



# Towards better climate change adaptation governance in Curaçao and Bonaire

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Course code: GEO4-2321  
Credits: 30 EC  
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Word count: 38.523  
Date: 01 - 08 - 2021



## Acknowledgements

Hereby I present my master thesis on climate change adaptation in two small island developing states in the Southern Caribbean. I was specifically motivated to do my thesis research in Curaçao, because I grew up there during elementary and high school and always had the desire to go back for research. The basis of my research are interviews that were conducted among policy makers and NGOs in Curaçao and Bonaire. It has been written to fulfill the graduation requirements of the Sustainable Development program at the University of Utrecht. I was engaged in researching and writing this thesis from February to August 2021 and visited the islands during a period of 2,5 months.

The research was difficult in the beginning due to the strict lockdown in Curaçao, but after the lockdown conducting interviews with more than 20 respondents has allowed me to answer the main research question.

I would like to thank my supervisor Carel Dieperink for his frequent guidance and support during this process. I also wish to thank all the respondents; without whose cooperation I would not have been able to conduct this thesis.

## Abstract

This study addresses the governance around climate change policies in two small islands in the Southern Caribbean. Like many other small islands across the world it is becoming increasingly clear that they are the most vulnerable to the effects of climate change like the increase in sea level rise, longer dry periods, loss of biodiversity, more extreme weather events (flooding and hurricanes) and increased fresh water demands (IPCC, 2014). To address such issues climate change adaptation policies will be necessary. The geographical focus of this research is the Southern Caribbean, specifically the islands of Curaçao and Bonaire. This study investigated what climate change adaptation policies are in place and could the policies be characterized as good governance? Policy documents were studied, and 22 semi-structured interviews were held with policy-makers and NGOs. First, a literature review of the concept of good governance was carried out to develop an analytical framework with principles and corresponding indicators for good governance. Second, the framework was applied to assess good governance in key climate policy documents of both islands. And third, the indicators of the framework were also used in the interviews with governmental stakeholders and NGOs, to assess from their perspectives good governance in climate policies. Curaçao and Bonaire have different jurisdictions, respectively an autonomous country in the Kingdom of the Netherlands and a Dutch municipality. Therefore, from a governance perspective it seemed interesting to compare both islands whether one jurisdiction is doing better than the other. The aims of the research are to reduce the knowledge gap on climate change adaptation in the Southern Caribbean, to develop a good governance framework, to assess good governance in climate change adaptation policies on both islands and to compare them. The last aim is what recommendations of enhancing good governance practices could be given. Results are that the developed analytical framework worked rather well and that the governance principles *Transparency, Inclusiveness and Connectivity* are relatively better in place than *Accountability* and *Government Effectiveness*. There are some differences between the islands but not striking.

## Highlights

- An assessment framework for good governance in climate change adaptation in small island states was developed.
- The good governance principles in the climate change policy documents of both islands are reasonably in place, but not extensively
- From the perspective of the stakeholders, good governance practices for climate policies are only partly in place: important parts like implementation of decisions linger and execution sojourn.
- Improvement of good governance practices is clearly possible on *accountability* and *governance effectiveness*, particularly in ‘output and outcomes’ and ‘performance reporting.
- Despite their different jurisdictions, Curaçao and Bonaire still are both non-sovereign jurisdictions in the Kingdom of the Netherlands. They are after all, more similar than different, which did not lead to big differences in good governance in their climate policies.

**Key concepts:** good governance, climate change adaptation in Small-Island Developing States, assessment framework.

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## List of abbreviations

<b>Abbreviation</b>	<b>Explanation</b>
ABC	Aruba, Bonaire, Curaçao
AZ	Ministry of General Affairs <small>Algemene Zaken</small>
BES	Bonaire, (St.) Eustatius, Saba
BONHATA	Bonaire Hotel and Tourism Association
BZK	Ministry of the Interior and Kingdom Relations
CARICOM	Caribbean Community
CARMABI	Caribbean Research and Management of Biodiversity
CBS	Central Bureau of Statistics
CC	Climate Change
CCCP	Curaçao Climate Change Platform
CN	Caribbean Netherlands
CCA	Climate Change Adaptation
CCCC (C4)	Climate Change Committee Curaçao
CCCCC	Caribbean Community Climate Change Center
CDEMA	Caribbean Disaster Emergency Management Agency
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLLJ	Caribbean Low-Level Jet
DCNA	Dutch Caribbean Nature Alliance
DRR	Department of Risk Management & Disaster Management <small>Directie Risicobeheersing &amp; Rampenbestrijding</small>
ECLAC	Economic Commission for Latin America and the Caribbean
EPP	Environmental Policy Plan Curaçao
EZK	Ministry of Economic Affairs and Climate Policy
GMN	Ministry of Public Health, Nature, and Environment <small>Ministerie van Gezondheid, Milieu en Natuur</small>
ILO	International Labor Organization
IOC-UNESCO	Intergovernmental Oceanographic Commission of UNESCO
IPCC	Intergovernmental Panel on Climate Change
LMN	Department of Agriculture, Environment, and Nature <small>Landbouw, Milieu en Natuur</small>
MEO	Ministry of Economic Development <small>Ministerie Economische Ontwikkeling</small>
METEO	Meteorological Department Curaçao
NA	Netherlands Antilles

NDP	National Development Plan Curaçao
NEP	National Energy Policy Curaçao
NEPP	Nature and Environmental Policy Plan Bonaire
NGO	Non-governmental organization
NPP	Nature Policy Plan Bonaire
NWO	Nederlandse Organisatie voor Wetenschappelijk Onderzoek
OCTA	Overseas Countries and Territories Association
OPRC	Caribbean Island Oil Pollution Response and Cooperation Plan
UN	United Nations
UNEP	United Nations Environmental Program
UNDP	United Nations Development Plan
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
RAC/REMPEITC - Caribe	The Regional Marine Pollution Emergency, Information and Training Centre – Caribe
R&O	Department of Spatial Planning (Ruimte & Ontwikkeling)
SAMOA	SIDS Accelerated Modalities of Actions
SDG	Sustainable Development Goals
SENDAI	Sendai Framework for Disaster Risk Reduction
SLR	Sea Level Rise
SNIJ	Subnational Island Jurisdictions
VVRP	Ministry of Traffic, Transport & Urban Planning <small>Verkeer, Vervoer &amp; Ruimtelijke Planning</small>
VWS	Ministry of Health, Welfare and Sport
WB	WorldBank
WGI	Word Bank Governance Indicators

# 1. Introduction

## 1.1 The impact of climate change on small islands

Small Island Developing States (SIDS) have long been recognized as being particularly at risk to climate change. They are defined as a distinct group of developing countries at the Earth Summit in 1992, because they face specific economic, climate, and political vulnerabilities. They often also have specific governance structures. (UN, nd). On the international scale there are 38 United Nations (UN) Member States and 20 non-UN Member States/Associate Members of Regional Commissions identified as SIDS by the UN, located in three regions: the Caribbean; the Pacific; and the AIMS (Atlantic, Indian Ocean, Mediterranean and South China Seas together) (UN, 2021). Because SIDS are at the forefront of climate change, there is a growing need for knowledge development in the fields of sustainable development and climate change adaptation (CCA). The SIDS share unique issues: small size, often remoteness, limited resources, often highly dependent on tourism, and global environmental challenges. Even though they emit the least carbon into the atmosphere, these small island countries often suffer the worst effects of climate change. For example, due to a warmer climate, sea levels are rising, causing more floods and beach damage, and an increasing number of mosquitoes causing more often outbreaks of vector-borne diseases. In this regard, the impacts of climate change will affect entire communities, their living conditions, and their social and economic conditions. In this context the UNESCO (2014) launched the **SIDS Accelerated Modalities of Actions (S.A.M.O.A. pathway, 2015)** with many sections addressing climate change adaptation for small islands, like:

*“We call for support for the efforts of small island developing States:*

*(a) To build resilience to the impacts of climate change and to improve their adaptive capacity through the design and implementation of climate change adaptation measures appropriate to their respective vulnerabilities and economic, environmental and social situations;*

*(b) To improve the baseline monitoring of island systems and the downscaling of climate model projections to enable better projections of the future impacts on small islands;*

*(c) To raise awareness and communicate climate change risks, including through public dialogue with local communities, to increase human and environmental resilience to the longer-term impacts of climate change;” (UN Samoa pathway, 2015, art. 44)*

It will be addressed in the literature in chapter 2, that particularly in small island jurisdictions the quality of the governance regarding climate change is an important issue for progress on the efforts mentioned above. Therefore, this topic of the quality of governance - also called ‘good governance’ will play a central role in this master thesis research. In the Leeward Antilles one finds a variety of governmental structures. Many times, these are related to their former colonial histories or to their different roads to independence, to autonomy in a union of countries or to becoming part of a greater country. Also, the two Leeward Antilles that will be studied in this thesis have different governmental structures. Curaçao is an autonomous country in the Kingdom of the Netherlands and therefore listed as a Small Island Developing State and a non-UN Member State in the Caribbean (UN, 2021). The neighboring island Bonaire is not listed as a (non) UN Member state, because it is neither an independent nor an autonomous state, but a special municipality within the jurisdiction of the country of the Netherlands. This is the case since 10-10-2010 when each of the five islands were unified in the former Netherlands Antilles (1954-2010) and chose to have their own jurisdictions. For

the purposes of this research, Bonaire will be considered a SIDS, because it has all the characteristics of small island states, except it is not an autonomous state.

## 1.2 Climate change on the Leeward Antilles

The Leeward Antilles, Aruba, Bonaire, and Curaçao (ABC-islands) are evenly impacted by climate change events. The most recent projections for the Caribbean Region, reported by the Intergovernmental Panel on Climate Change (IPCC) in the Fifth Assessment Report (AR5), are not deniable and indicate that the islands of the Dutch Caribbean will undergo dramatic environmental changes in the next decades and century (IPCC, 2014; DCNA, 2016). Even under an intermediate low emissions scenario, the following projections have been made for the Caribbean towards the last decades of this century (2081-2100): 1) an increase in air temperature of 1.4 ° C; 2) a decrease in rainfall of 5 to 6 %; 3) an increase in frequency and intensity of extreme weather events (66% increase in hurricane intensity); and 4) a sea level rise of 0.5 to 0.6 m due to thermal expansion of water and glacial melt. Higher emission scenarios are projected as well (IPCC, 2014; DCNA, 2016).

The ABC-islands are in the Southern Caribbean, an area that is predicted to become warmer and drier, with longer seasonal dry periods due to changes in the Caribbean Low-Level Jet (CLLJ)<sup>1</sup>. The projected scenarios for increased length in dry periods are expected to increase the freshwater demand for plants and people (IPCC, 2014). Coral reefs are expected to be particularly vulnerable as rising ocean temperatures and ocean acidification will result in massive coral bleaching and dying of coral. Coral reefs are extremely important for biodiversity. Sea level rise (SLR) threatens e.g., the functioning of the flamingo feeding areas of Bonaire due to an excessive influx of seawater. It also threatens the mangroves on both islands as salinity levels will become too high and the water depth too deep. Increased rainfall and SLR will accelerate the rate of beach erosion. Higher air temperatures and hurricane intensities pose a direct threat to the vegetation and flora of hilltops and mountains. Furthermore, climate change not only poses a severe threat to the ecosystems of the islands, but also significant socio-economic impacts are expected because the Dutch Caribbean islands - as almost all SIDS - are highly dependent on tourism. Hurricanes, beach erosion and coral bleaching can have a negative impact on the attractiveness of the islands and the perception of a safe holiday destination (DCNA, 2016).

## 1.3 Knowledge gap

Scholars studying climate change adaptation (CCA) in SIDS have been mostly focused on the Pacific islands. There are two recent review articles examining CCA for the Caribbean region without focusing on a specific island (Robinson 2020, Klöck & Nunn, 2019). Caribbean SIDS that have been studied more than once are Jamaica (5x), Anguilla (2x), Belize (2x), Cayman Islands (2x), Guyana (2x). Caribbean islands that have been the focus only once are Antigua and Barbuda, Bahamas, Barbados, Grenada, Puerto Rico, St. Lucia, Suriname, Trinidad and Tobago. SIDS that have not been the focus of any CCA study are Aruba, Bermuda, British Virgin Islands, Cuba, Curaçao, Dominica, Dominican Republic, Haiti, St. Kitts and Nevis, St. Vincent and the Grenadines, Turks and Caicos, U.S. Virgin Islands (Klöck & Nunn, 2019), and St. Martin. The BES-islands (Bonaire, Eustatius, and Saba) have been the focus of one CCA

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<sup>1</sup> The easterly Caribbean low-level jet (CLLJ) is a prominent climate feature over the Intra-American Seas, and it is associated with much of the water vapor transport from the tropical Atlantic into the Caribbean Basin (Cook & Vizy, 2010).

study (Debrot et al., 2010). Thus, it can be stated that in this respect there is a knowledge gap on the Leeward Dutch Antilles (ABC-islands). In figure 1 the Caribbean Region is shown.



**Figure 1** The Caribbean Region. Source: Geology.com

Furthermore, regional studies on climate change adaptation in SIDS sometimes fail to acknowledge the different impacts on different islands. Moreover, research on prospects and challenges for marginalized or specific communities like those in the Caribbean is limited. There are knowledge gaps on how such communities would adapt to climate change effects, on how their vulnerabilities should be addressed, on how resilience can be improved on how potential CCA measures should be governed and what the climate policy approaches of their governments or sub-national jurisdictions will be (Baptiste & Rhiney, 2016).

Since there is also a lack of knowledge on climate governance in the Leeward Antilles, it is important to show which current climate policies are in place and to assess the quality of the governance of these policies. Moreover, interesting differences in policies and aspects of good governance between the islands may emerge. Therefore, this research will investigate to what extent CCA policies can be considered as good governance practices in the Leeward Antilles, with the focus in Curaçao and Bonaire. It will be worth knowing to compare these two islands on aspects of good governance regarding CCA policies because they have different Subnational Island Jurisdictions (SNIJs): an autonomous country in the Kingdom of the Netherlands versus a special Dutch municipality.<sup>2</sup>

<sup>2</sup> Bonaire is part of what is called the Caribbean Netherlands, together with Statia and Saba, in Dutch also called the BES islands. Curaçao is part of what is called the Caribbean part of the Kingdom of the Netherlands, together with Aruba and St. Martin, all three autonomous countries in the Kingdom.

## 1.4 Aim and relevance

Due to the virtually lack of research, a first research aim is to contribute to more knowledge on CCA policies in the Southern Caribbean, in particular in Curaçao and Bonaire. The knowledge gap alone makes it already scientifically relevant. Moreover, the relation between good governance and CCA policies is even less studied and could therefore also contribute to a modest body of knowledge. The topics are socially and economically relevant because the island governments and communities will have to deal with smaller or bigger climate change impacts sooner or later and with policies that could mitigate and address these impacts. Learning about aspects of good governance in this respect and how to apply them, would mainly affect people's daily life, their health, and their economy, now and in the future and is therefore highly socially and economically relevant.

1. The first objective of the research is to improve knowledge on climate change adaptation and on aspects of the governance of climate change policies in two chosen Southern Caribbean islands.
2. The second objective is to raise awareness on climate change impacts as such and on good governance policies to mitigate and to adapt to climate change in small island communities.
3. The third objective is to compare Curaçao and Bonaire concerning their climate policies and the aspects of good governance of these policies, with the meaning to propose recommendations. Maybe the islands can take advantage of each other's experiences.

These research objectives all indicate the importance of the role of governance in CCA policies. Therefore, this thesis research will formulate questions about the state of the art of the CCA policies in Curaçao and Bonaire and about the quality of governance related to these policies. The questions will be elaborated in the following paragraph.

## 1.5 Research questions and framework

In this paragraph the research questions and a framework will be presented.

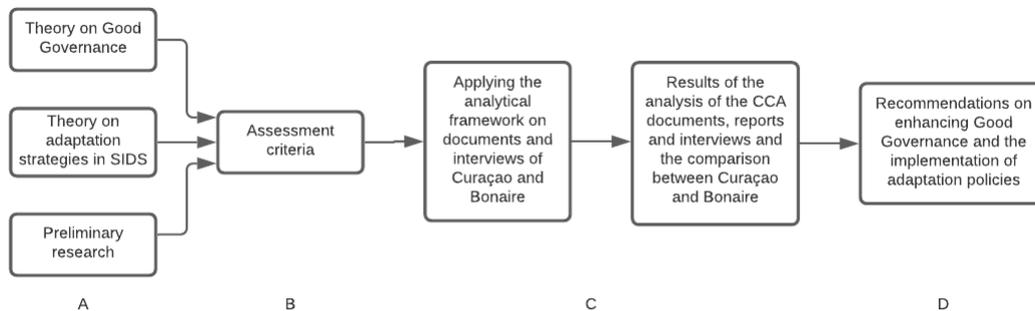
The central research question is:

*“To what extent can climate change adaptation policies in Curaçao and Bonaire be considered as good governance practices?”*

To provide an answer to this main research question the following sub-questions have been derived:

- What are aspects of good governance related to climate change adaptation in SIDS?
- What are the policies and practices on CCA that are in place in Curaçao and Bonaire and to what extent can they be considered as good governance practices?
- What are the stakeholders' perceptions on the different aspects of good governance in Curaçao and Bonaire?
- What are the similarities and differences between Curaçao and Bonaire on aspects of good governance regarding their CCA policies and can they be attributed to differences in jurisdiction?

The different phases in the research performed are schematically shown in the framework below.



**Figure 2** Research framework

At the start of this thesis research (A) the theory on good governance was studied. Secondly, theories on CCA strategies were studied and articles on CCA and CCA policies were reviewed, particularly the studies that dealt with climate change impacts in SIDS. Thirdly, preliminary research on the impacts of climate change in SIDS was done by reviewing articles on the topic and the IPCC Fifth Assessment report.

These different parts together offered input for the assessment criteria (B) for assessing aspects of good governance in CCA policies (C).

The research for the *first* question is carried out in part A and B of the above research framework. The research for question 1 included thorough literature study on *good governance* and *climate change adaptation in SIDS* in Scopus and Google Scholar. Then assessment criteria (indicators) for the two main concepts “good governance” (GG) and “climate change adaptation” (CCA) were developed. This resulted in an analytical framework (Ch. 3).

The *second* question will be answered by desk research. The analytical framework with indicators of good governance will be applied to the most important documents and reports regarding climate change adaptation and CCA policies on both islands (part C in above research framework). For the third question there was field research planned and carried out as planned. Key stakeholders are interviewed as much as possible in their own institutes and workplaces. The intention was to get also some *couleur locale*, where and under what conditions the CCA policies are developed and implemented by the respondents. It happened to be rather successful. The same analytical framework as used for the document study is used for the analysis of the interview results. These results should also provide an answer to the overall question about which aspects of good governance contribute to CCA policies and practices, according to the stakeholders (public officers, policy makers, and NGOs). The results of the interviews also provide insight into similarities and differences in aspects of good governance on the two islands and lead to recommendations which aspects possibly could enhance CCA policies and practices (part D in the research framework). At the end of the research process the limitations of the research are discussed and recommendations for possible further research are given. More elaboration on the used methods for data gathering and analyzing the data will be described in chapter 3.

## 2. Conceptualizing Good Governance in Climate Change Adaptation

### 2.1 Introduction

There is limited academic research that substantially examines good governance and climate change adaptation in Caribbean SIDS. This section reviews 22 articles and book chapters retrieved from a systematic search of Scopus®. The inclusion of the key words “good governance” AND “small island” AND “developing states” appearing in article titles, abstracts, and key words retrieved 31 results. From this, some results were excluded because their titles or abstracts turned out to be not relevant. In combination with a search in Google Scholar a total of 12 articles on good governance principles, and 10 articles on good governance in the context of CCA in SIDS were reviewed. For a better understanding of the concept of *good governance*, this chapter will elaborate on the underlying theories and approaches which are the foundation of this research. First, the broad scientific field of good governance literature will be reviewed, ranging from abstract theories towards analytical models and empirical studies in different geographical areas, even a little in small islands. Second, literature on good governance in the context of *climate change adaptation in SIDS* will be addressed. Then an answer could be given to the question: *What are aspects of good governance related to climate change adaptation in SIDS?* At last, an analytical framework is presented that forms the basis of this research.

### 2.2 Good governance

Defining good governance starts with a definition of the concept of governance itself. Governance in short refers to the systems and methods of rules and norms that manage society. The World Bank (2007a) defines governance as the “*manner in which public officials and institutions acquire and exercise the authority to shape public policy and provide public goods and services*” (Gisselquist, 2012, p. 3). Their definition of governance later is “*the manner in which power is exercised in the management of a country’s economic and social resources for development*” (The World Bank, 1999, p. 31). Kaufmann, Kraay and Mastruzzi (2010) have come to the following definition: “*the traditions and institutions by which authority in a country is exercised. This includes (a) the process by which governments are selected, monitored and replaced; (b) the capacity of the government to effectively formulate and implement sound policies; and (c) the respect of citizens and the state for the institutions that govern economic and social interactions among them.*” There are many more definitions of governance, but our focus shifts now to what ‘good governance’ is.

The discourse of good governance emerged in the late 1980s. The World Bank (1989, p. 12) defined good governance first as “*a public service that is efficient, a judicial system that is reliable, and an administration that is accountable to its public*”. Ten years later their definition elaborated to “*good governance refers to efficiency in public service, rule of law about contracts, an effective judicial sector, respect for human rights, a free press, and pluralistic institutional structure*” (Khan, 2015). Later, the World Bank added some new elements: control of corruption, minority views and the voices of the most vulnerable groups in society should be included in decision making.

The next discourse is about the principles of the UNDP (2011). They provide a set of 8 principles of good governance, some are overlapping (participation, consensus oriented, accountable, responsive, effective and efficient, equitable and inclusive, in accordance with the

rule of law), others are new (transparency) and compared to the WGIs control of corruption) is missing.

Kaufmann et al. (2010) argue that a single definition of good governance has not yet been determined, although it is widely discussed among scholars and used by policymakers. The governance indicators of the World Bank have been central in research after 2010, when Kaufmann et al. (2010) coined them as the Worldwide Governance Indicators (WGI). The six WGI indicators were distilled from hundreds of underlying variables and translated into measures. Khan (2015) agreed with Kaufmann et al. (2010) that the most influential conceptualization of good governance is the WGI framework of the World Bank (WB). The World Bank Governance Indicators (WGIs) were listed by Kaufmann et al. (2010) and Khan (2015) as good governance principles (see table 1).

<b>Good governance principle</b>	<b>Measures</b>	<b>Other scholars addressing the principle</b>
Voice and Accountability	The extent to which citizens can participate in the choice of their government	Lockwood (2010)
Political stability and the absence of unrest or violence	The possibility that the government will be destabilized or overthrown by violent means	Khan (2015) Briguglio (2016) Stojanovic et al. (2016) Weiler et al. (2017)
Government effectiveness	The quality of public services; the quality of policy formulation and implementation; and the reliability of commitment of the government to these policies	UNDP (2011) Gisselquist (2012) Stockemer (2014) Khan (2015) Briguglio (2016) Stojanovic et al. (2016) Keping (2018) Weiler et al. (2017) Huberts (2020)
Regulatory quality	The perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development	Ray (1999) The Commonwealth Secretariat (2000) Hope (2009) Stockemer (2014) Khan (2015) Briguglio (2016) Stojanovic et al. (2016) Weiler et al. (2017)
Rule of Law	The perceptions of the extent to which people obey the rules of society, and the quality of the police and the courts, property rights, and the likelihood of crime and violence	Lockwood (2010)
Control of corruption	The extent to which public power is utilized for private gain	Khan (2015) The Commonwealth Secretariat (2000) Briguglio (2016) Stojanovic et al. (2016) Weiler et al. (2017)

**Table 1** The World Bank Governance Indicators. Source: Kaufmann et al., 2010; Khan, 2015

The first GG principle in table 1 is *voice and accountability* to assess the extent to which citizens can participate in the choices of their government, as well as freedom of expression, freedom of association, and a free media. The second GG principle is *political stability* and the absence of unrest or violence. This measures the possibility that the government will be destabilized or overthrown by violent means (political violence or terrorism). The third GG principle is *government effectiveness*, which assesses the quality of public services; the quality of policy formulation and implementation; and the reliability of commitment of the government to these policies. The fourth GG principle is *regulatory quality*, which captures the perceptions of the ability of the government to formulate and implement sound policies and regulations that also permit and promote private sector development. The fifth GG principle is *the rule of law*. It measures: the perceptions of the extent to which people obey the rules of society (the quality of contract enforcement); the quality of the police; the courts, property rights; and the likelihood of crime and violence. Lastly, the sixth GG principle is *control of corruption*, which measures the extent to which public power is utilized for private gain.

From this table above, based on extensive literature study, it can be concluded that *government effectiveness* and *regulatory quality* are regarded as important good governance principles by the authors, since these are present in the lists of most reviewed literature. It shows that *political stability* and *control of corruption* are less present in authors' lists of good governance principles.

Some scholars criticize the WGI indicators because they don't pay enough attention to what means "good" (Huberts, 2011). There are two criticisms that should be noted. First, the focus of the World Bank is on the governance process as well as on the resulting policies. Although outcome is important, it is not self-evident that good governance in terms of process depends on "good" results. Second, by ostensibly assuming that all criteria must be optimized, the World Bank fails to recognize the tension between values and the importance of the context for the choices to be made in actual governance practices. Therefore, the World Bank is criticized that their WGIs on good governance are too broad, including the governance process as well as the results and the second criticism is that the WGIs are too 'Western', it imposes a framework that is more problematic for the circumstances in many (developing) countries (Huberts, 2020).

In this line Grindle (2004) introduces the concept of '*good enough governance*', recognizing that a lot of (developing) countries are not capable of fulfilling all WGIs good governance demands. Other good governance frameworks pay more attention to such different values systems and integrity issues and discern many types of good governance, i.e., in corporations and in institutions (Bovens, 't Hart and van Twist, 2007/2012). Moreover, Gisselquist (2012) compares the working definitions of good governance within and between various multilateral organizations and OECD-countries and shows that differences in terminology and emphasis are common. The author also shows that the concept is used incoherently which can result in vague policies on improving governance quality.

Furthermore, an article that has been cited by many scholars is Lockwood (2010), who's definition of good governance has been the foundation of many studies. The author characterizes good governance according to a set of seven principles – legitimacy, transparency, accountability, inclusiveness, fairness, connectivity, and resilience. The author argues that a framework for governance assessment should explicitly address management effectiveness which means primarily government effectiveness. Government effectiveness is

determined by the context (values, threats, influences, stakeholders); by planning (policies, strategies, plans); by inputs (human, financial, infrastructure & knowledge resources); in the processes (administration, finance, delivery & engagement systems); by outputs (completed actions, product and service delivery); and by outcomes (the extent to which objectives are achieved) (Lockwood, 2010). In the following table an overview is presented of Lockwood's principles and their performance outcomes. Reviewing literature of other scholars that also mention these principles resulted in the list in the 3rd column of the table. In this way the principles that are accounted as most imported by the authors can be identified.

Good governance principle	Performance outcome	Other scholars addressing the principle
Legitimacy	<p>The governing body is conferred with a legal or democratically mandated authority</p> <p>Stakeholders freely accept the governing body's authority</p> <p>The governing body has a long-standing cultural attachment to some or all the lands within the protected area</p> <p>The governing body acts in accordance with its mandate and purpose of the protected area(s)</p> <p>Governors act with integrity and commitment</p>	<p>The World Bank (1989) European Commission (2001) Graham et al. (2003) Hope (2009) UNDP (2011) Keping (2018) Huberts (2020)</p>
Transparency	<p>Governance and decision making is open to scrutiny by stakeholders</p> <p>The reasoning behind decisions is evident</p> <p>Achievements and failures are evident</p> <p>Information is presented in forms appropriate to stakeholders' needs</p>	<p>The Commonwealth Secretariat (2000) European Commission (2001) Graham et al. (2003) Kaufmann et al. (2010) UNDP (2011) Gisselquist (2012) Stockemer (2014) Keping (2018) Huberts (2020)</p>
Accountability	<p>The governing body and personnel have clearly defined roles and responsibilities</p> <p>The governing body has demonstrated acceptance of its responsibilities</p> <p>The governing body is answerable to its constituency ('downward' accountability)</p> <p>The governing body is subject to 'upward' accountability</p> <p>The levels at which power is exercised (local, sub-national,</p>	<p>The World Bank (1989) The Commonwealth Secretariat (2000) European Commission (2001) Graham et al. (2003) Hope (2009) Kaufmann et al. (2010) UNDP (2011) Gisselquist (2012) Khan (2015) Briguglio (2016) Stojanovic et al. (2016) Keping (2018) Weiler et al. (2017) Huberts (2020)</p>

	national, international) match the scale of associated rights, needs, issues and values	
Inclusiveness	<p>All stakeholders have appropriate opportunities to participate in the governing body's processes and actions</p> <p>The governing body actively seeks to engage marginalized and disadvantaged stakeholders</p>	<p>UNDP (2011)</p> <p>Huberts (2020)</p>
Fairness	<p>Stakeholders, office-bearers, and staff are heard and treated with respect</p> <p>There is reciprocal respect between governors from higher and lower-level authorities</p> <p>Decisions are made consistently and without bias</p> <p>Indigenous peoples' and human rights are respected</p> <p>The intrinsic value of nature is respected</p> <p>The distribution (intra- and intergenerational) of the benefits and costs of decisions and actions are identified and considered</p>	<p>Graham et al. (2003)</p> <p>Hope (2009)</p> <p>UNDP (2011)</p> <p>Gisselquist (2012)</p> <p>Khan (2015)</p> <p>Briguglio (2016)</p> <p>Stojanovic et al. (2016)</p> <p>Keping (2018)</p> <p>Weiler et al. (2017)</p> <p>Huberts (2020)</p>
Connectivity	<p>The governing body is effectively connected with governing bodies at different levels of governance</p> <p>The governing body is effectively connected with governing bodies operating at the same governance level</p> <p>The governing body's direction and actions are consistent with directions set by higher-level governance authorities</p>	
Resilience	<p>The governing body has a culture of intentionally learning from experience and absorbing new knowledge</p> <p>The governing body has the flexibility to rearrange its internal processes and procedures in response to changing internal or external conditions</p> <p>Formal mechanisms provide long-term security tenure and purpose for the protected area(s)</p> <p>The governing body utilizes adaptive planning and</p>	

	management processes The governing body has procedures to identify, assess, and manage risk	
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**Table 2** The good governance principles of Lockwood. Source: adapted from Lockwood (2010)

The table shows that principles *legitimacy*, *transparency*, *accountability*, and *fairness* were mentioned by most authors. *The rule of law* was not yet a separate principle but included in the others. Most authors listed *the rule of law* as separate indicators one since this was done by the WB (Hope, 2009; UNDP, 2011; Gisselquist, 2012; Khan, 2015; Briguglio, 2016; Stojanovic et al., 2016; Keping, 2017; Weiler et al., 2016; Huberts, 2020).

*Accountability* is the only principle that is present in all lists (WB, 1989; TCS, 2000; EC, 2001; Graham et al., 2003; Hope, 2009; Kaufmann et al., 2010; UNDP, 2011; Gisselquist, 2012; Turner et al., 2014; Khan, 2015; Briguglio, 2016; Stojanovic et al., 2016; Keping, 2017; Weiler et al., 2017; Huberts, 2020).

*Inclusiveness* is mostly referred to as stakeholder *participation*. Sometimes participation is scaled under the legitimacy principle (UNDP, 2011).

*Fairness* is regarded as an important principle of good governance (Graham et al., 2003). It is also referred to as two separate indicators: *equity* and *the rule of law* (UNDP, 2011; Gisselquist, 2012). The *rule of law* principle based on the WGI is also mentioned often (Hope, 2009; Khan, 2015; Briguglio, 2016; Stojanovic et al., 2016; Keping, 2017; Weiler et al., 2017; Huberts, 2020).

*Connectivity* and *resilience* are not mentioned as principles in the general literature review on good governance, except for Lockwood. However, as we will see in section 2.4, when good governance principles are applied in the context of CCA policies these principles happen to be used regularly.

To deal with the numerous interpretations and definitions concerning good governance it should be recognized that there is a tension between the different values relevant to good governance. The "best way out" could be not the same in various contexts. Almost none of the scholars in this field of good governance support the idea that all values can be consistently and coherently achieved in decision-making and implementation (Huberts, 2011). Therefore, it should be considered that it is not required that all indicators 'score' high to achieve good governance. In some cases, it could be that only certain indicators score high, and that governance policies are still effective to a certain extent. The next paragraph will address the context of climate change adaptation, particularly on small islands, which is used to find out which indicators are applicable to assess good governance in small islands contexts.

### 2.3 Climate change adaptation in SIDS

The second central concept in this research is climate change adaptation (CCA). Climate Change *Adaptation* measures are based on reducing vulnerability to the effects of climate change. *Mitigation* attends to the causes of climate change, while adaptation addresses its impacts. Given slow progress on *climate change mitigation* (greenhouse emission reduction obligations of Kyoto and Paris<sup>3</sup>) coupled with evidence of greater and more rapid impacts of climate change than those previously expected by the International Panel on Climate Change

<sup>3</sup> The Kyoto protocol and the Paris Agreement are treaties that aim to reduce anthropogenic greenhouse gases with legally binding obligations.

(IPCC), climate change *adaptation* is firmly on the international policy agenda as a crucial supplement to mitigation (Robinson, 2020).

CCA is a kind of container concept and extends over a large scope of empirical issues. Both in science and in policy practices much effort has been made to get a grip and consensus on the concept CCA. Above all effort has been put into categorizing the CCA impacts worldwide and categorizing adaptation measures that could be taken. The United Nations Framework Convention on Climate Change (UNFCCC, 2007) mentions several adaptation measures to address the impacts of climate change in different areas like urban, rural, small islands, and the low coasts. The UNFCCC listed: avoiding land degradation and biodiversity loss, creating land use plans; rainwater harvesting; provision of freshwater storage options and water efficient household appliances; application of beach setbacks, and sustainable fishing practices. To address the impacts on infrastructure and settlements after natural disasters, it often requires a whole process of engineering services, retrofitting houses; integrating resettlement programs; improvement of coastal zone activities; raising awareness and enhancing enforcement. The past trends in the Caribbean revealed that over the last three decades, a significant increase in droughts and flooding has occurred. It always means a combination of technical, social- and psychological knowledge and interventions. Prevention measures and policies are also to stop maladaptive practices, like the well-known mangrove destructions worldwide, and in the Caribbean too.

Climate change adaptation policies and practices can be categorized along different dimensions, e.g., by economic sector, by geographical space, on household or community level. For example, household-level adaptation measures likely contain mechanisms that protect against flood water. Adaptation practices on community-level could include installation of early-warning systems, safe sites with escape routes, and installing drains to reduce flood risks. With household and community-level adaptation alone the issues cannot be tackled. On macro-level institutional actions by governments are necessary to address issues such as improving urban and regional infrastructure, generating more effective and pro-poor governance structures, and enhance individual and community capacity-building (Middelbeek et al., 2014).

Often research states that the government is regarded as the main responsible actor for the coordination of climate adaptation (i.e. Lockwood 2010). However, to intervene at community-level other research stresses that multi participation approaches are necessary, with public and private parties as well (Mees et al., 2012). Ensuring effective community participation in climate change adaptation programs is essential (Van Aalst et al., 2008, Iwama et al., 2012). Moreover, researchers like Petzold and Ratter (2015) show the importance of essential technological measures. For example, the restoration of ecosystems (e.g., mangrove forest), improvement of infrastructures, the protection of people and relocation in extreme weather events, and coastal protection in response to SLR. Moreover, long-term planning, hazard mapping, legislation for construction and marine protected areas are regarded as important structural measures (Nunn, 2009). Particularly for long-term planning the government and her institutions usually play a pivotal role.

To summarize, climate change adaptation is always a combination of specific technology, resilient social capacity building, and public administration preparation together with democratic multi stakeholder involvement. This last part belongs to the field of good governance. Climate change adaptation is not only a matter of technology, but also a 'complex social interaction process' (Van Nieuwaal et al., 2009: 7f) that requires the rethinking of governmental processes.

The next paragraph will address the context of climate change adaptation, particularly on small islands, which is used to find out which indicators are applicable to assess good governance in that context.

#### 2.4 Good governance in the context of climate change adaptation in SIDS

Around the same time as the WB definition, the interest for good governance in SIDS emerged. The earliest research on good governance in SIDS was published by Ray (1999) with the focus on the Pacific Region. It is important to notice that “good governance and public administration reform do not mean small government” to understand that good governance can be achieved in various contexts. Good governance practices can mean different things to different people, and perceptions differ between developing and developed countries (Ray, 1999). It is argued that there should not be a single model for good governance practices and public administration structure due to the diversity of nations (UN General Assembly Resolution, 1996). Although there is not a single definition of good governance, the symptoms of *bad governance* are more or less universal. When applying good governance to the context of climate change adaptation in SIDS the literature shows that there is a focus on specific principles of good governance. All of Lockwood’s indicators were mentioned by at least one or more scholars. Both are listed in table 3.

Good governance principle	Scholars addressing the principle in SIDS
Legitimacy	Ray (1999) Turner et al. (2014)
Transparency	Ray (1999) Turner et al. (2014) Mycoo (2018)
Accountability	Ray (1999) Turner et al. (2014) Scobie (2018)
Inclusiveness	Ray (1999) Turner et al. (2014) Mycoo (2018) Pittman et al. (2014) Kelman (2016)
Fairness	Turner et al. (2014) Mycoo (2018)
Connectivity	Turner et al. (2014) Scobie (2016) Mycoo (2018) Gheuens et al. (2019) Middelbeek et al. (2014) Kelman (2016)
Resilience	Turner et al. (2014) Robinson (2018)

**Table 3** Lockwood’s (2010) good governance principles addressed in CCA literature on SIDS

The table shows that *legitimacy* is referred to by two authors in the context of SIDS (Ray, 1999; Turner et al., 2014). Turner et al. (2014) used Lockwood’s principles as the basis of their study.

They measured good governance perceptions of coral reef-dependent communities in the Caribbean. The results show a geographic pattern: more positive perceptions of governance principles were shown in Belize and Honduras (western Caribbean continental countries) than Barbados and St. Kitts and Nevis (eastern Caribbean Island countries). The authors indicate three reasons: differences in national level governance approaches; willingness to delegate authority to local level; and differences in socio-economic conditions and resource use (Turner et al., 2014).

*Transparency* is referred to by three authors that studied good governance in SIDS (Ray, 1999; Turner et al., 2014; Mycoo, 2018). ‘The reasoning behind decisions is evident’ was used in the study on water governance in Caribbean SIDS (Mycoo, 2018).

*Accountability* of governments is mentioned by three authors as an important indicator to measure good governance in the context of CCA in SIDS (Ray, 1999; Turner et al., 2014; Scobie, 2018). Scobie (2018) studied the nature of accountability in climate change governance in the Caribbean region. The study focused on the accountability principle of good governance in SIDS. The author distinguishes internal and external accountability and their various levels: normative, relational, decision, and behavioral. The study showed that accountability within departments (internal) was stronger than accountability outside departments (external) because actors did not acknowledge external stakeholders as agents to whom they should be directly accountable (Scobie, 2018).

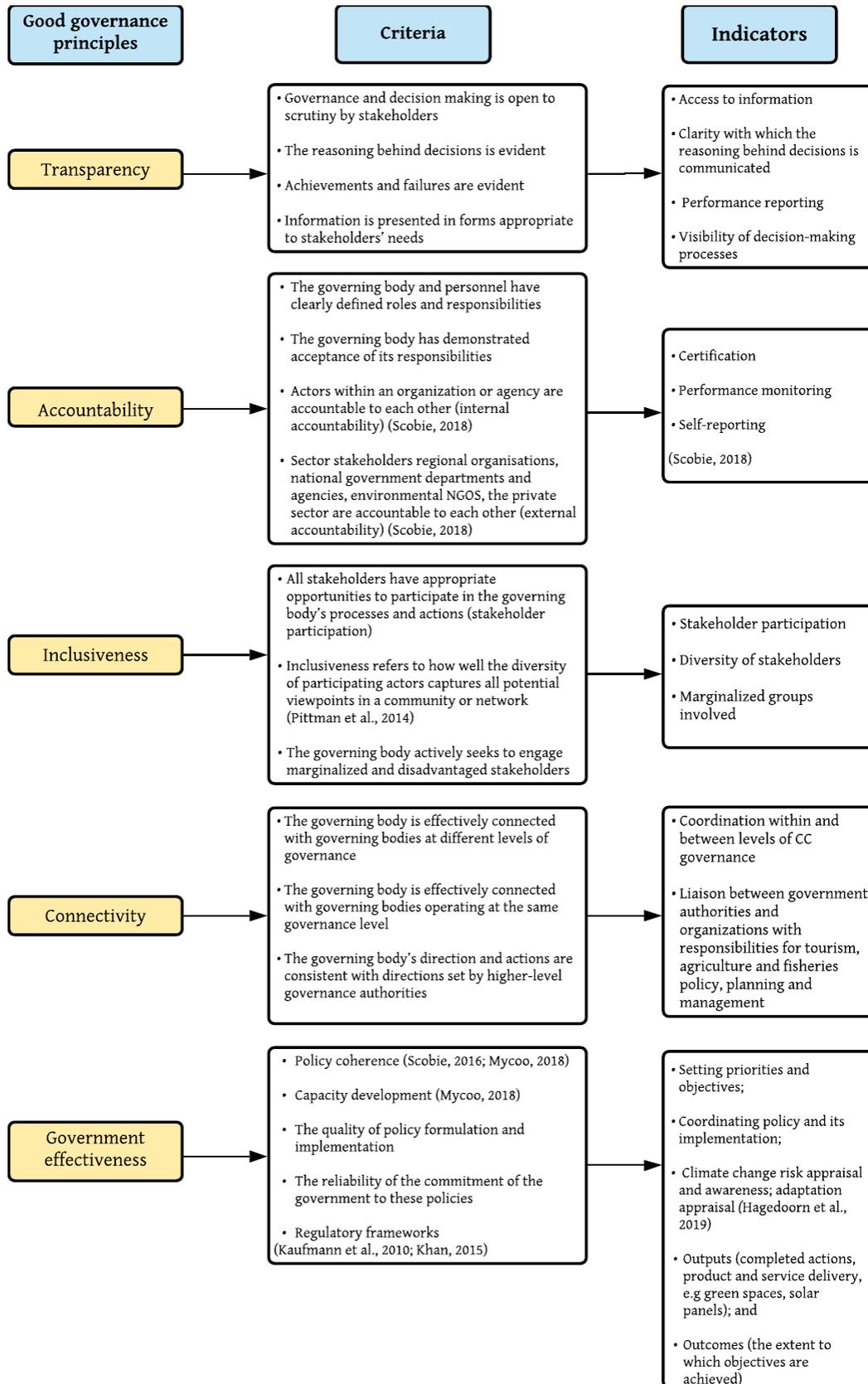
*Inclusiveness* is referred to mostly as the stakeholder’s participation or stakeholder engagement (Ray, 1999; Mycoo, 2018) or as part of *legitimacy* (UNDP, 2011). The reason Lockwood (2010) distinguished this indicator is because his definition of *legitimacy* does not include participation. “*Inclusiveness refers to how well the diversity of participating actors captures all potential viewpoints in a community or network*” (Pittman et al., 2014). Furthermore, community-based (local) participatory processes were mentioned as important for the inclusiveness of stakeholders (Kelman, 2016).

*Fairness* is referred to as *equity* in the literature on SIDS (Techera, 2010; Mycoo, 2018). Mycoo (2018) analyzes water governance in Caribbean SIDS and developed indicators to measure this: Effectiveness (policy coherence, capacity development), Efficiency (regulatory frameworks), Trust and (stakeholder) engagement (monitoring and evaluation).

*Connectivity* and *resilience* were not mentioned in the general debate on good governance, but in the context of CCA in SIDS they are regarded as important indicators by many scholars in the field (Turner et al., 2014; Robinson, 2018). Connectivity between various levels of government must be strengthened also to close the gap between community-based and national-level adaptation planning (Middelbeek et al., 2014). *Policy coherence* is regarded as an important criterion of good governance (Scobie, 2016; Mycoo, 2018). Scobie developed a three-pillar framework to assess policy coherence: 1) Setting and prioritizing objectives, 2) Coordinating and Implementing Policy, and 3) Monitoring, reporting and analysis (Scobie, 2016). The author argues that it is especially needed for sustainable development, which is included already in the principle of *connectivity by* Lockwood (2010). Furthermore, Boonreang (2015) provides suggestions on how governance and capacity-building in SIDS can be enhanced. These include cooperation between various levels of government, increased training and resources for the public sector, and improved awareness and participation on the community-level. It is argued that community participation can facilitate a greater social understanding of resilience and that good governance and proper adaptation measures are of great importance also or even more in SIDS (Boonreang, 2015; Gheuens et al., 2018).

## 2.5 Analytical framework

The analytical framework is adapted from Lockwood (2010) and Scobie (2016; 2018). The perception indicators were adapted from Hagedoorn et al. (2019). First, the WGI indicator government effectiveness and the indicators of Lockwood (2010) that were suitable for this research were selected. Then the good governance principles were searched in the context of climate adaptation in SIDS, which resulted in some additional criteria and indicators (Pittman et al., 2014; Scobie, 2016; 2018). Notable is that connectivity is regarded as a pivotal principle in the context of SIDS. A logical explanation for this would be that the Caribbean SIDS governments are often small governments (in the case of Curaçao and Bonaire) and therefore need to relate to other island governments or international bodies such as the Caribbean Community Climate Change Center (CCCCC).



**Figure 3** Analytical framework for assessing good climate change adaptation governance. Source: adapted from Lockwood (2010), Scobie (2016; 2018), and Hagedoorn et al. (2019).

The good governance principles that were identified for this research are presented in figure 3. Since it is such a diverse concept, a selection of principles was made based on a thorough literature research. The following criteria and indicators for good governance principles in the context of CCA in SIDS were selected based on a thorough literature review:

**Transparency** - governance and decision-making is open to scrutiny by stakeholders, the reasoning behind decisions is evident, achievements and failures are evident, and information is shared with stakeholders. These criteria are assessed by the access to information; the clarity with which the reasoning behind decisions is communicated; performance reporting; and the visibility of decision-making processes (Lockwood, 2010).

**Accountability** - the governing body and personnel have clearly defined roles and responsibilities and have demonstrated acceptance of their responsibilities. There is internal accountability which means that actors within an organization or agency are accountable to each other (Scobie, 2018). Moreover, there is external accountability: sector stakeholders from regional organizations, national government departments and agencies, environmental NGOs, and the private sector are accountable to each other. These criteria are measured by certification, performance monitoring, and self-reporting. Certification is impartial third-party auditing to determine to what extent the actor follows the principles (Scobie, 2018).

**Inclusiveness** - refers to how well the diversity of participating actors captures all potential viewpoints in a community or network (Pittman et al., 2014). The criteria include stakeholder participation in decision-making processes, diversity of the stakeholders, and the active engagement of marginalized people by the government. These criteria are assessed by the groups that are actively engaged in the process of developing and implementing CCA policies.

**Connectivity** - the criteria are that the governing body is effectively connected with governing bodies at different levels of governance and with governing bodies operating at the same governance level; and their direction and actions must be consistent with directions set by higher-level governance authorities. These criteria are measured by coordination within and between levels of Climate Change (CC) governance and the liaison between government authorities and organizations with responsibilities for tourism, agriculture, and fisheries policy, planning and management (Lockwood, 2010; Gheuens et al., 2019).

**Government effectiveness** - the criteria are policy coherence (Scobie, 2016; Mycoo, 2018), capacity development, the quality of policy formulation and implementation, the reliability of the commitment of the government to these policies, and regulatory frameworks (Kaufmann et al., 2010; Khan, 2015). Policy coherence can be assessed by the set priorities and objectives, coordination of policies and its implementation, and by monitoring, analysis, and reporting (Scobie, 2016). However, since the latter is overlapping with accountability, monitoring will be assessed under the accountability principle. Furthermore, the quality of policy formulation and implementation can be measured by climate change risk appraisal, climate change awareness, and by adaptation appraisal (Hagedoorn et al., 2019). The reliability of the commitment of the government to these policies can be assessed by the outputs (completed actions; and product and service delivery). The criteria of having regulatory frameworks in place can be measured by the outcomes (the extent to which the objectives are achieved) (Lockwood, 2010). These indicators are useful to assess the perception of government effectiveness on CCA policies by residents of both islands.

## 2.6 Conclusion

In this chapter a thorough literature research on the literature of good governance was done. The research covered more theoretical notions about good governance, analytical models with different combinations of indicators of gg and empirical studies that evaluate good governance in specific geographical spaces, cities, countries or small islands. This led to a synthesis of the WGI indicators discussed by Kaufmann et al. (2010) and the good governance principles of Lockwood (2010). Then these indicators were applied in the context of CCA in SIDS, which led to an analysis of articles in Pacific and Caribbean islands. From the WGI the *government effectiveness* indicator was found useful for this research. From the principles of Lockwood (2010) four principles were found frequently in the context of SIDS: transparency, accountability, inclusiveness, and connectivity. Finally, an analytical framework for this thesis research (figure 3) was developed with the selected good governance principles, their criteria, and indicators. This analytical framework will be used as an evaluative tool to assess CCA policies in Curaçao and Bonaire. In the next chapter the methods of this research are addressed.

## 3. Methods

### 3.1 Introduction

The methods chapter clarifies the way in which this thesis research was conducted. For the research a mixed-methods strategy of data collection has been used. The first sub-question was elaborated on in the paragraph research questions and framework, since it was part of the literature review and developing the theoretical framework. In this section the methods for the remaining sub-questions are discussed.

For sub-question 2, desk research on secondary literature, official policy documents and reports was carried out. For sub-question 3 and 4, (semi)-structured interviews were conducted with local key stakeholders, such as policy makers and NGOs, during the research period in Curaçao and Bonaire. From these interviews information on these policies and the political views on CCA was gathered.

The scope of this study is narrowed to two of the three ABC islands, Curaçao and Bonaire. On the one hand this is due to time constraints and therefore it was impossible to conduct interviews on all three islands. On the other hand, they were chosen because of their different governance jurisdictions, to investigate potential good governance differences.

### 3.2 Assessing policy documents

The sub-question “*What are the policies and practices on CCA that are in place in Curaçao and Bonaire and to what extent can they be considered as good governance practices?*” was addressed using government websites and documents to find out what has been published on climate change adaptation on both islands and to what extent it is on their public agenda. From these documents information on their priorities and goals was gathered. This sub-question was relevant for the following two sub-questions, because diving into these official documents made it possible to specifically address the policies during the stakeholder interviews. In table 4 the policies that have been published over the past decade are listed. After desk-research on the environmental policies, an analysis of the documents was carried out using the analytical framework. The policies were analyzed on the good governance indicators and a table was made to present the results whether the good governance criteria were present in these policies

or not. Some policy documents were more climate policies in a broader sense, like environmental policies, mentioned as successful by the stakeholders during the interviews.

<i>Policies in Curaçao</i>	<i>Policies Bonaire</i>
Overseas Territories Regional Risk Reduction Initiative (R3i) 2009 - 2016	Nature Policy Plan The Caribbean Netherlands 2013 - 2017
CARIBBEAN ISLAND OPRC PLAN (Caribbean Island Oil Pollution Response and Cooperation Plan) - 2012	Enforcement of Nature and Environmental legislation in the Caribbean Netherlands - 2019
Strategies For Sustainable Long Term Economic Development In Curaçao - 2013	Nature and Environment Policy Plan Caribbean Netherlands 2020 - 2030
Agriculture Policy Plan 2013-2017	
National Development Plan Curaçao 2015-2030	
Blue Halo Curaçao - 2015 (Waait institute)	
Environmental Policy Plan Curaçao 2016 – 2021	
Coastal Development in Curaçao: Best Practices to Minimize Adverse Impacts to Curaçao’s Marine Environment - 2018	
National Energy Policy for Curaçao - 2018	
A Roadmap For SDG Implementation In Curaçao - 2018	

**Table 4** Relevant environmental policy documents in Curaçao and Bonaire

### 3.3 Stakeholder perceptions

After identifying the climate adaptation policies on both islands, the knowledge, awareness and the views of the government officials (policy makers) and NGOs was examined. The sub-question was: “*What are the stakeholders’ perceptions on the different aspects of good governance in Curaçao and Bonaire?*”

For this part of the research question semi-structured interviews were conducted in Curaçao and Bonaire during a period of 12 weeks. The analytical framework, developed in chapter 2, was used to construct the interview questions. The five selected good governance principles (Transparency, Accountability, Inclusiveness, Connectivity, and Government Effectiveness) served as the basis of the questions. To address all these principles a set of 5-8 questions for each principle and its indicators were developed. The interview guide can be found in the appendix. The analysis of the interviews provided insight on which good governance principles are achieved from the perspective of the stakeholders and which need improvement in the future development of CCA policies. Since this research is a multi-criteria analysis in a qualitative form, there are no scores given to the indicators. However, the interviews provide enough information on all the principles. After transcribing the interviews, they were coded in NVIVO to assign the respondents answers to the indicators that ‘measure’ the good governance principles. A list of stakeholders (policy makers and NGOs) who are relevant for this research can be found listed below. The following contacts were approached by email.

<i>Stakeholders in Curaçao</i>	<i>Stakeholders in Bonaire</i>

<ul style="list-style-type: none"> <li>• S1 = General Affairs, Risk Management &amp; Disaster Relief (Algemene Zaken, Directie Risicobeheersing &amp; Rampenbestrijding)</li> <li>• S2 = Director Policy Department Ministry of Public Health, Environment, and Nature (GMN)</li> <li>• S3 = Ministry of Traffic, Transport &amp; Urban Planning (VVRP)</li> <li>• S4 = Meteorological Department Curaçao (METEO)</li> <li>• S5 = Central Bureau of Statistics Curaçao (CBS)</li> <li>• S6 = Algemene Zaken, Directie Risicobeheersing &amp; Rampenbestrijding (AZ, DRR)</li> <li>• S7 = General Affairs, Risk Management &amp; Disaster Relief (AZ, DRR)</li> <li>• S8 = Department of Agriculture, Environment, and Nature (LMN, GMN)</li> <li>• S9 = Caribbean Research and Management of Biodiversity (CARMABI)</li> <li>• S10 = Ministry of Economic Development (MEO)</li> <li>• S11 = Ministry of Health, Nature, and Environment (GMN)</li> <li>• S12 = Two stakeholders of the Ministry of Economic Development (MEO)</li> <li>• S13 = Amigu di Tera (NGO, Curaçao Sustainable Nature Development)</li> <li>• S14 = CARMABI</li> <li>• S15 = Biologist</li> </ul> <p>Total interviews: 15</p>	<ul style="list-style-type: none"> <li>• S16 = Stichting Nature Parks Bonaire (STINAPA)</li> <li>• S17 = Landbouw, Natuur en Voedselkwaliteit/Rijksdienst Caribbean Netherlands (LNV, RCN)</li> <li>• S18 = Ministry of Education, Culture and Science (OCW)</li> <li>• S19 = Agriculture, Cattle breeding, and Fishing/Openbaar Lichaam Bonaire (LVV, OLB)</li> <li>• S20 = Ruimte &amp; Ontwikkeling/Openbaar Lichaam Bonaire (R&amp;O, OLB)</li> <li>• S21 = Social Affairs, Education, Culture, Public Health and Youth (OLB)</li> <li>• S22 = STINAPA</li> </ul> <p>Total interviews: 7</p>
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**Table 5** Interviewed stakeholders in Curaçao and Bonaire

### 3.4 Identifying similarities and differences between Curaçao and Bonaire

The climate policy documents of both islands are analyzed with the analytical framework of the good governance principles. Each indicator of the good governance principles is assessed in these documents. For Curaçao the Curaçao Climate Change Policy Assessment 2018 was used to investigate what has been done so far and which good governance principles need to be strengthened. For Bonaire the Nature Policy Plan 2013-2017 and the Nature and Environmental Policy Plan Bonaire 2020-2030 were used. The sub-question was: *“What are the similarities and differences between Curaçao and Bonaire on aspects of good governance regarding their CCA policies and can they be attributed to differences in jurisdiction?”*

In addition to the policy documents comparison, the interviews were used to gather the knowledge and perspectives of the interviewed policy makers and NGOs on the good governance principles and assess to what extent these principles were present in the practices of the policy development process. The interview results were compared between the two islands. It was assessed if different use of good governance principles led to differences in practices in CCA on both islands. Furthermore, based on the interview results, it was assessed if the context of the different jurisdictions (Curaçao an autonomous country in the Kingdom, Bonaire, part of the Caribbean Netherlands) is of influence on CCA policies and practices.

#### The Site

The research was done on the site, in Curaçao and Bonaire. These former Dutch colonial islands became, together with 4 other Caribbean islands, an autonomous country in 1954. The islands were part of the six islands of the former Netherlands Antilles (1954-2020) Curaçao has 160.000 inhabitants, Bonaire 20.000 (CBS). Both islands are categorized as middle high-income countries, with yearly BNP of \$19.700 in Curaçao (WB 2019) and \$24.000 in Bonaire (CBS 2018). Curaçao has 444 km<sup>2</sup> and Bonaire 288 km<sup>2</sup>. Both islands have a multi ethnic

populations with African Caribbean's, Latino's, European Netherlands and people from other Caribbean islands.

During my stay of almost three months, I managed to conduct all the interviews, most of them face to face on the locations of the respondents, their workplaces, institutes or ministries in Willemstad in Curaçao and in Kralendijk in Bonaire. The situation was particularly challenging because in the beginning, after my arrival, there was a high outbreak of Covid-19, and the island went into a strict lockdown. Nevertheless, I managed to stay. Shortly after my arrival, a fellow student from the UU master Sustainable Development arrived. She also had planned her master thesis research in Curaçao. We rented an apartment together, worked on our theses and persisted during the lockdown. Despite the heavy lockdown in the first weeks, all the fieldwork was done in the expected time. Potential respondents were often rather easy to reach by phone to make an appointment and were often available on short term. Long term appointments were more difficult to make, but short-term appointments were quite flexible. Names of respondents were searched by the internet of ministries, nature institutes and NGOs. Because I lived in Curaçao during primary school and high school years with my family, there were several intermediate connections that were used. During the interviews the snowball-method worked out well. The respondents mentioned other relevant stakeholders.

## 4. Results for Curaçao

### 4.1 Introduction

In this chapter the results of the desk research as well as the interviews are presented. In paragraph 4.2 the CCA documents and reports of Curaçao are analyzed with the analytical framework presented in chapter 2. The analytical framework consists of five good governance principles, and each principle has several indicators. These indicators are used to assess to what extent the policies in the documents can be considered good governance practices. At the end results of the desk research are summarized to answer the second question of this research: *What are the policies and practices on CCA that are in place in Curaçao and Bonaire and to what extent can they be considered as good governance practices?*

In paragraph 4.3 for Curaçao the stakeholder perceptions on the different aspects of good governance are presented. These results are also assessed with the same analytical framework. The conclusion in the last paragraph provides an answer to the third question of this study: *What are the stakeholders' perceptions on the different aspects of good governance in Curaçao (and Bonaire)?* Results for Bonaire will follow in chapter 5.

### 4.2 Previous and current policy documents on Climate Change Adaptation in Curaçao

During my desk-research, searching for the main policy documents and reports on CCA polities I came across several policy documents from the past, regarding aspects of nature and environmental policies. These policy documents are not all CCA policies as such, but environmentally related or along the lines of sustainable development. In practice policy documents do not always follow the concepts as they are defined in scientific environments. Climate change adaptation is scientific sharper than the term is used in practice by policy makers around the world. Also, earlier more broad concepts such as sustainable development or environmental policy are still used and contain elements that later are more precisely

defined as CCA. Therefore, in this desk-research these policy documents are analyzed. First, it is distilled whether the policies in the documents state something related to CCA. Second, each of the documents is analyzed using the analytical framework to assess to what extent these policies contain elements of the principles of good governance.

### **Overseas Territories Regional Risk Reduction Initiative (R3i) 2009 - 2016**

This initiative was developed by the UNDP and covers the British and Dutch overseas countries and territories (Anguilla, Aruba, British Virgin Islands, Cayman Islands, Montserrat, Turks and Caicos, and the former Netherlands Antilles (Bonaire, Curaçao, St Maarten, Saba, and St. Eustatius). It was meant to strengthen the capacity of these small islands to predict and prepare for natural hazards and improve their resilience, by providing a network of regional infrastructure, programs, policies and protocols. The National Report Curaçao (2014) states that a preliminary risk and hazard assessment has been conducted in Curaçao under the R3I, which resulted in preliminary hazard maps and a database was created to archive all the documents related to disaster management.

In terms of CCA, the final report (2015) addressed that a Climate Change Committee was set-up in 2010 under the initiative and that the CCCCC was developing a National Climate Change Adaptation Strategy and Action Plan and a Climate Change Public Education and Outreach Strategy. Some of the programs under the initiative promote good governance. Furthermore, the report states that for Curaçao the well-being of the island depends on the protection of ecosystems, such as coral reefs and mangrove wetlands and that it is necessary to adopt measures to improve resilience and adaptation to the consequences of climate change and severe meteorological events (Bettencourt & Imminga-Berends, 2015).

### **Caribbean Island Oil Pollution Response and Cooperation Plan (OPRC) - 2012**

The Caribbean countries established a Sub-Regional Oil Spill Contingency Plan for the Island States and Territories of the Caribbean Region called the “Caribbean Plan” under the Cartagena Convention of 1983. The plan was led by The Regional Marine Pollution Emergency, Information and Training Centre (RAC-REMPEITC - Caribe) under the United Nations Environmental Policies (UNEP). The objectives of the Plan were to promote and implement regional cooperation in oil spill contingency planning, prevention, control and clean up; to develop appropriate measures of preparedness and systems for detecting and reporting oil spill incidents within the area covered by the Plan; to institute prompt measures to restrict the spread of oil; and to identify resources to respond to oil spill incidents (RAC-REMPEITC, 2012).

In terms of CCA, this policy does not address specific adaptation measures, but rather mitigation strategies to enhance the protection of coastal areas and reduce (the negative consequences) of oil spill incidents (RAC-REMPEITC-Caribe, 2012). This plan is one of the few that is ratified and implemented in Curaçao.

### **Strategies For Sustainable Long Term Economic Development In Curaçao - 2013**

This plan was developed by the Ministry of General Affairs (AZ). The objective of this task was to assist the Government of Curaçao to develop a sustainable and stable long term economic development strategy, through an in-depth analysis of the issues on the island and possible options to address them. This resulted in a set of Policy Recommendations, which were translated into two operational Action Plans (Short- and Long-Term) and an Implementation

Mechanism. The recommendations are set in Guiding Principles, which state the overall context and process for giving direction over the long-term and ensure trust between the Government and Curaçao's population. There were multiple fields which were addressed in the report, for the purpose of the research only the environmental objectives are taken up: enhance the legislative framework to protect the marine resources; develop and enforce an integrated waste management plan; identify water and electricity saving measures; encourage through incentives carbon neutral tourism; address effects of warming temperatures on fish stock; mandate sustainability impact assessments; regional cooperation on issues of common interest; and develop professional and research capacities in environmental policies.

In terms of CCA, the policy plan highlights the challenges related to climate change and states that adaptation and capacity-building must be prioritized. Moreover, the development of a framework within the UNFCCC is established to address urgent and long-term adaptation needs of SIDS (AZ, 2013).

### **National Development Plan Curaçao 2015 - 2030**

The NDP began under the leadership of the former Minister of Economic Development (MEO) and was embraced by the successive Ministers of Economic Development and subsequent Prime Ministers. The NDP's short-term objectives under Sustainability are focused on environmental sustainability. The relevant SDGs for Curaçao are better ocean, and integrated water resource management, and increased investment in renewable energy. There is cooperation between the government, the Global Water Partnership, the local university and NGO stakeholders to create an integrated water management plan. This plan should lead to better management of the water resources, including wastewater, stormwater, water demand and supporting regulations and legislation. Aqualectra developed Smart Meters and a water pipeline remediation project. Furthermore, the government works together with Carmabi and other stakeholders to research and develop protective measures for reefs, coasts and fisheries (NDP, 2015).

In terms of CCA, the policy plan addresses severe threats to mangroves and coral reefs and states that regional and international efforts are necessary to reduce the impact of climate change to protect the reefs of Curaçao. One of the 17 objectives is to take urgent action to combat climate change and its impacts. However, specific adaptation measures are not mentioned (NDP, 2015).

### **Blue Halo Curaçao - 2015 (Waitt institute)**

Blue Halo Curaçao is a partnership between the Government of Curaçao, the Waitt Institute, and other stakeholders which was launched in 2015. The Waitt institute is an American organization and consists of planning experts, lawyers, scientists, blue economy experts, sustainable fisheries specialists, communication connoisseurs, and policy analysts. The Council of Ministers adopted the Blue Halo Curaçao Policy Recommendations in November 2017. The plan is established to achieve sustainable, profitable, and enjoyable use of ocean resources. With this project ocean policies and a marine spatial plan was developed over the past five years by engaging stakeholders.

The actions taken under the initiative regarding CCA are the fishing reproduction zones, the no fishing zones, and a regulatory framework and new fisheries laws were implemented (Waitt Institute, 2015).

### **Environmental Policy Plan Curaçao 2016 – 2021**

The EPP Curaçao is developed by the Ministry of Public Health, Nature and Environment (GMN). For the implementation of most proposals of the plan, other entities are needed, both from the government and from non-government entities. The starting point of this policy plan is to establish licensing standards, against air, sea and environment pollution, soil contamination and for safe drinking water, standards that are based on the prevention of health problems. In addition, promoting the internalization of environmental costs and responsibility by the companies concerned by rewarding good environmental care. The main topics of the EPP are water policy (wastewater, waste management including litter), the pollution of the oil refinery, climate policy, legislation and enforcement.

Regarding CCA the policy plan includes an obligatory consideration of climate related aspects in the code when issuing building permits, both related to natural ventilation and cooling and adequate insulation. To adapt to the effects of SLR and extreme weather watershed regulations are implemented and building permanent constructions in vulnerable areas is restricted (GMN, 2016).

### **National Energy Policy for Curaçao - 2018**

The NEP Curaçao is led by the Ministry of Economic Development (MEO). The plan aims to make Curaçao's energy sector more efficient, more transparent for stakeholders and less dependent on petroleum imports. The nine strategies set by the policy are: 1) Solar panel electricity production, 2) Wind energy, 3) Natural gas, 4) Construction of a waste-to-energy facility, 5): Energy efficient transport, 6): Energy efficient buildings, 7): Demand-side energy efficiency strategy, 8): Efficient system operation, and 9) Efficient system planning. The policy takes up some key principles: the Government promotes the use of environmental best practices in the area of energy production and consumption, promoting new technologies, energy security will be increased by the actions taken, and the transport sector should become more efficient. Furthermore, the NEP recognizes that the regulatory framework needs to be strengthened to meet internationally accepted standards, and consumer behavior will be addressed. The government also recognizes that Aqualectra (the electricity and water company) and Curoil (the fuel import and distribution company) have to operate in accordance with good corporate governance principles, and implement the policy objectives (NEP, 2018).

In terms of CCA, the NEP includes sustainability and the transition towards renewable energy into their policy. Reducing the use of natural resources and the transition can be considered a CCA practice.

### **Coastal Development in Curaçao: Best Practices to Minimize Adverse Impacts to Curaçao's Marine Environment - 2018**

The Coastal Development in Curaçao was developed under the Blue Halo Curaçao in 2018 led by the Waitt institute. The report provides opportunities to minimize the environmental risks of development by implementing the following policy development and local management strategies: existing international commitments<sup>4</sup> must be adhered to. Existing legislation on nature protection, land use planning, and waste management must be enforced, and new legislation for environmental impact assessments, and water quality legislation should be developed. Moreover, aligning the economic goals of the Curaçao NDP with the environment,

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<sup>4</sup> Cartagena Convention, Convention on Biological Diversity, and the London Convention on the Prevention of Marine Pollution.

with UN Sustainable Development Goals; and identifying a plan for coastal hazards like SLR and flooding are important (Waitt Institute, 2018).

This is one of the CCA measurements taken under the Blue Halo Initiative. The document states that CCA is identified as an important goal for Curaçao. Adaptation is a significant challenge due to Curaçao's high level of coastal area to land mass. The key issues are technical preparation and financial investment against the consequences of CC. In addition, to achieve sustainability for the island, current infrastructure and future development should be enhanced (Waitt Institute, 2018).

### **A Roadmap For SDG Implementation in Curaçao - 2018**

In June 2018, a UN mission to support the implementation of the 2030 agenda was carried out in Curaçao. During the mission the UN group (UNDP, ILO, UNICEF, UNFPA and ECLAC) came together with multiple stakeholders from Government, Parliament, Supreme Court of Audit, national consultative organs, private sector, academia, labor unions, civil society and youth groups, as well as representatives from the Dutch Government. The goal of the mission was to implement a SDG roadmap for the island. The most important areas that were identified were: a) Assessment of current development plans and their alignment to the 2030 Agenda (mainstreaming); b) Identification of SDG accelerators, with accompanying priority interventions; c) Financing; d) Data production and monitoring; e) Institutional coordination mechanisms for the 2030 Agenda; and f) Partnerships and awareness raising. For environmental sustainability the focus areas were land-use, water and ocean management, and energy and renewable energy. The main challenges are weak enforcement of old legislation that needs to be revised to current standards. Moreover, water, air and soil pollution; illegal land occupation; increasing pressure on ecosystems and biodiversity; unsustainable fishing practices; vulnerability to climate change; energy insecurity; and a significant carbon footprint. Three "positive drivers" were suggested for the Environmental Sustainability Accelerator: water and ocean management, land use management under a Ridge to Reef approach, and renewable energy.

Regarding CCA, disaster risk preparedness is addressed in the roadmap. Examples are shoreline and watershed management for coastal protection.

In conclusion, of these policies eight of the nine address CCA for Curaçao. The R3i and the NDP highlight an adaptation plan to protect mangroves and coral reefs. The Strategies for SD points out the CC impacts and the need for an adaptation strategy in general. Moreover, the Blue Halo Initiative established no fishing zones, reproduction zones and new fisheries laws. The EPP and the SDG roadmap has caused better watershed management to adapt to SLR. The NEP is supposed to transition the island towards renewable energy. In terms of good governance principles, the R3i addresses them. The Blue Halo Initiative is one of the few plans that has resulted in visual outputs. After finding all these policies they were found they were analyzed on the good governance indicators. All the indicators for each good governance principle are shown in the table below. In the left column the policies that were mentioned above are shown.

Indicators	Transparency				Accountability			Inclusiveness			Connectivity		Government Effectiveness			
	Access to information	Clarity with which the reasoning behind the decisions is communicated	Performance reporting	Visibility of the decision making process	Certification	Performance monitoring	Self-reporting	Stakeholder participation	Diversity of stakeholders	Marginalized groups involved	Coordination within and between levels of CC governance	Liaison between government authorities and tourism, agriculture and fisheries	Setting priorities and objectives	Coordinating policy and its implementation	Climate change awareness	Outputs & Outcomes
Overseas Territories Regional Risk Reduction Initiative (R3i) 2009 - 2016	X							X					X	X	X	X
Caribbean Island Oil Pollution Response and Cooperation Plan (OPRC) - 2012			X			X	X	X			X	X		X		
Strategies For Sustainable Long Term Economic Development In Curaçao - 2013	X	X	X	X	X	X	X	X	X	X	X		X	X	X	Expected outputs
National Development Plan Curaçao 2015 - 2030	X	X	X	X		X	X	X	X	X		X	X		X	
Blue Halo Curaçao - 2015 (Waitt institute)	X		X	X		X		X	X			X	X		X	X
Environmental Policy Plan Curaçao 2016 - 2021			X			X	X	X	X							
National Energy Policy for Curaçao - 2018	X	X			X	X	X	X			X			X		
A Roadmap For SDG Implementation in Curaçao - 2018	X	X	X	X	X	X	X	X	X		X	X	X		X	Expected outputs

**Table 6** Good governance principles in the policies of Curaçao

The table above shows the results of to what extent the policy documents address the good governance principles from the analytical framework. A remarkable trend is that over the years in the analyzed documents the number of elements of good governance is increasing. This would mean that making policies according to good governance principles is gradually growing. The different indicators show some variety. Interesting is that in the documents the accountability indicators are (clearly) regulated (16 x over 3 indicators). The other good governance principles transparency, inclusiveness, connectivity and government effectiveness are more or less the same presence in the policy documents, analyzed by the indicators (14 x transparency on 3 indicators, 15 x inclusiveness over 3 indicators, 8 x connectivity (over 2 indicators) and 18 x government effectiveness over 4 indicators). The *Roadmap for SDG Implementation in Curaçao* from 2018 scores on all the indicators except on two (marginalized groups involved and coordination and implementation). The document points

out that there is a lack of coordination between the ministries. Also, the document *Strategies For Sustainable Long Term Economic Development In Curaçao* from 2013 scores on all indicators except for one indicator of connectivity: liaison between government authorities and tourism, agriculture and fishery policies and management organizations.

#### 4.3 The stakeholder perceptions on different aspects of good governance in Curaçao

In this paragraph the results of the stakeholder interviews will give insight on perceptions on different aspects of good governance. The results will be reviewed based on the analytical framework. It will then become clear in which areas of good governance the islands accelerate and in which areas there is room for improvement. The eyes of most stakeholder's specific climate change adaptation policies have yet to be developed. There are sustainable development policies and environmental policies in place but adaptation to climate change impacts is not. They were questioned on the NDP 2015-2030 and The SDG roadmap, and the EPP 2016-2021. The ministries that are involved with environmental policies are AZ, GMN, MEO, METEO, and VVRP.

#### Transparency

In general transparency is valued greatly by the stakeholders that were interviewed. The Ministry of General Affairs stated that there are committees in place with all relevant stakeholders where the Department of Risk Management & Disaster Management (DRR) has a monitoring role. The stakeholders are encouraged to provide input and DRR is responsible for monitoring of the action plans (S1, AZ, 2021).

At this moment the GMN is starting to develop a CC policy. There have been several consultations with the working group the Climate Change Committee Curaçao (C-4) to make an inventory of the status of climate policy measures within the government and externally. One of the conclusions of the inventory was that citizens and the private sector wanted to have more information on climate change from the government. METEO makes several attempts by providing folders and organizing a conference on tsunami day, where several organizations were invited to create a report (S2, GMN, 2021).

The OPRC Plan 2012 (Oil Spill) was created transparently with the input of the stakeholders. *"The latest version has been sent to everyone and they were able to give feedback. Some have done that. Finally, we had a meeting with all those stakeholders. And on certain points that were not yet completely aligned we agreed on during that meeting. It is a document that is widely supported. That is certainly the case."* (S7, DRR, 2021)

The NDP 2015-2030 is regarded as a very interactive program and very transparent. Its documentation is available on the government website. The difficulty with this is that citizens don't know that the information is there (S12, MEO, 2021).

Stakeholder 11 (S11) of the Ministry of Health, Nature, and Environment (GMN) stated that transparency can always be improved. Recently they did a comparison between Curaçao and The Netherlands and sensed anxiety towards publicity. This is because the policy developers are not the people who implement the law. *"Last year it was quite difficult to be transparent. Not that that is not possible, but people are quite suspicious of governments. The government must be very careful with things they make public. All eyes on and criticism. And that makes it even harder to be transparent because you try to do things the best you can. But you can be criticized very quickly"* (S11, 2021). Stakeholder 8 (S8) of the Department of Agriculture, Environment, and Nature (LMN) commented on the Ocean Plan (Blue Halo Curaçao): *"I was involved in that myself. We had several listening tours. We had six target*

groups participate in the listening tour, including the NGOs. That was one of the groups. Youths were a different group; government agencies were a different group. And we also conducted a survey among the general public on ocean policy.”

Stakeholders 12<sup>5</sup> of the Ministry of Economic Development (MEO) were questioned on their transparency in business operations regarding Sustainable Development. They said it could always be improved in the field of climate policy and sustainable development policy. *“In most cases it happens centrally, but you depend on different actors for information. If you don't have a dashboard or monitoring system yet, you may not have that transparency yet. It is a work in progress. A monitoring system is in the development phase. There is consultation with various authorities.”* (S12, MEO, 2021). On Kingdom level, there are consultations on monitoring and indicators, and developing a dashboard for the entire Kingdom. The SDG Secretariats of The Netherlands, Aruba, Curaçao, and Sint-Maarten have monthly meetings to see how they can come to one central monitoring system, to improve transparency. Now everything is discussed within every agency, within every ministry and then it is important to consult regularly to obtain information. Curaçao developed a Sustainability Coalition to exchange information with public, private, and civil society. In May the first meeting took place and people were very surprised with everything that is going on on the island regarding sustainability (S12, MEO, 2021).

The Ministry of Traffic, Transport & Urban Planning (VVRP, S3) stated on improving transparency: *“If you want to achieve your goal, then you have to take action. So, you announce it, you make your press releases. You organize an information evening. You're going into the community centers. It depends on what it is about and not everything is suitable for that. You talk to a directly interested party, people can ask questions, and that should be part of the process.”* (S3, VVRP, 2021).

The Meteorological Department of Curaçao (METEO, S4) is developing a Curaçao Climate Change Platform (CCCP), where everyone can subscribe as an organization. Representatives of the public sector, i.e., of the government, the private sector, academics, and NGOs. Anyone can register and participate in the discussion. The mission of the CCCP is to facilitate a scientific and evidence-based platform where expertise related to the adverse impacts of climate change is combined, to formulate mitigation and adaptation strategies for Curaçao (S4, METEO, 2021).

### ***Access to information***

Some of the stakeholders were positive, whereas others were a bit skeptical. The MEO (S12, 2021) is quite positive about the access to information: *“It is arranged in such a way that people can request information about all kinds of things that they think are necessary to get that information. Privacy is considered. All documents are open.”* Carmabi (S9) is also positive about the access to information. S9 stated that there are short lines with the government: *“If you would compare it with the Netherlands, how do you get to Rutte? That is not so easy so to speak. It's all a little easier here”* (S9, Carmabi, 2021). The ministry of GMN (S2) indicates that stakeholders can be critical of the policies that were developed. If there is scrutiny from NGOs, the private sector or a citizen, the GMN works together within a framework.

One of the stakeholders was quite skeptical of the access to information. *“Here, the government puts everything on Facebook. I find it odd that they are using a private platform to disseminate government information. On the other hand, I understand, because you reach a large group of people. Then, I come back to the transparency of the government. How easy*

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<sup>5</sup> S12 are two stakeholders of the MEO who were questioned during the same interview.

*is the government to find? How easily can I find information? The government could be much better in terms of accessibility. Sometimes you see addresses and telephone numbers on the government website that are no longer in use. Providing information is very difficult in Curaçao” (S11, GMN, 2021).* Furthermore, S11 also indicated that the government website is in three languages, but not every language provides the same information. For example, in Papiamentu everything is published on Covid-19 within a few minutes after the press conference, but it takes 2 days before the same information is published on the English and Dutch government website (S11, GMN, 2021).

### **Performance reporting**

The METEO (S4) indicates that they set up a panel to communicate the achievements on the SDG roadmap. In the past year the panel has functioned moderately according to S4 and needs to be adjusted. The panel is regarded as the most important tool for transparency because that way everyone can see who did a good job and who didn't (S4, METEO, 2021). The DRR states that not only organizing events on climate change is of importance, but also a follow-up on the events, and a specific planning (S7, DRR, 2021).

### **Visibility in the decision-making process**

To create 'visibility in the decision-making process', the minister developed a Sustainability Coalition, which is a platform where all actors can inform each other about developments in the field of SD. This is linked to the SDGs. This is a platform where all actors meet and inform each other about developments in the field of SD. This way they can immediately start monitoring all interventions and initiatives that lead to the realization of the SDGs in Curaçao in all kinds of areas and fronts (S12, MEO, 2021). For the SDG Roadmap public officials started with SDG 14 (the ocean). This will also happen for the other SDGs. *“We are going to organize an event for all SDGs with all stakeholders. The events are to inform ourselves and to engage the public and provide more information. We also have SDG week in September. Last year. Many speakers, people participate interactively. Also virtually. We are going to repeat it this year. It has to be every year. To be able to present the progress” (S12, MEO, 2021).*

In conclusion, there was bifurcation on the stakeholder's perception towards access to information. Some were positive, others felt like the access could be improved. Performance reporting is regarded as important to make the achievements of the government clear. METEO's platform could improve this in the future. On the 'visibility in the decision-making process' one of the stakeholders was negative in terms of how this will be achieved in the future (S8, LMN, 2021).

### **Accountability**

The accountability principle was assessed by certification, performance monitoring, and self-reporting. Moreover, the criteria of the principle were also addressed during the interviews. All stakeholders expressed that third party auditing by certification was not happening in Curaçao. Performance monitoring is done by 5 of the 13 stakeholders. Self-reporting was mentioned by three of the stakeholders. The METEO specifically mentioned that self-reporting is happening through the panel mentioned under the good governance principle transparency (S4, METEO, 2021).

### **Allocation of roles and responsibilities**

In terms of the criteria for accountability, the roles and responsibilities of the various ministries were assessed. Moreover, their internal and external accountability were

specifically mentioned. The ministry of General Affairs (AZ) indicates that they are not that busy with the SDGs. Once a quarter they must do a course or a workshop, but after that people don't feel responsible for it. The roles and responsibilities for climate policy are not clearly allocated. *“At one point, AZ was busy putting all stakeholders together to see who is doing what. I think everyone is involved in it a bit, but everyone in their own area. AZ wanted to get everyone together to better divide the tasks”* (S7, DRR, 2021).

All stakeholders point towards the VVRP, led by the METEO, as the main driver of the climate policies. This is also what came forward in the Curaçao Climate Change Policy Assessment (S12, 2021). However, VVRP indicates that they have a million other things that they are responsible for, and that climate is not on top of the list. *“Yes, the people of the METEO can tell you a lot about [climate change], but in the end they are not responsible for doing something about it. That baton must be handed over to the Ministry of GMN”* (S3, VVRP, 2021).

The GMN is allocated by some of the stakeholders, but they indicate that they are mostly involved in health, and not in nature and environment. It is a constant battle to allocate the roles and responsibilities according to one of the stakeholders (S11). The ministry of AZ and the DRR are the ones responsible for the Risk Profile 2017 - 2022, which provides insight on all the future risks, including climate change threats for the island. They develop action plans for these risks. S7 of the DRR states that they are responsible for the action plans and for testing it and monitoring. It is included in the plan that all stakeholders have their own responsibility. When the plan is activated, 1 person is responsible for the whole process. The latter then has to scale up and scale down the report according to a certain structure (S7, DRR, 2021). GMN and VVRP are overlapping in their roles and responsibilities according to S1. Green infrastructure and sewage systems are within VVRP, but water management within GMN, so these ministries also have to work together on these responsibilities (S2, GMN, 2021). S8 of GMN points out that there is a blueprint of the government apparatus, which states what the tasks and responsibilities are of each ministry. In addition, each ministry has its business plan with appendices. *“If all goes well, the duties and responsibilities should be clear, insofar as they are not detailed in the law. Sometimes the law states which minister is responsible for which policy field. If this is not the case, this will be clearly stated in the NWO final memorandum, stating the duties and powers of the ministries”* (S8, GMN, 2021).

### ***Performance monitoring and self-reporting***

According to S10 of the MEO there is too little accountability. *“It's a hard one too. This is particularly noticeable during the transition of policy formulation, adoption and decision-making. The execution is often the most difficult. Because that's often where the role patterns we just mentioned come into play. That execution often falls short of expectations. Then I think we have a faster tendency here to cover things that would be good with the mantle of love. “Oh yes, that's the daughter of... She means well”. Or just the other way around, “but he can't do anything about it”. It may be a political opponent. Yes, that's another negative link with it. Execution here is very difficult. I might run into you in the supermarket or the church. I think if you have a small island, accountability is a challenge”* (S10, MEO, 2021). Internally they try to be accountable to each other. When asking on international accountability S10 (2021) stated *“Internationally you will be pilloried anyway if you are not in compliance. Whether that is an international tax law or something else. The advantage of the SDGs is that they are good intentions. And political declarations of intent, as it were, come with a great moral charge, which you actually think you have to comply with. But you know, the SDGs are far from their bed for many people.”* Internationally Curaçao has to comply with

the RAMSAR convention, CITES Convention and the Cartagena Convention (SPAW Protocol), but this has to be worked out further in national legislation.

S2 of GMN states that accountability is happening ad hoc. There are certain supervisory bodies: the Court of Audit, an advisory board, and the SER (socio-economic council). *“According to the Constitution Act, the supervisory bodies have the authority to ask the ministries or any government service: ‘what have we done with all those policy plans?’ So, we must be accountable to those policy bodies. We don’t do it systematically, but ad hoc it happens when we have planned together, between GMN and VVRP. We can report ad hoc to each other or to the ministers? There is currently no system of accountability to other ministries. But there is the idea of setting up a sort of Central Planning Bureau to analyze and better coordinate this.”* The stakeholder experiences a good communication between some of the ministries, but not between all seven. The solution to this could be a central planning bureau or secretariat that provides an overview of what all the ministries are doing (S2, GMN, 2021).

In conclusion, an accountability mechanism or system for all stakeholders to hold each other accountable is in development. At this moment accountability agreements only happen to be made ad hoc. According to the literature and in our framework, accountability is regarded as an important principle for good governance and is not yet sufficient in place in this small island case.

## Inclusiveness

The inclusiveness principle is assessed in my interview by questions about stakeholders’ participation, about diversity of stakeholders, and if marginalized groups are or were involved.

### **Stakeholder participation**

On the stakeholder participation almost, all stakeholders were positive. There are committees formed by AZ where all the relevant stakeholders can participate every six months. S11 of GMN (2021) states on the inclusiveness of NGOs: *“Often enough they are involved in the whole process, in my opinion. I understand from reports that they are working on it. And then it sometimes surprises me that they criticize their own input. So together we work on a plan and then they say, ‘it’s not quite done as we would have liked’. The NGOs always feel that they do not have enough say and that their goals are not considered enough. Look, and I have to say it: ‘let’s all make our own policies’. There are resistances that you often feel.”* Some interviews with NGOs show that it became better overtime. E.g., Carmabi indicates that the involvement of NGOs has improved compared to 15-20 years ago.

Another stakeholder (ministry of GMN) mentioned that there has been stakeholder participation in climate change sessions at the University of Curaçao, but that usually the same stakeholders get involved or want to be involved. For others *“... the subject of climate remains a kind of far from my bed show. Not everyone yet really understands the essence of it and the risks”* (S2, GMN, 2021). The next step will be quite a project according to some stakeholders. It is to set up some sort of institutional body, a climate change panel to involve and inform different stakeholders, and where citizens are also involved. Civil society organizations usually play an important role. It is necessary to scientifically inform all citizens about climate and climate policy (S2, GMN, 2021). *“What does the climate mean for every citizen? The intention is then to go to different neighborhoods and talk or discuss with the representatives: what does climate change mean to them? More active behavior, includes creating support among citizens within a certain neighborhood that mainly consists of neighborhoods that are most vulnerable to climate change.”* The phrase *“climate remains*

*kind of far from my bed show*” has been mentioned by four of the stakeholders. They imply that climate change is not regarded as a top priority for citizens yet and even not for ministries that are responsible for it (S2, GMN; S3, VVRP; S5, CBS; S10, MEO, 2021).

Nevertheless, the CCCP platform that is being developed by METEO has this priority and will improve stakeholder participation further. From the start those who want to be involved must register in which subcommittee or working group they will sit in. There they are supposed to bring forward their input with elaborated argumentation. *“This is called evidence-based, so we actually have to come up with calculations, with a literature study, etc. We don't actually have to conduct a study ourselves, but they can say: I have that science, I have found a piece, and this is actually also important for Curaçao. And then they come to present it”* (S4, METEO, 2021). Moreover, when asked about the involved stakeholders in the Curaçao Climate Change Assessment, S4 stated that Amigu di Tera, Federashon di Otrobanda, Carmabi, DM foundation and others were involved. The DRR states *“Stakeholder involvement. Uhm, I think we score satisfactory on all fronts. Here and there a 6 minus. Here and there the 6 plus”* (S6, DRR, 2021).

### ***Diversity of stakeholders and engagement of marginalized groups***

On the diversity of stakeholders some respondents commented that the population of Curaçao is already very diverse (e.g., many nationalities - more than 55, different ethnic groups, several deprived groups). However, in the eyes of most stakeholders, representation of many groups has yet to be improved. There are many Latin- and Chinese people on the island, but their representation in the governing bodies is limited. In the private sector there is more diversity of stakeholders (S10, MEO, 2021). S12 of the MEO argued that the SDG Road map is actively seeking to engage the youth of Curaçao through a special youth program. Moreover, they indicated that women and some ethnic cultures are not seen as diverse stakeholders, but as part of society. However, the communication towards non-native speakers has to be approved according to S12. Most communication takes place in English (S12, MEO, 2021), but then only Papiamentu or Spanish speaking people are excluded. The METEO is also trying to involve the youth of Curaçao in the Curaçao Climate Change Road Map through press conferences (S4, METEO, 2021). On actively seeking to involve marginalized groups in the process, two of the stakeholders (AZ and VVRP) mentioned that they are visiting various neighborhoods and talking to representatives in the community centers in Montagne, Santa Maria and Bandabou (S1, AZ; S3, VVRP, 2021). These are relatively poor small villages in the countryside with little provisions.

In short, the inclusiveness of stakeholders is reviewed positively by almost all the stakeholders, although critics are heard as well as suggestions for improvement. It has been mentioned how the ministries are trying to maintain and improve the involvement of relevant stakeholders through the CCCP and to engage marginalized groups in the future. Most is about diversity of stakeholders and involvement of marginalized groups in the preliminary phases of the process. The implementation phase has not often been mentioned, probably because the climate change policy process has not arrived there yet.

### **Connectivity**

The connectivity principle was assessed in the interviews by questions about the coordination within and between levels of governance. The second indicator is about liaisons between government authorities and organizations with responsibilities for tourism, agriculture and fisheries planning and management. Since 10-10-2010, when Curaçao became an autonomous state in the Kingdom of the Netherlands, it has officially only one layer of governance, the

national level. However, there are many semi-public organizations like Aqualectra (water and electra distribution), like Selikor (garbage maintenance), like the Ambulance service etc. Also, the liaisons fall under the second indicator.

### ***Coordination within and between levels of governance***

The respondents were first asked if there was any coordination between the government and tourism, agriculture and fishery organizations concerning climate change policies. Second, they were asked about the kind and quality of the cooperation. The METEO, who made the Curaçao Climate Change Draft Road Map for different seminars that were held. They presented this Road Map to me during the interview. They showed their proposed approach to better coordinate climate governance. It is by the Result Based Management approach to create alignment of the stakeholder objectives, which seems to be rather successful so far. The Ministry of AZ is responsible for the coordination of climate governance according to S6 (DRR, 2021).

The MEO stakeholder (S10) states that there has been a lot of improvement in the cooperation with the ministry of GMN over the past two years. *“We are of course involved in the sustainability discussion from an economic perspective. GMN has traditionally been a bit more activist, purely from an environmental point of view. But one of the things in which we have made a lot of steps since then is the collaboration with GMN. That was not self-evident.”* The GMN (S2) states that in terms of climate change adaptation *“usually it is a big part of the responsibility between our ministry and the other two ministries. Yes, and we cannot do that alone as a ministry. But it is a joint effort from different levels.”* This also relates to the communication between ministries which was already mentioned under accountability. If the communication is lacking between some ministries, it is difficult to create coordination within levels of (CC) governance, according to the respondent. The ministry of AZ stakeholder argues that *“As a civil servant, we try to maintain a certain consistency and common thread. As a result, all the aspects you just mentioned regarding climate change continue. For example, METEO remains METEO even if there are dozens of ministers and ministries, governments, council of ministers or political color does not matter. Also, the DDR remains exactly the same. We serve the office. It doesn't matter who and with what plumage he is there. We serve that, but you try anyway, and every government has its own policy wishes. And then climate change must become part of it, with a firmer, more solid foundation, so to speak. I have the impression that this is the case”* (S6, DDR, 2021). It seems to be that they can manage somehow. However, another respondent is quite critical. *“It feels like no one is actually coordinating climate governance”* (S8, LMN, 2021).

Then there are the international bodies with aims and requirements. International coordination of governance for Curaçao happens in the region with CARICOM and CDEMA<sup>6</sup>. Curaçao is not a member of CARICOM because it is not an independent state but has an observer's status. Because of Curaçao's status within the Kingdom of the Netherlands - as an autonomous country - it also brings a certain coordination and cooperation. *“From the Kingdom of the Caribbean we have also set up cooperation agreements with Aruba, with Bonaire, with Sint Maarten, the CAS islands, and the BES islands”* (S6, DRR, 2021). Furthermore, the Blue Halo Curaçao is coordinated between the ministry of GMN and the

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<sup>6</sup> The Caribbean Disaster Emergency Management Agency (CDEMA) is a regional intergovernmental agency for disaster management in the Caribbean Community (CARICOM) established in 1991 with primary responsibility for the coordination of emergency response and relief efforts to Participating States that require such assistance (CDEMA, 2021).

Waitt Institution. For this project of climate change the Blue Halo Committee was established and consists of GMN, VVRP, and MEO.

### ***Liaison between government authorities and organizations with responsibilities for tourism, agriculture and fishery organizations***

On the indicator 'liaison between government authorities and organizations with responsibilities for tourism, agriculture and fisheries, and planning and management only S6 (DRR) commented that there are partnerships between DRR and other services and organizations, but it was not specified which ones.

To conclude, the coordination within and between levels of governance is viewed quite differently among the stakeholders for rather positive to negative. The METEO is actively improving the coordination, the MEO is positive about its collaboration with GMN, AZ feels like they have the responsibility to coordinate climate governance, whereas LMN feels like there is no coordination at all.

### **Government Effectiveness**

The government effectiveness principle was assessed in the interviews by the indicators: setting priorities and objectives; coordinating policy and implementation; CC risk appraisal, awareness, and adaptation appraisal; output; and outcomes. Some of the elements are already addressed by former mentioned indicators, but new elements were mentioned here.

### ***Setting priorities and objectives***

The respondents' answers rather vary in terms of their perceptions on setting priorities and objectives on the island. *"You noticed here that [climate change] wasn't alive yet. However, since 10-10-10 it is in conceptual perspective, it has found its place in policy terms. But it can definitely be much better"* (S10, MEO, 2021).

The DRR respondent (S7) noticed that they have not been engaged too much in the establishment of the National Development Plan Curaçao (2015-2030) (NDPC) and the SDG Roadmap for Curaçao (2018). *"We went to a few lectures to orientate, but we were not really involved. I am somewhat responsible for the climate change part. But we from DRR, haven't gotten around to it yet. There are many priorities. High priorities etc. We are a small team, we are in a crisis. It takes a lot of time to organize all those meetings. And you know, there are other heavy files. That is why climate is not really a high priority for us yet."* In line with the DRR, the respondent of VVRP (S3) indicated that they also have not gotten to the priorities yet. *"But now it would be obvious to look at water management. Why? Because it has been an issue for a long time, because of the flooding we're having. But that is only a minor part of the large analysis. But yes, it is something with which you can achieve relatively useful things. And whether you should call that adaptation, or climate policy at all. We can have a scientific discussion about that. For sure there must be an implementation agenda. At least pretending to say okay guys, this is what we're going to do for the next 3 years. This should be completed in 5 years. And whatever you explain, why and why not? Ultimately, the parliament wants to know that too"* (S3, VVRP, 2021). It is a work in progress according to S12: *"After this year, after a lot of effort from our side, most ministries have linked their budgets to the SDGs. Next year I hope it will be the other way around, they hopefully start with it"* (S12, MEO, 2021). Another stakeholder (S11) with foresight wonders if the priorities are not wrong sometimes and if it would be not possible to achieve the same thing, but in a different way. *"The government's priorities are on health and economy. Agriculture, environment and nature are a bit overlooked"* (S11, GMN, 2021). However, stakeholder S9

was rather positive on a new priority of establishing no fishing zones around the island. This was done in five months, whereas usually this would take 10 years (S9, Carmabi, 2021).

Other stakeholders indicated that there were indeed priorities and objectives set by their ministries. The METEO claimed as a priority objective to improve the building environment of the island by using better isolation material, like mirror glasses to keep the sun out and reduce the use of air conditioning (S4, METEO, 2021). The DRR itself as a body was established to set priorities and objectives regarding climate change policies. Respondent S6 (DRR, 2021) mentions that the disaster risk reduction programs under the IOC and the SENDAI frameworks of the UN are leading for the priorities set by the DRR. *“And if you extend that to the effects of climate change, you will see that the government of Curaçao is very busy, also with the theme of climate change.”* It is known and mentioned in some policy documents (ch 4.2) that the city center of Curaçao, which is on the UNESCO heritage list, will be flooded if the sea level rises by half a meter, thus this should be one of the priorities in CCA of the island according to the respondent (S6, DRR, 2021).

Furthermore, there were three areas that had priority within the EPP 2016-2022 plan: waste, wastewater, and air quality. According to S2 *“a lot is being done in the field of air pollution, and in the field of wastewater. In the field of waste, many preparations have been made within a working group in the past two years to prepare waste. The working group consists of GMN, the MEO and Selikor”* (S2, GMN, 2021). Other priorities within the EPP plan are mitigation and adaptation. The GMN focuses on reducing greenhouse gases and especially CO<sub>2</sub> because the island is still dealing with the refining of oil. Stakeholders S5 (CBS) and S10 (MEO) explain that the oil refinery “Isla” is a high priority that needs to be addressed. After many court cases of NGOs against the government in the last 15 years, which the government all lost, the refinery emissions should be reduced within five years according to respondent S2 (GMN, 2021).

Other priorities mentioned by the respondents were better coastal policy, mangrove conservation, green infrastructure, carbon sinks, and green buildings. *“Government buildings in particular are actually the most energy guzzlers, they usually use air conditioners. So indeed we have recommended as a policy measure to design better energy or climate neutral buildings. Because I think the government has big plans for Aquallectra. They can very well be a business case, an energy-efficient government”* (S2, GMN, 2021). The obstacle in setting priorities and objectives that was mentioned by nearly all respondents was finance. Asking for solutions, they designated the Kingdom of the Netherlands to invest in the islands when it comes to adaptation to climate change, because the investments far exceed local government budgets (S2, GMN; S6, DRR, 2021).

In short, two of the respondents (S3, VVRP; S7, DRR, 2021) stated that setting priorities and objectives has been limited regarding CCA, due to other crises and in particular to the fact that the last 1,5 year the Covid-19 crisis is more acute right now. However, the other stakeholders were more positive on the priorities set by their ministries in adapting to climate change. In particular, the refinery was mentioned by many respondents as a priority that needs to be addressed to improve air quality.

### ***Coordinating policy and implementation***

One of the respondents explains the former governance structure and the meaning for coordinating policies and implementation in Curaçao: *“We have Curaçao now, but until 2010 we were part of the Netherlands Antilles (NA), existing of 5 entities (Curaçao, St Maarten,*

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<sup>7</sup> Waste disposal company in Curaçao

Bonaire, Statia and Saba), and therefore Curaçao had two governments. We had the Netherlands Antilles federal government. Besides that, each island also had its own island-level governance. Here in Willemstad was the federal government of the NA and the local Curaçao government. That made it very unclear. Certain tasks fell under the federal government of the NA, and other tasks fell under the island territories. In 10-10-10, when the NA fell apart, the lion's share of the legislation had not been amended, due to that legacy. Since then, we only have one governance level with nine ministries. It is therefore still possible that specific tasks, that were covered by a certain legislation, had to be executed by certain entities, but so far have not been adapted to that blueprint that I called the NWO. So, yes, you have some overlap because of the merging of the two levels of governance in 2010. Adjustments still need to be made. Or a solution must be found that could do justice to distinguishing the tasks and powers of the ministries” (S8, LMN, 2021). Another respondent addressed the complexity of different levels of governance that must coordinate certain policies, referring to the level of the Kingdom on one side and the level of Curaçao on the other side. “You have the Netherlands that ratifies matters. And we (Curaçao) get certain treaties from the Kingdom that we have to ratify. As far as I know, Curaçao is already cooperating, certainly on climate change and such. But the States<sup>8</sup> (of Curaçao) retain their autonomy to determine which treaty, international treaties, will be ratified or not. And there is also a difference in treaties that must be ratified by the countries in the Kingdom” (S6, DRR, 2021). Although for Curaçao the single layer governance made coordination policies easier, there is still some heritage from the past and the present brings new complexities with the Kingdom and international bodies like the UN or CARICOM.

When it comes to implementation, four of the respondents find that implementation of climate policies in Curaçao is rather limited (S3, VVRP; S8, LMN; S11, GMN; and S12, MEO, 2021). Respondent S8 of the Department of LMN (within GMN) also states that there is a lack of coordinating policy with other ministries. Respondent S11 indicates a conflict of interest within the government. “No, I don't think there is any fragmentation. But there is a challenge because of the opposites in the policies we are working on. If you want to strengthen the economy you would say let the planes, come in, but what about your carbon footprint? What do we do with the waste from cruise ships? I don't think climate change is valued high enough” (S11, GMN, 2021). This is really a challenge for SIDS, because of other priorities such as poverty and hunger. One of the respondents was quite critical of the policy implementation. “I think too little is being done. I am extreme. I want to have a step-by-step plan. When will we get there? When will we know we'll get there? And how do we measure that we're getting there? To just have a list of SDGs and say we have to work on it... I have no use for that. I would like to see concrete points of what we are going to do. A long-term policy. And measuring points. We must first measure what it is and what we can do about it. I am too ambitious, we need to have good long-term policies of where we want to go and small steps of how we want to get there” (S11, GMN, 2021).

Three of the respondents are rather positive on the coordination of policies. The formal frameworks have been worked out, but that does not mean that it is fixed for the next [100] years, but it distinguishes Curaçao according to S10 (MEO, 2021). Moreover, the METEO indicated their political commitment towards implementation: “We want the committee to be set up via a national decree. So that's already a commitment, a political commitment. If we get a political commitment, we can carry on there. And here are the results of the three

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<sup>8</sup> The States of Curaçao is the unicameral parliament of Curaçao. It consists of 21 members and is elected for a four-year term.

volumes [on impact, mitigation, and adaptation]. They go back to the government and then we start with implementations. During the implementation phase, we should actually be sure that we can also get the policy director on board to prepare the various strategies for a political process. That's actually the most important part" (S4, METEO, 2021). This very knowledgeable stakeholder (S4) notices on policy coordination that everyone has great ideas about energy-efficient systems, but that there is little result for the island yet, because not everyone thinks in the same direction. "It's not because of our small size of the island, but it's more in the sense that we don't get everyone in the same direction. You also have the same phenomenon worldwide. Everyone wants to do something, but ultimately what is important for the country, that's something completely different. One must first say: we are going in that direction and then we must all look in the same direction" (S4, METEO, 2021).

One of the interesting policies that has been coordinated and implemented is the Blue Halo Curaçao that was signed in 2015 to improve and maintain the island's biodiversity<sup>9</sup>. Many steps have been taken since then, but not everything has been implemented yet. "Paper is patient but getting it through is another chapter altogether." There has been a long discussion between the government of Curaçao and the Waitt institute on marine spatial planning and who would be responsible for that. The Waitt institute wanted the Ministry of VVRP to lead this, but respondent S3 of this ministry states that they almost fell off their chairs, when they needed to include "the ocean" on top of the other tasks they are responsible for. Eventually it was worked out and a no fishing reserve was implemented. "Then you don't have 'wet spatial planning', but that will never happen" (S3, VVRP, 2021). The NGO Amigu di Tera is quite skeptical about the implementation of policies (S13, Amigu Di Tera, 2021).

Concluding, in most of the interviews the respondents were skeptical about policy coordination and implementation. They indicate that coordinating policy is difficult among others, due to tasks that fell under a certain legislation in the past and which has not been amended after the dismantling of the NA. There is also a lack of policy implementation due to conflict of interest within the government. However, some respondents were positive about steps made in policy coordination in some areas, but still found that implementation could be improved.

### ***Climate Change risk appraisal, awareness, and adaptation appraisal***

There is limited awareness on the impacts of climate change among average citizens according to two respondents of ministries. The government needs to improve this to reduce (potential) citizens' resistance (S11, GMN; S3, VVRP, 2021). They criticize that governmental information on climate change and climate policies should not only be communicated via Facebook in one language, but first in all official languages and second at least on multiple platforms (S11, GMN, 2021).

Other stakeholders mention that the awareness has improved over the past decade. "People are more aware 'oh, there is something going on with the climate. Also, with experiences already with SLR and temperature increases on the island" (S2, GMN, 2021). The same stakeholder records that the government is aware of global warming and its impacts. "I was at the climate summit in Madrid in 2019, and so was the minister of GMN. So the politicians know. There is no specific policy, but we do have other policy fields that are related to climate change." It is recognized that Curaçao has vulnerable areas that will be affected by climate change. E.g., The city center is not too high above sea level. Or another

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<sup>9</sup> Curaçao, together with Aruba and Bonaire, possesses about 200 endemic species and subspecies which live nowhere else in the world. The ABC islands are part of the Caribbean biodiversity hotspot (Debrot, 2006)

vulnerable area, Curaçao's coasts. At least some politicians are aware of the need for coastal protection, respondent S8 noticed (S8, LMN, 2021).

A new Administration is currently (June 2018) being formed; the former Administration (Ruggenaath of the PAR) lost the elections. Two other parties (MFK and PNP) have made a coalition agreement in which they are working on a government program in which climate, although in superficial statements, seems to become an issue of importance. In the past this was not yet the case. The respondent from the ministry of Health, Nature and Environment explains: *"It is, however, in outline only. Then it says, for example: more must be done for a better climate, more information [is needed] and in the field of climate-neutral, uhm, buildings, energy-efficient buildings. In that respect there is therefore more awareness and should create more value of course especially among the citizens"* (S2, GMN, 2021). The respondent also indicates that more awareness is needed on how people themselves can adapt to the impacts of climate change, because most citizens view it so far as a government issue, instead of their own issue.

Nevertheless, awareness is on the agenda. The ministry of AZ is developing a roadshow to create more awareness on the impacts of climate change among citizens. The theme of the roadshow is *being self-sufficient and becoming more resilient*. The hurricane season started mostly in June and therefore a seminar was organized and pamphlets on the impacts were made. Stakeholder S1 argued that *"the population [must] do classes. They have that... All that.... There's disbelief, denial, and so forth. People don't believe that we wouldn't experience severe flooding, for example. Or hurricanes and things like that"* (S1, AZ, 2021). When asked about the differences in awareness among citizens compared to ten years ago, S7 (DRR, 2021) responded that *"I don't think there is much change. When you go to the conferences and workshops, it seems like a lot of people are committed. But often you just don't hear anything after that. The sequel is pending. You do invest to organize it, but if you don't do anything with it anymore.... Maybe it happens behind the doors, but there is no more communication about: here we are now, we have done this in the meantime, we have not yet achieved what we want. That will then be omitted. And certainly, the people who participated, we don't hear anything anymore."*

On the topic of Risk Profile development, the DRR played the main role. The Risk Profile includes all the risks and vulnerabilities that have been identified for Curaçao. The list includes 35 risks, including the impacts due to climate change, such as tropical storms, intense precipitation, flooding, rough seas, and heat waves. It is important to communicate this to the people to prepare and protect them (S6, DRR, 2021). In addition, the respondent of Amigu Di Tera mentioned their active awareness raising campaigns and clean-up projects in the neighborhoods (S13, Amigu di Tera, 2021).

In short, some stakeholders noticed a lack of awareness among average citizens, whereas others say it has improved over the past ten years. Awareness raising about the CC impacts has received more attention by the ministries and the government compared to the past. Respondents expect climate change policies will be and must be continued in the future, because there is no escape

### **Outputs and Outcomes**

Most respondents expressed that the outputs (completed actions) and outcomes (the extent to which objectives are achieved) of policies are limited. Most policies are still in the starting phase. There are two completed actions according to the stakeholders. One of them is the implementation of the no fishing zones and the implementation of coastal improvement because of the Blue Halo Initiative. The other completed activity is the protection of

mangroves, but this was a standalone project of an NGO and not due to governmental policy. The no fishing zones are protected by an administrator and are surrounded with little flags. The policy objectives on the building environment as indicated by S4 (METEO, 2021) have yet to be achieved in the future. However, the METEO did develop and implement early warning systems for extreme weather events in neighborhoods. Some stakeholders stated that due to the Covid-19 pandemic everything regarding CCA has been put on hold (S3, S5, S7, 2021). Another output that was mentioned by respondent S8 (LMN, 2021) is the Scientific Environmental Assessment in 2015. He found that important, but it has fallen into oblivion a bit. This research provided insight into the status of Curaçao's corals, fish, and the water quality. However, the respondent claimed that on the EPP 2016-2021 nothing has been carried out in the past five years. Overall, it became clear during the interviews that outputs and outcomes are not impressive and are to be achieved more extensively and profoundly in the future.

#### 4.4 Conclusions on stakeholder perceptions in Curaçao

On which principles of good governance score the results of the stakeholder interviews positive and on which ones more negative? First, the positive and negative perceptions of all the stakeholders are listed in the table below. They are discerned per indicator to assess the five GG principles. First the results are summarized by the amount of stakeholders. Then conclusions are drawn per GG principle.

The table below presents the stakeholder's positive or negative perceptions regarding the different indicators that are discerned for each of the five good governance principles. Eight of the stakeholders were positive on the access to information. Two respondents touched positively upon the clarity of the reasoning that was made for the decisions. Four respondents were positive about the experienced 'visibility in the decision-making process' of certain CCA policies. Third party auditing by certification is not yet happening on the island according to our respondents. Four stakeholders indicated that they monitor their own performance regarding the policy plans. Only Carmabi and the METEO carry out institutional self-reporting. The GG principle that nearly all stakeholders but one was positive about is the inclusiveness of stakeholders. The indicator diversity of stakeholders was reviewed as positive by five of the respondents. At the indicator 'marginalized groups involved' a respondent of MEO mentioned the limited representation of Chinese and Latino citizens in the government and in the civil service and therefore in participating in policy making. The indicator 'coordination within and between levels of governance' is good according to four of the respondents. However, two other respondents find that there is a lack of coordination when it comes to CCA policies. Two respondents mentioned that liaison between the government and tourism, agriculture, and fishery organizations is good. About half of the respondents were relatively positive on most of the indicators, others were only positive about some indicators of the GG principles and one or two were quite negative across the board.

Indicators	Transparency				Accountability			Inclusiveness			Connectivity		Government Effectiveness			
	Access to information	Clarity with which the reasoning behind the decisions is communicated	Performance reporting	Visibility of the decision making process	Certification	Performance monitoring	Self reporting	Stakeholder participation	Diversity of stakeholders	Marginalized groups involved	Coordination within and between levels of CC governance	Liaison between government authorities and tourism, agriculture and fisheries, and planning and management organizations	Setting priorities and objectives	Coordinating policy and its implementation	Climate change awareness	Outputs & Outcomes
AZ (S1)						+	-	+	+-						+	
GMN (S2)	+			+		+		+	+		+		+		+-	
VVRP (S3)				+				+-					-	+-		
Meteo (S4)			+			+	+	+	+					+	+	+
CBS (S5)	+							+	+				+	-		
DRR (S6)								+			+	+	+	+-	+	
DRR (S7)	+	+	+					+					-		-	
LMN (S8)	+			-	-	+		+	+		-			-	+-	-
Car-mabi (S9)	+	+	+	+			+	+					+		+-	+
MEO (S10)	+					-	-	-	+	+-	+	+	+	+-		
GMN (S11)	+							+					-	-	-	
MEO (S12)	+		+	+		+-		+	+		+	+	+-			
Ami-gu di Tera (S13)	+-							-	-	-	-		-	-	+	-

**Table 7** Good governance principles in Curaçao according to stakeholders

On the GG principle transparency there is bifurcation on the stakeholders' perception towards the indicator 'access to information'. Some were positive, others felt like the access could be improved, not only government information via Facebook. The indicator 'performance reporting' is regarded as important to make the achievements of the government clear to the politicians, to the public officers and to the public. METEO's platform could improve this in the future according to interview results because this platform is creating a dashboard for monitoring different policies. On the indicator 'visibility in the decision-making process' one of the stakeholders was clearly negative if this will be achieved in the future, because the coordination lacks and there are too many institutional problems in his view.

The GG principle accountability performs as one of the poorest in the interviews. The interviews showed that so far accountability agreements only happen to be made ad hoc, not structural. In the literature and in our framework, accountability is regarded as one of the most important principles for good governance. And yet in conclusion this is not sufficient in place in this small island case. However positive is that a few interviews report that an accountability system for all stakeholders to hold each other accountable is in development.

The GG principle ‘inclusiveness of stakeholders’ on the other hand is reviewed rather positively by almost all of the stakeholders. Nevertheless, some critics are heard as well as suggestions for improvement are made. It has been mentioned how the ministries are trying to maintain and improve the involvement of the relevant stakeholders through the CCCP and to engage more marginalized groups in the future. Notably the indicators ‘diversity of stakeholders’ and ‘involvement of marginalized groups’, are only recognized in the preliminary phases of the process. In the implementation phase they have been mentioned rarely, probably because the climate change policy process has not arrived in that phase yet.

To conclude on the GG principle of connectivity the indicator ‘coordination within and between levels of governance’ is viewed quite differently among the stakeholders from rather positive to negative. The METEO is actively improving the coordination and the ministry of MEO is positive about its collaboration with the ministry of GMN. However, the ministry of AZ feels like they have the responsibility to coordinate all climate governance, whereas LMN, the department of agriculture, environment and nature, and part of the ministry of GMN feels like there is no coordination at all.

The important GG principle ‘government effectiveness’ emerges rather poorly from the interviews. On one of the indicators ‘setting priorities and objectives the picture is diverse. Two respondents (S3, S7) clearly stated that there has been quite limited priority setting regarding CCA policies. They blame this mostly on other crises the government has to deal with (political and economic) and in particular to the Covid-19 crisis that has been priority number one during the last 1,5 year. However, the other stakeholders were more positive on the priorities set by their ministries in adapting to climate change. In particular, the oil refinery and its pollution were mentioned by many respondents as a priority that needs to be addressed. Many court cases forced the government to take action in the pollution of the oil refinery.

A second indicator for GG principle government effectiveness is ‘policy coordination and implementation’. In most of the interviews the respondents were skeptical about policy coordination and implementation. They indicate that coordinating CCA policies is in some cases difficult since those policy tasks fell under a certain legislation in the past and which legislation has not been amended after the dismantling of the Netherlands Antilles. There is clearly also a lack of policy implementation (another indicator of government effectiveness) due to conflicts of interest within the government, between different ministries who are all obviously accountable for parts of climate policies. But also some departments inside one ministry wrestle with conflicts of interest, e.g., the department of agriculture with the department of nature under the same roof of the Ministry of Health, Environment and Nature. However, other respondents showed the other side of the coin and pointed to steps that had been made in policy coordination in some areas. On the other hand, they still found that implementations could be much more improved.

The third indicator for the GG principle government effectiveness is the lack of climate change awareness. The interviews report extensively about the lack of awareness among average citizens, whereas other respondents noticed that it certainly has improved over the past ten years. Particularly NGO stakeholders and those who are involved in awareness raising

are more positive. Awareness raising about the CC impacts has received more attention by ministries, public officers and politicians compared to the past. Most stakeholders expect climate policies will be more and more on the agenda in the future because there is no escape. Expected is that international bodies will also increase the pressure on CCA policies.

The final indicator for the GG principle government effectiveness is to measure the outputs and outcomes of CCA policies. It became clearer in each subsequent interview that outputs and outcomes of CCA policies are not impressive, if not lacking at all in some areas. This was partly attributed to the fact that many CCA policies are still in the starting blocks. Lack of financial resources is the first reason mentioned in the interviews for no outcomes and outputs of CCA policies. Also, the Covid-19 pandemic is often blamed for the lack of output in the last 1,5 year.

## 5. Results for Bonaire

### 5.1 Introduction

In this chapter the results of the desk research as well as the interviews are presented. In paragraph 5.2 the CCA documents and reports of Bonaire are analyzed with the analytical framework presented in chapter 2. At the end results of the desk research are summarized for an answer on question 2 of this research: *What are the policies and practices on CCA that are in place in Curaçao and Bonaire and to what extent can they be considered as good governance practices?* (For Curaçao results, see chapter 4.2)

In paragraph 5.3 the stakeholder perceptions on the different aspects of good governance are presented and assessed by the analytical framework. In the last paragraph a conclusion on the results is given and an answer is provided on the third question of this study: *What are the stakeholders perceptions on the different aspects of good governance in Curaçao and Bonaire?* (For Curaçao results, see chapter 4.4)

### 5.2 Previous and current policy documents on Climate Change Adaptation in Bonaire

#### **Nature Policy Plan for The Caribbean Netherlands 2013 - 2017**

The NPP for the Caribbean Netherlands (Bonaire, Statia and Saba) was developed by the Dutch Ministry of Economic Affairs in cooperation with stakeholders from the Island Governments (Bonaire, Statia and Saba), nature conservation organizations (Dutch Caribbean Nature Alliance), the BES business sector, the BES tourist sector, the Dutch Ministry of the Interior and Kingdom Relations (BZK), and Dutch the Ministry of Infrastructure and the Environment. The plan provides a framework for good management and sensible use of nature in the Caribbean Netherlands. The aim of the Plan is to ensure sustainable use of nature, so that the ecosystems and its services of the island can be preserved. The plan is intended as a basis for sound decision-making and for the sound allocation of resources and funds. It provides a framework for the island-specific nature policy plans that are drawn up by the island governments. This plan has been developed due to national legislation on nature and biodiversity protection, and international agreements, treaties and regional agreements to which the Kingdom has committed itself. This policy plan clearly addresses climate change threats, but states that from island level it is impossible to tackle the drivers (like greenhouse emissions). It means climate mitigation policies are not possible. As Adaptation policies the

Plan suggested for Bonaire improving the resilience of the island ecosystems to enable them to withstand the predicted impacts and to minimize the adverse effects (NPP, 2013).

### **Enforcement of Nature and Environmental legislation in the Caribbean Netherlands - 2019**

This policy document is a sort of follow-up report on the previous one, with a consecutive plan drawn up by the Council of Legal Protection. I decided to include this report in the analysis, because it gives a clear overview of what the climate policies have triggered in Bonaire. The report is about stray cattle, litter, and other problems in the Caribbean Netherlands. The Council for Legal Protection has investigated the extent to which legislation in the field of nature and the environment is enforced in the Caribbean Netherlands (CN). In that context, Council researchers have studied available documents and interviewed employees of the organizations involved, including the three public entities and nature conservation organizations. The legislation for CN is based on five-year policy plans at national level (the Netherlands) in the field of nature and the environment. The document doesn't refer to climate adaptation as such (Raad voor de rechtshandhaving, 2019).

### **Nature and Environment Policy Plan Caribbean Netherlands 2020 - 2030**

The new Nature and Environment Policy Plan was developed in 2020 and led by the Dutch Ministry of Agriculture, Nature and Food Quality, the Dutch Ministry of Infrastructure and Water Management and the Dutch Ministry of the Interior and Kingdom Relations (BZK) and the island governments. This plan builds on the previous Nature Policy Plan for the Caribbean Netherlands 2013 - 2017 and on the report State of Nature in the Caribbean Netherlands 2017. The vision of the plan is “*a prosperous society and cultural identity in balance with a resilient and healthy natural environment*”. The plan has three strategic climate goals: reverse coral reef bleaching, restore and conserve unique habitats and species, and sustainable water- and land-use for local economy development (LNV, INW, BZK, 2020). These goals address climate change adaptation, although the causes certainly will not stem from climate change alone.

In conclusion, two of the three documents evidently address climate change. The previous Nature Policy Plan 2013-2017 did not use at that time the concept of climate change and did not clearly imply adaptation measures. Nevertheless, this previous plan strived for more resilient ecosystems, which could with hindsight be understood as a kind of adaptation. In the meantime, the new NEPP 2020-2030 does clearly address CCA like mentioned above, with climate goals and measures.

Indicators	Transparency				Accountability			Inclusiveness			Connectivity		Government Effectiveness			
	Access to information	Clarity with which the reasoning behind the decisions is communicated	Performance reporting	Visibility of the decision making process	Certification	Performance monitoring	Self-reporting	Stakeholder participation	Diversity of stakeholders	Marginalized groups involved	Coordination within and between levels of CC governance	Liaison between government authorities and tourism, agriculture and fisheries	Setting priorities and objectives	Coordinating policy and its implementation	Climate change awareness	Outputs & Outcomes
Nature Policy Plan The Caribbean Netherlands 2013 - 2017	X	X	X	X		X	X	X			X	X	X	X	X	
Enforcement of Nature and Environmental legislation in the Caribbean Netherlands - 2019			X					X				X	X	X	X	
Nature and Environment Policy Plan Caribbean Netherlands 2020 - 2030	X	X	X	X		X	X	X	X			X	X	X	X	

**Table 8** Good governance principles in the policies of Bonaire

The table above shows the scores on indicators of good governance in the three analyzed policy documents of Bonaire. The document of 2019, about enforcement of legislation, scores very modestly, only on five of the 15 indicators of the analytical framework. Remarkably this document does not show indicators for transparency nor for accountability. On the other hand, it scores on four of the five indicators of government effectiveness. Both other policy documents are elaborated long term climate plans, one from 2013 till 2017 and the most recent one covers 2020 to 2030. These two long term plans do relatively well on the indicators for good governance. Both documents miss scores at the same assessment indicators. Both don't score on outputs and outcomes, not on marginalized groups and diversity of stakeholders for inclusiveness, and not on certification for accountability. Bonaire does relatively well on good governance presence in the long term documents. Interesting is that the more complex indicators like outputs and outcomes and certification for accountability in the long term plans do not score well in terms of good governance. One could perhaps cautiously conclude that these documents show that good governance is better in place in the process than in hard results like outcomes and certification. Maybe the same could count for the document of 2019 on enforcement of legislation, no hard results yet.

### 5.3 The stakeholder perceptions on different aspects of good governance in Bonaire

In this paragraph the results of the stakeholder interviews will give insight on perceptions on different aspects of good governance in Bonaire. The results will be reviewed based on the analytical framework. It will then become clear in which areas of good governance the islands accelerate and in which areas there is room for improvement. The ministries that are involved with environmental policies are LNV (RCN) and LVV (OLB).

## Transparency

During the interviews in Curaçao the respondents were asked about the Nature and Environment Policy Plan Caribbean Netherlands 2020 - 2030 (NEPP) that was developed by the Ministries of Agriculture, Nature and Food Quality (LNV), Infrastructure and Water Management, and the Ministry of the Interior and Kingdom Relations (BZK) and about the completed Nature Policy Plan 2013 - 2017 which was developed by The Ministry of Economic Affairs.

### **Access to information**

Respondent S19 of the LVV (OLB) was involved in the process of setting up the NEPP 2020-2030. The respondent indicated that the reach out was very limited and that the discussions where they were involved were mostly with nature organizations. *“I think that's a loss because you also have to involve the community. That is a challenge in Curaçao, because there are few in Curaçao, the people are not well organized.”* In comparison, Curaçao has community centers, representatives, unions, and organized churches. S19 states that everything is better organized there because it is a larger island. *“Nothing is organized here. So, if you want to talk to the population. How do you do that then? So uhm. Then you should really spend a lot of time on surveys and information campaigns. First, to spread the message to let people know what you're thinking about. And then a survey to find out what they think about it. That of course costs a lot of time and money. And that was not the option in this plan. The tendency was, that's kind of the trend here on Bonaire, to only listen to what the nature organizations want”* (S19, LVV, 2021). S18 stated that there was active participation during the meetings that they were involved with and that the people involved use those meetings to gather knowledge on the consequences of climate change. After that, discussions can take place (S18, OCW, 2021). STINAPA is a foundation with a statutory task assigned in the national and the island law. The foundation is carrying out that management but is independent from the government. They stated that the access to information was possible on request, but that it is not always easy to get access to information in the preparatory phase. *“Let's say official notes and policy considerations that may lead to interventions on the island that have an effect not only for the protected natural areas, but also for climate change. So, in that respect, put very simply, we are no different than the average citizen who wants to know that. So it really depends on how good our contacts are, both with the executive council locally in Bonaire and with the departmental clubs in The Hague”* (S16, STINAPA, 2021). The department of R&O indicates that they provide their information in work documents on the government website of the OLB. It is continuously in process and tested for evaluation. In all their processes the R&O carry out stakeholder analysis and promote stakeholder involvement of the private sector (S20, R&O, 2021).

### **Clarity with which the reasoning behind decisions is communicated**

On the clarity with which the reasoning behind decisions is communicated, S16 (STINAPA, 2021) commented that when legislation comes from The Hague, it is more extensive and broadening in the argumentation than when a regulation or an island decree is adopted. That is why there is always just a memorandum of explanation. However, that does not necessarily mean that better argumentation leads to better decision-making according to S16. *“But yes, The Hague is of course just a very bureaucratic apparatus that does nothing more than write those explanations. And in Bonaire, someone who is responsible for nature, the environment and climate must also be the Office Manager, so the government is much smaller. It is really just a small, almost twenty thousand inhabitants. It's actually a small village center. So that*

*[clarity of reasoning] differs, sometimes better than other times” (S16, STINAPA, 2021). The respondent of the R&O (OLB) states that there are frameworks and guidelines that they must work towards. The process is as follows: “Uhm, well, decision-making takes place at the Executive Council, which mandates that part back to the boards and directors. Uhm, and a decision must be motivated in accordance with good governance. What we mainly do in our advice is: Of course, we test our policy or precedent-setting and the part of legislation that is in place. Uhm, but not everything has a policy written on it, so sometimes you have to write that too. Well, this has happened before in the past, so you just develop it. And then? Then it's up to the executive council to decide. And once that happens... It may also be that a different decision is made than your advice and that must be done with motivation, to be able to implement it” (S20, R&O, 2021). On the clarity that NGOs provide reasoning behind their decisions, respondent S21 (OLB, 2021) states that the reasoning is communicated clearly by the nature interest group. Especially the Blue Nation vision for the island spends much attention to the environmental issues. There are sessions for a master plan Bonaire, where there is renewed attention for the subject of climate change and adaptation.*

### ***Performance reporting***

Respondent S17 of the LNV (RCN) says that the NEPP 2020 - 2030 is transparent because it is made public. In addition, nowadays it is the norm that the government should provide a document on what they have achieved with the policy plan which must be accounted for to the House of Representatives (Tweede Kamer). However, the respondent is skeptical about such a report. *“But is this really a blessing? And what can you do with it? OK, so what? You have had a report prepared. So what can you really do with that report?” (S17, LNV, 2021). When asking about the reporting of failures and achievements, the NGO indicated that it is difficult to talk to civil servants about (potential) failures (S16, STINAPA, 2021). The Department of R&O says that there is a government website where documents are published, which was mentioned under *access to information*.*

### ***Visibility in the decision-making process***

In Bonaire there are two levels of government, the National Office for the Caribbean Netherlands (RCN) and the island government (OLB). The RCN is the link between the ministries that are present in Curaçao, St. Eustatius and Saba. *“So we have partial municipal/island autonomy and for a part Bonaire has co-government. “In some cases it is the RCN and in some cases the island government (OLB). There is not a very clear division between those two authorities in the field of climate, nature management and the environment. There are tasks that the RCN does directly in Curaçao and there are tasks that the island government does itself” says respondent S16 (STINAPA, 2021). This division makes it difficult on the island to have 'visibility in the decision-making process'. The other respondent from STINAPA mentioned that they are not formally involved in the decision-making process and that they don't have a formal vote. They are asked to provide feedback on occasion. “But look, the government has different departments. So what the Ministry of Agriculture and Nature Management [wants] can easily be negated by decisions of other ministries. Moreover, the Dutch government does not speak with one voice in that sense” (S22, STINAPA, 2021).*

In conclusion, one respondent was rather negative on their access to information (S19, LVV, 2021). Three of the respondents were rather positive in either getting access on demand (S16, STINAPA, 2021) or gathering knowledge during the stakeholder meetings (S18, OCW, 2021). The R&O published documents on their website to improve access to information. The

clarity with which decisions are being communicated differs between The Hague and island level. On island level it is something that can be improved. Moreover, performance reporting is a delicate subject in Bonaire according to two of the stakeholders (S17, LNV; S22, STINAPA, 2021). 'Visibility in the decision-making process' is sometimes difficult due to the two layers of governance and the NGO is not formally involved in the decision-making process.

## Accountability

### **Certification**

When asking the respondents about third party auditing of the policies. One of the stakeholders mentioned that the Secretariat of the CITES, the Secretariat of the Cartagena Convention, and DCNA are auditing their protocols in the region. *“However, not at the level where you have a sort of complete system in which responsibility and accountability is set, and also demanding accountability from a number of permanent actors according to a fixed pattern or a fixed procedure no, we don't have that”* (S16, STINAPA, 2021). Furthermore, the respondent of LNV (RCN) addresses the Board of Financial Supervision (CFT) who reviews the budget of the OLB (S17, LNV, 2021). Furthermore, respondent S20 (R&O, 2021) says that the policy plans on the environment are tested against the 17 SDGs under pressure of The Hague. He also states that Bonaire can still appeal to the Overseas Countries and Territories Association (OCTA), who are responsible for auditing their overseas projects.

### **Performance monitoring**

On the performance monitoring of the policies the respondent of LNV (RCN) answered *“I do not think so. You have the ombudsman, of course, and the government sometimes hires consultants if they see that something is not going well. But then it is ordered by the government itself. So I think that the CFT and the ombudsman are looking into that solicited and unsolicited. And also the law enforcement council. These are councils that have been established by law that give advice and look at: is the government carrying out its responsibilities properly”* (S17, LNV, 2021). The respondent of the R&O (OLB) specifies that they are monitoring wastewater and flora and fauna in a biodiversity database. In terms of policy document monitoring they have evaluated the Nature Policy Plan once, twelve years ago, but there is no specific monitoring dashboard in place (S20, R&O, 2021). Another stakeholder argued that evaluation is an issue on the islands. *“We often have new initiatives, new ideas on the islands. But we don't evaluate them. Do, check, systematically. Collaboration is also anchored in our work culture. Look, carry out the large model like in the Netherlands in a different form. It's more of a weird and messy [system], not really a polder model. Here (in Bonaire) it should be a topic of conversation, but usually it's about small things. People are interested in the everyday things around them and not in the big topics in the world”* (S18, OCW, 2021). Moreover, STINAPA argued that they are only monitoring certain topics, thematically. For example, the amount of sharks or water quality. *“But not that we have some kind of unambiguous logical planning and a control cycle where we all stick to the same mechanisms and indicators and verification sources and things like that. No, that is really what every club determines for itself”* (S16, STINAPA, 2021). In addition, respondent S22 said that they held the OLB responsible if a permit has been issued unlawfully. For example, in January of this year STINAPA won a lawsuit on the dredging of a saliña<sup>10</sup>. However, STINAPA has a difficult position, because they are funded by the government and carry out government tasks.

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<sup>10</sup> A salt lake or cove closed off from the sea by a dam of dead coral has an important function for the collection and filtration of (rain)water.

### **Self-reporting**

The respondents were asked about international accountability towards CARICOM and other regional alliances (DCNA). Respondent S18 indicated that it is not the government who publishes annual reports, but that it's the NGOs that do that. For example, STINAPA produces annual reports. *“What they do in principle should be a task of the local government, but it is those organizations that are partly subsidized by the government. They do this on behalf of the government. So that means that the government does not assume its ultimate responsibility. Because I think that's the case when you hand over certain responsibilities that belong to the island to other organizations. This means that those organizations must provide answers in a report or report. This means that the matter must be dealt with within the Executive Council or within the Island Council. And only then are you accountable to third parties. It should run through the local government and not through the NGOs”* (S18, OCW, 2021). Accountability towards The Hague only happens when there is a lot of pressure carried out. *“Suppose it concerns aspects that have to do with this subject. Then they are forced to, because you also have a manager who is responsible for the implementation of the management agreements. He often sits at the table with the government and says: 'hey hello, here it is written: you have approved this, how far are you with it? You can only expect something if you apply a lot of pressure and have a supervisory body. However, that does not mean that you can expect anything in terms of quality”* (S18, OCW, 2021). Furthermore, the NEPP 2020-2030 will be evaluated in 2025 (S17, LNV, 2021).

### **Allocation of roles and responsibilities**

In terms of roles and responsibilities for environmental policies the respondent of LNV (RCN) expresses that they are responsible for the international conventions. During the development plan of the NEPP 2020-2030 the LNV negotiated with three ministries. *“What are the possibilities for SZW within this plan in terms of social employment, for example? We have had talks with JLW about enforcement, and with OCW about education. That way you can see all the links in this plan”* (S17, LNV, 2021). The respondent of R&O illustrated that they try to incorporate climate change adaptation into their environmental policies but pleads that an integral climate change policy is necessary (S20, R&O, 2021). The respondent further indicated that there is overlap between the ministries that are responsible for the policy plan. There is also some overlap in responsibility between the RCN and OLB. Respondent S17 illustrates this with an example: *“Take flamingo NGOs as an example. That is the responsibility of the OLB to manage those, and the island nature. But they [the flamingos] also have a certain international status. For example, if it goes very badly with flamingos and they become extinct... Then of course you have to hold the minister of LNV (RCN) accountable for nature throughout the whole Netherlands, including the Caribbean Netherlands”* (S17, LNV, 2021). Moreover, stakeholder S22 argued that there is some sort of sister agreement with the other islands, but that Bonaire is looking more and more towards The Netherlands when it comes to dealing with climate change effects and that the other islands are turning a blind eye. However, the commitments under the SPAW protocol (Cartagena Convention) differ between the islands. The RCN is more advanced when it comes

to taking initiatives on climate change in comparison to the OLB according to S18 (OCW, 2021).

In short, third party auditing is carried out by the CITES secretariat, DCNA, and by the R&O, but there is not a specific mechanism in place for the certification of policies. Performance monitoring is not happening according to two of the stakeholders (S17, LNV; S18, OCW, 2021). Two other stakeholders however monitor their own topics (S20, R&O; S16, STINAPA, 2021). Moreover, the government publishes annual reports and is held accountable by the DCNA. Reporting to The Hague is only necessary when a lot of pressure is carried out. Furthermore, the allocation of roles and responsibilities is sometimes difficult because of the overlap between the RCN and OBL.

### Inclusiveness

Respondents from the RCN, OLB, and the NGO were questioned on stakeholder participation, the diversity of stakeholders, and the involvement of marginalized groups.

### **Stakeholder participation**

First, the respondent of the LNV (RCN) points out that there have been stakeholder meetings regarding the NEPP 2020-2030. The respondent notices that NGOs find it difficult that there is a distinction between consultation and the final plan. *“You want to give everyone the opportunity to name everything. Ultimately, however, it is up to you as a government to determine what will be included in the final plan. So eventually there will be a policy plan that you go through with the pen. This is feasible and this is not.”* The respondent also mentioned that they proposed to the OLB to develop a platform with all environmental stakeholders to improve engagement and representation. *“If you have a platform in which all nature stakeholders are involved, it becomes easier. If something happens, you go to the platform and ask ‘gosh, what does ‘nature’ think of this development?’”* (S17, LNV, 2021).

The R&O (OLB) mentioned that a couple of years ago they carried out a trajectory called *Nos ta biba di Naturalesa* (We live from our Nature). In this trajectory islanders were concerned to improve their engagement and develop awareness among them for the protection of nature (S20, R&O, 2021). Respondent S21 (Social Affairs) addressed the current development of a master plan which includes climate change and environmental conservation in which all stakeholders were concerned via social media and other channels to participate in various sessions. The executive council has made an appeal to the population, NGOs, and other parties to gather input on the plan (S21, OLB, 2021). One of the respondents was critical of the participation of stakeholders. *“I believe that the NGOs are indeed invited to participate in this whole process. But what you notice is that not all NGOs are interested. And not all NGOs employ people who understand the importance of this topic. Because we are dealing with a small-scale island, everything is still in development. Everything is still running when it comes to climate change, when it comes to nature conservation, it is still on the back burner”* (S18, OCW, 2021).

The respondents of STINAPA stated that there is good contact between the government and the NGO. Respondent S16 (STINAPA, 2021) argued the following: *“You actually have two categories where Stinapa is a category in itself that is a bit in the middle between on the one hand government and maybe even business interests of hotel owners. And on the other hand the more activist NGOs. It is often antagonistic. You often see a lot of mistrust on the part of such an NGO towards both the government and even STINAPA.”* The respondent furthermore indicates that the government does not always want to include every party that wants something in the field of environment and nature in the early phase of the negotiations.

First, some kind of conflict needs to happen and then they will join the table (S16, STINAPA, 2021).

### ***Diversity of stakeholders and engagement of marginalized groups***

The OLB discussed that NGOs, and the tourist board are involved in the stakeholder consultations. There is a windsurfers foundation led by locals. There is a fishery organization named PISKABON who are responsible for the interest of the fishermen. Then you have Bonhata, with more non-locals. What has become an issue for Bonaire is that the local residents have become a minority in their own country, which gives a lot of friction according to respondent S20. *“There is no longer a diving school owned by local people. There is no resort owned by locals, so it's a bit double. And also with climate change. Uhm, Bonaireans often rightly say that all these developments are taking place and we have to do something about climate change. But we don't feel that it is our responsibility, so let the people from outside do something with it”* (S20, R&O, 2021). In line with this, respondent S21 (Social Affairs, 2021) commented that the non-locals are more invested in environmental matters than the locals. Respondent S22 of STINAPA claimed that they try to incorporate stakeholder feedback when developing management plans for the national parks. They have been established by the diving industry, and therefore are dependent on good relationships with the industry. In the beginning all stakeholders were represented in the board of STINAPA: the fishermen, the hotel sector, the diving industry, the watersports, and the OLB. *“That turned out to be an unworkable situation and we gradually moved away from it. That is no longer the case, but there is still daily consultation with various sectors”* (S22, STINAPA, 2021).

Concluding, stakeholder participation is high in Bonaire according to all but one of the stakeholders. However, their input on the plans is not always considered. Another respondent indicated that not all NGOs want to participate but are invited to the meetings (R&O). Furthermore, the diversity of stakeholders is high due to the representation of different groups (windsurfers, fishermen, etc.). Fishermen used to be a marginalized group but have found engagement by establishing their own cooperation. However, due to increasing population by immigration, Bonaireans have become a minority on the island and thus, more non-locals are involved in the stakeholder meetings.

## Connectivity

### ***Coordination within and between levels of governance***

Respondent S17 of the LNV (RCN) explained the governance structure of Bonaire. There are two layers of government, three if you include the international agreements. coordination within the departments happens with the relevant colleague. Between the departments there is a steering group Caribbean Netherlands Kingdom, which is located in The Hague. In The Hague all the departments come together, and coordination occurs between them. Concerning the coordination in The Hague from RCN to OLB, then it is respondent S17 who is in contact with the concerning colleagues from the local government (OLB). *“I am in contact with the LNV department, I am in contact with colleagues from nature. In the first instance, I usually am in contact with the policy officer, at policy officer level. If it is more complex, you go to the head of the department, a director, or lieutenant governor or deputy* (S17, LNV, 2021). For the NEPP 2020-2030 the RCN developed a steering group Land and Water led by the lieutenant governor, where all the directors of the OBL are represented. Under the steering group there is a working group, with policy officers encompassed. *“On this island there are dozens of steering groups these days. That's kind of the new way to get more commitment and better and clear agreements”* (S17, LNV, 2021).

Respondent S20 of the department of R&O (OLB) adds that there are overlaps in responsibilities between the RCN and the OLB. *“Since 10-10-10 we have been dealing with ‘het Rijk’, ministries LNV, INW... in the development of the policy plan, because they are involved with the environment, nature, and agriculture... and the Ministry of the Interior with spatial planning”* (S20, R&O, 2021). They try to do that integrally. The plan includes nature, environment, agriculture, and fishing. It all comes together with different programs, which also pay attention to climate change. All the ministries are included from the governments of the islands, so there is automatically an interaction between the levels of government according to respondent S20. However, the respondent also notices that it is sometimes difficult to establish coordination. *“We often say on a small island we all work on small islands. So sometimes it is... You can no longer avoid the fact that you sometimes work past each other. Uhm. But of course we try to do that as well as possible, that this is done integrally”* (S20, R&O, 2021). In addition, respondent S22 illustrates that coordination is achieved rather easily due to the short connections. Stakeholders message each other on WhatsApp or call each other because everyone knows one another. In contrast, respondent S18 of the OCW (OLB) indicates that the topic climate change has not been discussed in a roundtable. About the coordination between The Hague and Bonaire respondent S16 commented that coordination differs per subject. Large topics that get a lot of press attention are addressed with good coordination according to the respondent. *“One has his own sheep better in order in consultation with The Hague than the other”* (S16, STINAPA, 2021).

### ***Liaison between government authorities and organizations with responsibilities for tourism, agriculture and fishery organizations***

*“The national government (RCN) is of course at a higher level, a more abstract level. You often want to consult more with the stakeholders when it comes to specific projects, about the implementation and the elaboration, which happens more at a local level. In the Netherlands you have the province, which is responsible for nature in The Netherlands. This is then discussed with the parties involved. At the RCN, you consult with the major sector organizations about the broad outlines. So you have less often those kinds of sessions (with local stakeholders). However, two years ago I had many sessions for the National Plan that is valid for ten years (NEPP 2020-2030). During the realization of this you have a lot of consultation with stakeholders, but afterwards when the specific projects, the specific processes, then it is more island-based”* (S17, LNV, 2021). Moreover, in regard to the SPAW protocol (Cartagena Convention) the RCN invited the OLB as an observing participant in order to reach the support and interests for the island. The respondent added that the LNV finances 1 FTE at the DCNA for their communication and research liaison. The DCNA is responsible for communicating all the research that is carried out at universities, by researchers and foundations, so that it becomes available to the broader audience. The DCNA manages the Dutch Caribbean Biodiversity Database that stores all the research.

Furthermore, the LNV is very active in the fisheries. The past year they have been supporting the fishermen in setting up a fisheries cooperative (PISKABON) in order to make it easier for the RCN and the OLB to communicate with the fishermen. The liaison has improved since this cooperative has been established, because they participate in workshops and stakeholder meetings (S17, LNV, 2021). Furthermore, respondent S22 mentioned that there was a nature alliance (Alianca di Naturalesa), a consultation structure led by the RCN. Unfortunately that alliance is no longer in place. The issue there is that coordination and input have no formal value. The input is mostly informal, and not binding according to respondent S22 (STINAPA, 2021).

Overall, respondent S17 regards the connectivity principle as the most achieved in Bonaire, because there is no province above you, the government is in direct contact with the RCN. *“There is actually quite a lot of connectivity. From the local government to the national government, as well as to the treaties. So I think it's pretty good actually. Doesn't mean it's always effective, but the connectivity is there (S17, LNV, 2021).*

To conclude, there are three layers of government. The connectivity between the RCN and the local government (OLB) is valued greatly according to one of the stakeholders (LNV). This can be attributed to the short lines and connections on the island. However, one of the respondents was a bit more hesitant about the coordination and indicated that there is sometimes some overlap between the two and unavoidably work past each other (R&O). In addition, the liaison between the government authorities and the fishery organization (PISKABON) is reviewed as positive according to one of the respondents (LNV). Overall, the connectivity is valued positively by all of the stakeholders.

## Government Effectiveness

### **Setting priorities and objectives**

According to respondent S17 of the LNV (RCN) climate change adaptation is a difficult topic. It is definitely mentioned in the agendas of the political parties, but it does not translate into clear trajectories. Specific commitment regarding CCA is limited. The current government in Bonaire does explicitly mention that coastal development should be limited. However, there is still development that is not beneficial in regard to CCA (S17, LNV, 2021). The respondent S20 (R&O, 2021) states that the focus has been in other policy areas, such as education and security. In addition, respondent S18 comments that the capacity can be improved if the government would make climate change adaptation a priority. *“The civil service that must support the government also focuses on implementing the agreements. Look, here the government program, it is just a paper file. There isn't even a progress report. When it comes to governing and directing... and there is an actual program developed... That needs to be given more shape and substance with us. It should be a routine. It has to become a work culture. Unfortunately we are not there yet” (S18, OCW, 2021).* In line with this, the NGO stakeholder from STINAPA (S22, 2021) argues that for the realization you have to be extra careful in the context of climate change, i.e. to tackle local threats, does not exist among local policymakers, nor among the national government. *“When it comes to priorities, very strange contradictory decisions are still being made in 2021. And then you see that climate change and the interests of future generations, nature and environmental interests, do not really weigh so heavily in the greater scheme of things” (S22, STINAPA, 2021).*

### **Coordinating policy and implementation**

The coordination of policy is a problem due to the current departmental division in The Hague, and because of the division in the portfolios among local ministers. The stakeholders in Bonaire have to deal with this: *“I do believe the division is with five different ministers and in three different departments. Uhm BZK, EZK, and LNV. Uhm, and to a certain extent VWS. Uh, well-being aspects. That is a patchwork of departmental involvement with various political leaders. And no, that does not improve the effectiveness” (S16, STINAPA, 2021).* In addition, the respondent added that the challenges regarding climate change are located in the western part of the Kingdom, the six islands. *“The root cause is very different. The SLR, the increase in temperature of the ocean which leads to coral and mangrove reduction, is very different compared to the European Netherlands. There is a multi-billion dollar plan on the table and has long been implemented for raising dikes, along rivers and along the coast. But*

*we cannot simply copy paste those plans to Bonaire. And then you see that there is sadly little serious structural interest in climate change in the Caribbean part of the Kingdom in The Hague. I find that really problematic”* (S16, STINAPA, 2021). The respondent adds *“that if there is no serious structural interest from The Hague, who is literally the person who works as a coordinator, who helps as a counterforce, as well as a hindrance on what you have to get done at other ministries to arrive at serious climate policy. So that's a problem that's on both sides of the ocean. That for me it is essentially a political question, or rather an electoral question”* (S16, STINAPA, 2021). He wonders why the Kingdom does not take the BES islands and maybe even the ABC islands as pilots and global forerunners in the CCA policies.

The respondent of LNV addressed that in the previous Nature Policy Plan from 2013-2017 the goal was to mainstream the environment into the plan, instead of stand-alone nature policies. Unfortunately, this was not completely achieved because everyone is turning towards their own party according to S17 (LNV, 2021). Respondent S20 emphasized the necessity of an overarching masterplan for climate change and that current policy coherence is limited. However, the R&O does try to incorporate old documents, in order to prevent further fragmentation of policies (S20, R&O, 2021). Respondent S22 (STINAPA, 2021) comments that the NEPP 2020-2030 is a good and coherent policy, with specific attention for the removal of stray goats. However, the issue is not setting the priorities, but execution of the policy plan. Respondent S18 also touches upon the lack of implementation strategies and the funding of such a plan. *“So there is a vision on paper, but in practice you don't see it, because every year there must be some activities that support that vision. And they must let that vision live, it must be visible. And that is missing. There is no.... There is not yet enough awareness to make that vision live on the island. That means that a lot still needs to be done”* (S18, OCW, 2021). All respondents touch upon the fact that the capacity of the government and ministries is limited in small island developing states.

### ***Climate Change risk appraisal, awareness, and adaptation appraisal***

In terms of capacity development, the department of R&O is ‘busy with’ the neighborhoods. The respondent S20 comments that their capacity is limited. Yet, the department aims to incorporate climate change (adaptation) into their policy plans in the most practical way. For example, by planting mangrove trees. Respondent S20 mentions that awareness and communication is something that comes forward in the evaluation. Therefore, awareness and education, awareness, and communication are the overarching goals of the current policy plan. However, the respondent indicates that awareness raising is quite difficult if the population does not understand the necessity of the topic (S20, LNV, 2021).

Awareness raising is carried out in a great program for the youth by STINAPA according to respondent S21 (Social Affairs, 2021). Moreover, there are some press releases ad hoc, but it could be improved says respondent S20 (R&O, 2021). Two of the respondents point out that it is difficult to raise awareness for climate change effects, when the priorities of the local citizens lie with overcoming poverty and hunger (S19, LNV; S21, Social Affairs, 2021).

### ***Outputs and Outcomes***

The milestones of the NEPP 2020-2030 are quite broad, because it is a broad plan for the whole Caribbean Netherlands. The approach will differ between the islands. For example, the objective to remove stray grazers will differ for St. Eustatius, Saba, and Bonaire. In Saba there is political commitment to remove all goats at once, but in Bonaire a different approach is necessary because there is not enough support base according to respondent S17 (LNV, 2021). The first step is national park Slagbaai, where the LNV has set up a project for helping farmers

to professionalize. The next phase of the execution agenda will be enforcement. Furthermore, reforestation is one of the outputs that the LNV wants to facilitate, but the respondent indicates that it is difficult for the government to decide on which areas are destined for development and which are destined for reforestation. However, the respondent states that reforestation has been a successful output (S17, LNV, 2021). Moreover, one of the respondents said that the WEB (water and energy company) is busy with implementing solar panels (S21, Social Affairs, 2021).

The other respondents were less positive about the outputs and the extent to which the objectives set by the 2013-2017 Nature Policy Plan have been achieved. It is stated that the implementation plan, including evaluation moments and assessments is not where they are yet according to S18 (OCW, 2021). Like mentioned before, the support base of the residents is low, and often policy is viewed as disturbing. *“I don't notice it, the policy is just disturbing, I'm already having such a hard time, it stops me from catching turtles, that I can no longer chop a tree for charcoal, the policy creates more poverty, I am not served by it”* (S18, OCW, 2021).

To sum things up, setting climate change adaptation as a priority is challenging according to all respondents, because of other priorities that are regarded as more urgent. Moreover, coordinating and implementing policies is challenging due to the division of The Hague and the OLB. Also, the root cause of CC impacts is different in the Caribbean part of The Netherlands, compared to the European part of The Netherlands. Therefore, implementing the same climate policies is impossible. It is key to review old policies and develop an overarching master plan. In terms of awareness raising, the youth program led by STINAPA is valued best by the respondents, but it is also indicated that it is difficult to raise awareness among a population with urgent needs (hunger). Furthermore, two outcomes have been achieved (reforestation and the professionalization of farmers). Nonetheless, the objectives set by the old policy plan have not been reached and are referred to as disturbing for locals.

#### 5.4 Conclusions on stakeholder perceptions in Bonaire

The table below presents the stakeholder's positive or negative perceptions regarding the different indicators that are discerned for each of the five good governance principles.

On the *transparency* principle most of the respondents indicated that ‘the access to information’ is sufficient. The R&O (OLB) is trying to create transparency by publishing information on the government website. Communicating decisions, evidently towards stakeholders, needs further improvement on island level according to the stakeholders. Obviously, to be heard, the NGO nature interest groups do communicate the facts and their aims and decisions clearly. Performance reporting is a delicate subject in small scale island governments (where everybody knows each other) that needs further improvement. The ‘visibility in the decision-making process’ is sometimes challenging due to dealing with the two layers of governance (OLB and The Hague).

*Accountability.* Certification by third party auditing is in place, done by international bodies (CITES and DCNA), but there is not a particular auditing mechanism in place on island level to assess the climate policies. The scale is too small for that according to stakeholders. Notably, the NGO stakeholders are positive on ‘performance monitoring’. However, looking from the perspective of the government officials it can be seen that they are less positive in this respect. Furthermore, self-reporting is limited on island government level, only two of the stakeholders mention self-reporting. Moreover, the OLB is held accountable by DCNA and sometimes directly by The Hague. In terms of the allocation of roles and responsibilities it is

sometimes difficult to allocate this clearly, because of the overlap in practice between the OBL and the RCN, which also has its policy officers working in Bonaire.

On the *inclusiveness* principle, six of the seven respondents were positive about the stakeholder participation. Stakeholders are always broadly invited, like the relevant NGOs, but sometimes not all want to engage. Representation of various stakeholders (fisherman, windsurfers) is very good due to the establishment of their own associations. On the other hand ‘involvement of marginalized groups’ is addressed little. Then there is the issue that was pointed out by the respondents about the representation that local born Bonaireans have become a demographic *minority* on their island. The influx of European Dutch people increased substantially since 2010 when the island became a municipality of the Netherlands. Also the influx from migrant workers from the Caribbean and Latin America region accrued (a.o. Perú, Dominican Republic, Venezuela) and some more people from Curaçao exchange their island for Bonaire.

The *connectivity* principle is regarded as the most positive on the island due to the short connections and that everyone knows each other. ‘Coordination between levels of governance’ is perceived as good by five of the stakeholders. However, one of the stakeholders indicated that the OLB and RCN sometimes work past each other due to overlapping tasks. The liaison with the fishery association has resulted in a better connectivity between the government and fishermen.

On *government effectiveness* the results vary between the respondents. ‘Setting priorities and objectives’ is viewed as negative by five of the stakeholders. Moreover, the RCN and STINAPA had a positive view on ‘policy coordination and implementation’, whereas the two respondents of OLB were more questionable on this. They criticize simply copy-pasting Dutch CCA policies to the Caribbean. It is not possible, due to the different root causes of the CC effects. Most of the stakeholders were positive of the ‘awareness raising’ on the island, particularly about the youth program. Though raising awareness about climate change to a population with other priorities (like poverty and unemployment) is difficult according to two of the respondents. ‘Outputs and outcomes’ are limited. The objectives set by the old Nature Policy Plan (2013-2017) have not been met. However, two outcomes, reforestation and professionalization of farmers, have been implemented. More to come is the hope of most stakeholders and at the same time a frustration that outcomes are moving slowly.

	Transparency	Accountability	Inclusiveness	Connectivity	Government Effectiveness
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Indicators	Access to information	Clarity with which the reasoning behind the decisions is communicated	Performance reporting	Visibility of the decision making process	Certification	Performance monitoring	Self-reporting	Stakeholder participation	Diversity of stakeholders	Marginalized groups involved	Coordination within and between levels of CC governance	Liaison between government authorities and tourism, agriculture and fisheries, and planning and management organizations	Setting priorities and objectives	Coordinating policy and its implementation	Climate change awareness	Outputs & Outcomes
STIN APA (S16)	+			+	+	+		+	+		+-	+-	-		+	-
LNV (S17)	+		-		+	+	+	+			+	+	+-	+	-	+
OCW (S18)	-	-				-	-	+	+-		+		-	-	+-	-
LVV (S19)		-						-							-	-
R&O (S20)	+				+	+-	-	+	+	-	+-		-	-	+-	+
Social Affairs (S21)		+			-	-	-	+	-	-					+	+
STIN APA (S22)	+					+	+	+	+		+	+	-	+	+	+-

**Table 9** Perceptions on GG principles by the respondents in Bonaire

## 6. Comparing Curaçao and Bonaire on Good Governance factors regarding climate governance

In this chapter the results on the policy documents on both islands are compared to each other, as well as the results of the stakeholder interviews. In Curaçao there were more policy documents found than in Bonaire. In the table below it is shown how many of the policy documents address the good governance principles' indicators.

*Transparency.* Six of the eight documents address transparency, in particular 'access to information'. Strangely 'performance reporting' is not mentioned in the policy documents on both islands. Notwithstanding the stakeholders do mention that there is performance reporting. In practice most of the stakeholders on both islands were positive on this performance reporting: 8 of the 13 respondents in Curaçao and 4 of the 7 respondents in Bonaire. On both islands the respondents were also rather positive about the access to information, on both sides one respondent stated that the access to information was lacking. On the indicator 'visibility in the decision-making process' more respondents in Curaçao were positive than in Bonaire.

The *accountability* principle is addressed more often in the policy documents in Curaçao than in Bonaire. However, the respondents in Bonaire did mention that certification, as one of the elements of accountability, was carried out sometimes by international bodies. Performance monitoring is addressed in policy documents on both islands and self-reporting thereof is also addressed. However, on both islands there are respondents that indicate that this is insufficient.

The *inclusiveness* principle is addressed in all policy documents. Stakeholder perceptions on this principle are the same on both islands. On both islands one respondent

indicated that the diversity of stakeholders is limited. However, more respondents were positive in this respect. The involvement of marginalized groups is mentioned in two of the eight policy documents, whereas in the policy documents of Bonaire it is not mentioned at all.

Interestingly, the *connectivity* principle is that none of the respondents in Bonaire perceived this as negative on the island, whereas in Curaçao it was stated by two respondents that the coordination between levels of governance is limited. In all of the policy documents in Bonaire the liaison between the government and fishery and agriculture organizations is addressed. On both islands the liaison with fishermen organizations is perceived as good.

The *government effectiveness* principle mentioned in more than half of the policy documents in Curaçao and in all of the documents in Bonaire. On the outputs and outcomes respondents' answers varied. Some respondents in Curaçao stated that nothing has been achieved yet and that all the policies on CCA are in the starting phase, whereas in Bonaire 3 of the 7 stakeholders indicated that there have been some outputs indeed.

Good Governance Principles and indicators		Policy documents CUR	Interviews CUR	Policy documents BON	Interviews BON
Transparency	Access to information	6/8	8/13 (++) 1/13 (+-)	2/3	4/7 (++) 1/7 (-)
	Clarity with which the reasoning behind the decisions is communicated	4/8	2/13 (+)	2/3	1/7 (+) 2/7 (-)
	Performance reporting	-	4/13 (+)	-	1/7 (-)

	Visibility in the decision-making process	4/8	4/13 (+) 1/13 (-)	2/3	1/7 (+)
<b>Accountability</b>	Certification	3/8	2/13 (-)	0	3/7 (+) 1/7 (-)
	Performance monitoring	7/8	4/13 (+) 1/13 (-) 1/13 (+-)	2/3	3/7 (+) 2/7 (-) 1/7 (+-)
	Self-reporting	6/8	2/13 (+) 2/13 (-)	2/3	2/7 (+) 3/7 (-)
<b>Inclusiveness</b>	Stakeholder participation	8/8	11/13 (++) 1/13 (+-) 1/13 (-)	3/3	6/7 (++) 1/7 (-)
	Diversity of stakeholders	5/8	5/13 (+) 1/13 (-) 2/13 (+-)	1/3	3/7 (+) 1/7 (-) 1/7 (+-)
	Marginalized groups involved	2/8	1/13 (+-) 1/13 (-)	0	2/7 (-)
<b>Connectivity</b>	Coordination within and between levels of governance	4/8	4/13 (+) 2/13 (-)	1/3	3/7 (+) 1/7 (+-)
	Liaison between the government and organizations with responsibilities for fisheries and agriculture	4/8	2/13 (+)	3/3	2/7 (+) 1/7 (+-)
<b>Government effectiveness</b>	Setting priorities and objectives	5/8	5/13 (+) 4/13 (-) 1/13 (+-)	3/3	4/7 (-) 1/7 (+-)
	Coordinating policy and implementation	4/8	1/13 (+) 4/13 (-) 3/13 (+-)	3/3	2/7 (+) 2/7 (-)
	Climate change awareness	5/8	4/13 (+) 2/13 (-) 3/13 (+-)	3/3	3/7 (+) 2/7 (-) 2/7 (+-)
	Outputs and outcomes	2/8	2/13 (+) 2/13 (-)	0	3/7 (+) 3/7 (-) 1/7 (+-)

**Table 10** Comparison between the policy documents and interviews on both islands

In the table below it is shown which good governance principles are addressed in the policy documents on both islands. The crosses indicate how many of the indicators per principle were mentioned. In addition, the stakeholder perceptions on each principle are shown. For government effectiveness the indicators were presented separately, because it is difficult to state that the government effectiveness is good if only one of the indicators is valued as good by the respondents. The crosses that are bold indicate that they score good on all the indicators of this principle. Therefore, it can be concluded that the Strategies for Sustainable Long-term Economic Development in Curaçao scores the best on the good governance principles, as well as the Roadmap for SDG Implementation in Curaçao scores good on transparency, accountability, and connectivity. Both documents address three out of five principles. Second best is the NDP, which scores good on transparency and inclusiveness. In Bonaire the nature policy plans (old and new) score good in terms of transparency and also government effectiveness. When reviewing the respondents' answers the perceptions on the connectivity principle varies notably. It is perceived high by the respondents in Bonaire and medium in Curaçao. This can be ascribed to the short lines in Bonaire between the RCN and the OLB,

whereas in Curaçao there are some ministries that do not speak with each other, according to the interviews. When comparing the respondents' answers on the government effectiveness principle, setting priorities was perceived better in Curaçao than in Bonaire. However in terms of outputs and outcomes, the respondents in Bonaire indicated that some policies have been implemented and that outputs have been carried out.

	Curaçao								Stakeholders	Bonaire			Stakeholders
	Overseas Territories Regional Risk Reduction Initiative (R3i) 2009 - 2016	Caribbean Island Oil Pollution Response and Cooperation Plan (OPRC) - 2012	Strategies For Sustainable Long Term Economic Development In Curaçao - 2013	National Development Plan Curaçao 2015 - 2030	Blue Halo Curaçao - 2015 (Waitt institute)	Environmental Policy Plan Curaçao 2016 - 2021	National Energy Policy for Curaçao - 2018	A Roadmap For SDG Implementation in Curaçao - 2018		Nature Policy Plan The Caribbean Netherlands 2013 - 2017	Enforcement of Nature and Environmental legislation in the Caribbean Netherlands - 2019	Nature and Environment Policy Plan Caribbean Netherlands 2020 - 2030	
Transparency (4)	x	x	xxxx	xxxx	xxx	x	xx	xxxx	High	xxxx	x	xxxx	High
Accountability (3)		xx	xxx	xx	x	xx	xxx	xxx	Medium	xx		xx	Medium
Inclusiveness (3)	x	x	xxx	xxx	xx	xx	x	xx	High	x	x	xx	High
Connectivity (2)		x	x	x	x		x	xx	Medium	xx	x		High
Government effectiveness (4)	xxxx		xxx	xx	xxx		x	xx	Setting priorities (+) Creating awareness (+) Coordinating policy & implementation (-) Outputs & Outcomes (-)	xxx	xxx	xxx	Setting priorities (-) Creating awareness (+) Coordinating policy & implementation (+-) Outputs & Outcomes (+-)

**Table 11** Comparison between the policy documents and interviews on both islands

## 7. Discussion and Conclusion

### 7.1 Introduction

This study had the aim to present a good governance framework, to show to what extent the CCA policies in Curaçao and Bonaire can be considered as good governance practices and what the stakeholders' perspectives are on good governance in CCA policies on their islands. Well executed scientific reports were available containing in detail all the foreseeable climate impacts, data and prospects, well collected for the entire 21st century. These reports are executed by international as well as local bodies (e.g. UN, WB, CCCCC, CARMABI, STINAPA). Scientifically a lot is known about the climate impacts in Curaçao and Bonaire. Based on this information, evidence based long term policy plans are made on both islands. Therefore, on paper many climate policies are in place in Curaçao as well as Bonaire. "But paper has patience" to cite a stakeholder.

Is good governance then in place in the CCA policies of both islands? Yes and No. The patient policy papers contain more or less all the principles of good governance based on the assessment by the developed framework of principles and corresponding indicators. The results on the five principles of good governance - *transparency, inclusiveness, connectivity,*

*accountability and government effectiveness* - will be addressed in the discussion and conclusion section (7.2). Then reflections will be made on the limitations of this research and suggestions for further research will be given (7.3). The last paragraph will elaborate some notable recommendations for both islands.

## 7.2 Discussion and Conclusion

Some principles and corresponding indicators for good governance score better than others. The *transparency and inclusiveness* principles score relatively well in the analyzed policy documents as well as in the views of the respondents on both islands. Among *transparency* the indicator ‘access to information’ scores high on both islands. Bonaire could improve in ‘clarity in communicating reasons behind decisions’ for better governance practices.

The *accountability* principle is in place in most documents and is assessed positively. This is quite in contrast with the views of most respondents who are quite critical about the accountability of climate policies on their islands. Accountability and all three corresponding indicators need improvement in their views. The indicators are ‘certification’, ‘performance monitoring’ and ‘self-reporting’.

The *connectivity* principle was clearly more present in Bonaire than in Curaçao in the views of stakeholders. The Bonairean stakeholders ascribe this to the close relationship between the RCN and the OLB, despite sometimes some delineation of tasks and responsibilities between the two. Whereas in Curaçao this GG principle *connectivity* is less likely in place due to a bigger society with more institutions and more distance to government bodies of the Kingdom, as noticed by the Curaçao respondents.

Moreover, the *government effectiveness* principle was perceived a little more positively in Curaçao than in Bonaire, particularly on the indicators ‘setting priorities’ and ‘creating awareness’. Although in terms of ‘coordinating policy and implementation’ and ‘outputs and outcomes’, the respondents in Bonaire value their practices slightly more favorably than in Curaçao, but the differences are small. One of the main complaints from the perspective of the stakeholders is the lack of implementing policies and monitoring progress. The ‘outputs and outcomes of policies is one of the most important indicators of good governance according to the literature (ch.2) and also in the eyes of the interviewed stakeholders. And especially this one is missing. Main arguments uttered in Curaçao for failing in *government effectiveness* are lack of finances, lack of sense of urgency and the Covid-19 pandemic. In Bonaire in this respect more sounds were heard about antagonisms and inflexibility between the OLB government of Bonaire and the Administration in The Hague.

In Curaçao there is quite some variety in the perspectives of the different respondents on this *government effectiveness* practice. Some interviewed policy makers in the core of the CCA policy process are rather positive. They are working on awareness programs, on creating networks and on coordinating activities and people. Therefore, they see more action happening, than stakeholders from a distance. Nevertheless, those who assess most of the good governance indicators positively, are still very negative about the lack of visibility of one of the main GG indicators ‘output and outcomes’.

Answering the central question “*To what extent can climate change adaptation policies in Curaçao and Bonaire be considered as good governance practices?*” We can tentatively conclude that the five assessed good governance principles are partly in place, but not all of them are strongly and extensively present. The visibility of indicators per principle also varies. Some indicators are rather modestly visible or are lacking at all. This leads to one of the main conclusions of this thesis research: the three good governance principles *Transparency*,

*Inclusiveness and Connectivity* score relatively better than *Accountability* and *Government Effectiveness*. Another conclusion is that the presence of the five good governance principles and the corresponding indicators is clearer in the policy documents, than in the perceptions of the stakeholders in the interviews. The discrepancy between the policy documents and the views of the stakeholders is the most substantial for the principles of *Accountability* and *Government Effectiveness*. Stakeholders are much less positive about these good governance principles in regard to CCA policies.

One could conclude that the hard indicators seem to score the lowest, like on the indicator 'output and outcomes'. Some stakeholders were very negative about what was executed and about the slowness of real implementations over the years. On the other hand, some policy makers who are intensively involved in the process see a bit more where progress is made. Even if it is not yet publicly visible in output, they are happy with small steps, e.g., in awareness raising, in attention from politicians or in financial or research support from international organizations and scientists.

Some differences between Curaçao and Bonaire in the presence of good governance in climate policies are already mentioned above. Based on the analysis there is no big clarity that one island does much better on good governance practices in climate policies than the other. In some respects, Bonaire does better and in other respects Curaçao seems to be doing better, but the differences are not striking. Back and forth they can learn from a variety of elements in the process of policy making and implementation. In some ways Bonaire seems to be ahead, e.g., in restoring the ecosystem, in sustainable fishery and in reforestation. In other ways Curaçao seems to be further in the process like in coral reef protection, biodiversity protection, in mangrove restoration and in awareness raising projects.

Some of the findings in this thesis research are supported by existing research. The expected differences between Curaçao and Bonaire, because of their different small-island-jurisdictions (respectively autonomous in the Kingdom and municipality of the Netherlands) was not found. The differences in the jurisdictions of both islands did not lead to better governance practices in climate policies in one island compared to the other. This finding could be related to the findings of Turner et al. (2014) who also used the principles of Lockwood for measuring good governance practices. They found differences in good governance in climate policies related to different jurisdictions in the investigated small islands. They also proved that islands with better socio-economic conditions and with more resource availability have more good governance in climate policies in place (Turner et al., 2014). Why did this thesis research then not find such a relation? In hindsight Curaçao and Bonaire are too similar to show differences in good governance practices in climate policies. They have different jurisdictions, but they still are both *non-sovereign* small islands under a kingdom umbrella. The presence of the Kingdom of the Netherlands ultimately makes the availability of resources quite different from sovereign small island states which Turner et al. have studied, islands who have nothing to fall back on. Turner et al. (2014) also proved that small island states with better socio economic conditions, middle income versus lower income, do better in good governance in climate policies. In line with this result there is no reason to expect good governance differences between Curaçao and Bonaire. Although both have different average income levels (\$19.700 in Curaçao and \$23.000 in Bonaire), they both are categorized by the World Bank as *high income* small island jurisdictions. Initially for this thesis research the jurisdiction differences between Curaçao and Bonaire seemed of relevance for possible differences in good governance in climate policies. In the end Curaçao and Bonaire are too similar comparing them to other Caribbean islands.

Another finding in this thesis research supported by existing literature is that both islands have clearly shown how central the role of governments is for good governance in climate policies and practices. This is supported by Nunn (2009), Scobie (2016), Lockwood (2010) and Ha et al. (2018). Scobie (2016) even stated that good governance is in fact more important than the climate policies as such. Climate policies can't be effective without good governance, which is also a reason for the Copernicus Institute at the University of Utrecht to develop a special research program "[Governance of Climate Adaptation and Mitigation](#)". Governance conditions related to climate adaptation policies play a central role in this research program as visible in the research of Dieperink and others (Ha et al., 2018). The central role of government counts for all phases in the process of climate policy making and implementation. A central finding in this thesis study is that the role of government is more present in the earlier phases of the process than in the latter phases of implementation, performance reports and monitoring output and outcomes. This is also known from previous research by Robinson and Gilfillan (2017). They noticed that it remains difficult to identify effective solutions to governing climate change at finer scales, and to quantify the relative impact of poor governance. Output and outcomes are the longer-term results and are often not immediately measurable, particularly in small island states with often weak institutional bodies and low administrative capacity.

In line with the previous finding and also supported by other research (Grindle, 2004) is the insufficient (governance and institutional) capacity of most small island governments. Grindle introduced the concept of '*good enough governance*', recognizing that a lot of (developing) countries and small islands are never capable of fulfilling all WGI's good governance demands. What is realistic in each SIDS context?

Another finding in this thesis research is somehow divergent from previous research. Scobie (2018) showed that external accountability is weaker than accountability within government departments, because internal actors do not regard external stakeholders as agents who they should be directly accountable to. However, the findings in this thesis research showed that the respondents indicated that precisely external stakeholders are seen as rather important, particularly in international conventions, but that there is no system in place to guarantee this and to make it visible.

### 7.3 Limitations of the research

While conducting the interviews I sometimes got the feeling that it was perhaps too early for this research because the climate policy plans were still in progress and occasionally even not known by some respondents, although they were a stakeholder in the field. It was an indication of low priority setting of climate policies compared to other more imperative political issues. Also a low public awareness of climate change - 'a far from their bed topic' according to stakeholders- did not contribute to more political prioritization. The process of climate governance stagnated before the implementation phase. This was clear in Curaçao, and in Bonaire it seems if the process was not yet there, apart from the nature policies.

Stakeholders view several relevant factors behind the slow implementation and lack of output and outcomes in the climate policies that are in place on paper. For the disappointment and criticisms heard between the lines or openly by stakeholders they direct to the financial and economic situation of both islands and to the corona pandemic that worsened the already vulnerable economic situation by the shutdown of the tourist sector. These context factors were not the focus of my research in the first place, but they emerged during the interviews. In follow up research it would be good to address and incorporate such long term and short

term factors somehow in the framework, also because of the relevance the respondents ascribed to these context factors.

### ***Reflections on the used methods***

The results of this research are in some respects in line with my expectations but in other respects not and could surely be improved. Positive and even above expectations was that I could do the fieldwork and conduct the interviews on the side despite a severe Covid-19 pandemic, and a lockdown with heavy restrictions such as a driving license plate permit for only two days a week, on islands with very scarce public transportation.

I could visit some of the involved institutes, conduct the interviews on site and could sometimes meet with colleagues of the respondents as well.

Critical reflections concern the type of stakeholders. Looking back I should have interviewed more different NGO stakeholders and also a stakeholder of CHATA, the Tourist Board of Curaçao, representing the main economic sector on the island. I would expect that NGO stakeholders could have been more critical about GG principles in CCA policies than the policy makers I interviewed. Moreover, the respondents viewed sustainable development policies and nature policies as being climate policies. However, most respondents were accessible to answer my research questions. Only two of the interviews were not used for the research.

Another critical reflection that can be made is that I originally intended to carry out a survey with a household panel or to use focus groups with citizens in neighborhood communities. Contacts were already made. Both methods happened to be impossible because of the lockdown. Even for the household panel study one had to visit the households in person. Therefore the perspectives of a-select groups of citizens of Curaçao and Bonaire are missing in this study. This is a pity and at the same time a recommendation for further research. The citizens' awareness of CCA and their participation in implementing policies is highly valuable as is mentioned by stakeholders on both islands and has been shown by previous research in other parts of the world (Iwama et al., 2021, Van Aalst et al., 2008).

Furthermore, in future research the abstract concept of climate change adaptation could be elaborated more towards what it encompasses for different islands and what it means for islanders? For example, adapting to sea level rise could mean for one island not building too close to the coast or on higher parts of the island, but will not work for another island. The same counts for most possible measures of climate change adaptation in small islands. Attention to factors of good governance and the lack of them is more crucial than the technical solutions to CCA as such. This invites further research in the future for the relation between good governance and CCA policies.

One suggestion, made by stakeholders, lingered and kept coming back, which I would like to use for a closing statement. Make Curaçao and Bonaire, or even better the BES islands and the ABC islands, to pilot islands, trying out various climate change adaptation policies according to the island communities and according to the good governance principles. This could be an excellent opportunity to show what is possible on small islands with vulnerable communities and economies and make the BES and the ABC islands global forerunners in the CCA policies. It will also contribute to the scientific body of knowledge of climate change in SIDS and will put the Southern Caribbean with the BES and ABC islands more on the scientific map.

## 7.4 Recommendations

The review of the literature in chapter 2 showed how important it is for developing and implementing CCA policies that principles of good governance are in place. This applies even more in places with weak governments and weak institutions. Both islands studied have had to deal with rapidly changing administrations in the last decade, which makes it difficult to develop and implement sound policies that meet the GG principles.

Small suggestions from this research could be found in the comparison of Bonaire and Curaçao. Both islands do better in some aspects of good governance and do worse in different other aspects.

Based on the research in this thesis the conclusion can be drawn that the prospects for climate change adaptation policies in Curaçao and Bonaire so far are limited. This study has identified several challenges particularly with regard to good governance and therefore, I would like to make the following recommendations.

First, on both islands the deficiency in some governance principles and indicators should be improved by regulations in such a way that climate change adaptation issues become in the lead for steering other policy areas. E.g. Improving or reforming the tourist sector should start from a climate change adaptation perspective, rather than the other way around. An interesting example in this respect in Bonaire is the fishery sector. The NGOs Carmabi and Stinapa also work from that perspective. Moreover, the island governments could systematically develop frameworks for ‘coordinating policy and implementation’ and ‘performance monitoring and reporting’, which are the least in place in practice, as this study showed.

Second, although both island governments assess positively on inclusion of different stakeholders, enhancement on the involvement of local enterprises is possible, also in early phases of the process, in participation in the policy formulation and management processes. Delegating more responsibilities and authority to a variety of actors can improve a sense of ownership, broader than only the NGOs. Notwithstanding that the role of the island governments will always stay central in small island states. Due to the small scale, funding for small-scale experiments is recommended, often leading to more support and participation from the community. NGOs in Curaçao and Bonaire support the development of more small-scale projects in climate adaptation such as new mangrove planting (Curaçao) or mangrove restoration (Curaçao and Bonaire). Moreover, initiatives to restore biodiversity of coral bleaching could be small scale developments, funded by international organizations such as the Waitt institute.

Third, both island governments should invest more financial resources and institute mechanisms to enhance policy implementation. This is where the importance of good governance comes to the fore. Small islands will never have enough money to finance the necessary climate policies in the next decades. International sources will arrive, but under conditions of good governance, or good enough governance in place. Without good governance in place climate change adaptation policies will never become successful as is shown by scholars (Robinson 2020) and is also the starting point for the Worldbank (WGI’s). Although the access to information is evaluated positively, information sharing across ministries seems insurmountable sometimes. In addition, information sharing with the public and with the private sectors are important topics for improvement with many challenges (“A governmental Facebook page is not enough”). Improvement of public awareness of climate change issues and policies regulations can enhance resource ownership of a.o. the island coasts, the coral,

the biodiversity, the mangrove, which can enhance public participation and improve policy implementation.

Fourth, the science-policy interface could be improved by establishing communities of practice and research. Island institutes like Carmabi, Blue Halo Curaçao, or Stinapa are well connected to many international actors. These organizations already play an important role in generating long-term visions, influencing values, and producing knowledge. However, they could play a role in fostering collaboration and social learning among different actors and brokering solutions to specific issues.

Fifth, next research steps are needed to further elaborate on the assessment framework. The assessment framework in this study, based on Lockwood (2010) and the WB indicators, has shown that the chosen good governance principles and indicators have an impact on the climate change adaptation policies. Nevertheless, elaboration and tailoring of the framework is possible, mostly on the hard indicators. The framework in this study can be used for further studies in different small island states and get hold on meaningful variations in good governance conditions related to climate policies. The good governance framework has shown its utility in this South Caribbean islands study but can still be improved by conducting more case studies. Curaçao and Bonaire have different jurisdictions, but the difference is small compared to other Caribbean small islands, particularly the differences between sovereign and non-sovereign small states could be interesting. The framework can be adjusted by including indicators that address features of different governmental or political systems. Refinement of the framework could also be realized by applying it to other government regimes in the Caribbean, like in the British, French or Spanish speaking small island states. Moreover, the framework could be further tested by applying it to cases in the Windward islands that are often hit by hurricanes. This could lead to discussions which good governance principles of the framework are most distinguishing in enhancing CCA policies. The framework showed that it captured relevant variations in good governance principles, especially between the ones in the first phase of the process and the ones in the last phase of implementation, monitoring, and measuring outcomes. Follow-up research will probably show other limitations of this study.

With the speed climate change is taking place, more hurricanes in the Caribbean, severe flooding in Europe and China this summer, unprecedented temperature rises in Canada, forest fires in Australia and California, it will hopefully create more political leverage for realizing some of the recommendations. These above recommendations match with broader policies for SIDS of the UN and SAMOA (2015).

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## Appendices

For the NGOs the interview guide for Curaçao is included and for the policy makers the one for Bonaire is included. The other two have the same questions, but are adapted to the policies and ministries of the specific island.

## Appendix 1. Interview guide NGOs

Fijn dat u de tijd wilt nemen voor dit interview. Mevrouw /meneer ..... En als u het goed vindt zou ik dit interview graag opnemen, zodat ik het terug kan luisteren. Mijn onderzoek gaat over...

"OK, [naam respondent], bedankt dat ik dit kan opnemen," om de bevestiging van toestemming te documenteren.

### Introductie

1. Waar is uw organisatie in enkele zinnen voor verantwoordelijk? Of: Wat is de missie van uw organisatie?
2. Hoe lang werkt u al bij / bent u lid van deze organisatie?
3. Wat zijn uw persoonlijke taken en verantwoordelijkheden?

### Gevolgen van klimaatverandering

4. Hoe staat het ervoor met de risico-inschatting van klimaatverandering op Curaçao? (high, medium, low) Is er een risico-inschatting gemaakt op Curaçao? Wanneer? Door wie?
5. In hoeverre is uw organisatie hier mee bezig op het eiland? Sinds wanneer?
6. Kunt u een voorbeeld geven van wat u bijvoorbeeld heeft gedaan?
7. In hoeverre zijn eilandbewoners zich bewust van de impacts en gevolgen van klimaatverandering? Invullen:
  - van de temperatuurstijging (hittegolf),
  - van de zeespiegelstijging, kust overstromingen, zware regenval
  - van de coral bleaching,
  - van de mangrove sterfte
8. Wordt er iets gedaan aan awareness raising? (D.m.v projecten, bijeenkomsten, campagnes) Zo ja, door 'wie' of 'welke partij'?
9. Op welk gebied/welke gebieden het meest van bovenstaand lijstje (temp, zeespiegelstijging etc). (CARMABI school projecten)

### Curaçao CC Policy Assessment: Project proposal for UNESCO (2018)

Ik wil graag een aantal vragen stellen over dit plan/beleid en de samenwerking met de overheid en de betrokkenheid van uw organisatie. Het gaat dan bv over de transparantie, over taken en verantwoordelijkheden, over monitoring e.d (de good governance principles).

### Transparantie

12. In hoeverre heeft uw NGO toegang tot allerlei informatie over klimaatadaptatiebeleid (CCA policies)? Wordt dat bij een instantie of bij Min van Gezondheid, Milieu en Natuur en bijgehouden?
13. Kunt u een voorbeeld geven van waar dat niet het geval was? En waarbij dat wel het geval was?
14. In hoeverre is er vanuit de overheid duidelijkheid waarmee de motivering achter besluiten wordt gecommuniceerd naar stakeholders? Naar ngo's, naar parlement, naar burgers?
15. In hoeverre is er zichtbaarheid op de besluitvormingsprocessen in de voorbereiding van klimaatadaptatiebeleid? Zijn jullie hierbij betrokken? Wie neemt de belangrijkste besluiten?  
  
Formeel: minister, parlement, informeel? Bv. vector-borne diseases/chikungunya of kust overstromingen (coastal inundation) of integraal water management?
16. Is er een samenwerking van uw organisatie met de overheid en hoe verloopt die samenwerking? Aan tafel / overleg of wordt u bij monitoring betrokken?

17. In hoeverre zijn de resultaten en mislukkingen van klimaatbeleid duidelijk?
18. Welk beleid vindt u tot nu toe bv eigenlijk mislukt? Wat zou er wel moeten gebeuren? (ingrijpen van buitenaf: WHO, NL, UN).
19. En welk beleid vindt u wel succesvol tot dusverre? Waardoor komt het volgens u dat dit beleid wel succesvol is geweest tot nu toe?

### **Accountability**

20. In hoeverre zijn belanghebbenden in regionale organisaties verantwoordelijkheid verschuldigd aan elkaar?) bijv aan CARICOM of andere Caribische organisatie, aan Curaçaose overheid, de particuliere sector en milieu-ngo's, aan UN of World Bank)
21. Kunt u aangeven of de volgende verantwoordingsmechanismen binnen uw mandaat vallen en / of een vast onderdeel van uw werkzaamheden vormen? (M.a.w legt uw organisatie ook verantwoording af aan andere organisaties en/of de overheid? Vaak, zelden want valt onder mandaat; of valt niet onder mandaat, maar toch wordt vaak of zelden verantwoording afgelegd.
22. Is third party auditing (certification) een onderdeel van uw activiteiten of mandaat?
23. Hetzelfde wil ik vragen over monitoring en prestatie van actoren binnen de sector, speelt uw organisatie daarin ook een rol? Worden jullie vaak betrokken bij het monitoren?
24. Jaarlijkse self-reporting (jaarverslag) van uw organisatie?

### **Inclusiviteit**

25. Hebben alle belanghebbende groepen (stakeholders) passende mogelijkheden om deel te nemen aan de processen en activiteiten van het bestuursorgaan? Zoals bij het opstellen van het NDP 2015-2030 en het Environmental Policy Plan 2016-2021.
26. Is er voldoende betrokkenheid van stakeholders/belanghebbende groepen bij het klimaatbeheer van de overheid?
27. Zijn er ook voorbeelden van belanghebbende groepen die expliciet worden uitgesloten van inspraak in beleidsvormingsprocessen?
28. Zo ja, wat zijn volgens u de redenen voor een beperkte betrokkenheid van sommige belanghebbenden, bv bepaalde groepen burgers?
29. Hoe zou de betrokkenheid van belanghebbende groepen kunnen worden verbeterd? (e.g marginalized groups)
30. Is er diversiteit binnen de betrokken actoren, bv. jongeren, vrouwen, diversiteit van bevolkingsgroepen - spaanstaligen, Curaçaoënaars, nederlanders, expats? (NGOs, overheid, local community)
31. Is er veel veranderd over de afgelopen tien jaar qua betrokkenheid naar uw mening?

### **Connectiviteit**

32. Worden er vaak bijeenkomsten gehouden tussen de overheid en organisaties m.b.t toerisme, landbouw en visserij, planning en beheer?
33. Kunt u iets vertellen over hoe zo'n proces verloopt? Zoals bv. bij het opstellen van het National Development Plan 2015-2030?

### **Government effectiveness**

Beleidscoherentie (policy coherence)

34. Is het beleid op het gebied van klimaatbeheer duidelijk of zijn er overlappingsen? Voorbeelden? (bv. National Development Plan Curaçao 2015-2030, Blue Halo Curaçao - 2015, NATIONAL ENERGY POLICY for Curaçao 2018)

Capaciteitsontwikkeling (het vermogen, de menskracht, het opleidingsniveau, om iets te doen)

35. Hebben agentschappen die betrokken zijn bij klimaatbeheer de capaciteit om hun rollen en verantwoordelijkheden uit te voeren?
36. Heeft volgens u het Ministerie van Gezondheid, Milieu en Natuur voldoende capaciteit (vaardigheden, kennis, gereedschappen, uitrusting) om adaptatiebeleid uit te voeren? Op welk gebied gebeurt dit het meest?)
37. Kunt u redenen voor het gebrek aan capaciteit van agentschappen waarmee u bekend bent geven?
38. Zou u aan kunnen geven hoe de capaciteit van deze agencies op het gebied van milieubeheer kan worden versterkt? (Waait institute)

The quality of policy formulation and implementation

39. Wat vindt u van de kwaliteit van het beleid inzake aanpassing aan klimaatverandering? Wat zou er anders of beter kunnen?
40. Wat vindt u van de uitvoering van het CCA-beleid op het eiland?

The reliability of the commitment of the government to these policies

41. Wat vindt u van de betrouwbaarheid van de inzet van de overheid voor dit beleid? (Heel goed, voldoende, onvoldoende)
42. Hoe kan de inzet van de overheid worden verbeterd?

Regulatory frameworks

43. Zijn er regulatory frameworks die kijken of het beleid daadwerkelijk wordt uitgevoerd?
44. Zijn er voorschriften en wetten van kracht die de uitvoering van dit beleid verzekeren?

## Appendix 2. Interview guide policy makers

Fijn dat u de tijd wilt nemen voor dit interview. Mevrouw /meneer ..... En als u het goed vindt zou ik dit interview graag opnemen, zodat ik het terug kan luisteren.

"OK, [naam respondent], bedankt dat ik dit kan opnemen," om de bevestiging van toestemming te documenteren.

### Introductie

1. Hoe lang werkt u in uw huidige functie?
2. Waar is uw ministerie/organisatie in een paar zinnen verantwoordelijk voor?
3. Wat zijn uw persoonlijke taken/verantwoordelijkheden? En uw afdeling?

### Gevolgen van klimaatverandering

4. Bewustwording: Leeft er iets van klimaatadaptatie bij politici? Bij burgers? Bij welke NGOs
5. Is er al ervaring met climate change effecten? Kunt u een voorbeeld geven?
6. Hoe staat het ervoor met de risico-inschatting van klimaatverandering op Bonaire? (high, medium, low) Is er een risico-inschatting gemaakt op Bonaire? Wanneer? Door wie?

### Beleid inzake klimaatverandering

De volgende klimaat beleidsdocumenten heb ik online gevonden. Hierover zou ik graag wat vragen willen stellen.

- Beleidsplan natuur en milieu Caribisch Nederland 2020-2030
  - Handhaving Natuur- en Milieuwetgeving In Caribisch Nederland Over Loslopend Vee, Zwervend Vuil En Andere Problemen Voor De Natuur Op Bonaire, Sint Eustatius En Saba
  - Nature Policy Plan: The Caribbean Netherlands 2013 - 2017
7. Wordt er al veel gedaan aan klimaatadaptatie (duurzame ontwikkeling) vanuit het RCN/OLB/uw ministerie?
  8. Wat is het beleid op dit moment? Welke wordt (het meeste/beste) uitgevoerd?
  9. Is dit overheidsprogramma volgens u een grote verbetering, een kleine verbetering of geen verbetering?

### **Goed bestuur**

10. Wat wordt volgens u beschouwd als goed bestuur?
11. Is daarvan sprake op Bonaire als het gaat om klimaatverandering beleid?
12. Waarom wel/niet? Kunt u daar verder op ingaan?

### **Transparantie**

13. Voert het RCN/OLB/uw ministerie haar belangrijkste taken integer en transparant uit?
14. Zijn afdelingen / ambtenaren die betrokken zijn bij klimaatbeleid transparant in hun bedrijfsvoering?
15. Wat controleren ze wel of niet en waarom?
16. Hoe communiceren ze met de partijen die gecontroleerd moeten worden?

### **Accountability**

17. In hoeverre is er een duidelijke verdeling van rollen en verantwoordelijkheden bij het klimaatbeleid? (1 ministerie verantwoordelijk, meerdere, samenwerking?)
18. Wat zijn de rollen en verantwoordelijkheden van agentschappen? Worden de instanties die betrokken zijn bij klimaat governance duidelijk verwoord?
19. Welke actoren hebben overlappende rollen en verantwoordelijkheden? Hoe kunnen deze overlappingen worden gecorrigeerd? Hoe zou je verbeteringen kunnen realiseren?
20. Doet de overheid voldoende aan monitoring en evaluatie van hun prestaties op het gebied van klimaatadaptatie?
21. Als deze activiteit ontoereikend is, geef dan aan waarom u denkt dat dit zo is. Welke manieren zijn er volgens u om monitoring en evaluatie te verbeteren?

### **Inclusiviteit**

22. Worden ngo's organisaties voldoende betrokken bij het beleid omtrent klimaatverandering?
23. Hoe worden ze bijvoorbeeld betrokken? (half/jaarlijks overleg, stuurgroep, commissies, bilateraal?)
24. Mogen ze meewerken aan het beleid? Of alleen achteraf kritiek leveren?
25. Zo nee, wat denk je dat de redenen zijn voor die beperkte betrokkenheid?
26. Hoe kan de betrokkenheid van ngo's en andere belangengroepen belanghebbenden worden verbeterd? Voorbeelden: inspraakprocedures maken, laten meewerken/inschakelen bij bewustwording, wijkgroepen inschakelen, media?

### **Connectiviteit**

27. Is er sprake van versnippering en gebrek aan coördinatie voor klimaat governance? Hoe komt dat? Wat zou tot verbeteringen kunnen leiden?
28. Hoe verloopt de samenwerking tussen de verschillende ministeries?

29. Kunt u iets vertellen over hoe zo'n proces verloopt? Zoals bij het opstellen van het beleidsplan natuur en milieu Caribisch Nederland 2020-2030?
30. Worden er vaak bijeenkomsten gehouden tussen de overheid en organisaties m.b.t toerisme, landbouw en visserij, planning en beheer?

### **Government effectiveness**

#### Beleidscoherentie (policy coherence)

31. Is het klimaatbeleid duidelijk en transparant?
32. Zijn er overlappingsen en duplicaties bij verschillende ministeries? Geef voorbeelden van beleid overlappingsen? Bv. Min milieu, Min. Toerisme, Min. Huisvesting

#### Capaciteitsontwikkeling (het vermogen, de menskracht, het opleidingsniveau, om iets te doen)

33. Hebben agentschappen die betrokken zijn bij klimaat governance de capaciteit om hun rol en verantwoordelijkheden uit te voeren? Waar schort het aan? Voorbeeld? Deskundigen?
34. Heeft Landbouw Milieu en Natuur voldoende capaciteit om efficiënt te presteren op klimaatadaptatie?
35. Beschikt de afdeling Landbouw, Milieu & Natuur over voldoende capaciteit om klimaatadaptatie te managen? Op welke velden (rif/behuizing/etc) voor burger bewustwording, technische veranderingen (early warning systems), sociale aanpassing (hogere temp, hoger water, .....
36. Waarom is er volgens u gebrek aan capaciteit van agentschappen waarmee u bekend bent? Wat zijn hiervoor de redenen?
37. Hoe zou volgens u de capaciteit (de milieu governance capaciteit) van deze milieu agentschappen kunnen worden versterkt?
38. Wat vindt u goed aan het het beleid inzake aanpassing aan de klimaatverandering op Bonaire? Wat vindt u minder geslaagd in het beleid?
39. Wordt er voldoende aan bewustwording gedaan? Voorbeelden?

#### De betrouwbaarheid van de inzet van de overheid voor dit beleid

40. Vindt u van de betrouwbaarheid van de inzet van de overheid voor dit beleid voldoende? (of onvoldoende)
41. Hoe belangrijk is het op de agenda? Worden er werkgroepen gehouden? etc.
42. Hoe zou volgens U de inzet van de overheid kunnen worden verbeterd op dit punt/punten?

#### Regulatory frameworks

43. Zijn de regels en wetten die het mandaat van uw afdeling/van uw taak regelen voldoende om efficiëntie/voortgang? Is dit in het klimaatbeleid te bereiken?
44. Zo nee, wat voor veranderingen of hervormingen van de regelgeving cq, wetgeving zou u dan willen voorstellen?