Chad," Environmental Performance Index, accessed August 5, 2024, https://epi.yale.edu/country/2024/TCD
167 Environmental Performance Index, "Chad."

hard work, Estonia has continued to keep focus on building sustainable practices and a greener future. While having sustainability in its policies, the country does not rank in the top Gören study of linguistically diverse countries. It only has a score of 49.44 on linguistic fractionalization. 168

#### Low Culture/Low EPI

This set of countries represent the low linguistically diverse and lowest ranks on the Environmental Performance Index. While efforts have been made on establishing environmental policies, these countries have shown poor execution on preservation and protection matters for sustainable practices. With scores below 50, states continue to struggle with the promotion of environmental work. Countries belonging to this bloc may be attributed to low scores on the Environmental Performance Index, including but not limiting, the lack of analysis on certain scores depending on the policies and practices done in that area. Additional challenges may be seen for the lack of economic resources to found activities or practices that achieve sustainable productions. States in this bloc also have a low score on Erkan Gören's study on diversity. With less than 50 percent of their linguistic fractionalization, countries have small cultural dialogue, with little to no differences. While much national recognition may be done for languages to be known as "official languages," it is the lack of local languages that establish these countries' diversity score.

States like Bolivia, with low language diversity and low EPI scores may fall into this group. Having low scores on Ecosystem Vitality, especially for the lack of data collection on sectors like fisheries and marine protection, has affected Bolivia's score on the Environmental Performance Index. Not only does the lack of information affect the country's score, but also the range in scores for Ecosystem Vitality, Environmental Health, Climate Change has altered the country's overall performance. 169

### **Committee Mission**

Established in 1945, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has been working for 79 years on building peace through cultural, educational and scientific international cooperation. 170 Promoting worldwide joint efforts, UNESCO has aimed to achieve universal respect for human rights among countries alongside a standard of no discrimination against race, sex, religion or language.<sup>171</sup> As stated in UNESCO's Constitution, one of the main purposes of the Organization is to protect cultural heritage with the help of international understanding and a deep respect for diversity.<sup>172</sup> Having an inclusive approach has brought UNESCO's Member States to seek universal peace and security, making progress on the inclusivity aimed by the organization.

UNESCO has been determined as the United Nations' organization in charge of culture and its development. Focusing on the preservation, protection, and diffusion of cultural elements such as traditions, world heritage sites, intangible cultural heritage elements, and creative cities. The organization's initiatives contribute to the present and future existence of culture. 173 Being the only institution that establishes a link between development and the right to culture, UNESCO's cultural action currently faces 4 challenges. This includes protecting culture in crisis situations, adapting to contemporary challenges, preserving heritage and developing sustainable, inclusive, and creative societies. 174 With a present call to action for sustainable practices, delegates' discussion should focus on the promotion of sustainability within cultural events while preserving and protecting cultural heritage. A focus on working on celebrating cultural events in a sustainable manner but keeping traditions alive by celebrating them in an environmentally friendly way should be debated.

According to UNESCO's mandate, delegates should aim to exchange cultural practices to achieve a deeper understanding

World Population Review, "Most Diverse Countries 2024."

169 "Bolivia," Environmental Performance Index, accessed August 5, 2024, https://epi.yale.edu/country/2024/BOL

170 "UNESCO in brief," UNESCO, accessed August 7, 2024, https://www.unesco.org/en/brief#:~:text=UNESCO%20works%20to%20

ensure%20that,platforms%20for%20development%20and%20cooperation.

171 "Constitution," UNESCO, accessed August 7, 2024, https://www.unesco.org/en/legal-affairs/constitution.

172 UNESCO, "Constitution."

173 "About the Culture Sector," UNESCO, accessed August 7, 2024, https://www.unesco.org/en/culture/about#:~:text=UNESCO's%20

cultural%20initiatives%20include%20safeguarding,livelihoods%20in%20the%20creative%20economy.

174 UNESCO, "About the Culture Sector."

of each cultural heritage. This will help to create inclusive solutions to sustainable cultural events. No sustainable development could be done without culture, that is why a focus on building sustainable cultural practices has been brought as a call to action.<sup>175</sup>

<sup>175 &</sup>quot;Culture," UNESCO, accessed August 7, 2024, https://www.unesco.org/en/culture .

# **Research and Preparation Questions**

Your dais has prepared the following research and preparation questions as a means of providing guidance for your research process. These questions should be carefully considered, as they embody some of the main critical thought and learning objectives surrounding your topic.

# **Topic A**

- 1. To what extent is your country impacted by the effects of climate disasters?
- 2. In what ways does your country interact with SIDS? Does this relationship offer disaster preparedness support?
- 3. Is sustainable tourism implemented in your country? If yes, what does it look like?
- 4. How does climate disaster affect the variety and quality of education different countries offer?
- 5. How can the available resources for SIDS be best used on the frontlines of climate change? What resources is your country able to provide?
- 6. What models does your country have in place for disaster preparedness and resilience? How can these strategies be better implemented globally, especially in SIDS?

# **Topic B**

- 1. What cultural events does your country celebrate? How might these events impact sustainability? Has your country been impacted by the lack of sustainability of these events?
- 2. Does your country have any legislation, initiatives, programs, or other measures that contribute to the promotion of sustainability of cultural events?
- 3. How can your country suggest the implementation of new legislations, initiatives, or programs whilst maintaining and appreciating other countries' culture and the events surrounding it?
- 4. Has your country taken any action to implement sustainable tourism? And if so, how has it contributed to the sustainability of cultural events?
- 5. What actions has your country taken to preserve the cultural significance of the events that take place in it?
- 6. To what extent have environmentally sustainable measures infringed upon the cultural traditions of local communities in your country?
- 7. Has intercultural dialogue taken a significant role in the maintenance or modification of any cultural event in your country? How can this essential tool for sustainability within cultural events be improved further?

# **Important Documents**

### **Topic A**

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# **Topic B**

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