Master's Thesis of Juna Hwang

Public Participation in Climate Negotiations:

Analyzing Drivers of Varied Engagement among Caribbean Small Island Developing States

기후 협상에서의 대중 참여: 카리브 해 소도서국가의 참여도 차이 결정 요인에 대한 분석을 중심으로

February 2025

Graduate School of International Studies
Seoul National University
International Cooperation Major

Juna Hwang

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Advisor: Lee, Geun

Submitting a Master's Thesis of International Studies

November 2024

Graduate School of International Studies
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Juna Hwang

Confirming the Master's Thesis written by
Juna Hwang

February 2025

Chair	Song, Jiyeoun (Seal)
Vice Chair	Yoon, Semee (Seal)
Examiner	Lee, Geun (Seal)

Abstract

Caribbean Small Island Developing States (SIDS) are at the forefront of the climate crisis, being disproportionately vulnerable despite their minimal contribution to global emissions. Their participation in climate negotiations is critical to addressing their unique challenges, advocating for resources, and influencing global climate policies. However, engagement levels vary significantly among Caribbean SIDS, a disparity this research seeks to analyze.

This study focuses on eight Caribbean SIDS (Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines), selected based on their independence, AOSIS membership, economic status, and political stability. Using criteria such as climate pledges, negotiation participation, and global initiative involvement, countries were categorized as active ('Pushers'), moderate ('Moderates'), or passive ('Bystanders'). While prior studies emphasize ecological vulnerability and abatement costs as key factors, this paper identifies 'public participation' as a critical determinant. Utilizing a public participation framework, the study finds that Pushers exhibit high public engagement ('Collaborate'), while Bystanders rely on information dissemination ('Inform').

This research fills a gap in understanding Caribbean SIDS' roles in climate negotiations, offering policy implications for enhancing engagement. It provides a fresh perspective on climate-vulnerable nations' strategies, emphasizing the importance of public participation in shaping effective climate action.

Keyword: Caribbean Small Island Developing States, Climate Risks, Climate Negotiations, Level of Engagement, Public Participation

Student Number: 2023-20592

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Abbreviations and Acronyms

ABAS	Antigua and Barbuda Agenda for SIDS: A Renewed Declaration for Resilient Prosperity
AFOLU	Agriculture, Forestry, and Other Land Use
AIS	Atlantic, Indian Oceanm and South China Sea
AOSIS	Alliance of Small Island States
AR6	Intergovernmental Panel on Climate Change 6th Assessment Report
BAU	Business-as-Usual
BPoA	Barbados Programme of Action
CAMI	Caribbean Agrometeorological Initative
CARICOM	Caribbean Community Common Market
CCCCC	Caribbean Community Climate Change Centre
CCDR	County Climate Development Report
CCIA	Climate Change Impact Assessment
CCORAL	Caribbean Cliamte Online Risk and Adaptation Tool
CDM	Clean Development Mechanism
CDB	Caribbean Development Bank
COP	Conference of Parties
CSO	Civil Society Organization
CTF	Clean Technology Fund
CVI	Coastal Vulnerability Index
CYEN	Caribbean Youth Environment Network
DVRP	Disaster Vulnerability Reduction Report
EAD	Expected Annual Damage
EAG	Environmental Awareness Group
EAPE	Expected Annual Number of People Exposed
ENB	Earth Negotiation Bulletin
EnGenDER	Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean
ESD	Environmental Sustainability Division

ESL	Extreme Seal-Level
EU	European Union
GAMI	Global Adaptation Mapping Initiative
GARD	Gilberts Agricultural and Rural Development Center
GCCA	Global Cliamte Change Alliance
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Fund
GHG	Green House Gas
GGGI	Global Green Growth Institute
GCCA+	Global Climate Change Alliance Plus
IAP2	International Association for Public Participation
ICCAS	Integrated Climate Change Adapatation Strategies
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
KAP	Knowledge, Attitude, and Practices
LDCs	Least Developed Countries
NAPs	National Adaptation Plans
NCs	National Communications
NDCs	Nationally Determined Contributions
NGO	Non-Governmental Organization
MSI	Mauritius Strategy
MoU	Memorandum of Understanding
OECS	Organization of Eastern Caribbean States
ODA	Official Development Assistance
PA	Paris Agreement
PEO	Public Education and Outreach
R2RP	Roof to Reef Programme
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

RKRs	Representatie Key Risks
SAMOA	Small Island Developting States Accelerated Modalities of Action
SDGs	Sustainable Development Goals
SGD	St. George's Declaration of Principles for Environmental Sustainability in the OECS (SGD)
SGP	Small Grants Program
SIDS	Small Island Developing States
SIRMM	Sustainable Island Resource Management Mechanism
SLR	Sea-Level Riske
TC	Tropical Cyclones
UN	United Nations
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
WMO	World Meteorological Organization

Chapter I. Introduction

Addressing climate change is crucial for the ecological stability and resilience of global communities. Recognized by the UN General Assembly as the 'common concern of mankind,' there is a pressing need for action (Choy, 2021). However, despite countries' pledges to act towards climate change, many identified climate-related risks are higher, and projected long-term impacts are up to multiple times higher than before (IPCC, 2023). Among the key identified climate risks are those associated with ocean and coastal ecosystems. Observed risks include ocean warming, sea level rise, and changes in ocean circulation, stratification, and coastal upwelling.

Among vulnerable groups affected by the hazards and impacts on coastal and ocean ecosystems, Small Island Developing States (SIDS) are often considered the most susceptible to climate change, notably to sea level rise and coastal extremes (Magnan et al., 2022). SIDS consists of 39 states and 18 associate members of United Nations regional commissions that face unique social, economic, and environmental vulnerabilities. As explicitly mentioned in their definition, SIDS are particularly categorized according to their vulnerability to climate change as they face severe consequences despite being among the world's lowest emitters. Recognizing the urgency, SIDS have been acting towards the frontlines of the climate crisis, engaging in climate negotiations and establishing emission reduction targets, and being committed to international forums, advocating climate action. However, within the SIDS, there is a noticeable disparity in engagement levels in climate negotiations.

Against this backdrop of a universally critical need for robust climate controls, this paper addresses a central puzzle: despite expectations that all SIDS would be equally active in climate negotiations, why do we see variations in their levels of engagement? This research aims to uncover the distinct factors contributing to these differences, which are crucial for understanding and potentially enhancing the participation of these vulnerable states in global climate negotiations. In this regard, this paper proposes that the level of public participation and government's endeavor in engaging relevant stakeholders is the key factor in explaining the divergent extent of engagement in climate negotiations.

Within all identified SIDS, this paper will focus on the Caribbean SIDS that are classified as independent states, members of the Alliance of Small Island State (AOSIS), and have a relatively similar economic status and political stability, which then narrows down to 8 countries. The 8 countries are Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines. It particularly explores the 8 SIDS' different levels of engagement in climate negotiations and investigates the key contributing factors for the difference.

This paper holds significance in four key areas. Firstly, no previous studies have dealt exclusively with the Caribbean SIDS in identifying their engagement in climate negotiations. Thus, by providing a detailed examination of the Caribbean SIDS' involvement, this research fills a critical gap in the existing literature on global climate dialogue. Secondly, by identifying the factors that lead to different levels of engagement within the Caribbean SIDS, it analyzes the reasons for non-active or less-active states, which could help policymakers tailor more effective strategies. Third, elucidating the variations in engagement, this research enhances the understanding of the strategic positions of the world's most climate-vulnerable countries within global climate negotiations. Lastly, by conducting this analysis from a South Korean perspective ensures an objective and neutral approach, enriching the discourse with diverse international viewpoints.

The remainder of this paper is structured as follows. In the next section, this paper will commence by reviewing the extant literature concerning the selected 8 SIDS within the realm of climate change negotiations dynamics. It will further explore existing studies related to the subject such as the 'interest-based explanation' and previous literature on 'public participation.' Subsequently, it will elaborate on the research design, specifically detailing the selection of target countries and target negotiations of analysis. Following this, this paper will delve into identifying the factors that differentiated the level of engagement in climate dialogues between the 8 SIDS, which then leads into a discussion on the implications of the findings.

Chapter II. Theoretical Discussion

1. Definition and the Grouping of SIDS

The scope of Small Island Developing States (SIDS) varies depending on the definition. Depending on which definition is used, the number of SIDS can range from 52 to 60. The United Nations (UN) defines SIDS as a distinct group consisting of 39 States and 18 Associate Members of United Nations regional commissions, all of which face unique social, economic, and environmental vulnerabilities. Similarly, the United Nations Development Program (UNDP) defines SIDS as a distinct group comprising 38 UN member states and 20 non-UN members and associate members of UN regional commissions.

Not only do the definitions vary, but there are also differences in how SIDS are grouped. With 52 to 60 countries identified as SIDS, many studies categorize them to enhance the effectiveness of their research. However, this process presents numerous challenges as SIDS exhibit significant differences among themselves. According to Vousdoukas et al. (2023), SIDS differ in their coastal ecosystems and geomorphologies across three main sectors: (1) exposure to climate change, (2) economics, and (3) land governance structures. Variations in exposure to climate change include the fact that some SIDS are more susceptible to tropical cyclones (TC) as they are located in the TC belt, while others are less affected by TCs but more exposed to swell waves or short-period sea waves. Economically, while most SIDS are classified as Least Developed Countries (LDCs), some have the highest gross domestic product (GDP) per capita. In terms of land governance, there are differences in land tenure systems, with some lands predominantly publicly owned and others privately owned. Additional distinctions include social, political, cultural, and ethnic differences.

However, despite these variations, there are common characteristics that SIDS share, which make grouping them possible. These similarities provide justification for the groupings. Some common characteristics of SIDS include remoteness, small populations, dependence on ocean resources, reliance on imports, limited access to finance, debt pressure, and, most importantly, vulnerability to climate change (UNDP, 2022). Recognizing their diverse circumstances, Gomes, C. (2014) analyzed the SIDS into 6 categories, focusing on traits that group the

countries together. The first is its small size and narrow resource base, which results in the dependence on a narrow range of primary products and export markets. Due to this, SIDS is prone to high public debt. Second is the geographic position and insularity, which refers to the fact that Caribbean SIDS are all small, archipelagic, and insular compared to other countries. Third is their vulnerability to natural disasters and external shocks. Due to their geographical characteristics, many Caribbean SIDS experience natural disasters which impact is much more intense than others. Other factors include environmental, governance, and social factors.

The most common baseline for grouping SIDS is their location, or geographical baseline. Vousdoukas et al. (2023) categorize SIDS based on their location, resulting in four classifications: 31 SIDS in the Caribbean Sea, 3 in the East Atlantic, 5 in the Indian Ocean, and 21 in the Pacific Ocean. The United Nations initially classifies SIDS by their membership, 38 UN members and 20 non-UN members. Among the 38 UN members, they are further sorted according to geography: 9 in the Atlantic, Indian Ocean, and South China Sea (AIS), 16 in the Caribbean, and 13 in the Pacific. Although grouping SIDS based on geographic location is feasible, many studies focus either on a single country or a selected group of countries, typically from a regional perspective (Robinson, 2020). For example, Petzold et al. (2023) concentrate on island case studies included in the Global Adaptation Mapping Initiative (GAMI) database to analyze context-specific patterns of island adaptation. Similarly, Mohan (2022) exclusively examines Caribbean SIDS in analyzing efforts to achieve their Nationally Determined Contributions (NDCs) in the energy sector.

To this end, determining and specifying the target of the study is crucial. As provided earlier about how diverseness of SIDS, it is crucial to narrow the SIDS down. This paper utilizes four criteria for the screening process of all Caribbean SIDS, allowing the research targets to be narrowed down to 8 states. This research will analyze a total of 8 countries (Antigua and Barbuda, the Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines). These countries are all Caribbean SIDS that are classified as independent states, currently members of the AOSIS, and have a relatively similar economic and political status, which gives justification of comparison.

2. Climate Risks in the Caribbean SIDS

One of the main factors uniting SIDS is their vulnerability to climate change. Article 4.8 of the United Nations Framework Convention on Climate Change (UNFCCC) identifies specific groups of countries that are particularly vulnerable to the adverse effects of climate change and thus warrant special consideration for assistance in their adaptation efforts. These are (1) small island countries, (2) countries with low-lying coastal areas, and (3) countries with areas prone to natural disasters (Simpson et al., 2010). SIDS have characteristics which make them particularly vulnerable to the effects of climate change, specifically due to sea level rise and extreme events, including relative isolation, small land masses, concentrations of population and infrastructure in coastal areas, a limited economic base and dependency on natural resources, combined with limited financial, technical and institutional capacity for adaptation (IPCC, 2007).

SIDS were first recognized as a special case for both their environment and development at the '1992 United Nations Conference on Environment and Development' held in Rio de Janeiro, Brazil (UNDP, 2022). Climate change primarily affects SIDS through sea level rise. For example, nearly 22 million people in the Caribbean live less than six meters above sea level, and over half of the infrastructure in the Pacific islands is located within 500 meters of the coast (Mycoo et al., 2022). This aligns with two of the representative key risks (RKRs) identified by the Intergovernmental Panel on Climate Change (IPCC): RKR-A and RKR-B. RKR-A pertains to risks to low-lying coastal socio-ecological systems, while RKR-B addresses risks to terrestrial and ocean ecosystems (O' Neil et al., 2022).

Among all SIDS, Caribbean SIDS are particularly vulnerable to external shocks. To be more in specific, during the 43rd Caribbean Community and Common Market (CARICOM) Conference in 2022, United Nations Secretary-General António Guterres highlighted the acute vulnerability of Caribbean SIDS to the climate crisis, referring to the region as 'ground zero' for the global climate emergency (United Nations, 2022). They exhibit several common vulnerabilities with other global SIDS, including their small geographic size, restricted useable

land, economic reliance on international markets, and susceptibility to the effects of climate change, especially rising sea levels.

In addition to their acute vulnerabilities, the Caribbean SIDS are particularly relevant to this study because they provide a diverse representation of varying levels of engagement in climate negotiations. Despite shared geographic and economic challenges, the eight selected countries demonstrate differences in their approaches to addressing climate change, from active leadership in global fora to relatively limited participation. This variation offers an opportunity to explore the factors influencing these differences, providing valuable insights for broader global policy applications.

The Caribbean region also represents a microcosm of the challenges and opportunities faced by SIDS globally. By focusing on this region, the study can delve deeper into the interplay of vulnerability, resilience, and policy, offering lessons that extend beyond the Caribbean to other SIDS and vulnerable nations. Moreover, the region's history of collective advocacy through mechanisms such as the AOSIS and its contributions to international frameworks like the Paris Agreement highlight its strategic importance in global climate governance.

The Caribbean is composed of over 700 islands, reefs, and cays, organized into 30 territories that include sovereign nations, overseas territories, and dependencies. The Caribbean Sea, also referred to as the Caribbean Basin, is divided into three main physiographic regions within the West Indies: (1) the Greater Antilles, which encompasses Cuba, Jamaica, Hispaniola (shared by Haiti and the Dominican Republic), and Puerto Rico; (2) the Lesser Antilles, consisting of the Virgin Islands, Saint Kitts and Nevis, Antigua and Barbuda, Montserrat, Guadeloupe, Dominica, Martinique, Saint Lucia, Saint Vincent and the Grenadines, Barbados, and Grenada; and (3) the isolated island groups of the North American continental shelf, including the Bahamas, as well as the islands on the South American shelf, such as Trinidad and Tobago and the Netherlands Antilles (Aruba, Curaçao, and Bonaire). Bermuda and the Cayman Islands are also part of this subregion (FRA, 2000).

These countries are considered as 'climate-vulnerable' territories. The term 'climate-vulnerable' territories refer to regions like the Caribbean SIDS, which face significant challenges due to low-frequency, high-intensity climatic

events. The climate risks faced by these territories are detailed in Table 1, which categorizes the risks into two main types: (1) regional climate variations and (2) extreme weather events, as defined by the World Meteorological Organization (WMO). Notable climate impacts observed in the Caribbean include tropical cyclones, drought, and changes affecting the habitability of reef islands and coastal areas. Additionally, alterations in rainfall patterns and air temperature have been documented. The IPCC Sixth Assessment Report (AR6) provides further insights into these phenomena, presenting data on fundamental climate metrics with a specific focus on the Caribbean region (O'Neill, 2022). Table 1 shows the projected climate vulnerabilities in the Caribbean, which are collectively identified in numerous reports.

Table 1: Projected Climate Vulnerabilities in the Caribbean

Categorization		Trends	Specific Metric
Regional Climate Variations	Air Temperature	Warmer	Increase in daily minimum temp by 0.28°C per decade
	Precipitation	Above normal to negative	Above-normal rainfall was recorded in parts of the Dominican Republic and eastern Cuba. In the Eastern Caribbean islands, negative rainfall anomalies were predominant (around 20% below normal)
	Sea Level Rise	Greater than average	3–5 mm yr–1 in the East Caribbean and 2.5–3 mm yr–1 in West/North Caribbean.
Extreme Events	Tropical Cyclones	Slightly fewer storms	Minor/major cyclones compared to 1984–2013.
	Heavy Precipitation, Floods, and Landslide	Heavy rainfall events and subsequent flooding and landslide episodes	N/A
	Droughts	Low confidence in the direction of change	Inconsistent between sub-regions and not statistically significant.

Source: Elaborated by the author based on IPCC Sixth Assessment Report and WMO - Report on the State of the Climate in LAC.

Among these projected climate change, 'Sea Level Rise (SLR)' in regional

climate issues and ‘Heavy Precipitation,’ ‘Floods,’ and ‘Landslide’ for extreme events have been at the center of the issue. Numerous studies show that these two impacts of climate change are interrelated. Strauss and Kulp (2018) examined SLR in the Caribbean by measuring historical mean sea levels, adding the modeled difference between mean sea level and mean high tide, and projecting future SLR. This method used by Strauss and Kulp (2018) forms the basis for predicting future high tide lines and identifying land at risk of permanent inundation under different scenarios. Similarly, SLR exacerbates flooding, as rising seas interact with tides, storm surges, and waves to create temporary extreme sea levels, further increasing flood risk in vulnerable areas. In this regard, SLR is at the fundamental of climate change impacts for the Caribbean SIDS.

Maitland et al. (2024) emphasized that the Caribbean’s relatively low elevation and heavy reliance on coastal zones for settlement make it highly vulnerable to SLR. This geographic vulnerability, particularly for Caribbean SIDS, is well-documented. Moreover, the AR6 identifies SLR as a major driver of other climate risks, such as coastal erosion, with high confidence (Mycoo et al., 2022). Furthermore, Martyr-Koller et al. (2021)’s study on SLR on SIDS indicates that SLR increases the magnitude and severity of extreme sea level (ESL) events that occur with these storms, leading to increased frequency and severity of coastal flooding. According to Vitousek et al. (2017), the frequency of coastal flooding is expected to double within the coming decades due to rising sea levels. Tropical regions, including many SIDS, are predicted to face the most significant increases in flooding events. Thus, SLR is seen not only as a direct threat but also as an exacerbating factor for a range of climate-related risks in the region. In respect of this, numerous climate negotiations, such as the ‘International Conference on SIDS’ put much emphasis on SLR as climate risks SIDS face compared to other climate risk issues.

3. Caribbean SIDS in Climate Negotiations

Addressing these climate risks and acknowledging their vulnerability, SIDS have been striving to lead in climate action by engaging in climate negotiations. Climate negotiations are defined as ‘a process where representatives from various countries, international organizations, and other stakeholders come

together to discuss, formulate, and agree upon measures to address climate change.' Their efforts can be analyzed through domestic and international negotiations. Engaging in climate negotiations for SIDS is particularly important because to effectively mitigate and adapt to the most severe effects of climate change, this demands significantly greater efforts from developed nations but also necessitates the swift inclusion of typical climate-vulnerable countries in crafting climate policies. Additionally, it is important to assist these countries in preparing for the gravest consequences of climate change, which their vulnerabilities are known to the global community through various climate dialogues. Thus, to know the most climate vulnerable countries' needs, them engaging in these negotiations are crucial.

Domestically, SIDS have demonstrated political commitment by presenting national climate action plans, known as Nationally Determined Contributions (NDCs). NDCs are fundamental to climate negotiations as they encapsulate individual countries' commitments to reducing greenhouse gas (GHG) emissions and adapting to climate impacts, aligning with the goals of the Paris Agreement (PA). The iterative process of submitting, reviewing, and updating NDCs ensures transparency and promotes increased ambition over time, crucial for achieving global targets. This mechanism enables a structured and collaborative approach to global climate action, reflecting diverse national capacities and responsibilities.

This phenomenon is intriguing, as despite the well-known limitations in their capacity to implement both climate change mitigation and adaptation strategies, the presentation of ambitious strategies appears challenging (IPCC, 2022). To this end, previous studies explored the inherent reasons for SIDS 'scaling up' their climate goals. Mohan (2023)'s study on the financing needs of Caribbean SIDS reveals that these states highlight the financing obligations of developed countries in their NDCs. Furthermore, ahead of the upcoming 26th Conference of Parties (COP26), 93% of LDCs and SIDS submitted 'updated' NDCs, adhering to the core principles of the Paris Agreement to escalate their efforts through the 'ratchet up' mechanism. This demonstrates one of the most evident reasons for some of SIDS' ambitious climate policies, which is to influence the international community. The 'ratchet up' mechanism refers to a unique trait of the Paris Agreement where dedicated countries must work on a five-year cycle of submitting

its ‘ambitious’ climate actions. Since 2020, countries have been submitting their NDCs, which each successive NDC reflecting a higher degree of ambition compared to the previously submitted version, which is referred to as the ‘intended nationally determined contributions (INDCs) (UNFCCC, n.d.). Countries are obliged to update the INDCs and submit the updated version every five years, outlining how much they intend to reduce emissions. Each submission should be more ambitious than the last version (Bennett, P., 2016). This whole overarching process is called ‘ratcheting up’ their initial goals.

In addition to submitting their NDCs, Caribbean SIDS have also implemented domestic frameworks and initiatives to back-up their climate goals. For instance, as one of the most vulnerable countries to climate change, Barbados has launched its ‘Bridgetown Initiative’ in 2022 to assist in leading a paradigm shift in the discourse of scaling capital flows and reshaping the financing system to achieve the Sustainable Development Goals (SDGs) and spur climate action (Bridgetown Initiative 3.0 – Bridgetown Initiative, n.d.). It aims to enhance global financial support and reform by reallocating at least USD 100 billions of unused Special Drawing Rights, restructuring debt with favorable terms, significantly increasing development lending to USD 500 billion annually for SDGs, mobilizing over USD 1.5 trillion yearly from the private sector for green projects, overhauling the governance of international financial institutions for greater fairness, and creating a trade system that underpins a global green and equitable transformation. Furthermore, it launched its ‘Roof to Reef Programme (R2RP)’ to build resilience and sustainable development at individual, community, and national levels. While the Bridgetown Initiative focused on enhancing the financial capabilities, R2RP aims to enhance the adaptive capacity derived from climate change. Over the next decade, it is expected to concentrate on enhancing infrastructure and ecosystems to support policy development needed to achieve its objectives.

Internationally, SIDS have articulated their concerns through three main mechanisms: (1) forming alliances, (2) creating overarching frameworks, and (3) participating in climate change negotiations. Notably, the Alliance of Small Island States (AOSIS), a coalition of 44 small island and low-lying coastal states, was formed in 2015 to enhance its capacity to influence climate negotiations. Additionally, SIDS have established frameworks such as the ‘1994 Barbados

Program of Action' and the '2014 SAMOA Pathway,' which provide clear frameworks for action in selected priority areas. Lastly, SIDS have been at the forefront of climate negotiations, exemplified by their active participation in the United Nations Framework Convention on Climate Change (UNFCCC) Conferences of the Parties (COP).

More specifically, the Caribbean SIDS have also displayed the three main mechanisms in participating in the international arena. Firstly, other than the AOSIS where all SIDS are joined, Caribbean SIDS formed their own alliances such as the 'Organization of Eastern Caribbean States (OECS)' and the 'Caribbean Community and Common Market (CARICOM).' OECS is an international inter-governmental organization dedicated to regional integration in the Eastern Caribbean. There are currently 11 member states.[①] Especially, the 'Environmental Sustainability Division (ESD)' under OECS operates under the OECS to implement strategic actions to achieve the vision and goals of 'St. George's Declaration of Principles for Environmental Sustainability in the OECS (SGD) 2040.'

CARICOM is a grouping of twenty-one countries: fifteen Member States and six Associate Members.[②] CARICOM rests on four main pillars: economic integration, foreign policy coordination, human and social development, and security, and under these pillars, CARICOM runs the 'Caribbean Community Climate Change Centre (CCCCC)' that coordinates the Caribbean region's response to climate change, working on effective solutions and projects to combat its environmental impacts and global warming. Through these established alliances, Caribbean SIDS leverage the collective strength and resources to support their initiatives and actively pursue their climate change mitigation and adaptation goals.

Secondly, Caribbean SIDS have engaged in climate negotiations by creating 'overarching frameworks.' One example is the 'Small Island Developing States Partnership Framework.' This framework was established during the third International Conference on SIDS in 2014, where it was designed to monitor

① The 11 member states are Antigua and Barbuda, Commonwealth of Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and The Grenadines, British Virgin Islands, Anguilla, Martinique, Guadeloupe

② The 15 member states are Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guya na, Haiti (Presidential Council), Jamaica, Montserrat, Saint Lucia, St Kitts and Nevis, St Vincent and the Grenadines, Suriname, and Trinidad and Tobago. The 6 associate member states are Anguilla, Bermuda, British Virgin Islands, Cayman Islands, Curaçao, and Turks and Caicos Islands.

progress of existing, and stimulate the launch of a durable partnership for the sustainable development of SIDS. Formalized in December 2015, the Small Island Developing States Partnership Framework includes a member state-driven Steering Committee, annual global and regional partnership dialogues, and a standardized reporting process to maintain high visibility for SIDS issues at the UN, facilitate the sharing of best practices, and encourage the initiation of new sustainable development partnerships. Thus, by creating this strategic framework, SIDS intended to leverage on a mechanism for articulating and demonstrating its leadership in the international arena and develop its capacity to take future positive steps.

Lastly, SIDS have gradually moved to the forefront of climate change debates following the excessive need for tackling climate change, by being directly engaged in international climate negotiations. One example is the Maldives. The Maldives, at the 1987 Commonwealth Heads of Government Meeting in Vancouver, highlighted the disproportionate effects of climate change on small islands and low-lying states, calling for international attention to these regions. Despite the Commonwealth not representing all UN member states, its inclusion of a majority of SIDS marked this meeting as a pivotal moment for advancing SIDS' climate change agenda (Rasheed, 2019). President Maumoon Abdul Gayoom of the Maldives emphasized the urgent need for global collective action, noting that SIDS, despite contributing minimally to climate change, suffer its severest impacts and lack sufficient resources to address it alone. In this regard, it is notable that previously, country representatives of SIDS emphasized its vulnerability towards climate change in the international stage. A more recent example is the negotiations concerning the Paris Agreement. As the Chair of AOSIS, the Maldives' Minister of Environment and Energy, Mr. Thoriq Ibrahim, emphasized the crucial role of international cooperation in the climate agreement, highlighting its importance in preventing severe climate impacts such as sea level rise and the loss of entire nations, as well as addressing issues that require collective global efforts (McGrath, M., 2015).

Likewise, as SIDS gear up for the fourth International Conference on SIDS in Antigua and Barbuda in May 2023, they utilized a 'High-Level Event' at the 28th Conference of Parties (COP28) to emphasize their climate priorities.

Despite early progress with the loss and damage fund, leaders like the Bahamas' Prime Minister Philip Davis insisted on continued international commitment beyond mere pledges. Meanwhile, Kerryne James, Grenada's Minister for Climate Resilience, highlighted the critical role of SIDS unity and collaboration, as demonstrated during the Grenada Dialogue, in strengthening their collective voice in climate negotiations.

However, the three mechanisms; (1) forming alliances, (2) creating overarching frameworks, and (3) participating in climate change negotiations are not used as the same level within the SIDS. The AOSIS group, for example, is composed of islands that are threatened by climate change in very different ways, and clearly, their degree of involvement in climate efforts is different and individual interests may differ a great deal from those representing the true coalition's interests (Betzold, Castro and Weiler, 2012). Pertaining to this, this research delves into the 'why' factor of the variations in the level of engagement of these countries, despite their well-known susceptibility to climate impacts.

4. International Support and Initiatives for Caribbean SIDS

Caribbean SIDS not only engage actively through domestic and international negotiations but also serve as focal points for global attention and support. Recognizing the unique and pressing vulnerabilities of these nations, numerous international conferences, workshops, and projects have been directed toward fostering resilience and sustainable development. For example, the fourth International Conference on SIDS, held in May 2024 in Antigua and Barbuda, included a regional preparatory meeting specifically targeting the Caribbean. Prominent international organizations (IOs) like the Global Environment Facility (GEF) and the Global Green Growth Institute (GGGI) have spearheaded projects and capacity-building initiatives tailored for Caribbean SIDS. GEF's 'Expanded Constituency Workshop and Regional Adaptation Workshop,' hosted by the Government of the Dominican Republic, aimed to foster inclusive engagement, share best practices, and enhance skills in project and program implementation for Caribbean SIDS.

Similarly, GGGI, which focuses on aiding developing countries in transitioning toward green growth, has dedicated efforts toward the Organization of Eastern Caribbean States (OECS). Following the signing of a Memorandum of Understanding (MoU) with the OECS in February 2018, GGGI established its OECS Headquarters in Saint Lucia. One of its notable projects, 'Caribbean Region (CAR02) Green Growth Governance – Support for OECS Policy Analysis on Energy Resilience,' aimed to mobilize resources for sustainable energy development and implement OECS recommendations on energy resilience.

The United Nations Development Programme (UNDP) has been actively involved in Caribbean SIDS, implementing programs focused on disaster risk reduction, renewable energy transition, and enhancing climate resilience. The 'Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience in the Caribbean (EnGenDER)' project, for instance, integrates gender considerations into climate resilience planning across nine Caribbean nations, ensuring that marginalized groups benefit from climate adaptation strategies.

The World Bank also plays a significant role in supporting Caribbean SIDS. Through its 'Climate Resilience Investment Program,' it has worked with these nations to enhance infrastructure resilience and foster economic diversification. Projects such as the 'Disaster Vulnerability Reduction Project' in Saint Lucia focus on reducing risks associated with natural disasters. Meanwhile, the European Union (EU) has been a longstanding partner of Caribbean SIDS, providing funding and technical support for sustainable energy and environmental conservation projects. The 'Global Climate Change Alliance Plus (GCCA+)' initiative, for instance, has supported efforts like coastal protection in the Caribbean.

By leveraging the resources and expertise of these IOs, Caribbean SIDS have been the center of attention globally for enhancing their climate resilience, promoting sustainable development, and strengthening their voices in global climate negotiations.

5. Literature Review

5.1. Interest-based Explanation

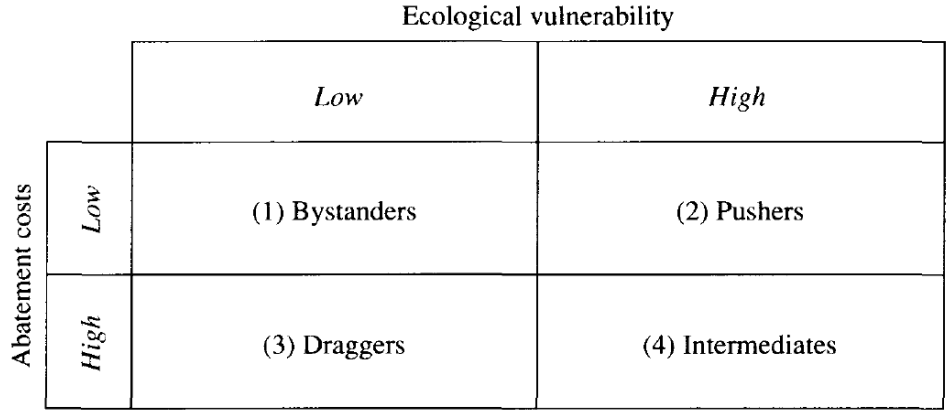
Previous research also acknowledged the fact that some states act aggressively towards promoting stricter climate regulations while others are not. Its puzzle to solve was 'why do other countries try to prevent or slow internationally coordinated action toward international environmental protection?' In the process of identifying the reasons for the different level of engagement, Sprinz and Vaahtoranta (1994) developed an 'interest-based explanation.' The interest-based explanation of the international politics of environmental management focuses on those domestic factors that shape a country's position in international environmental negotiations (Sprinz and Vaahtoranta, 1994). Within the three preconditions: (1) each country is a self-interested actor, (2) each country's specific preferences in a specific situation are not well known, and (3) assumes for the issue-areas (e.g., ozone depletion and transboundary acidification), states pursue two main goals with the help of their environmental foreign policies. The two goals are as follows: states seek to avoid vulnerability, and they are more inclined to participate in environmental protection when the costs of compliance are relatively minor.

Out of this, the paper classifies the countries in 4 categories: (1) Bystanders, (2) Pushers, (3) Draggers, and (4) Intermediates. According to Sprinz and Vaahtoranta (1994), each classification is defined as follows. Bystanders are countries with low ecological vulnerability and low abatement costs. They are expected to support international environmental efforts more than draggers due to the low cost of implementation but are generally less motivated to act since they are less affected by environmental issues directly. Pushers are countries with high ecological vulnerability and low abatement costs. They actively strive for stringent international regulations because they stand to benefit significantly from global efforts to mitigate environmental issues. These countries likely experience direct negative impacts from environmental problems and find that addressing these issues is economically feasible. Draggers are countries with low ecological vulnerability and high abatement costs. They tend to resist international environmental regulations because the high costs of implementing changes

outweigh the immediate benefits. Lastly, Intermediates are countries that find themselves in a complex position with both high ecological vulnerability and high abatement costs. They recognize the benefits of environmental regulation but are cautious about the economic implications of implementing such regulations. Their support for international environmental policies may be conditional or vary depending on the specific circumstances or negotiations. Figure 1 shows the '2x2' matrix for the classification of a country's support for international environmental regulation, created by Sprinz and Vaahtoranta (1994).

Similarly, Chasek et al. (2018)'s study explored actors in the environmental arena, classifying the actors into nation-state, international organizations, multilateral financial institutions, nongovernment organizations, and corporations. Chasek et al. (2018) also put more emphasis on the four roles nation-state actors play in forming global political agenda: (1) lead state, (2) supporting state, (3) swing state, and (4) veto state. According to its classification, a lead state has a strong commitment to effective international action on a specific issue, moves the process of negotiations forward by proposing its own negotiation formula as the basis for an agreement, and attempts to get the support of other state actors. Support state is comparably behind stronger action but gradually gravitate toward support for the initiative led by the lead states. A swing state demands significant concessions to its interests as a price for pursuing for an agreement and a veto state opposes the formation of an environmental agenda or regime. This definition aligns with that of Sprinz and Vaahtoranta (1994)'s, lead state as a pusher country, supporting state as intermediates, swing state as bystanders, and veto state as draggers.

Figure 1: Classification of a Country's Support for International Environmental Regulation



Source: Sprinz and Vaahtoranta, 1994

Sprinz and Vaahtoranta (1994) looked at the 'incidence of skin cancer among their populations in the mid-1970s' for the 'Ecological Vulnerability' index when analyzing states' interest in the topic of stratospheric ozone depletion. Similarly, for transboundary acidification in Europe, it used 'maximum exceedance of critical loads (total acidity, 5th percentile)' for the same variable. Despite countries having significant difference in the recognized ecological vulnerability, ecological vulnerability variable showed no significance in the 8 selected SIDS.

In Sprinz and Vaahtoranta (1994)'s study, the term 'Abatement Costs' was used to describe the resource outlays associated with a governmental position on reducing emissions. Specifically, these costs refer to the expenses governments incur to decrease environmental pollutants through various measures and technologies. This metric reflects a country's 'relative effort' by indicating the proportion of its economic output that is devoted to environmental abatement, thereby providing a standardized measure to compare the commitment of different nations to mitigate environmental impacts. In its study, it used 'Intensity of Chlorofluorocarbons (CFC) consumption in 1986 (net atmospheric increase in relation to GNP per capita)' for the variable for stratospheric ozone depletion and 'Annual cost of a 30% reduction of SO2 from 1980 levels by the year 2000 (percentage of GDP)' for the variable for transboundary acidification in Europe.

However, these classifications were not applicable to the 8 Caribbeans SIDS. Firstly, there are no distinct differences within the 'ecological vulnerability' variable. Numerous indicators have been used to identify a country's ecological vulnerability to climate change such as on 'Coastal Vulnerability Index (CVI),' 'Composite Vulnerability Index,' 'Multi-scale Coastal Vulnerability Index,' and 'Expected Annual Number of People Exposed (EAPE) to climate risks (Rocha et al., 2023). However, there were no differences that differentiates the countries, which then makes no use of setting the ecological vulnerability variable as one factor to influence domestic politics, as was used by Sprinz and Vahhtoranta (1994).

Second is the availability of data. Given the diverse and country-specific nature of projected climate change impacts, it is inherently difficult to comprehensively measure all ecological vulnerabilities for each country. As climate risks vary depending on geographical, socio-economic, and environmental contexts, it is challenging to establish a single vulnerability metric that applies universally. Also, consolidating country-specific data for these indices is challenging due to lack of data. In other words, these indices are heavily dependent on the availability of data at each spatial scale, which was not found for the 8-research target SIDS. Furthermore, relevant data from the World Bank is very restricted. For instance, despite the existence of indices, no data is available for all 8-research target SIDS. These indices include 'additional population exposed to annual coastal floods due to sea level rise,' and 'natural hazard levels – coastal flood' in Country Climate and Development Report (CCDR), provided by the World Bank (CCDR | Databank, n.d.).

The limitations of leveraging on the 'abatement cost' variable was also evident within the 8 SIDS. These limitations were also inherent in the availability of data. Previous research utilized the 'Expected Annual Damage' (EAD) index to assess the cost-effectiveness and necessity of these expenditures relative to potential economic losses from environmental impacts. However, this index did not align with the original definition of the 'abatement costs' variable, which does not account for damage costs. Consequently, the EAD index is inappropriate for this analysis. To this regard, due to the unclear distinction within the available data of both indices, applying interest-based explanation was 'proven' to be inapplicable for this research.

Thus, this paper seeks to identify other factors that influenced the different patterns countries show in engaging in climate dialogues. However, it will leverage on the terms, 'Bystanders' and 'Pushers' in describing the different traits between the 8 SIDS. Furthermore, it follows the logic of the interest-based explanation, where it first identified that states see different levels of support for stringent international environmental controls and investigated the contributing factors in the domestic level.

5.2. Approaches to Public Participation in Climate Negotiations

This paper seeks to find the reason for variability in the level of engagement in climate negotiations in how public participation was leveraged. Previous research also acknowledged the fact that some states act aggressively towards trying to engage the public in their climate negotiation process domestically. Doelle and Majekolagbe (2023)'s study examines the role of public participation in integrating climate change considerations into impact assessment processes (CCIA), highlighting the complexity of climate change and the need for a participatory approach to manage its multifaceted challenges effectively. Within the study, public participation was advocated as a platform for transformative learning, cooperative action, and adaptive management, contributing to more legitimate and effective climate governance.

Cattino and Reckien (2021)'s study also shows that public participation can lead to greater local climate ambition and potentially, greater action. It points out public participation in climate issues enhances the legitimacy and equity of decision-making processes, making climate policies more representative and just. It fosters greater awareness, learning, and empowerment within communities, enabling them to push for stronger international commitments of their country. This engagement also then promotes community cooperation and dialogue, leading to cohesive national strategies for climate negotiations. Thus, the study emphasizes that public participation is crucial for driving more engaged and effective country participation in international climate efforts (Cattino and Reckien, 2021). In this regard, public participation is considered as a grand societal and 'environmental'

challenge. If implemented on in an effective way, it pushes a country to act on the urgent demand for action to combat climate change (Perlaviciute and Squintani, 2020).

To this backdrop, public participation is crucial in countries actively engaging in climate negotiations as it drives political will, ensures accountability, and enhances the legitimacy of negotiation positions. By integrating local knowledge, fostering innovation, and mobilizing resources, public involvement strengthens a country's climate agenda and provides negotiators with stronger leverage. It builds trust, sustains momentum across political cycles, and encourages behavioral shifts toward sustainability. For climate vulnerable countries, such as the SIDS, public participation amplifies their voices, highlights lived experiences of climate impacts, and garners international support, making climate commitments more impactful and aligned with domestic and global needs.

While there is no universally agreed definition of public participation, numerous research focus on the aspect of 'inclusion' of the public in public issues. Cattino and Reckien (2021) defines public participation as 'any process that directly engages the public in decision-making and gives full consideration to public input in making that decision.' Often, it refers to 'a deliberative process by which interested or affected citizens, civil society organizations, and government actors are involved in policymaking before a political decision is taken (Cattino and Reckien, 2021).' It further identifies four essential conditions that enhance the effectiveness of public participation in climate planning, aiming for ambitious and transformative outcomes. Firstly, there must be a recognition of all actors, roles, and portions of the population, particularly the most vulnerable, as well as an understanding of the socio-political context. Secondly, it is vital to ensure clear and meaningful engagement at all stages of the decision-making process. Third, it is crucial that full decision-making power is granted, enabling citizens to have a real influence over the climate change planning process. Lastly, it is important to have available adaptation options and processes that prioritize the logic of welfare over safety, or social over human security, to support comprehensive and effective climate planning.

Similarly, Kumpu, V. (2022)'s study delved into the definition of public engagement, and the relationship of it with addressing climate change. The study of

public engagement with climate change encompasses two interconnected but distinct approaches (Hoppner and Whitmarsh, 2010). It first identifies the differences between 'personal' engagement and 'civic (or public)' engagement. Personal engagement refers to an individual's connection with the issue of climate change, encompassing cognitive, emotional, and behavioral dimensions (Lorenzoni et al., 2007). This form of engagement includes how 'individuals' think, feel, and act regarding climate change, often influenced by their knowledge, awareness, and perceptions, as well as their emotions, values, and actions that either contribute to or mitigate climate change (Whitmarsh et al., 2013). On the contrary, civic engagement involves the civic (or the public) in collective problem-solving, policymaking, and dialogue (Lorenzoni et al., 2007). It includes structured participatory methods like public consultations, citizen juries, and deliberative polling (Blue, 2016). Rask and Worthington (2016) describe this as processes where citizens or stakeholders play a clear role in policy development, emphasizing the political dimensions of climate change engagement, such as how it influences public policy and governance rather than personal consumption or lifestyle choices (Carvalho et al., 2016).

Table 2 shows the varying definition of public participation in various resources. To this backdrop, in this paper, public participation is defined as 'the extent to which a government involved the public into decisions and actions on public issues.' Considering the context of the paper, 'public issues' will be focused on 'climate change issues.' Reflecting on these insights, the papers show that the extent of public participation in climate issues domestically can significantly impact a government's activeness in climate negotiations. When the public is engaged, they are more likely to demand stringent and effective climate policies, thereby prompting governments to take bolder actions in climate dialogues. Essentially, a well-informed and actively participating public can exert pressure on political leaders to prioritize and advance climate action in global negotiations (Eckerd and Heidelberg, 2020).

Table 2: Definition of Public Participation

	Definition	Source
Public Participation	A deliberative process by which interested or affected citizens, civil society organizations, and government actors are involved in policymaking before a political decision is taken.	Cattino and Reckien (2021)
	A process of collective problem-solving, policymaking, and dialogue. State of involvement in climate change at cognitive, affective, and behavior levels.	Lorenzoni et al. (2007)
	A process which involves structured participatory methods like public consultations, citizen juries, and deliberative polling.	Blue (2016)
	A process where citizens or stakeholders play a clear role in policy development, emphasizing the political dimensions of climate change engagement.	Rask and Worthington (2016)
	Various types of activities that are used to incorporate people's interests, concerns, needs, and values into decisions and actions on public issues.	Creighton (2005)

Source: Developed by the author based on various sources.

To measure 'public participation,' Khatibi et al. (2021)'s study developed a theoretical framework in policymaking in climate dialogues and divides the degree of participation levels. It focuses on whether public awareness, knowledge and engagement improves climate change adaptation policies of a country. It comes up with a theoretical framework to explain all stages of the climate policy cycle. Within this cycle, the study emphasizes the importance of public participation and engagement. It then utilizes the International Association for Public Participation (IAP2) spectrum where it has identified five levels of public participation, (1) inform, (2) consult, (3) involve, (4) collaborate, and (5) empower. The second column of Figure 2, 'Public Participation Goals,' shows the level of public participation in a particular decision.

Similarly, Hwang and Song (2023)'s study delved into identifying the different levels of participation in four countries in Latin America, Argentina, Brazil, Chile, and Costa Rica. It seeks to elucidate the participation and influence of stakeholders within forest restoration projects that employ the Reducing Emissions from Deforestation and forest Degradation in developing countries (REDD+) mechanism. This study also utilizes the IAP2 spectrum of public participation (referred to as 'stakeholder engagement' within the research) to

analyze stakeholders' engagement in reforestation projects. Within the context of stakeholder engagement, different strategies for stakeholder participation in the decision-making process were explained. The initial stage involves 'Inform,' where stakeholders are unilaterally provided information to understand the issues they face. Secondly, 'Consult,' reflects two-way communication where stakeholders' opinions are sought and considered in the decision-making process. Following this, the 'Involve' stage signifies a deeper level of engagement, where stakeholders 'participate' in discussions and contribute to decision-making. Advancing further, 'Collaborate' indicates a stage where stakeholders and decision-makers 'jointly exert effort' and share responsibility in developing solutions. The research found that in this stage, joint projects are established, and initiatives involving stakeholders are constructed. Finally, 'Empower' represents the highest level of engagement, where stakeholders hold substantial decision-making power and are enabled to direct and propel initiatives. This stage goes beyond merely including stakeholders in initiatives, integrating them into the actual implementation governance structure. This framework emphasizes the evolution from passive recipients of information to active co-creators of decisions, ultimately fostering a sense of ownership and responsibility among stakeholders. The third column in Table 3, 'Activities' shows the specific activities related to each of the participation levels. The closer a country's public participation approaches Level 5, the more effectively it can influence climate policy and decision-making.

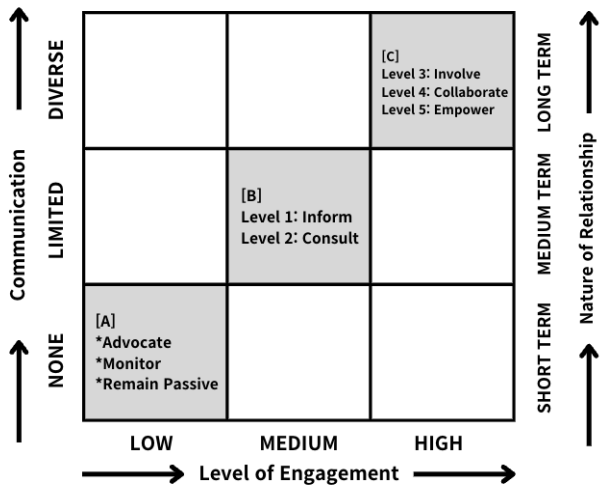
Additionally, Hwang and Song (2023) adopted a 'rating scale' based on the 'AA1000 AccountAbility's Stakeholder Engagement Standard (2015)' to assess the level of stakeholder engagement across three criteria: communication, level of engagement, and nature of the relationship. As illustrated in Figure 2, the scale categorizes stakeholder engagement into three progressive sections. Section [A] represents minimal engagement where there is no communication, typically involving advocacy, monitoring, or passive behaviors, associated with short-term relationships. Section [B] denotes a moderate level of engagement where stakeholders are either informed or consulted, reflecting limited communication and medium-term relationships. The highest level, Section [C], encompasses involving, collaborating with, and empowering stakeholders, indicative of diverse and frequent communication and long-term relationships.

Table 3: Public Participation Levels

Public Participation (PP) Levels	Level 1: Inform	Level 2: Consult	Level 3: Involve	Level 4: Collaborate	Level 5: Empower
Public Participation Goals	"To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions."	"To obtain public feedback on analysis, alternatives, and/or decisions."	"To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered."	"To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution."	"To place final decision makings in the hands of the public."
Activities	• Factsheets and announcements • Bulletin board postings • Annual reports Conference	• Surveys • Focus Groups • One-on-one Meetings • Public Meetings and Workshop • Online feedback and discussions	• Multistakeholder forums • Advisory panels • Advisory committees • Participatory decision-making	• Reference groups • Joint projects • Building multi-stakeholder initiatives • Building partnerships	• Incorporating stakeholders into governance structures (as members of specific committees or as shareholders)

Source: Developed by the author based on Khatibi et al (2021) and Hwang and Song (2023).

Figure 2: Different Levels and Approaches to Participation



Source: Hwang and Song (2023)

In this regard, this paper posits that varying levels of public participation prior to climate negotiations significantly influence the degree of engagement in these negotiations. Thus, by examining the different levels of public participation across the 8 countries, this paper seeks to uncover why there are variations in their engagement in climate policy discussions.

6. Research Question and Propositions

Against this backdrop, it is evident that SIDS, particularly those in the Caribbean, are highly vulnerable to climate risks. This vulnerability underscores the need for proactive engagement in climate mitigation and adaptation. Such measures include escalating climate goals (‘ratcheting up the climate goals’), forming alliances, establishing comprehensive frameworks, and participating in international climate negotiations. However, contradicting to these expected outcomes, there are clear differences in how the Caribbean SIDS act in climate negotiations. Previous research endeavored to identify the factor in influencing the differences by utilizing the interest-based explanation, but as was discussed in the previous section, it was proven to be inadequate for identifying the drivers of variation for the 8 Caribbean SIDS.

Consequently, this research aims to unravel the following puzzle: **Why are some Caribbean SIDS proactive in climate negotiations, while others show less initiative in these areas?**

To explore this question, this paper will first analyze the engagement of the 8 selected Caribbean SIDS in climate negotiations. This analysis involves mapping their common positions as well as differences in engagement in climate negotiations, utilizing public data available from specific negotiations. This includes reports from the Earth Negotiations Bulletin (ENB), lists of signatures from selected meetings, and officially submitted documents by each country. From this analysis, the 8 SIDS were classified into three categories: 'Pushers,' 'Moderates,' and 'Bystanders.' The terms were derived from Sprinz and Vaahtoranta (1994)'s classification of states.

Once the different levels of engagement between these states are delineated and grouped, the paper will examine factors that differentiate them. The upcoming section will provide a detailed account of how each variable contributing to this analysis is quantified and interpreted, ensuring a comprehensive understanding of their strategic positions in international negotiations.

To address the core research question of why different countries, demonstrate varying levels of commitment to international climate policies, this research proposes two propositions:

(a) A country's level of engagement in climate negotiations is positively influenced by the extent of public participation in climate issues at the domestic level.

(b) The greater a country's interaction with the public and the government is two-directional, the more a government will be influenced by and engage more actively in climate negotiations.

Chapter III. Research Design

1. Data and Case Selection

1.1. Research Target Selection

The paper considers 8 countries: Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines.

The 8 Caribbean SIDS were selected by shortlisting the states according to four factors. According to Vousdoukas et al. (2023)'s classification of the SIDS, there are a total of 31 Caribbean SIDS.[③] Out of these 31 states, this paper shortlisted them to 8 by following four stages, (1) independent states, (2) those that are members of the AOSIS, (3) countries classified as upper middle income to high income countries, and lastly, (4) politically stable countries. Table 5 shows the screening process for the selected 8 countries. Columns that are highlighted are those that adhere to the criteria, which therefore were chosen as research targets.

The following section is to explain each of the criteria for the screening process of the target countries. The first criteria are those that are independent states. This is considered the most valuable criteria among the four, considering the vast history of the Caribbean states. According to Murillo-Zamora (2021)'s study on the definition of independence of states in the perspective of international relations, it explains to be an independent state, a state must have sovereignty over its territory and population. A 'sovereign state' is defined as a political entity that holds the right to domestic autonomy and the ability to enter treaties independently with other entities, excluding external sources of authority both in theory and in practice. Sovereignty underpins the legal status of states in the international system and provides the framework within which independence is exercised. In essence, sovereignty is the authority, and independence is the practice of that authority without external interference. Thus, independence can be seen as the practical assertion of sovereignty, particularly in how a state interacts with the international community and asserts its interests. It embodies the principle that a state exercises

[③] Aruba, Anguilla, Antigua and Barbuda, Bonaire, Sint Eustatius and Saba, Bahamas, Belize, Bermuda, B arbados, Cuba, Curacao, Cayman Islands, Dominica, Dominican Republic, Guadeloupe, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint-Martin, Montserrat, Martinique, Puerto Rico, Suri name, Sint Maarten, Turks and Caicos Islands, Trinidad and Tobago, Saint Vincent and the Grenadines, British Virgin Islands, and Virgin Islands, US.

its sovereign authority without any direct administrative interference from other states. Independence is crucial for a state to assert its identity, formulate its foreign policy, and conduct relations on an equal footing with other states. The concept is fundamental to the international legal and political order, where state sovereignty is recognized and respected among the members of the international community (Murillo-Zamora, 2021).

This is an important criterion for the shortlisting of the Caribbean States for the following two reasons. Firstly, still to this date, vast number of states classified as the Caribbean SIDS remain dependent. The Caribbean is one of the regions that have suffered from colonialism from 1492, when Columbus first landed in the island of Hispaniola, now divided into Haiti and Dominican Republic. Since then, as many islands and coastal areas were easily accessible to European ships, territories were claimed gradually by the Europeans. Territories once owned by the Indigenous Peoples were transformed through plantation agriculture. Table 4 shows the summary of the historical Caribbean colonizers. In the twentieth century, many of the Caribbean islands gained independence, but some remained Crown colonies of their European colonizers with varying degrees of autonomy.

Table 4: Colonialism in the Caribbean Region

Colonizer	European Colonies
Spain	Cuba, Dominican Republic, Puerto Rico
British	Antigua and Barbuda, The Bahamas, Jamaica, Cayman Islands, Turks and Caicos Islands, Dominica, St. Lucia, St. Vincent, Grenada, Barbados, Virgin Islands, Trinidad and Tobago, Montserrat, Anguilla, St. Kitts and Nevis
Dutch	Curaçao, Bonaire, Aruba, St. Eustatius, Saba and Sint Maarten (southern half)
French	Haiti, Guadeloupe, Martinique, St. Martin (northern half), St. Barthélémy
The United States	Puerto Rico, Virgin Islands, Cuba

Source: Created by the author based on various resources.

Whether these countries are independent states were determined by the United States Department's list of Independent States in the World (2024). For instance, Anguilla is not yet recognized in the international community as the sovereignty of the territory is in the United Kingdom. It is classified as the 'British

Overseas Territory.' Similarly, the country of Curaçao is recognized as the land of the Netherlands. Independent states are ticked as 'Yes' in Table 5 and were therefore moved on to the second criterion.

The second reason is that negotiations, particularly in a modern context, are possible only between sovereign entities. Sovereignty, fundamentally tied to the clear demarcation of borders and the full exercise of authority within those borders, grants a nation the right to engage in binding agreements. If a state lacks sovereignty, it cannot fully participate in negotiation processes because its decisions may not be independently upheld or enforced. Only sovereign states can guarantee the fulfillment of their commitments because they possess the ultimate authority to enact and ensure compliance with the terms they agree upon. This capacity for autonomous decision-making is crucial in the realm of climate negotiations, where commitments often involve significant policy shifts and long-term implementation. Thus, without sovereignty, a territory's ability to represent its unique needs and vulnerabilities is limited, ultimately hindering its capacity to contribute meaningfully to global climate dialogue and action.

The second criterion focuses on membership in the Alliance of Small Island States (AOSIS), used to identify countries engaged in both mitigating and adapting to climate risks. Since its inception in 1990, AOSIS has served as an advocate for the 39 small island and low-lying coastal developing states, promoting their interests in climate negotiations and sustainable development, securing significant global commitments to reduce GHG emissions, and amplifying the voices of these vulnerable nations on the world stage (Chair of AOSIS – AOSIS, n.d.). This study assumes that AOSIS member states, comprising 39 small island and low-lying coastal developing states, acknowledge their vulnerability to climate change and are committed to addressing it. These members are categorized into three geographical groups: 16 in the Caribbean, 14 in the Pacific, and 9 in the African, Indian Ocean, and South China Sea (AIS) region. This is to reflect a strategic selection based on geographic and environmental exposure which could influence distinct adaptive strategies and solutions in the face of climate change. Selecting AOSIS membership as a criterion ensures that all shortlisted countries have a minimum level of engagement in climate negotiations. As an alliance focused on advocating for small island states, AOSIS members are already

involved in key climate discussions, like those under the UNFCCC. This makes them ideal for analyzing the differences in how actively they engage in negotiations, ensuring that any variations reflect different strategies rather than a lack of participation.

The third criterion selects countries classified as upper middle to high-income. This inclusion serves a dual purpose: firstly, to avoid other factors that can influence the variations in engagement, and secondly, to examine nations with sufficient economic resources to effectively implement their climate objectives. The Caribbean SIDS, with their diverse landscapes, populations, and economic sizes, are analyzed under this criterion to assess their capability and readiness for climate action. Focusing on economically stronger SIDS ensures the study of regions where policy and infrastructure developments are feasible, offering insights into best practices that could be applicable across varying economic contexts.

Similarly, the fourth criterion considers the political stability of the countries, vital for maintaining and fulfilling climate commitments. Political stability is gauged using the World Bank's 'Political Stability and Absence of Violence/Terrorism' index, expressed in percentile ranks based on the most recent year's data. This index measures perceptions of the likelihood of political instability and politically motivated violence, including terrorism (Kaufmann et al., 2010). Countries are ranked on a scale from '0 (lowest stability)' to '100 (highest stability),' segmented into the following categories: (1) less than 16.98, (2) 16.98 to 33.96, (3) 33.96 to 51.42, (4) 51.42 to 67.92, and (5) above 67.92. Selection based on political stability ensures the identification of environments where policy implementations can be executed without significant disruptions, enhancing the likelihood of sustained climate action success. For this study, only countries in the top 32% for political stability (above the 68th percentile) were selected. Among the Caribbean SIDS, this criterion narrowed the selection to a total of eight countries.

Each of these criteria was designed not only to focus the research but also to ensure the selection of target countries that offer a realistic and comprehensive overview of the capabilities and strategies in climate resilience.

Table 5: List of the Caribbean SIDS

Country	Independent States (Yes/No) *	AOSIS Member (Yes/No) **	Current Classification by Income***	Political Stability Index (average for 5 years) ****	Selected(S)/ Excluded(E)
Aruba	No	No	High income	97.64151	E
Anguilla	No	No	N/A	N/A	E
Antigua and Barbuda	Yes	Yes	High income	82.5471725	S
Bonaire, Sint Eustatius and Saba	No	No	N/A	N/A	E
Bahamas	Yes	Yes	High income	79.245285	S
Bermuda	No	Yes	High income	84.43396	E
Barbados	Yes	Yes	High income	91.5094376	S
Cuba	Yes	Yes	Upper middle income	61.320755	E
Curaçao	No	No	High income	N/A	E
Cayman Islands	No	No	High income	100	E
Dominica	Yes	Yes	Upper middle income	95.754715	S
Dominican Republic	Yes	Yes	Upper middle income	55.1886787	E
Guadeloupe	No	No	N/A	N/A	E
Grenada	Yes	Yes	Upper middle income	85.3773575	S
Guyana	No	Yes	High income	47.1698112	E
Haiti	Yes	Yes	Lower middle income	10.3773584	E
Jamaica	Yes	Yes	Upper middle income	57.5471687	E
Saint Kitts and Nevis	Yes	Yes	High income	82.5471725	S
Saint Lucia	Yes	Yes	Upper middle income	77.8301849	S
Saint-Martin	No	No	High income	N/A	E
Montserrat	No	No	N/A	N/A	E
Martinique	No	No	N/A	N/A	E
Puerto Rico	No	No	High income	63.679245	E
Suriname	No	Yes	Upper middle income	58.0188675	E
Sint Maarten	No	No	N/A	N/A	E
Turks and Caicos Islands	No	No	High income	N/A	E
Trinidad and Tobago	Yes	Yes	High income	56.603775	E
Saint Vincent and the Grenadines	Yes	Yes	Upper middle income	85.3773575	S
British Virgin Islands	No	No	High income	N/A	E
Virgin Islands, US	No	No	High income	N/A	E

Source: Created by the author based on various resources

Data for each criterion was retrieved as follows:
* The status of independent states was determined according to Independent States in the World (2024) set by the U.S. Department of State.
** The status of AOSIS membership was according to AOSIS official homepage.
*** The current classification by income was retrieved from the World Bank's official list.
**** Data from the political stability index was retrieved from the World Bank's 'Political Stability and Absence of Violence/Terrorism' index.

1.2. Target Negotiations Selection

To measure the level of engagement in climate negotiations of the 8 research targets, this paper will investigate three types of negotiations, (1) climate pledges shown in Nationally Determined Contributions (NDCs), (2) participation in international climate change negotiations, and (3) propositions of globally recognized initiatives.

1.2.1. Nationally Determined Contributions

As was addressed in the previous section, the Caribbean SIDS have put an effort to engage in climate dialogue in two dimensions, domestically and internationally. Domestically, SIDS have shown significant political resolve by developing and submitting national plans for climate action to the UNFCCC, known as Nationally Determined Contributions (NDCs). In addition to the NDCs, countries submit National Adaptation Plans (NAPs) and National Communications (NCs), but the latter two documents were rarely considered in this stage of research mainly due to their irregularity in submission.

While the NAPs and NCs are submitted sporadically and vary based on a country's strategies to manage climate risks, NDCs are pivotal for analysis as they not only uphold the global commitments outlined in the Paris Agreement but also specify the contributions of individual countries towards these objectives. NDCs represent politically backed commitments by countries. They outline the targeted reductions in GHG emissions, the timeline for these reductions, and the strategies nations intend to deploy. Furthermore, NDCs enable governments to coordinate and align sector-wide actions with climate objectives. Finally, the universal nature of NDCs, mandatory for all countries and ratified at the highest governmental levels, positions them as essential tools for confronting not only the climate crisis

but also interconnected challenges such as energy and food price surges, security issues, migration, and global health crises like the COVID-19 pandemic. These contributions embody a holistic approach to governmental policymaking, emphasizing the integration of climate action into broader national and international agendas.

Despite being crafted in the country-level, NDCs are a core component of the broader UN climate negotiations, serving as each country's individual commitment toward the goals of the Paris Agreement. They are not only influenced by international climate talks but are also reviewed and refined through mechanisms like the Global Stocktake, which assesses collective progress and guides future NDC development. Through transparency reports and UNFCCC synthesis assessments, NDCs create a cycle of accountability, ensuring that countries' climate actions are aligned with global climate goals and adapt to emerging priorities (Overholt, n.d.). Thus, NDCs provide a measure of global progress towards meeting our shared climate goals.

1.2.2. A Country's Participation in Climate Negotiations

Second is the analysis of a country's participation in climate negotiations itself. In this paper, states' engagement in the 'Fourth International Conference on Small Island Developing States' will be explored. This negotiation falls under 'Conferences of the Sustainable Development of Small Island Developing States' category by the 'International Institute for Sustainable Development (IISD).' The negotiation was chosen for analysis because of two reasons. Firstly, is because of its latest gathering in a crucial series that addresses the unique challenges faced by SIDS. This conference is particularly significant as it provides the most recent insights into how these islands are navigating their climate-related vulnerabilities and what new commitments are being made in response to evolving environmental threats. By focusing on this conference, this research taps into the latest discussions and strategies, gaining a clearer view of how SIDS are engaging with the global community to secure a sustainable future. Secondly, this approach not only keeps the analysis current but also deeply relevant, as it highlights the continuous international efforts to support these vulnerable regions amid the mounting pressures of climate change. The first conference, held in Barbados in 1994,

produced the Barbados Programme of Action, a pivotal step in the international commitment to the sustainable development of SIDS. This initiative was furthered by subsequent conferences in Mauritius, the second conference held in 2005 and Samoa, the third conference in 2014, each reinforcing the ongoing global support for these vulnerable regions.

To elaborate on each of the derived Actions, at the first conference, two action plans have been adopted. Firstly, 'Barbados Programme of Action for Small Island Developing States (BPOA)' was adopted. It reinforced commitments from Agenda 21 into specific actions for national, regional, and international levels, including the adoption of the Barbados Declaration to strengthen political will. The BPOA identified 14 priority areas such as climate change specifically towards coastal risks, disaster management, and biodiversity, along with cross-sectoral needs like capacity building and technology transfer, aimed at addressing the unique challenges of SIDS. These challenges include geographical isolation, dependency on international trade, high population density, and limited resources, which collectively hinder socio-economic development. The BPOA set out a comprehensive strategy to promote sustainable development across SIDS by addressing these multifaceted issues through a detailed action plan to be implemented in the short, medium, and long term (UNGA, 1994).

In the second conference, the Mauritius Strategy (MSI) was adopted. The MSI, building on the initial actions of the BPOA, introduced 19 priority areas, adding new themes such as trade, health, and sustainable production, and addressed the significant challenges SIDS face upon transitioning from least developed country status. This included mitigating the loss of concessional finance and supporting alignment with international goals like the Millennium Development Goals. In the third conference, the Accelerated Modalities of Action (SAMOA) Pathway was adopted. The SAMOA Pathway, focused on promoting sustainable economic growth, climate resilience, environmental protection, and social development through its five priority areas. These include enhancing sustainable practices, improving disaster risk reduction, protecting biodiversity, advancing health and gender equity, and strengthening partnerships to support these initiatives.

Following this, the fourth conference has been held in St. Johns, Antigua and Barbuda, from 27th to 30th May 2024, under the theme "Charting the course

toward resilient prosperity." Twenty-two Heads of State and Government and more than 3,000 delegates attended the Conference, including representatives from government, the private sector and civil society. Two types of meetings, Regional Preparatory Meetings, Interregional Preparatory Meeting, were taken place prior to the official conference. All outcome documents for the corresponding meetings were part of the analysis.

1.2.3. Globally Recognized Initiatives

Lastly, a country's proposition of globally recognized initiatives will be analyzed. This involves assessing the extent to which nations contribute to and influence international environmental policies through their proactive initiatives. By proposing solutions and frameworks at global forums, nations can lead and shape the discourse on sustainable practices and environmental management. This study will examine various high-impact initiatives endorsed or introduced by the target countries, evaluating their effectiveness and the role these initiatives play in integrating SIDS' specific needs into global climate action strategies. Such contributions not only bolster international cooperation but also reflect a commitment to innovative and forward-thinking strategies that address the unique challenges faced by the Caribbean SIDS.

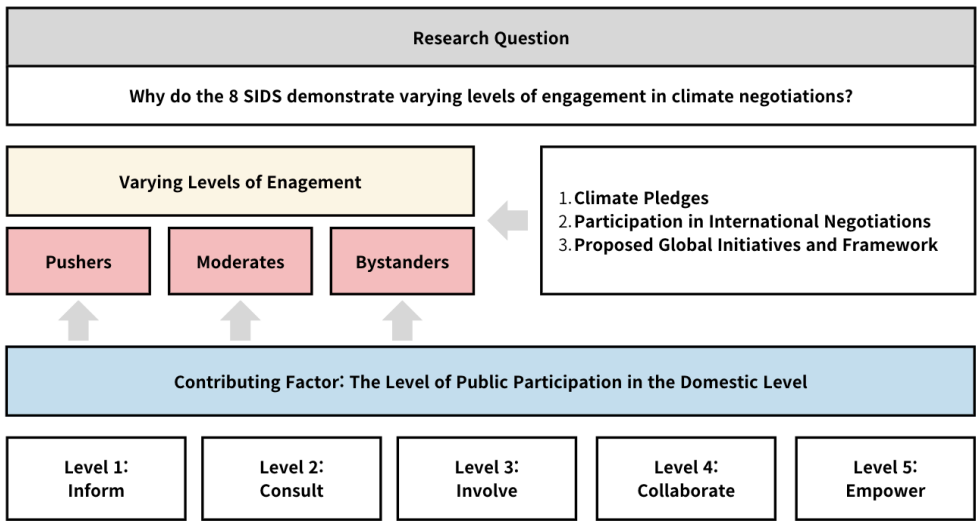
2. Research Methodology

Within this backdrop, a vast qualitative analysis will be taken place. The report employs a qualitative methodological approach, including a comprehensive analysis of government policies, review of academic literature, examination of relevant official documents, and utilizing all this, a comparative analyses between the 8 SIDS. This multifaceted approach ensures a thorough understanding of the current landscape of the 8 SIDS engagement in climate negotiations.

Figure 3 shows the overall research design. The research question posed seeks to understand why the 8 Caribbean SIDS demonstrate different levels of participation in climate discussions. It first categorizes the 8 SIDS into three groups based on their engagement levels: 'Pushers,' 'Moderates,' and 'Bystanders,' which reflect their proactive involvement, moderate involvement, and limited or no

involvement, respectively. Participation is assessed through three main dimensions: (1) the extent of climate pledges made, (2) participation in international climate negotiations, and (3) proposed global initiatives and frameworks. It also highlights a key contributing factor to these varying levels of engagement: the level of public participation within each country. This is segmented into five levels ranging from 'Inform,' where the public is merely informed about climate policies, to 'Empower,' where the public is actively empowered to participate in policymaking.

Figure 3: Research Design



Source: Created by the author.

Chapter IV. Variations in the Level of Engagement

Three main analyses will be used to measure the variations in the level of engagement of climate negotiations. First is the review of documents submitted by the 8 countries to the UNFCCC. NDCs are at the heart of the bottom-up approach of the Paris Agreement (PA) and outline states' national efforts to reduce emissions and adapt to the impacts of climate change (Calliari and Ryder, 2023). While NDCs are usually regarded as 'technical documents,' previous research has shown that they also play a political role in signaling issues that are particularly important for a country and those that are actively engaged or vice versa (Leinaweaver and Thomson, 2020). Thus, by analyzing the submitted documents, this research will first provide global mapping of the variations of engagement in climate negotiations between the 8 selected SIDS. Second is the review of a country's participation in the actual climate negotiations. Lastly, a country's proposition of globally recognized initiatives will be analyzed.

1. Review of Climate Pledges

To show that the 8 SIDS differ in the level of engagement in climate negotiations, the paper delves into the official documents submitted by each country to examine the specific areas toward which their interests are directed. This research regards

NDCs are submitted every five years to the UNFCCC secretariat, and each successive NDC is meant to signal a scaling up of effort and is intended to be as ambitious as possible. When a country submits a new version of its NDC, either as an update to the first version or as its second NDC, previous versions are archived, and the latest submission becomes the 'active' one. The NDCs are at the heart of the mitigation architecture of the Paris Agreement (Salman et al., 2022). Specifically, submissions of NDCs and its need for ambitious goals are outlined in Article 3 of the Paris Agreement, 'Article 3: As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11, and 13 with view to achieving the purpose of this Agreement as set out in Article 2. (Paris

Agreement, 2015).' Additionally, according to Article 3, 'the efforts of all Parties will represent a progression over time, while recognizing the need to support developing country Parties for the effective implementation of this agreement. (Paris Agreement, 2015).' A notifying trait of the submitted NDCs is that they embody mitigation efforts at the national level (Siriwardana and Nong, 2021). Most of the targets outlined in the NDCs were determined at the national level, with little to no external requirements or guidelines provided to define their scope, making it difficult to quantify or compare the pledged efforts. The plans define how to reach the targets, and elaborate systems to monitor and verify progress so they stay on track. Since climate finance is key to implementing the plans, NDCs ideally also detail a financing strategy.

As the focus of the NDCs was dedicated to a country's mitigation efforts, after the 16th Conference of Parties (COP16), countries were pushed to formulate and implement National Adaptation Plans (NAPs) to identify medium to long-term adaptation needs and develop relevant strategies. The UNFCCC Paris Agreement emphasizes that adaptation should be a country-driven process under Article 7.5 (UNFCCC, 2016). Article 7.5 of the Paris Agreement explicitly shows that 'Parties acknowledge the adaptation action should follow a country-driven, gender responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, …, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate. (Paris Agreement, 2015).'

Besides the NDCs, under the UNFCCC, NAPs are considered key instruments for developing country Parties to design their adaptation actions towards climate change (Mizuno and Okano, 2024). Despite all 193 parties to the Paris Agreement issuing at least the first NDC with 151 parties submitting the updated version, approximately 70 countries have adopted the NAPs (Leiter, 2021). This is explicitly shown in Table 6 where out of the 8 research target countries, only 3 have submitted its NAP, which has not been updated to date. Additionally, A National Communication (NC) is a report that each Party to the Convention prepares periodically in accordance with the guidelines developed and adopted by the Conference of the Parties (COP) (UNFCCC, 2009). Currently, 6 cycles of NC have been taken place, with a total of 154 countries submitting for the first cycle

(NC1), 146 countries for NC2, 109 countries for NC3, 36 countries for NC4, 5 countries for NC5, and 2 countries for NC6. Due to the irregularity of submission of these documents NAPs and NCs were not the 'main' document of analyses but it was considered if more elaboration was needed in reviewing the NDCs. Review of NCs was made in the latter section of the research.

Among all the submitted documents, this paper reviewed the most recently submitted versions by countries.

Table 6: List of Reviewed Official Documents

Party	NDCs (Submission Year / Version)	NAPs (Submission Year)	NCs (Submission Year)				
			NC1	NC2	NC3	NC4	NC5
Antigua and Barbuda	2021 (V2)		2001	2011	2016		
The Bahamas	2022 (V2)		2001	2015	2024		
Barbados	2021 (V2)		2001	2018			
Dominica	2022 (V2)		2001	2012	2020		
Grenada	2020 (V2)	2019	2000	2019			
Saint Kitts and Nevis	2021 (V2)		2001	2016			
Saint Lucia	2021 (V2)	2018	2001	2012	2017		
Saint Vincent and the Grenadines	2016 (V1)	2019	2000	2016			

Source: Created by the author

* The Bahamas' third National Communication submitted in 2024 was not considered for analysis as it was submitted after the target negotiations.

Despite there not being a specific template for the NDCs, there are mainly three components that are included in all NDCs, (1) Mitigation targets, (2) Adaptation targets, and (3) Measures countries are willing to implement to enhance financial capabilities. To unify the analysis of all documents, the three criteria will be used to analyze the national preferences shown in the latest NDCs. The three components were first analyzed on the basis provided by the data in the NDCs. Some of the analysis on the adaptation targets of each country were further developed based on the submitted NAPs and NCs.

The reason for looking at the three components in analyzing the

documents is as follows. Firstly, despite previous studies tending to focus solely on mitigation or adaptation targets, countries are aiming to achieve both goals simultaneously. Mitigation strategies refer to 'reducing' climate change, which involves reducing the flow of heat-trapping GHG into the atmosphere, either by reducing the source of these gases or enhancing the 'sinks' that accumulate and store these gases (NASA., n.d.). On the other hand, adaptation strategies refer to strategies that aim to assist in 'adapting' to life in a changing climate. The goal for these adaptation strategies is to reduce the risks from the actual effects and impacts derived from climate change, thus, suggesting ways to cope with the ill-effects of the already-happening climate risks.

However, in the international arena, the level of importance of both strategies were biased to mitigation strategies. Traditionally, mitigation has received more attention in climate change actions plans (Grafakos et al., 2019). Whereas it is important to reduce anthropogenic influences on climate change through various mitigation measures, adaptation to climate change and climate variability is receiving equal importance and is considered increasingly urgent (Estoque et al., 2022). For instance, adaptation strategies have received increased attention from policymakers, and it is today widely agreed that an effective management of climate change requires both strategies (Jagers and Duus-Otterström, 2008). One of these reasons is due to the rising attention to implement strategies appropriate for each country's context. For instance, in Colombia, given Colombia's low level of energy consumption and carbon emissions, the implementation of adaptation policies is much more effective than mitigation policies. Similar to that of Colombia's case, there is a growing argument that SIDS should also focus on climate change adaptation policies rather than mitigation policies.

Despite this, there is still an imbalance between the focus on adaptation and mitigation strategies within countries, and in some countries, adaptation plans are often less advanced (Papa et al., 2015). This can also be seen in Table 6, where NDC submissions are updated while NAP submissions are either none or is the first submission. Concerning this, the upcoming revision process of NDCs are seen as an opportunity to align with a country's NAP to maximize synergy between both processes (GGGI, 2024). To this regard, in this paper, both mitigation and

adaptation targets will be evaluated.

In addition to these targets, financial measures countries plan to adopt will be measured as the third component. This is due to two reasons. Firstly, as briefly explained above, SIDS often tend to raise its concerns for climate finance, due to its lack of capacity. Therefore, most SIDS include its keen interest in raising climate finance to back up its mitigation and adaptation goals. This is shown in two measures, utilizing its own domestic financial capacity and calling for international support. One example is SIDS beginning to aggressively push for remuneration of the ecological and climate debts[④], in addition to calling for wealthy states to take the lead on cutting emissions (Khan et al., 2019). Secondly, as climate actions plans have traditionally tended to focus on either mitigation or adaptation strategies, a lot of countries lack documents that have an integrated strategy, thus making it difficult for an integrated analysis (Sharifi, 2021). In this regard, a country's financial measures to be deployed can provide an overview of how a country depicts its mitigation and adaptation strategies. Amid these circumstances, in addition to the mitigation and adaptation targets of each country, this paper will analyze the 'preferred' financial measures as the third component. In the following section, an in-depth analysis of each of the eight countries will be conducted.

1.1. Antigua and Barbuda

As one of the Caribbean SIDS, Antigua and Barbuda is exposed environmentally to projected climate change impacts which accelerates coastal erosion and inundation, lower average annual rainfall, increased flooding, and increase in tropical storm intensity (Cashman and Yawson, 2019). This in turn impacts its focal industries. To this backdrop, it has submitted its 'updated' NDCs and the 'third' version of NCs to the UNFCCC. Its updated NDC states its mitigation and adaptation targets as well as its prepared and preferred financial measures to successfully implement the targets. Its updated NDCs has been submitted in 2021, while the latest version of its NCs was in 2015. This shows a

④ The concepts of carbon debt, climate debt, and ecological debt were introduced into international clima te politics in the late 1990s by non-governmental organizations (NGOs) such as Acción Ecológica and C hristian Aid. Climate debt advocates purport that the Global North owes the Global South a climate debt, which is far greater than the Third World financial debt due to its disproportionate use of atmospheric space without payment (Khan et al., 2019).

significant gap between the submitted documents, which in turn stress the need for focusing on the most recently presented document.

Antigua and Barbuda's mitigation targets aim to achieve the 1.5-degree Celsius (°C) mitigation goal and adaptation strategies assuming a 3.4°C global temperature increase, aligning with their 'net-zero by 2040' goal (*Antigua and Barbuda*, n.d.). These targets are said to be achieved by incorporating technologies, policies like land use planning, updated building codes, and financial instruments such as catastrophic insurance. The updated NDC builds on the 2015 Intended Nationally Determined Contributions (INDC), maintaining unachieved targets and updating the others. For instance, its INDC sets the mitigation targets aimed at reducing GHG emissions by 25% below 1990 levels by 2020 (*INDC of Antigua and*, 2015). It specifically expresses that the updated NDCs is for greater ambition due to reduced technology costs (Antigua and Barbuda, 2021). The strategy emphasizes coupling sectors like energy with agriculture, transportation, and resilience-building to lower mitigation and adaptation costs, reduce fossil fuel imports, and utilize solar and wind energy. It acknowledges transitional risks and advocates for inclusive, gender-responsive approaches ensuring no one is left behind, while also highlighting financial challenges and opportunities for new businesses (Antigua and Barbuda, 2021).

Antigua and Barbuda has committed to significant climate mitigation targets aimed at transforming its energy landscape and reducing GHG emissions. A pivotal goal is achieving 86% renewable energy generation by 2030, which reflects a major shift toward utilizing sustainable energy sources such as solar and wind. Additionally, it has set an ambitious target for 100% new vehicle sales to be electric by 2030, aiming to decrease emissions from the transportation sector substantially. Beyond energy and transport, it also focuses on exploring emissions reductions in the waste sector and Agriculture, Forestry, and Other Land Use (AFOLU) sectors by 2030 (Antigua and Barbuda, 2016).

Building on the adaptive measures, Antigua and Barbuda has stated it is committed to update to the national Building Code, mandating that all new homes built post-2025 include renewable energy generation and storage systems. This initiative is designed to ensure resilience and reduce reliance on grid-based energy sources. Further, the country plans to power 100% of its water supply infrastructure

with renewable energy by 2030, thereby securing critical water resources against potential disruptions. Additionally, adaptation measures extend to ensuring that all educational, health, food security, and emergency shelter facilities are powered by their own grid-interactive renewable energy sources by 2030, thus fortifying critical infrastructure against climate-induced vulnerabilities (Antigua and Barbuda, 2022).

To achieve both mitigation and adaptation targets, Antigua and Barbuda made it clear the importance of adequate financial strategies to support its 'ambitious' targets. It intends to develop comprehensive financial strategies that are gender-responsive and socially inclusive to facilitate NDC implementation. These include initiating debt-for-climate swaps by 2025 to alleviate financial burdens while funding climate action and raising USD 120 million from external support providers by 2030 for adaptation in the private sector (Antigua and Barbuda, 2021). These financial mechanisms are aimed at enhancing the nation's capacity to meet its climate goals while ensuring economic sustainability. Additionally, one notable fact in its NDCs was its strong interest in building the Loss and Damage Fund. This includes setting up comprehensive and tailored national programs for risk management, which aim to provide support mechanisms for farmers, fishers, and other vulnerable groups against climate risks (Antigua and Barbuda, 2021). The strategy also involves developing and implementing sustainable risk financing products and enhancing financial resilience among households that are particularly vulnerable to climate impacts.

Reflecting on Antigua and Barbuda's approach to climate finance, it employs a dynamic two-pronged financial strategy to tackle its ambitious climate goals, creatively balancing local initiatives and international aid. Domestically, the government fosters green investments by reshaping fiscal policies, such as offering tax incentives for renewable energy projects, to encourage private sector involvement. Internationally, it seeks funding through collaborations with entities like the Global Environment Facility (GEF) and the Green Climate Fund (GCF), advocating for the unique needs of the SIDS in global forums. Additionally, innovative approaches such as debt-for-climate swaps are explored to directly link financial relief with environmental projects, providing a practical solution to manage national debt while enhancing climate resilience. The nation is also active

in securing resources from the Loss and Damage Fund to support communities most vulnerable to climate impacts, such as farmers and coastal populations, by developing tailored risk management programs that include insurance schemes and safety nets, ensuring a comprehensive and sustainable approach to its climate commitments.

1.2. The Bahamas

Similar to that of Antigua and Barbuda, the Bahamas' vulnerability to climate change has caused huge impacts. As the reliance of the country's economy on tourism is high, rising sea levels and increase of inundation caused by SLR, tropical storms further emphasize the need to act toward mitigating and adapting to climate change. To this background, The Bahamas has submitted its first NC in 2001, updating it in 2015 and 2024 respectively. Additionally, it updated its INDCs in 2022, submitting the second version to the UNFCCC in 2022. It has not yet submitted its NAPs.

The Bahamas has set ambitious targets to reduce its GHG emissions and enhance its energy sustainability by 2030. Its goal is to reduce its GHG emissions by 30% compared to its business-as-usual (BaU) scenario (Boretti and Zubaidy, 2021). At the center of this 30% reduction goal, it focuses on gradually changing to renewable sources, significantly reducing its dependence on imported fossil fuels. Additionally, the country is focused on transforming its transportation sector, aiming for 35% of vehicle purchases to be electric and 15% hybrid by the end of the decade. These targets are supported by comprehensive sectoral strategies, including 41 specific mitigation measures across critical sectors such as energy, industrial processes, agriculture, land use, and waste management, thereby contributing to a substantial decrease in national emissions (The Commonwealth of The Bahamas, 2022). Considering this context, its primary focus in the mitigation sector is in the energy sector.

Regarding the adaptation targets, The Bahamas plans to strengthen the structural resilience of key infrastructure to withstand severe weather events and sea-level rise. This includes updating building codes and fortifying energy and water resources. Management and conservation of ecosystems are also prioritized

to maintain their natural protective functions against environmental stresses. Furthermore, the adaptation strategy extends to protecting human health and securing food and water resources, ensuring that the population can withstand climate-related disruptions (The Commonwealth of The Bahamas, 2022).

Given this setting, to achieve its goals in the energy sector and building structural resilience, a large portion of The Bahamas' documents are dedicated towards creating efficient financial strategies. It aims to develop mechanisms to attract international funding and investments in climate resilience and sustainable practices. A key component is the establishment of a Loss and Damage Fund aimed at managing both economic and non-economic losses associated with climate change impacts. This fund is to facilitate quick recovery and risk management solutions, enhancing the country's capacity to respond to and recover from climate-related events (The Commonwealth of The Bahamas, 2022).

1.3. Barbados

Comparable to other island states, Barbados is highly susceptible to the impacts of climate change, such as SLR, coastal erosion, rising temperatures, changes in rainfall patterns, drought and more intense TCs (Mycoo and Chadwick, 2012). Amid these circumstances, Barbados has submitted its updated NDC in 2021, and its second NC in 2018. It has not yet submitted its NAP, which adaptation targets to be analyzed in more detail in reference to NDCs and NCs. Barbados aims for a fossil fuel-free economy and to reduce GHG emissions to near zero by 2030. Its mitigation ambition is 70% reduction in GHG emissions, economy-wide by 2030. Its first submitted NDC targeted a 44% reduction in GHG emissions by 2030 compared to a BaU scenario, whereas the updated NDC aims for a total of 70% reduction with a 95% renewable energy share in electricity, 100% electric vehicles, a 20% increase in energy efficiency, and significant reductions in fuel consumption and waste emissions (Barbados, 2021). This portrays how Barbados 'ratchetted up' its climate goals in the consecutive years.

Delving into the details in mitigation goals, the primary aim is to achieve a fossil fuel-free electricity sector by 2030, a bold move reflecting the country's commitment to reducing GHG emissions significantly. Additionally, Barbados

plans to transition its vehicle fleet to 100% electric or alternatively fueled vehicles, underlining its dedication to clean transport initiatives. These actions are not just about compliance but represent a fundamental shift towards sustainable energy solutions that resonate with the global urgency to combat climate change (Barbados, 2021).

Regarding its adaptation goals, understanding its vulnerability as a SIDS, it places substantial emphasis on enhancing its resilience to the adverse effects of climate change. This includes strengthening the resilience of critical infrastructure to withstand climate impacts, which is vital for maintaining functionality in the face of natural disasters. The country also focuses on ecosystem management and protection, ensuring that natural defenses can mitigate climate effects effectively. Furthermore, comprehensive strategies for water and food security are set to ensure that these essential resources remain accessible and sustainable, supporting the community's health and stability (Barbados, 2021).

On this foundation, Barbados also put high emphasis on developing its financial strategies. It has explicitly stated that despite its debt restructuring achieved in 2018 has improved the Government of Barbados' position, more concessional finance is needed (Central Bank of Barbados, n.d.). Barbados continues to call for priority international support for adaptation and mitigation in small islands, climate finance and other means of implementation being key to their sustainable development (Banerjee et al., 2018). Barbados aims to attract international funding and investment to bolster its climate resilience. This involves establishing national frameworks that encourage sustainable economic practices and effective disaster risk management, such as updating policy and legislative frameworks to facilitate the effective implementation of the NDC goals.

1.4. Dominica

Dominica is also highly susceptible to the impacts of climate change, such as excess rainfall and hurricanes, and geophysical events such as earthquakes and tsunami (Schnitter et al., 2018). It has submitted its updated NDC in 2022 with the third NC in 2020. Dominica has set a mitigation target to reduce GHG emissions by 45% by 2030 relative to 2014 levels (The Commonwealth of Dominica, 2022).

This goal is underpinned by significant investments in renewable energy sources, notably geothermal energy, aiming to achieve 100% renewable energy by 2030. The strategy includes enhancing the island's forest and soil carbon sequestration capabilities.

In response to its vulnerability to climate impacts, Dominica's adaptation strategy focuses on bolstering the resilience of its agricultural sector to secure food supply, protecting coastal and marine ecosystems critical for biodiversity, and implementing comprehensive measures across its natural systems. These actions are designed to fortify the island against the increasing frequency and intensity of adverse climate events, ensuring that its ecological riches and community livelihoods are preserved and sustained for future generations (The Commonwealth of Dominica, 2022).

Dominica's climate goals are supported by its preferred financial strategy that seeks to harness international climate finance and foster strong partnerships. The establishment of a 'climate-resilience execution agency' under the 'Climate Change and Environment Trust Fund' is to support the implementation of Dominica's NDC targets, its 'Low Carbon Climate Resilient Development Strategy' and its 'Climate Change Adaptation Policy.' Furthermore, it puts high emphasis on the need for Foreign Direct Investment (FDI) in achieving its set targets. Dominica has been leveraging support from major funding bodies, including GCF, GEF, UNDP, Clean Technology Fund (CTF), and the Caribbean Development Bank (CDB) (The Commonwealth of Dominica, 2022).

1.5. Grenada

Grenada has submitted its updated NDC in 2020, NAP and its second NC in 2019. Grenada's NDC focuses on its priority in promoting its NAP. NAP for the years 2017-2021 includes goals to strengthen institutional structures for climate adaptation, integrate climate change into national planning, and ensure climate-responsive governance and financing. Key objectives include enhancing food stability, water governance, and public awareness (Grenada, 2020). For mitigation targets, Grenada commits to reducing its GHG emissions by 40% by 2030 relative to the 2010 levels. This has not been updated since its first NDC submitted in 2016

and is a mere confirmation of the previously set target. This target is seen to encompass efforts across multiple sectors, including energy, forestry, waste management, and Industrial Processes and Product Use (IPPU). Moreover, Grenada includes F-gases in its reduction targets, adhering to its commitments under the Kigali Amendment.[⑤] This comprehensive approach highlights Grenada's dedication to substantial reductions in emissions, showcasing its proactive role in global climate efforts.

The adaptation strategies within Grenada's NDC are intricately linked with its NAP, emphasizing resilience in critical economic and environmental sectors. The plan is designed to enhance its capacity to withstand the adverse effects of climate change while ensuring that adaptation efforts also support broader mitigation goals. It maximizes the co-benefits of adaptation activities, ensuring they contribute effectively to Grenada's overall emission reduction objectives (Grenada, 2019). Furthermore, Grenada's stated financial measures are geared towards to receiving international support. It highlights the need for an estimated USD 984.9 million to USD 1.054 billion for mitigation targets through 2030. It seeks to mobilize these resources through grants, technical assistance, and capacity-building initiatives, leveraging support from multilateral and bilateral partnerships (Grenada, 2020).

1.6. Saint Kitts and Nevis

Pertaining to its vulnerability to SLR and the threats of accelerated coastal erosion and flooding, St. Kitts and Nevis has submitted its updated NDC in 2021 and its second version of NC in 2016. The most notable factor addressed in its submitted documents was the strong emphasis on addressing loss and damage in their climate strategy. Its NDC highlights the importance of developing resilience to climate change impacts, particularly those related to extreme weather events. The country's approach integrates these considerations into their overall national development and climate action plans, ensuring that they effectively address both

[⑤] At the Twenty-Eighth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, held in Kigali from 10 to 15 October 2016, the Parties adopted, in accordance with the pr ocedure laid down in paragraph 4 of article 9 of the 1985 Vienna Convention for the Protection of the Ozone Layer, a further amendment to the Montreal Protocol as set out in Annex I to the report of the Twenty-Eighth Meeting of the Parties (Decision XXVIII/1) (UNTC, n.d.).

immediate and long-term climate risks (Saint Kitts and Nevis, 2021).

St. Kitts and Nevis has pledged to reduce its GHG emissions by 61% by 2030 relative to the 2010 levels. This marks a substantial increase in ambition from its first NDC, reflecting a shift from a business-as-usual (BaU) approach to a more aggressive and measurable target (St. Kitts and Nevis, 2021). The plan includes transitioning to 100% renewable energy for electricity generation and increasing the share of electric vehicles in the national fleet to at least 2%. This strategy addresses the largest sources of emissions, power generation and transportation, by setting a clear and quantifiable goal.

In terms of adaptation, it has not yet submitted its NAP, thus the adaptation strategies were analyzed according to the NDC. The updated NDC integrates climate change considerations into the national development agenda, aiming to reduce vulnerability across several critical sectors including agriculture, coastal and marine ecosystems, and water resources. The strategy highlights the importance of building adaptive capacity and enhancing resilience through a series of cross-sectoral measures. St. Kitts and Nevis plans to mainstream climate adaptation into all relevant aspects of governance and development, ensuring that climate resilience is a central component of national progress (Saint Kitts and Nevis, 2021).

To achieve both strategies, NDC outlines significant financial and technical support requirements, estimated at USD 127 million USD for implementing its adaptation strategy alone. St. Kitts and Nevis emphasizes the need for international support, including climate finance, capacity building, and technical assistance, to achieve its ambitious targets. The NDC specifically calls for the development of infrastructure to support electric vehicles, including charging stations, and training programs to facilitate the transition to a low-carbon economy. Considering this scenario, St. Kitts and Nevis puts high emphasis on procuring its finance through international support (Saint Kitts and Nevis, 2021).

1.7. Saint Lucia

Acknowledging its vulnerability, Saint Lucia has submitted its updated NDC in 2021, NAP in 2018, and the third NC in 2017. Saint Lucia has committed

to reducing its greenhouse gas emissions by 7% by 2030 relative to 2010 levels, focusing primarily on the energy sector, which includes electricity generation and transportation (Saint Lucia, 2021). This is a deeper reduction goal than the previously submitted NDC. Its goal underscores the country's commitment to contributing to global efforts to restrict temperature increases to well below 1.5°C above pre-industrial levels, despite its small scale of emissions.

The adaptation component of Saint Lucia's NDC is robust, integrating climate change adaptation into the national development agenda to enhance resilience across critical sectors including tourism, water, agriculture, fisheries, and infrastructure. The government has also developed a NAP, which was submitted in 2018, which prioritizes cross-sectoral and sector-specific adaptation measures to safeguard and enhance the island's environmental and economic stability against the backdrop of climate vulnerability (Government of Saint Lucia, 2018).

Saint Lucia's NDC outlines an indicative cumulative investment cost of approximately USD 368 million to achieve the mitigation targets by 2030. This financial estimate highlights the need for substantial international support, including technical and financial resources, to effectively implement the planned climate actions. Similar to that of St. Kitts and Nevis, the country's approach includes leveraging these international funds to complement limited national resources, emphasizing the essential role of global cooperation in achieving its NDC objectives. It realizes the lack of its national financial capacity, which in turn stresses the need for international support (Saint Lucia, 2021).

1.8. Saint Vincent and the Grenadines

Saint Vincent and the Grenadines has not yet submitted its updated version of its NDC. Its NDC still remains in the first version submitted in 2016, second round of NC in 2016, and NAP in 2019. Unlike the other 7 SIDS that have submitted the 'updated' version of their NDCs, Saint Vincent and the Grenadines remains with its first NDC, submitted in 2016. It commits to a mitigation goal of reducing GHG emissions by 22% by 2025 compared to the BaU scenario (Saint Vincent and the Grenadines, 2016). This commitment is underpinned by significant investments in renewable energy, particularly geothermal and hydro power, and

enhancements in energy efficiency across public and private sectors.

The adaptation strategy is intricately integrated into the national development agenda, ensuring that climate resilience is built across vulnerable sectors such as agriculture, fisheries, and tourism. The focus is on mainstreaming climate adaptation to safeguard and enhance the livelihoods dependent on these sectors, thereby enhancing the nation's resilience to the adverse impacts of climate change. This comprehensive approach includes enhancing public education and reforming regulatory frameworks to support effective environmental management and disaster resilience.

Financially, the NDC outlines a clear need for international support to achieve its ambitious climate goals. This includes financing for both mitigation and adaptation initiatives, capacity building, and technology transfer. The estimated financial requirements underscore the significant investment needed to reduce emissions and enhance resilience, highlighting the need for substantial international cooperation and support. Saint Vincent and the Grenadines' NDC also emphasizes the importance of integrating climate action with sustainable development goals. Through extensive stakeholder consultations involving public and private sectors, the NDC aims to ensure that climate actions are inclusive and support the country's broader economic and social development plans. Additionally, the intention to use international carbon markets and mechanisms like the Clean Development Mechanism (CDM) reflects a strategic approach to finance sustainable development, ensuring environmental integrity and transparency (Saint Vincent and the Grenadines, 2016).

2. Review of the Fourth International Conference on SIDS

For the fourth International Conference on SIDS, outcome documents for a total of four regional preparatory meetings and the actual conference were analyzed. The list of outcome documents includes, (1) AIS Regional Preparatory Meeting, (2) Caribbean Regional Preparatory Meeting, (3) Regional Preparatory Meeting for the Pacific Region, (4) Interregional Preparatory Meeting, and the (5) outcome document of the fourth international conference on SIDS.

At the conference, Antigua and Barbuda served as the host nation for the

conference, playing a pivotal role not only in organizing the event but also in leading high-level discussions. Antigua and Barbuda's Prime Minister Gaston Browne was elected President of the Conference. He emphasized the unprecedented global challenges faced by SIDS, caused by large-scale polluters, and highlighted the importance of international law in mitigating climate impacts. The conference approved the "Antigua and Barbuda Agenda for SIDS: A Renewed Declaration for Resilient Prosperity" (ABAS) (Penniman et al., 2024). Further notable contribution from Antigua and Barbuda came from Tumasie Blair, the Deputy Permanent Representative of Antigua and Barbuda to the UN, who reported on significant meetings with international financial institutions. The discussions centered on the necessity for reforms in the global financial architecture, enhancing the governance representation of SIDS, and advocating for the adoption of the Multidimensional Vulnerability Index (MVI) to better reflect the unique vulnerabilities of these states.

Similarly, Barbados was frequently acknowledged for its historical contributions to SIDS development frameworks. Notably, Barbados' foundational role in the Barbados Programme of Action (BPoA) was highlighted, a testament to its longstanding leadership and influence in shaping sustainable development priorities for SIDS. Furthermore, as recognized as the birthplace of the SIDS agenda, called for biennial meetings to ensure policies remain responsive to changing conditions. Delegates from Barbados highlighted the need for effective implementation of agreements to ensure significant progress by the next conference. Grenada served as one of the Conference Vice-Presidents (Penniman et al., 2024).

Dominica was mentioned as part of broader regional discussions, emphasizing collective Caribbean efforts to address shared challenges such as climate resilience and sustainable development. However, specific contributions or detailed statements from Dominica were not highlighted in the documents, reflecting a more collaborative rather than individual national profile within the conference. Correspondingly, Grenada was recognized for its involvement in the leadership dynamics of the conference, notably being elected as one of the vice-presidents in the meetings. This role underscored Grenada's active participation in the organizational and decision-making processes, reflecting its commitment to advancing the SIDS agenda on an international scale.

Compared to that of Dominica and Grenada, Saint Kitts and Nevis shared general mentions in the context of regional collaboration. Specific national contributions or detailed discussions led by Saint Kitts and Nevis were not outlined in the provided documents. However, its engagement in the conference was noted by the speech of its Prime Minister, Terrance Michael Drew. He emphasized the challenging path to prosperity for the world's most vulnerable micro-states, likening it to a 'dystopian movie.' He highlighted the resilience of island communities in navigating these challenges and stressed the high cost of capital for small island developing states as one of the speakers in the opening of the conference. Additionally, the Prime Minister's endorsement of the Bridgetown Initiative's call for the reform of the international financial architecture underscored the critical need for financial reforms to support the development and technological mastery required by the youth of small island states. The Prime Minister also noted the importance of mastering technology that drives modern socio-economic activity and stressed the necessity for resilient infrastructure to support tourism, particularly in water-scarce regions.

Saint Vincent and the Grenadines was noted for its logistical contribution to the conference, having hosted one of the preparatory meetings. However, despite this involvement, in the rest of the documents, it did not show significant engagement or act of saying in the other meetings. Similarly, The Bahamas had a less specified role in the documented sessions. The available documents do not detail individual contributions or specific statements made by representatives from the Bahamas, indicating either a less prominent role in this conference or simply less visibility in the documented outputs. Similarly, specific details about Saint Lucia's individual contributions were not found.

3. Global Initiatives and Frameworks

Alongside the country's participation in its stated commitments and climate negotiations, some countries have pushed for more engagement by proposing 'globally recognized' initiatives or frameworks. Among all 8 SIDS, this research found a notable distinction between those that have proposed one globally, and those who did not.

In line with Antigua and Barbuda's pivotal role during the Fourth International Conference on Small Island Developing States, not only hosting the conference but also leading the creation of the Antigua and Barbuda Agenda for Small Island Developing States, it proposed 'Agenda for Small Island Developing States' which was supported by the United Nations General Assembly (UNGA, 2024; UN, 2024). This Agenda is significant as it encapsulates a decade-long framework aimed at enhancing the resilience and prosperity of SIDS through various strategic measures. The agenda itself was a product of Antigua and Barbuda's proactive stance in global climate discussions, highlighting their commitment to addressing the unique challenges faced by small island states. It called for international support across multiple fronts, including strengthening health systems, achieving gender equality, empowering youth, and importantly, conservation and sustainable use of marine resources and biodiversity.

A notable aspect of the agenda was the push for the establishment of a 'SIDS Centre of Excellence in Antigua and Barbuda,' which aimed to serve as a hub for innovation, capacity building, and knowledge sharing among small island states. Furthermore, the Agenda included critical financial strategies such as facilitating easier access to affordable and concessional finance for SIDS, which is essential for these nations given their limited fiscal space and vulnerability to external economic shocks. This initiative reflects a strategic approach by Antigua and Barbuda to not only address immediate resilience needs but also to lay a foundation for long-term sustainable development among SIDS communities (Penniman et al., 2024).

Not only Antigua and Barbuda, but also Barbados is well-known for its self-proposed global initiative called the 'Bridgetown Initiative.' It is Barbados' proposal to reform the financial mechanism of the international community to assist vulnerable countries to cope with and adapt to climate change. It has outlined three key steps in the Bridgetown Initiative to address the financial challenges faced by developing nations due to climate-related disasters. The first step proposes modifying the terms of funding, such as suspending interest payments during crises like pandemics or natural disasters, to prevent these nations from spiraling into debt crises. Secondly, it advocates for development banks to provide an additional USD 1 trillion for climate resilience projects in vulnerable countries, emphasizing

discounted lending. The third step involves establishing a Global Climate Mitigation Trust, which seeks to leverage USD 3 to 4 trillion in private funding to support climate mitigation and reconstruction efforts following climate disasters. This strategic initiative aims to enhance financial stability and climate resilience in developing countries, reflecting a proactive approach to both economic and environmental challenges (Penniman et al., 2024).

This proposal has been recognized positively in the global community, gaining support from developed countries such as the United States, England, and France. International support for the initiative has been outlined numerous times in the 27th and 28th UNFCCC Conference of Parties (COP). For instance, at COP27, Prime Minister of Barbados, Mia Amor Mottley, made a national statement which highlighted its national efforts to reach the globally agreed 1.5-degree Celsius target (UN, 2023). Its national efforts include the establishment of 'Blue Economy Roadmap' and the 'Roofs to Reefs Programme (R2RP).' These are nationally implemented programs. In response to the national statement in support of the Bridgetown Initiative, it was successful in gaining support. French President Emmanuel Macron expressed his support for many aspects of Mottley's initiatives and agreed with her proposal to establish a task force to develop detailed proposals for the World Bank and International Monetary Fund (IMF) before their Spring Meetings in COP27. Furthermore, Kristalina Georgieva, Managing Director of the IMF, expressed her general support for the Bridgetown Initiative. Concurrently, World Bank President David Malpass welcomed the initiative's call for a substantial increase in climate finance (Doe J., 2022). Additionally, U.S. climate envoy John Kerry supported reforms at the IMF and World Bank aimed at significantly boosting the availability of climate finance for developing countries, stating that such reforms are achievable (Osborn, 2022).

This initiative was further recognized during COP28, where Barbados constantly highlighted its commitment to the proposal thereby voicing for international support. This was well shown in the 'COP28 UAE Declaration on Climate Relief, Recovery and Peace' where the declaration was endorsed by 78 national governments and 40 organizations for a collective commitment to enhance financial support for climate adaptation and resilience. Barbados signed the declaration by 'building on flagship initiatives of its own.'

Besides Antigua and Barbuda and Barbados, the other SIDS have primarily focused their climate action efforts within their national or regional contexts. While the other 6 countries have launched various domestic initiatives aimed at addressing climate change, they have not yet proposed or led global frameworks or initiatives that have garnered international recognition or support. Nonetheless, these domestic efforts are crucial as they lay the groundwork for comprehensive climate resilience and adaptation strategies that are tailored to their unique environmental, economic, and social contexts. For instance, some of these countries have implemented rigorous coastal management programs, renewable energy projects, and disaster readiness protocols that, although localized, contribute significantly to their overall climate resilience. The challenge remains, however, for these nations to elevate their visibility and influence in global forums, where they can advocate more effectively for international support and collaboration necessary for addressing the multifaceted challenges posed by climate change on a worldwide scale.

4. Categorization of the 8 SIDS

A total of three criteria were used in analyzing the official documents, (1) mitigation targets, (2) adaptation targets, and (3) financial measures. For mitigation targets, all the 8 SIDS share a strong emphasis on increasing renewable energy usage and electrifying the transportation sector as part of their mitigation targets, aiming to reduce their reliance on fossil fuels. Additionally, each has set ambitious goals for reducing GHG emissions within specified timelines, adhering to a universal commitment to climate action. Antigua and Barbuda aims for 86% renewable energy by 2030 and 100% electric vehicle sales. The Bahamas targets 30% renewable energy and significant vehicle electrification by 2030. Barbados seeks a mitigation ambition of 70% reduction in GHG emissions by 2030. Dominica plans a 45% GHG reduction by 2030 with the development of renewable sources. Grenada aims to reduce emissions by 40% by 2030, incorporating sector-wide measures. Saint Kitts and Nevis target a 61% CO2 reduction with 100% renewable energy in electricity by 2030. Saint Lucia aims for a 7% reduction in GHG emissions in the energy sector by 2030. Saint Vincent and the Grenadines

target a 22% economy-wide emission reduction by 2025.

That said, the scope and ambition of the respective targets vary. Some SIDS like Antigua and Barbuda and Barbados set aggressive targets for a fossil fuel-free electricity sector by 2030, while others, such as Saint Lucia, adopt more modest goals, such as a 7% GHG reduction in the energy sector. The specific mitigation measures also diverge, with initiatives ranging from general renewable targets to specific projects like geothermal development in Dominica.

For adaptation targets, all countries tend to focus on strengthening infrastructure resilience to withstand climate impacts and adapting critical sectors such as agriculture and water management to deal with future climate risks. This is in line with the 8 SIDS' main economic target sector, identified in the previous section. However, the specific strategies differ in focus depending on the identified local vulnerabilities. Antigua and Barbuda focuses on renewable energy-powered infrastructure and updated building codes by 2025. The Bahamas enhances infrastructure resilience and ecosystem management. Barbados strengthens infrastructure and implements comprehensive security strategies. Dominica boosts food security and protects coastal resources. Grenada integrates its submitted NAP across critical sectors such as energy, forestry, and waste. Saint Kitts and Nevis integrates climate adaptation into national development, focusing on coastal and marine ecosystems. Saint Lucia develops a detailed NAP across key sectors such as tourism, water, agriculture, fisheries, infrastructure, education, and health. Saint Vincent and the Grenadines integrates climate adaptation into national development, focusing on the identified vulnerable sectors such as agriculture, fisheries and tourism.

Lastly, a common thread among the countries is the reliance on international financial support to meet their climate goals, pointing to a shared need for external funding to drive their climate initiatives. Each country also explores innovative financing strategies, including debt-for-climate swaps and the creation of funds to manage climate-related damage. Antigua and Barbuda implements gender-responsive financial strategies and aim to raise USD 120 million for adaptation. The Bahamas develops strategies to attract international funding and establish a risk management fund. Barbados seeks international funding and investment in resilience. Dominica leverages international climate finance and

establishes a climate-resilience agency. Grenada requires significant international support, estimated between USD 984.9 million and USD 1.054 billion. Saint Kitts and Nevis need international support with an estimated adaptation strategy cost of USD 127 million. Saint Lucia requires substantial international resources, with indicative costs of USD 368 million. Saint Vincent and the Grenadines also require international support for financing and capacity building.

However, the amount of financial aid required and the strategies for acquiring it differed. Grenada, for instance, anticipates a need for substantial international support ranging between USD 984.9 million and USD 1.054 billion, whereas Saint Kitts and Nevis' financial strategy focuses on a more modest USD 127 million for adaptation efforts. Moreover, some emphasize leveraging domestic resources in addition to international funds, whereas others depend more heavily on external support, reflecting varied approaches to securing the financial means necessary for their climate actions.

In light of the assessed qualitative data, this research found that the primary difference among the countries lies in their mitigation targets. The difference in the adaptation targets between the countries are not in their 'intensity' or 'severity' but rather in the 'target sectors.' Additionally, all countries emphasized the need for international financial support, although the required amounts vary. Antigua and Barbuda in need for USD 120 million, Grenada in need between USD 984.9 million and USD 1,054.5 million, and St. Kitts and Nevis in need for USD 127 million for mitigation targets and USD 637 million for adaptation targets. Given that all countries need additional climate finance beyond their domestic capabilities, measuring differences in financial needs presents challenges.

Regarding mitigation targets, the goals set by the 8 SIDS vary considerably. Most have established baselines for achievement by 2030, except for St. Vincent and the Grenadines, which has yet to update its NDC submission. Barbados leads with a target of a 70% GHG emission reduction, followed by St. Kitts and Nevis with 61%. Subsequently, Dominica aims for a 45% reduction, Grenada 40%, The Bahamas 30%, St. Vincent and the Grenadines 22%, and St. Lucia 7%. Antigua and Barbuda, while not specifying a percentage reduction in GHG emissions by 2030, plans to accelerate its energy transition by developing a new energy sector focused on local generation using abundant wind and solar

resources, aiming to replace 86% of fossil fuel imports by 2030. Table 7 shows the emission reduction targets by countries.

Table 7: GHG Emission Reduction Targets of the 8 SIDS

Country Name	Stated Target by 2030*	Changes from the Previous Targets**	
		Previous reduction percentage (compared to that of)	Updated
Antigua and Barbuda***	*Not explicitly states the exact percentage of GHG emission reduction.* ('86% renewable energy generation from local resources in the electricity sector by 2030 and 100% of new vehicle sales to be electric vehicles by 2030.')	N/A	N/A
The Bahamas	'Reduction of GHG emission by 30% compared to its BaU scenario.'	30% reduction (BaU)	Not updated.
Barbados	'70% reduction relative to business-as-usual emissions in 2030.'	44% reduction (BaU)	70% reduction (BaU)
Dominica	'A total GHG emissions reduction of 45% below 2014 levels by 2030.'	44.7% (2014 levels)	45% reduction (2014 levels)
Grenada	'Grenada commits to reducing its GHG emissions by 40% of the 2010 emissions levels by 2030.'	40% reduction (2010 levels)	Not updated.
Saint. Kitts and Nevis	'Reduction of economy-wide CO2 emissions by 61% by 2030.'	35% reduction (BaU)	61% reduction (2010 levels)
Saint. Lucia	'7% Greenhouse Gas (GHG) emissions reduction in the energy sector relative to 2010, by 2030.'	7% reduction (2010 levels)	Not updated.
Saint. Vincent and the Grenadines	'Economy-wide reduction in GHG emissions of 22% compared to its BaU scenario by 2025.'	22% reduction by 2025 (BaU)	Not updated.

Source: Compiled from the submitted official documents.

*Exact text from official documents.
** All GHG emission reduction targets are by 2030.
*** Compared to other countries, Antigua and Barbuda does not clearly state the amount of GHG emission reduction percentages it aims to achieve but instead focuses on the 'energy' sector. However, its mitigation target in the energy sector is the highest among the 8 countries, making its engagement considered as 'high.'

As per the analyses of the Fourth International Conference on SIDS, the participation of states can be classified as the following four: (1) a country leading a meeting, (2) proposing a new framework, (3) addressing support for other countries' initiatives, or (4) a country's engagement was not highlighted or found in relative outcome documents. During the conference, Antigua and Barbuda stood out by hosting the event, with their Prime Minister, Gaston Browne, presiding as President of the conference. This leadership position enabled them to steer high-level discussions effectively and push forward the 'ABAS,' a strategic plan for enhancing resilience and sustainable development among small island states. Barbados also showcased significant leadership, historically and at this conference, particularly through its ongoing influence in shaping sustainable development priorities for SIDS. Their foundational role in the establishment of 'BPoA' highlights their long-standing commitment and leadership in international policy formulation for SIDS development.

Dominica was recognized for its participation in broader regional discussions, emphasizing collective Caribbean efforts to tackle shared challenges such as climate resilience and sustainable development. While Dominica did not lead specific sessions or propose new frameworks, their collaborative role within the conference supported the overall dialogue on regional strategies and collective responses to common vulnerabilities. Grenada, similarly, was involved in the leadership dynamics of the conference. Serving as one of the Vice-Presidents, Grenada played a role in the organizational and decision-making processes, underscoring their commitment to advancing the SIDS agenda on an international scale. Saint Kitts and Nevis demonstrated its support for significant initiatives, particularly through the endorsement by Prime Minister Terrance Michael Drew of the Bridgetown Initiative during his opening speech. This support highlighted the need for reforms in international financial architecture to support SIDS' economic stability, though their specific contributions were not extensively documented in the main outcome documents.

Conversely, Saint Vincent and the Grenadines contributed primarily through logistical support, hosting one of the preparatory meetings. This role was vital in shaping preliminary discussions but did not translate into a significant

influence or active engagement in the main conference agenda. Participants like The Bahamas and Saint Lucia had less specified roles, with their contributions embedded within broader regional discussions. Their involvement did not include leading discussions or proposing new frameworks, and their participation was not prominently documented, reflecting a more subdued engagement in the conference outcomes.

In the context of global climate initiatives and frameworks, Antigua and Barbuda have been pivotal in leading significant initiatives, such as hosting the Fourth International Conference on SIDS and spearheading the creation of the 'Agenda for Small Island Developing States.' This agenda, endorsed by the UNGA, includes strategic measures for improving resilience and prosperity in SIDS, emphasizing the importance of cross-sectoral support including health, gender equality, and environmental conservation. Likewise, Barbados has made notable contributions through the 'Bridgetown Initiative,' which proposes substantial financial reforms to assist vulnerable nations in coping with climate change. These initiatives highlight both countries' roles as leaders in international climate discussions, effectively addressing the specific needs and challenges of SIDS on a global scale. The other 6 SIDS have primarily focused their efforts on national or regional climate action initiatives rather than proposing or leading new global frameworks.

In light of this analysis, this paper has classified the eight SIDS into three groups: (1) Pushers, (2) Moderates, and (3) Bystanders. The terms 'Pushers' and 'Bystanders' are adopted from the study by Sprinz and Vaahtoranta (1994), while the term 'Moderate' has been used to accurately describe the characteristics of the countries in this category. To this end, this paper defines each classification as follows:

Pushers: Countries with ambitious, frequently updated climate pledges and proactive involvement in international climate negotiations, often taking on leadership roles and supporting globally recognized initiatives.

Moderates: Countries that maintain consistent participation in international climate negotiations with moderate climate pledges, focusing on implementing frameworks primarily at the domestic level.

Bystanders: Countries that exhibit lower ambition or static climate pledges

with minimal or less documented participation in international negotiations, concentrating mainly on domestic policy frameworks.

Table 8 shows which countries' classification.

Table 8: Classification of the 8 SIDS

	Climate Pledges	Participation in International Negotiations	Global Initiatives
Pushers (2) (Antigua and Barbuda, Barbados)	High and updated climate pledges.	Active	Proposed global initiatives that gained internationals support.
Moderates (3) (Dominica, Grenada, Saint Kitts and Nevis)	Moderate level of climate pledges with some being updated and others not being updated.	Moderate	Frameworks on initiatives remained at the domestic level.
Bystanders (3) (The Bahamas, Saint Lucia, Saint Vincent and the Grenadines)	Low and not updated climate pledges.	Participation was (rarely) found in documents.	Frameworks on initiatives remained at the domestic level.

Source: Created by the author based on section 4.

To this end, this research will then further analyze the factors that influence countries to have different levels of engagement in climate dialogues.

Chapter V. Driving Factors of Variations

As was introduced in Chapter 2, in evaluating the factors that influence the varying levels of engagement among countries in climate negotiations, the study by Sprinz and Vaahtoranta (1994) initially considered 'ecological vulnerability' and 'abatement costs.' However, these variables proved inadequate for explaining the differences among the 8 target Caribbean SIDS. The concept of ecological vulnerability did not offer distinct insights for these nations due to their uniformly high exposure to climate risks, particularly regarding sea level rise. Additionally, the 'abatement costs' variable was ineffective for further analysis due to a lack of comprehensive data.

Recognizing these limitations, Sprinz and Vaahtoranta (1994) suggested exploring additional factors in future research to enhance the understanding of why countries engage differently in climate negotiations. One significant factor the study proposed was the representation of domestic interests and the public's awareness of climate risks. This study finds that the extent of public participation in preparing for climate negotiations at the domestic level could critically influence the degree of a country's engagement in global climate discussions. This relates to the insights from Sprinz and Vaahtoranta (1994), which emphasized the significance of public participation in domestic climate dialogues. Such participation ensures that domestic interests are well represented and demonstrates the public's awareness of their nation's climate challenges.

To this backdrop, this section will delve into how governments integrate public opinion and awareness into their strategic planning for climate action. The focus will be on examining the mechanisms through which public concerns are translated into national policies and the extent to which these policies reflect the priorities of their constituents. Additionally, this analysis will explore the role of governmental transparency and accountability in facilitating or hindering public participation. By understanding these dynamics, the research aims to uncover deeper insights into the political processes that drive or impede effective climate governance.

1. Public Participation

The following section examines the methods each country used for public participation. As previously classified into three, (1) Pushers, (2) Moderates, and (3) Bystanders, this section will analyze their participation accordingly. The following section examines the methods each country used for public participation. Vast data was retrieved from the countries' submitted National Communication (NC) documents. NCs are periodic reports that Annex I Parties to the Convention are required to prepare every four years to fulfill their reporting commitments. These reports provide essential, transparent, and comparable information, enabling a comprehensive review and assessment of each Party's progress in implementing the Convention. NCs contribute to monitoring efforts by detailing the actions countries are taking towards achieving the climate goals and their specific targets. SIDS were among the first to complete initial NCs and submit them to the COP. During the process of designing the NCs, countries are obliged to fill in information relevant to the achievement of the objectives of the convention. Amongst this section, countries share efforts taken to address 'Education, Training and Public Awareness' and 'Capacity Building, Information Sharing and Networking.' To this end, this research mainly focused on the following section in analyzing countries' level of public participation domestically.

1.1. Pushers

The Government of Antigua and Barbuda implemented several initiatives to engage the public in raising climate resilience and awareness before it engaged in climate negotiations. However, these efforts were not simply top-down initiatives; they were largely made possible by active participation and collaboration from the public. Local communities, NGOs, and grassroots organizations worked alongside the government to co-create strategies that built capacity and resilience, ensuring that climate adaptation became a shared priority across all levels of society.

One significant example of 'joint initiatives' is the 'Caribbean Agrometeorological Initiative (CAMI),' supported by the European Union, which involved disseminating climate information to improve agricultural outcomes. This

initiative enhanced collaboration between meteorological services, agricultural research institutions, and farmers, ensuring that the latter received relevant data to improve crop management practices (The Government of Antigua and Barbuda, 2015). CAMI's outputs were known to have increased awareness among policymakers and better farming community preparedness for extreme weather conditions. Additionally, the government emphasized training and education through various programs. Projects like the 'Sustainable Island Resource Management Mechanism (SIRMM)' and 'Global Climate Change Alliance (GCCA)' focused on training in climate modeling and Geographic Information Systems which were delivered to the specific program targets (The Government of Antigua and Barbuda, 2015). The National GEF Small Grants Programme (SGP) was also established to support community-led projects addressing global environmental challenges, promoting local adaptation strategies such as sustainable agriculture.

Public engagement was not only led by the government but also, various non-governmental organizations (NGOs) also played a crucial role in raising climate awareness. For example, the 'Environmental Awareness Group (EAG)' conducted public education on biodiversity and conservation, incorporating climate change into school curricula and organizing field trips. Similarly, the 'Gilberts Agricultural and Rural Development Center (GARD)' focused on educating farmers on sustainable practices and the importance of climate adaptation through practical training and public awareness campaigns (The Government of Antigua and Barbuda, 2015). These NGOs facilitated practical training and organized awareness campaigns that empowered individuals to take ownership of climate solutions, creating a bottom-up momentum for change.

Similar to that of Antigua and Barbuda's engagement strategy, the Government of Barbados and regional organizations engaged in a series of 'initiatives' aimed at increasing public awareness and building capacity for climate change adaptation before participating in international climate negotiations. These efforts were characterized by education, training, and collaboration with research institutions and the broader community.

The Ministry of the Environment in Barbados established an 'Environmental Education Committee' to foster interaction between the

government and the public on environmental matters, including climate change. This included the annual 'Environment Month Celebration' and an award recognizing achievements in environmental work and sustainability. Also, one notable factor of Barbados was it utilized survey results to acknowledge public awareness regarding climate change. For instance, in 2006, a survey revealed that while many were aware of climate change, a substantial portion lacked a clear understanding of its impacts. To this backdrop, efforts were made to increase knowledge through public service announcements and interactive activities like walks and tours. Schools incorporated informal climate education through subjects like geography, though there was no formal climate change curriculum. Various environmental clubs were also set up within schools to link with government and NGOs for climate initiatives (Government of Barbados, 2018).

Barbados especially highlighted the participation of its youth, stating in its official documents the importance of youth awareness on climate issues. The 'Caribbean Youth Environment Network (CYEN)' played a critical role in educating young people on climate issues. It conducted training and awareness campaigns, including the 'Day of Action Campaign' and the 'Caribbean Youth Climate Change Mitigation Project' to involve youth in national and regional climate change discussions. Additionally, Barbados actively leveraged on already-made international frameworks. For instance, the Caribbean Community Climate Change Centre (CCCCC), established in 2005, has been pivotal in coordinating regional efforts to address climate change. It developed frameworks like 'Climate Change and the Caribbean' to guide regional adaptation and resilience efforts. Barbados was stated to have actively participated in exercises focusing on climate advocacy, disaster risk response, renewable energy use, and using the Caribbean Climate Online Risk and Adaptation Tool (CCORAL) to improve climate resilience (Government of Barbados, 2018).

Both Antigua and Barbuda and Barbados primarily engaged the public through collaborative initiatives, either by involving citizens in existing programs or developing new ones to address climate challenges. Antigua and Barbuda's approach included projects like the CAMI and the GCCA, while Barbados focused on activities such as the Environmental Education Committee and youth engagement through the CYEN. A key shared aspect of their strategies was the

active role of diverse entities, particularly NGOs, in educating the public, creating a dynamic where the public itself contributes to broader awareness efforts. This strong emphasis on collaboration and stakeholder inclusion places both countries at 'Level 4 – Collaborate' within the public participation framework, as they not only involve the public but also partner with various groups to co-develop solutions and strategies for climate resilience. This two-way communication ensured that climate resilience became a shared responsibility, highlighting the indispensable role of community-driven action in addressing climate challenges.

1.2. Moderates

According to Dominica's national documents, it first utilized survey to acknowledge the public awareness of climate issues. Dominica was one of six OECS member states participating in the Knowledge, Attitudes, and Practices (KAP) survey conducted between 2012 and 2013. This survey aimed to assess the public's awareness and understanding of climate change, their attitudes toward it, and their actions to mitigate its impacts, and it revealed that Dominica had the lowest awareness of changing weather patterns among its respondents, with 20% reporting that they had not heard of such changes. The survey results highlighted the need for more targeted education to increase understanding of climate change among Dominicans, especially in rural areas and among less-educated groups. The government used these insights to emphasize the need for targeted educational campaigns focusing on these demographics to improve climate awareness. Efforts to increase awareness included utilizing local media, such as radio broadcasts and community meetings, which were more accessible to these groups (Commonwealth of Dominica, 2020).

Thus, the government of Dominica emphasized community participation by partnering with local groups and leveraging traditional communication methods. This included the use of radio shows, which were tailored to reach people during commutes and daily routines. The aim was to make climate change information more accessible to all, especially those who faced challenges in accessing digital platforms, ensuring that climate messaging reached a broader audience. Additionally, the government aimed to integrate discussions of climate change into

broader public education efforts, emphasizing its direct impact on local livelihoods and development challenges, such as agriculture and natural disaster preparedness. The strategy involved making connections between climate change and Dominica's socio-economic conditions, like the impacts of hurricanes and rainfall patterns, to make the issue more tangible for the population (Commonwealth of Dominica, 2020).

The Government of Grenada mainly focused on awareness-raising and capacity building to engage the public in climate change issues. The 'Integrated Climate Change Adaptation Strategies (ICCAS)' project featured a branding strategy under 'Grenadapts,' which included logos, roadside signs, and banners across Grenada to boost visibility and public interest in climate issues. The project ran awareness campaigns, such as producing a music video titled 'Can't Do This Alone' to raise awareness of climate change and its impacts. This aimed to resonate with local communities and encourage collective action. Also, ICCAS organized events like the Climate Change Walk, which drew approximately 1,300 participants, highlighting the importance of community engagement in climate issues. The walk combined education with recreation to foster a wider understanding of climate challenges (The Government of Grenada, 2017).

Furthermore, Grenada's initiatives included training in management, leadership, coastal zone planning, and international climate diplomacy. The training aimed at equipping local leaders with the skills to manage climate impacts effectively. The project also published briefs on topics such as Coastal Zone Management and water resources, serving as public information resources to address local climate concerns. Grenada capitalized on digital platforms to enhance public access to climate information, using social media for disseminating educational content (The Government of Grenada, 2017). This strategy aimed to leverage the increasing use of the internet among Grenadians to spread awareness efficiently.

Similarly, Saint Kitts and Nevis endeavored to engage the public by disseminating information through public awareness campaigns, utilizing local media outlets and educational materials to ensure that climate change information reaches a broad audience. In addition to these informational efforts, in the process of developing its NC and NAP, numerous public consultations and participatory

methods have been employed. These consultations were conducted by seeking public feedback on analysis, alternatives, and decisions, as well as partnering with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution (Saint Kitts and Nevis, 2015). More specifically, during developing its adaptation strategies, it included stakeholder consultations and community-level participation, suggesting a deliberate effort to incorporate diverse perspectives and expertise in climate change discussions and actions.

The three Moderate countries, Dominica, Grenada, and Saint Kitts and Nevis, engaged the public primarily through awareness campaigns, surveys, and targeted education efforts. Dominica utilized the KAP survey to gauge public awareness of climate issues, highlighting the need for targeted educational campaigns, especially in rural areas. This approach falls into 'Level 2 - Consult,' as it involved gathering feedback and using survey insights to shape future strategies. Grenada, through the ICCAS project and public events like the Climate Change Walk, focused on awareness-raising and community engagement, aligning with 'Level 3 – Involve' by directly involving citizens in climate-related activities and providing training opportunities. Saint Kitts and Nevis, on the other hand, combined informational campaigns with public consultations during the development of its climate policies, demonstrating a blend of 'Level 1 – Inform' and 'Level 3 - Involve.' These varying approaches illustrate a spectrum of engagement methods within the Moderate category, ranging from providing information to actively involving the public in decision-making processes. Unlike that of the 'Pusher' countries, there were varying levels, which suggests that public participation levels were country specific.

1.3. Bystanders

In The Bahamas, the approach to public participation is structured yet varied across different educational levels, reflecting a nuanced strategy to broaden environmental awareness and action. At the primary level, the curriculum introduces general environmental education, laying a foundational awareness among young learners. At the secondary level, there is a more direct approach with

specific modules on climate change included in the curriculum (The Commonwealth of The Bahamas, 2014). This is complemented by efforts to develop educational resources such as comic booklets that make climate change topics accessible and engaging for both primary and secondary students. Higher education in The Bahamas also contributes to climate education through programs like 'Small Island Sustainability at The College of The Bahamas.' These programs, although not exclusively focused on climate change, include courses that help students understand the broader context of sustainable development.

The government of Saint Lucia implemented targeted initiatives to engage the public in climate change awareness and action, focusing on education, community involvement, and capacity building. Through the 'Disaster Vulnerability Reduction Project (DVRP),' 'Public Education and Outreach (PEO)' efforts targeted policymakers, including parliament members, to improve understanding of climate risks and adaptation strategies. Additionally, Saint Lucia leveraged both traditional media, like radio and television, and digital platforms to ensure broad dissemination of climate information. The government partnered with civil society organizations (CSOs) and regional entities like the CCCCC for training and capacity building (The Government of Saint Lucia, 2017).

In Saint Vincent and the Grenadines' official documents, most of its endeavor to include public participation was focused on training and capacity building for various stakeholder groups. This includes a series of targeted workshops designed to enhance local expertise in essential areas such as GHG inventories, vulnerability and adaptation, and mitigation assessment. These workshops were noted in its documents as crucial for developing a robust national response to climate change by educating stakeholders about the identification of emissions sources, assessment of vulnerabilities, and exploration of mitigation strategies. More specifically, the 'GHG Inventory Workshops' aimed to equip participants with the skills necessary to accurately identify and measure sources of greenhouse gases, which are fundamental components of national mitigation strategies. Additionally, the 'Vulnerability and Adaptation Workshops' provided stakeholders with the latest scientific knowledge and policy guidance necessary to understand and plan for the impacts of climate change specific to Saint Vincent and the Grenadines and the broader Caribbean context. Mitigation Assessment

Workshops focused on creating baseline scenarios and understanding potential mitigation strategies, preparing stakeholders to contribute to long-term climate resilience (Saint Vincent and the Grenadines, 2015).

Alongside these capacity-building efforts, Saint Vincent and the Grenadines also implemented a comprehensive public awareness campaign. This campaign leveraged various media channels, including radio, television, and print, to spread knowledge about climate change issues widely. Educational initiatives extended through all education levels, integrating climate change into curricula and fostering a foundational understanding among the youth. The campaign also included interactive elements like environmental competitions in schools, presentations at summer programs, and public exhibitions, enriching the community's engagement with climate topics (Saint Vincent and the Grenadines, 2015).

The three Bystander countries, The Bahamas, Saint Lucia, and Saint Vincent and the Grenadines, demonstrate a largely passive approach to public engagement on climate issues, aligning with 'Level 1 – Inform' of the public participation framework. Their strategies focus primarily on the government delivering information through structured educational programs and capacity-building workshops. In The Bahamas, climate education is integrated into school curricula at various levels, complemented by materials like comic booklets to engage younger audiences, yet there is little evidence of these efforts translating into broader community action. Saint Lucia's efforts, while targeting specific groups through initiatives like the DVRP and traditional media campaigns, remain focused on providing information rather than fostering active public involvement. Similarly, Saint Vincent and the Grenadines' emphasis on training workshops for stakeholders and public awareness campaigns does not extend into mechanisms for public participation in decision-making processes. Even though Saint Vincent and the Grenadines used the term 'workshop,' which activity falls under 'Level 2 – Collaborate,' the description of the workshop is hard to see that by this, the government was able to obtain public feedback, alternatives, or other decisions, but rather, merely a tool to provide the public with information. Given these considerations, these countries maintain a one-way communication model, providing information but lacking opportunities for the public to engage beyond

receiving this information, indicating a limited progression from awareness to active participation.

2. Evaluation of Propositions

Based on the comprehensive evaluation of public participation strategies in the previous section, the analysis confirms the positioning of each country within the public participation framework. Antigua and Barbuda, alongside Barbados, exemplify 'Level 4 – Collaborate,' demonstrating a proactive and inclusive approach to public participation. They have effectively integrated collaborative initiatives, incorporating the public into existing programs and establishing new platforms for citizen involvement in climate adaptation. The strategies in Antigua and Barbuda include projects such as the Caribbean Agrometeorological Initiative and the GCCA. These initiatives relied on active participation from local communities and NGOs, whose inputs informed program design and execution. The government's facilitation of platforms for 'two-way communication' allowed public voices to be heard.

Similarly, Barbados has focused on fostering public interaction through its Environmental Education Committee and youth-oriented activities spearheaded by the CYEN. A key characteristic of both approaches is the significant involvement of NGOs, which actively educate and mobilize the public, facilitating a participatory environment where public contributions directly inform and shape climate strategies. Thus, the public of both countries were engaged in climate issues by taking part in initiatives prepared by both the government and NGOs. By fostering 'two-way communication' and ensuring that public participation extended beyond consultation to active collaboration, Antigua and Barbuda and Barbados have demonstrated the potential of inclusive, ground-up approaches to climate adaptation.

For the Moderate countries, Dominica, Grenada, and Saint Kitts and Nevis exhibit a range of engagement levels, from consultative to actively involved. Dominica's use of the KAP survey provides a foundation for its 'Level 2 – Consult' positioning, as it utilizes public feedback to tailor educational strategies. Grenada enhances public engagement through the ICCAS project and events like the

Climate Change Walk, aligning with ‘Level 3 – Involve’ by raising awareness and encouraging direct public participation in climate initiatives. Saint Kitts and Nevis employs a dual strategy that combines information dissemination with engaging the public in policy development, reflecting a hybrid of ‘Level 1 – Inform’ and ‘Level 3 – Involve.’

The Bystander countries, The Bahamas, Saint Lucia, and Saint Vincent and the Grenadines, adhere to a ‘Level 1 – Inform,’ characterized by a strong emphasis on structured educational programs. The Bahamas integrates climate education into its school curricula and uses engaging materials like comic booklets to capture the attention of young students, though these initiatives do not typically translate into broader community action. Saint Lucia targets specific groups with projects such as the Disaster Vulnerability Reduction Project (DVRP) and utilizes traditional media to disseminate information, focusing on awareness rather than active involvement. Similarly, Saint Vincent and the Grenadines emphasizes training workshops and public awareness campaigns, which, while educational, do not facilitate significant public participation in decision-making. Although workshops might imply a more interactive ‘Level 2 – Consult,’ the described functions of these countries are predominantly informational, not designed to solicit extensive public feedback.

In this context, the analysis highlights how differently countries approach public participation in climate action, depending on their level of commitment and resources. ‘Pushers’ actively bring the public into the conversation, shown in a ‘two-way’ communication style, with the government providing a platform for the public to participate in climate issues. This role was also achieved by NGOs. ‘Moderates’ engage the public but do so to a lesser extent, maintaining some level of involvement without the same intensity or depth seen among Pushers. Meanwhile, ‘Bystanders’ tend to keep public participation at arm’s length, often limiting it to formalities or minimal input. Bystanders showed a ‘one-directional’ communication style, where the government merely informed the public with climate issues.

To this regard, the analysis provides evidence for both propositions, demonstrating that countries with higher levels of public participation in climate issues, such as Antigua and Barbuda and Barbados, are more engaged in climate

negotiations. This also supports the idea that a country's domestic public engagement and the way government commits to foster public participation directly influence its involvement on the global climate stage.

Chapter VI. Conclusion and Discussion

This paper investigates possible contributing factors for the different level of engagement of the 8 SIDS in climate negotiations. It argues that the different levels of public participation leveraged in the domestic level is the key contributing factor. It first classifies the 8 SIDS into 'Pushers', 'Moderates,' and 'Bystanders' depending on their (1) climate pledges, (2) direct participation in climate negotiations, and (3) propositions of globally agreed framework and initiatives. By this, Antigua and Barbuda and Barbados were classified as 'Pusher' countries, Dominica, Grenada, and Saint Kitts and Nevis as 'Moderates,' and The Bahamas, Saint Lucia, and Saint Vincent and the Grenadines as 'Bystanders.' Within these classifications, the paper analyzed and evaluated the public's participation domestically regarding climate issues and found clear differences between methods used between the groups.

The level of public participation amongst the 8 SIDS was analyzed utilizing the 'Public Participation Level' framework. The Pusher countries showed 'Level 4 – Collaborate' engagement where public actively participated in climate change initiatives by partnering with NGOs and the community to co-develop solutions. The Moderates shown a country-dependent results where it was hard to unify the three countries' level of engagement into one. Dominica, Grenada, and Saint Kitts and Nevis employed a range of strategies from conducting awareness surveys to organizing public consultations, placing them between 'Level 2 – Consult' and 'Level 3 – Involve,' with varying degrees of public interaction and feedback utilization. The Bystander countries' public participation remained in Level 1- Inform, where they primarily focused on information dissemination with minimal public interaction, positioning them at 'Level 1- Inform.' The flow of communication remained largely one-directional and limited to educational settings without fostering broader community participation or feedback mechanisms. These

findings validate the propositions that countries with higher levels of public engagement tend to be more active in climate negotiations, as this engagement reflects efforts to represent their citizens' needs on the global stage.

This paper presents key implications tailored for three audiences: (1) the 8 SIDS, emphasizing region-specific strategies to enhance climate negotiation engagement; (2) other countries, offering broader applicable insights; and (3) global practitioners, particularly in the realm of climate finance and public participation. Firstly, among the 8 research targets, for 'Bystander' countries, the findings suggest strategies to foster more active participation in climate negotiations, ensuring public needs are more effectively represented. Promoting public participation at the highest levels can encourage 'Moderate' and 'Bystander' countries to transition into the 'Pushers' category, thereby amplifying their influence in global climate dialogues. By integrating public voices into domestic policymaking, these countries can enhance their negotiation positions and align their climate commitments more ambitiously. Furthermore, countries like Antigua and Barbuda and Barbados demonstrate how embedding public participation in domestic policy processes can serve as a model for deeper international engagement.

Furthermore, this research provides insights for other countries as well. With the upcoming round of NDC updates due by February 2025, where mitigation targets will extend to 2035, countries have a critical opportunity to leverage public participation frameworks to strengthen their commitments. Such frameworks not only ensure that public voices are reflected in national climate pledges but also serve as a catalyst for more aggressive action in climate finance and negotiations. For instance, mobilizing diverse stakeholders, including governments, civil society, and the private sector, can enhance the design and implementation of impactful climate initiatives tailored to the unique contexts of SIDS.

The importance of effective climate finance partnerships cannot be overstated. These partnerships enable SIDS to pool financial resources, share risks, and access innovative solutions. By aligning funding with local needs and capacities, such partnerships increase the sustainability and success of climate initiatives. However, challenges remain in scaling and improving the efficiency of multi-stakeholder collaborations, as the current implementation of SDG-focused

partnerships often lacks the transformative impact required to tackle climate change effectively.

As demonstrated by the events of COP29, collective action and public influence are critical to achieving ambitious climate outcomes. The walkout by delegations from AOSIS and LDCs highlighted persistent gaps in global climate negotiations, particularly in securing adequate financial commitments to meet the needs of the most vulnerable. While progress was made with an increased pledge of USD 300 billion annually by 2035, this falls short of the USD 1.3 trillion demanded to address climate impacts and transition to sustainable energy systems. These instances underscore the necessity of fostering public engagement and integrating societal voices into global climate dialogues. By empowering the public to demand and support stronger climate action, global practitioners and governments can ensure more inclusive, fair, and ambitious agreements that prioritize the needs of vulnerable nations and drive transformative change. By adopting the public participation framework and strengthening climate finance partnerships, SIDS can drive more ambitious climate action and negotiations. These strategies not only empower vulnerable nations but also set a precedent for inclusive and effective global climate governance.

However, despite these insights, this study has certain limitations that could be addressed in future research. Limited data availability for some countries may have led to an underestimation of their public participation efforts during the study. Furthermore, as evidenced by the diverse levels of public participation among the ‘Moderate’ countries, focusing solely on public participation is not sufficient to fully explain their varying levels of involvement. Future research could explore additional factors that influence climate negotiation engagement, offering a more nuanced understanding of these dynamics. Moreover, the fact that none of the 8 SIDS have progressed to ‘Level 5 – Empower’ in public participation poses a significant challenge for these climate-vulnerable countries. Further research is essential to identify the barriers to this advancement and propose strategies to enhance public participation at the highest level.

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국문 초록

카리브해 소도서 개발도상국(Small Island Developing States; SIDS)은 상대적으로 낮은 온실가스 배출량에도 불구하고 기후변화로 인한 극심한 취약성을 겪고 있다. 이에 따라, 기후 협상에서의 이들의 참여는 기후 취약 국가의 요구를 반영하고, 자원 및 지원 확보를 통해 기후변화 피해를 최소화하는 데 필수적이다. 그러나, 카리브해 SIDS의 기후 협상 참여 수준에는 뚜렷한 차이가 존재하며, 본 연구는 그 이유를 분석하는 데 목적이 있다.

본 연구는 독립국, 군소도서국가연합(Alliance of Small Island States; AOSIS) 회원국, 유사한 경제 상황 및 정치적 안정성을 기준으로 선정된 8개국 (Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines)을 대상으로, 기후 서약, 국제 협상 참여도, 글로벌 이니셔티브 관여도를 분석하여 '활동적 참여국(Pushers),' '중도 참여국(Moderates),' '소극적 참여국(Bystanders)'으로 분류하였다. 기존 연구는 기후 취약성과 저감 비용이 협상 참여에 영향을 미친다고 보았으나, 본 연구는 '대중 참여(public participation)'를 새로운 변수로 제시하였다. 대중 참여는 정부가 공공 문제(public issues)에 대중을 얼마나 참여시키는지를 나타내며, 대중 참여 프레임워크(public participation framework)를 통해 각국의 참여 수준을 '1단계 – 정보 제공'부터, '5단계 – 권한부여'로 나누어 분석하였다.

연구 결과, 활동적 참여국은 대중과 NGO 및 지역 커뮤니티 간의 협력을 강조하며 '4단계 – 협력'을 나타낸 반면, 소극적 참여국은 정보 전달에 초점을 맞춘 '1단계 – 정보 제공' 수준에 머물렀다. 이는 대중 참여 수준이 기후 협상에서의 국가별 활동 수준에 중요한 영향을 미친다는 점을 보여준다.

본 논문의 의의는 다음과 같다. 첫째, 카리브해 SIDS의 기후 협상 참여를 중점적으로 다룬 최초의 연구로 새로운 통찰을 제공한다. 둘째, 대중 참여를 핵심 요인으로 제시하여 정책적 시사점을 제안한다. 셋째, 참여 수준의 차이를 명확히 하여 기후 취약 국가의 전략적 현실을 분석한다.

주 요 어: 카리브 해 소도서 개발도상국가, 기후변화, 기후 위기, 기후 협상, 대중 참여
학 번: 2023-20592