

Underlying conceptualizations of climate justice in the Global North and South

A comparative discourse analysis of positions on justice in
National Adaptation Plans

Bachelor thesis

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Abstract

In recent years, a number of nations in the Global North and South started preparing for the impacts of climate change by developing their National Adaptation Plans. Like other political discourses, there is evidence for an increasing focus on justice in these documents. However, ideals around justice are socially constructed, making it unclear what justice positions are taken up by which nations. This thesis uses a systematic framework to empirically analyse National Adaptation Plans and reveal the differences in justice ideals between nations in the Global North and South. The results show that countries on the Global South focus on improving the livelihoods of rural communities and overcoming gender inequalities. To achieve this, the Southern countries use funds coming from transnational donors. In contrast, countries of the Global North encourage individual responsibilities to adapt and focus on the role of the private sector. To some degree, adaptation is financed by their governments.

Key words: National Adaptation Plan, Justice framework, Global North and South, Climate adaptation

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1. Introduction

Far from being a constant factor, the Earth's climate has been shifting back and forth for countless years. And human beings have been subjected to changing environments ever since their first appearance. But never before did climate change happen in the way it does today. With each passing year, considerable amounts of human-induced greenhouse gasses are emitted into Earth's atmosphere (Biagini et al., 2014). As a consequence, global temperatures have risen 0.8°C above pre-industrial levels (IPCC, 2022). Impacts of the warming atmosphere can be traced everywhere. From river floods in Western-Europe, to droughts in East-Africa and wildfires in the Western United States. Extreme weather events like these will pose increasing danger to humans in the decades to come (Zolnikov, 2019). Next to that, the continuing process of population growth, in combination with urbanization, has exposed many areas to potential climate disasters (Alfieri et al., 2015).

When considering the implications of these factors, the necessity of adapting to the changing climate becomes clear. Human, material and economic losses can be prevented by proactively adjusting the built environment and reshaping social and economic systems (Biagini et al., 2014). However, successful climate adaptation arguably requires deeper considerations. Evidence has shown that climate change causes fundamental injustices due to various reasons. First, vulnerable countries and poor communities in the developing world are systematically more exposed to extreme weather events. In Africa, for instance, there are many rural communities who live in close relation with ecosystems. And since Africa is harassed by severe climate stresses, the livelihoods of these communities are in immediate danger (Zolnikov, 2019). Second, there are large differences in adaptive capacity between communities around the globe. Social-economic disadvantages including poverty, inadequate access to social services and lack of education limit the adaptation capacities of vulnerable groups (Audet, 2012). Third, adaptation measures themselves can lead to an uneven distribution of burdens and benefits among different groups. For example, interventions can negatively affect or displace poor communities. Such was the case in Manila and Medellin, where poorer neighbourhoods were removed to make room for infrastructure projects. Next to that, there is evidence for interventions that prioritize elite groups at the expense of the poor. An example is Boston, where flood barriers were constructed that exclusively protected areas of economic value (Anguelovski et al., 2016)

In recent years, scholars observed that such justice issues are increasingly emphasized in political discourses and research programmes. Some even speak of a 'justice turn' in global governance (Biermann & Kalfagianni, 2020). Evidence for the increased consideration of justice can also be found in the field of climate adaptation. Following the Paris convention of 2015, the Green Climate Fund (GCF) was requested to provide support for the formulation of National Adaptation Plans (NAPs

henceforth). In addition to countries in the Global North, a number of less developed countries in the Global South also participate in the programme (Hammill, 2019). NAPs are policy documents formulated by national governments that assess the challenges posed by climate change in that country. Next to that, however, they also seek to “reduce vulnerability to the impacts of climate change, by building adaptive capacity and resilience” and “addressing gaps” (UNFCCC, 2022). Hence, NAPs are inherently concerned about the unfair outcomes for different people due to exposure and vulnerability (i.e., climate justice).

Where problems emerge, however, is that considerations of inequalities and injustices in NAP documents have taken place through normative interpretations of justice concepts (Klinsky et al., 2017). Ideas around climate justice are not homogenous, but socially constructed instead, making the comparison of justice discourses problematic (Kaufmann et al., 2016). There are in fact many philosophical convictions about what a just society implies. And governments in different parts of the world write policy documents from their own justice standpoints, resulting in an unstructured debate (Biermann & Kalfagianni, 2020). This thesis aims to compare these underlying positions on climate justice by categorizing statements relating to justice in NAPs of the Global North and South.

1.1 Research question

Justice topics are increasingly discussed in climate adaptation discourses throughout the Global North and South. These address the unequal exposure and vulnerability of different groups and places to climate change impacts. However, justice ideals are heterogenous and socially constructed. Up to now, it is unclear what justice positions are supported by what nations and why. This thesis, for that matter, offers a systematic approach to categorize justice positions and applies it to NAPs of the Global North and South. The objective is to add clarity to empirical discourses concerning climate justice by revealing the major differences in justice ideals. In order to meet this aim, the following research question has been formulated:

How are fundamental positions on justice reflected differently in National Adaptation Plans developed by countries in the Global North and South?

1.2 Sub questions & reading guide

This research starts by discussing the societal and scientific relevance of the topic. It continues with two theoretical sub questions that discuss the term climate justice and its meaning. First, the term is defined more closely and set against other forms of justice. Second, the discussion around justice is substantiated with multiple options for theoretic justice distinctions that can be used to categorize discourses in NAPs.

After that, two empirical questions answer what global challenges lie ahead due to climate change and what strategies are implemented to adapt. These last two questions are used to formulate assumptions on the justice issues that are at play in the countries included in the analysis. To summarize, the following four sub questions are covered:

1. *What are the definitions of climate justice according to theory?*
2. *What theoretical distinctions of justice are provided by literature?*
3. *How do the global consequences of climate change exacerbate vulnerability in the continents included in this research?*
4. *Which potential climate adaptation strategies are opted in the continents included in this research according to empirical research?*

The justice distinctions of the theoretical chapter are then used to develop the conceptual model and the research framework. Before presenting the results for the Global North and South, there are chapters on the operationalization of the research framework and methodology. After presenting the results, they are summarized and discussed in the conclusion. This thesis ends with a critical consideration of its limitations and suggestions for future research.

1.3 Societal relevance

From a societal point of view, the assessment of normative positions on climate justice is particularly relevant considering the concrete global dangers posed to humans by extreme weather events that result from climate change. Additionally, the damage potential of climate disasters is worsening due to urbanization and various other socio-economic processes (Alfieri et al., 2015). The combined effects of these two factors are likely to aggravate issues on climate justice, especially because burdens and benefits are unevenly distributed among groups of citizens (Kaufmann et al., 2016). A systematic discourse analysis that demarcates the different positions on climate justice in the Global North and South can help to prevent future human and economic losses by instigating public and political discussions on the justice. This particularly applies to the national and international levels of climate policy making.

On a national level, this research can introduce state actors to alternative positions on justice that may not have been considered in their own NAPs. A wider knowledge of justice issues, in combination with policy insights from other countries, can help national governments to recognize vulnerability, exposure and justice inequality in their countries. In that way, future human and financial losses can be prevented. Alternatively, the knowledge obtained with this research can be used by NGOs operating in the field of climate justice, or social inequality in general, to address justice ambitions through a bottom-up approach. This will also encourage

governmental policy makers to examine their existing justice ideas more closely. Which will in turn stimulate them to become more transparent in their policy. On an international level, the insights of this research are of particular relevance to diplomats involved in international climate negotiations. That is because this research can reveal the differences in exposure and vulnerabilities between the Global North and South. With this new knowledge, diplomats can obtain a better understanding of what countries need what support and why. It also shows why there may be conflicting ideas about what a just adaptation process should be like. These may have hampered previous international negotiations and the gaps can now be addressed and bridged.

Ultimately, the increased awareness and closer consideration of climate justice can have three positive outcomes. It can help to conform justice outcomes to political opinion, urge governments to increase the transparency of their ambitions and policy regarding climate justice, and assist in shaping common ground among international diplomats.

1.4 Academic relevance

Following the argument of Biermann & Kalfagianni (2020), global research is as yet insufficiently prepared for a greater emphasis on justice issues. That's because actors use their own interpretations of what justice should imply. This is particularly problematic because it makes the current debates more normative than empirical in nature (see also Schlosberg & Collins, 2014). At the same time, much of the literature on climate adaptation has been theoretical, and there is an absence of empirical data from policy practises (Biagini et al., 2014). It is thereby also unknown what conceptualizations of justice are actually supported by states engaged in climate adaptation governance (Biermann & Kalfagianni, 2020). And as argued by Williams et al. (2014), Western scholarship all too often focusses on the experiences of states in the Global North, whilst neglecting the perspectives of the South. In the postcolonial era, scholars should instead engage with the Global South because it helps to decentre and deconstruct understandings rooted in the Global North. Southern perspectives can challenge the prevailing discourses of the North, allowing for critical comparison and reconsideration of Western-centred interpretations (Williams et al., 2014).

This thesis uses a coherent research framework to reveal contrast and overlap in conceptualizations of climate justice between and within the Global North and Global South. The aim here is to test if both structure and depth can be added to normative climate justice discourses by using a justice framework. Research frameworks suited to assess justice outcomes have already been established, for instance by Kaufmann et al. (2016). However, this framework focusses on burdens and benefits of actors, and not so much on fundamental views on justice. Klinsky & Dowlatabadi

(2009) did develop a framework on climate justice, but this framework has been established using an inductive method and is therefore very issue-specific. That is to say, the outcomes attained when using their model are not easily comparable to non-climate related justice topics.

A framework that does take into account major philosophical positions around justice that return in many policy fields has been constructed by Biermann & Kalfagianni (2020). Their planetary framework is more general in its approach than the others and can therefore be applied to any environmental phenomenon in which justice plays a role. The framework is particularly suitable for the research aim of this thesis because it provides the tools for a systematic categorization of embedded justice views in policy documents, political processes or other containers of discourse. As of today, the framework has only been applied to sustainable development agendas of the UN and the 'Future Earth' programme and proved to be a practicable tool of analysis (Biermann & Kalfagianni, 2020). This thesis provides the opportunity to test if the framework is equally applicable to contexts of climate justice by applying it to three NAPs of the Global North and three of the Global South.

2. Theoretical framework

This chapter unfolds into four sections and answers the theoretical as well as the empirical sub questions of paragraph 1.2. The first two sections discuss the meanings of the term climate justice and uncover its dimensions. The third section provides an overview of the global challenges that are caused by climate change. The fourth and final section presents possible adaptation strategies that can be derived from empirical research. Argumentation as to why the inclusion of these theories is relevant for the purpose of this research is provided at the beginning of each paragraph.

2.1 Theories of climate justice

In this paragraph, the debates about the multiple meanings of climate justice are examined. The purpose here is to ground the subsequent discourse analysis in a thorough set of ideas of climate justice. And particularly, to explain why climate justice is a difficult concept that involves deeper philosophical considerations. Ultimately, it becomes clear why a systematic framework is appropriate to approach discourses on climate justice.

2.1.1 Origins of climate justice

The movement of climate justice in academic literature found its origin in the broader environmental justice discourses that emerged in the 1980's (Schlosberg & Collins, 2014). The definition of 'environment' here tends to move away from the traditional view of environment as wilderness or nature that is detached from human culture. Instead, the environment should be understood as a space that people interact with through living and working. Taking this conceptualization of the environment as a starting point, the environmental justice movement is concerned with the deterioration of the human habitat and how this threatens everyday activities (Shmelev, 2001). The initial writings of justice scholars centred around the unequal distribution of environmental risks and the role of governments in protecting their citizens, now known as distributive justice (Bullard, 1983). Environmental scholars noticed that poor communities and other marginalized groups were subject to more threats posed by the environment in which they lived. The unequal living conditions that resulted from this were seen as but another indicator of structural inequality between rich and poor groups in society (Ikeme, 2003). From here, it takes only a small step to also take into consideration the dangers posed by climate change. It should therefore not come as a surprise that climate justice emerged as a sub-movement of environmental justice in literature. The consideration of climate justice has expanded in academic debates since 2000, particularly since the unjust impact of hurricane Katrina (Schlosberg & Collins, 2014).

2.1.2 Definitions of climate justice

Ever since the first appearance of environmental justice, there are, however, problems to come up with clear a definition of the concept. As René Audet points out, "in the literature on sustainable development, it will be difficult to find a concept that is as misused and misinterpreted as that of equity and environmental justice" (2012, p. 371). What makes climate justice particularly tricky is that it follows from normative judgement. For that matter, the meaning of what is just, largely depends on the social actor that manipulates it, even if some aspects are grounded in law (Audet, 2012). Therefore, the discourse analysis of this research should be primarily based on the idea that justice is socially constructed through disagreement and bargaining. Only with this consideration in mind does it become possible to identify the different justice discourses that are grounded in NAPs. Nevertheless, it is useful to become familiarized with popular meanings to gain understanding of the general topics that are covered by climate justice. Later in this research, the knowledge will be used to discuss what possible framework is best suited for categorizing climate justice discourses. The best way to do this, however, is not by attempting to find a single definition of the concept, which is impossible. A better course of action is to unfold the key dimensions of climate justice (Audet, 2012).

According to Audet (2012), climate justice encompasses three fundamental dimensions: allocation of greenhouse gases rights, the problem of abatement and the problem of vulnerability. The first refers to the idea that countries of the Global North carry higher historical responsibility for climate change in the first place, which is called the 'climate debt'. Because of this, the controversial argument is that Northern nations should receive fewer emission rights than Southern nations. With the idea of historical accountability in mind, developing countries should be allowed to develop freely without any considerations for the climate (Audet, 2012). Second, there is the related problem of sharing abatement costs (i.e., carbon reduction costs). This refers to the issue that developed nations should take the lead in mitigation efforts according to the UNFCCC. As a consequence, climate mitigation puts a higher burden on the resources of wealthier countries. This can be regarded as an advantage to the economies of emerging nations (Audet, 2012). Third, for the vulnerability problem, the focus no longer lies on the causes of climate change, but on the uneven consequences it exerts on different regions. From a global perspective, some countries are more vulnerable to the impacts of climate change than others (Audet, 2012). This type of injustice is particularly evident in the developing world, where more people die when exposed to equal extreme weather events. As the Alliance of Small Island States (AOSIS) puts it, "Survival rather, than justice, is the issue at the heart of vulnerability" (Audet, 2012, p378). And as evidenced by Roberts and Parks (2007), vulnerability largely depends on the strength of economies and established institutions (Roberts & Parks, 2007). On closer consideration, all three dimensions have something in common. They all relate to the concept of 'common, but differentiated responsibilities' (CBDR). It says that, although the entire global society should take action to fight climate change, each country has its own responsibilities and different types of capabilities that it can deploy (Audet, 2012).

Schlosberg and Collins (2014) provide an alternative set of dimensions of justice. Though it should be noted that these dimensions apply to the broader environmental justice studies, and not specifically to climate justice. They distinguish between distributive justice, recognition justice and participation justice (Schlosberg & Collins, 2014). First, distributive justice deals with the uneven allocation of environmental conditions, costs and benefits. Scholars have observed that poor communities as well as marginalized groups are often more exposed to environmental hazards, and that they have less means to protect themselves against them. Recognition justice, then, refers to the idea that these vulnerable groups, who face higher risks, should be recognized in policy making procedures. Finally, participation justice demands that vulnerable groups should, apart from being recognized, also be actively included in decision making processes concerning environmental policy (Schlosberg & Collins, 2014). It should be noted, however, that the three dimensions are strongly related to one another. The absence of recognition, coupled with a lack of participation, can cause unequal burdens of environmental threats in the first place (Lake, 1996).

2.2 Philosophical distinctions of justice

This chapter uses the framework of Biermann & Kalfagianni (2020) for reasons discussed in chapter 1.4 (academic relevance). Their framework is deemed to fit best to purposes of this research. The core principles of their framework are summarized and explained in this chapter and are later used in the discourse analysis of this research.

According to Biermann & Kalfagianni (2020), there are five mainstream philosophical positions on justice that can be identified in political discourses and programmes. They include liberal egalitarianism, cosmopolitan theories, the capabilities approach, libertarianism and critical perspectives. These are laid out in this chapter and will return in the conceptual model of this research. Biermann & Kalfagianni (2020) bring forward five indicators to identify these positions: relevance of national borders, moral obligations towards the poor, importance of personal moral and religious convictions, way to serve justice and mechanism to achieve justice. These will be explained more closely in the operationalization (chapter 2.7).

First, *liberal egalitarianism* combines the principles of equality, personal responsibility and personal freedom and. It centres on the role of institutions in distributing rights and responsibilities (Cappelen & Tungodden, 2006). In this sense, social structure is more important than individual agency because the tradition argues that institutions distribute economic opportunities in society and therefore create inequality. Though, the key difference with libertarianism is that the liberal egalitarian tradition agrees to distribute wealth if this benefits the disadvantaged members of society (Biermann & Kalfagianni, 2020). The dominant modern egalitarian view is that, if people are offered an institutional framework with equal opportunities and respecting personal freedom, should themselves be held responsible for their accomplishments. For liberal egalitarians, borders are highly relevant because it frames justice issues in terms of shared nationality and citizenship. It therefore views societies as isolated national communities. The liberal egalitarian is deemed superior to traditional egalitarianism because it is considered to contain a more appealing distributive ideal. Traditional egalitarians do not believe that institutional unfairness is an argument for inequality, and instead argue everyone should be held responsible for their own actions (Cappelen & Tungodden, 2006).

Second, *cosmopolitan theories* suggest the existence of a global community amongst all human beings. In the view of cosmopolitans, global interactions and institutions such as financial markets and trade regimes create global reliance between groups of people and create worldwide benefits and burdens (Wolff & Pogge, 1989). They argue that social interaction is not bounded to nation states, but that it takes place on a global scale. In other words, borders pose no real boundaries

and are thus meaningless in issues of justice. Contrary to liberal egalitarianism, they say that institutions operate on a global scale create worldwide inequalities. Their goal is a globally fair distribution of benefits and burdens. The argument is that all human beings should have the means to live a basic life (Biermann & Kalfagianni, 2020).

Third, the *capabilities approach* assesses institutions according to the impact that they exert on people's effective opportunities, i.e., the capabilities that people possess to lead a worthy and dignified life. Contrary to liberal egalitarianism, the focus here lies not on people's income or economic means, but on human dignity (Nussbaum, 2013). This implies that all people should be enabled to live a rich life by developing their reason and individual capabilities in favour of the common good. Proponents of the capabilities approach argue that not all humans have the ability/resources to translate income into a higher quality of living. The idea here is to move away from traditional narrow indices for measuring well-being like Gross National Product. Instead, they advocate for the broader Human development index and other capabilities-based indicis. The capabilities approach makes no explicit statements about the limitations posed by borders in justice issues (Biermann & Kalfagianni, 2020).

Fourth, *libertarianism* affirms the rights of individuals to liberty, free exchange and property ownership. Contrary to the previous three positions, libertarianism places its focus on individual agency based on liberty, property ownership and free markets. In contrast to liberal egalitarianism, they strictly see the redistribution of wealth by governments as an unjust phenomenon. For libertarians, just outcomes can only be achieved when markets can function freely and when the role of the government is minimized. Libertarians are strong advocates for a limited role of the state and redistributions of wealth should only be made possible with the consent of the wealthy class. In this sense, particular borders or nations do not play a role (Biermann & Kalfagianni, 2020).

Fifth, *critical perspectives* examines the existence of structural conditions that determine inequality. The emphasis here lies on the political agency of marginalized groups suffering injustices in getting their voices heard. Note the linkage to recognition- and participation justice in paragraph 2.1. Critical perspectives argues that justice can only be achieved by breaking down the repressive systems that create class inequalities (Biermann & Kalfagianni, 2020).

2.3 Consequences of climate change & vulnerability

This chapter reviews the global impacts posed by the changing climate. It then considers more specifically the climate vulnerabilities for the continents included in the discourse analysis of this research (Europe, Africa & South-America, see chapter 3.2). Next, this chapter seeks to find out what particular groups are vulnerable in these continents and why. The aim here is to formulate assumptions on what justice issues are at stake in the nations covered in the discourse analysis of this research.

2.3.1 Global consequences of climate change

The latest reports of the Intergovernmental Panel on Climate Change (2021, 2022) provide adequate insight into the observed global climate change impacts. One of the key findings of the writers is that extreme weather will occur more frequently and more intense. These include periods of heavy precipitation, severe droughts, heatwaves and tropical cyclones (IPCC, 2021). Furthermore, the adverse impacts from flooding and tropical cyclones have increased due to rising sea levels. Over the last decades, substantial impacts to humans, settlements, ecosystems and infrastructure have resulted from such weather extremes. Food and water supplies have been reduced, exposing millions of people to acute nutrition insecurity. According to the report, these problems are most severe in Africa, Asia and South America. In such places with high vulnerability, climate change impacts can even accumulate into humanitarian crises. The unavailability of food is most pressing for small-scale farmers, children, the elderly and pregnant women (IPCC, 2022). In all global regions, climate change has caused human morbidity and mortality. For instance, incidence of water-borne and vector-borne diseases have increased and expanded in range of spread. In addition, increased rain and flooding have inflated the occurrence of diarrheal diseases, including cholera (IPCC, 2022).

Next to that, it should be noted that urban settings are particularly vulnerable to the consequences of climate change. That's because climate and non- climate hazards sometimes coincide. For instance, heatwaves are more severe in cities, due to high density and pavement. Likewise, existing urban air pollution has been aggravated by climate change. This increased exposure to heat and fine dust has been associated with cardiovascular diseases and lung diseases. Evidence has pointed out that impacts are concentrated on socially and economically marginalized urban citizens, who, for instance, live in informal settlements (IPCC, 2022). In addition to negative impacts, some positive, mainly economic, effects of climate change have also been identified. These include new opportunities for the tourism sector, comparative advantages in the agricultural market for some nations and reduced energy demand (IPCC, 2022).

2.3.2 Vulnerabilities in Europe, Africa & South America

The latest report of the Intergovernmental Panel on Climate Change (2022) states that “vulnerability of ecosystems and people to climate change differs substantially among and within regions” (p.14). Factors that determine such differences include unequal exposure, unsustainable land use, marginalization, inequity, and destruction of ecosystems (IPCC, 2022). Similarly, Zolnikov (2019) states that “the effects of climate change will be unevenly distributed, with some areas suffering more than others” (p.118). In her book, Zolnikov (2019) picks out the unique and most pressing problems posed to respective continents that cause vulnerability. The following alineas set out to discuss these major challenges posed to the continents of the nations that are included in the discourse analysis of this research (see chapter 3.2).

In Europe, one of the most notable problems is the increase of extreme precipitation in northern Europe and drought in southern Europe. The effects posed to humans may include heat-related morbidity and mortality, adverse effects due to storms and introduction of new diseases. These health effects can undermine employment, and hence productivity, of the generally strong economies of Europe (Zolnikov, 2019). Vulnerable groups in Europe include urban residents in low-income areas, marginalized populations, migrant populations and elder people with weaker health. Some sectors in Europe are negatively impacted by climate change, whereas others may face market opportunities. For the former case, Zolnikov (2019) specifically mentions insurance companies, who may be subjected to unobtainable demands. For the latter case, she mentions new market opportunities for transportation companies. Tourism in Eastern Europe may be affected due to less reliable snow conditions in winter sports areas. Finally, the occurrence of floods is likely to increase in Europe, especially in the coastal countries with rivers. Many cities of economic importance in Western Europe are located in flood-prone areas and support high-density populations (Zolnikov, 2019).

According to Zolnikov (2019) and the IPCC (2022), West-, Central- and East Africa are among the regions that are most impacted by climate change. Temperatures in Africa are projected to increase more than the global average according to various scenarios. Countries in Africa struggle with heatwaves, sea level rise, and landslides. In addition to that, many African countries are home to rural communities that rely on extensive farming methods for their food supply (Zolnikov, 2019). Such local communities, who are directly dependent on ecosystems, are particularly adversely impacted by climate change (IPCC, 2022). Another climate-related risk that endangers rural communities in Africa is the lack of clean water sources. Water sources are increasingly found empty or contaminated with water-borne illnesses. In addition, there are concerns that HIV/AIDS will endanger more African people in the near future. Due to low GNP levels in Africa, it proves to be hard for many African

governments to cope with change. As a result, African countries have to resort to donor aid to implement climate policy (Zolnikov, 2019).

According to the latest IPCC report (2022), South-America is also among the regions that is most impacted by climate change. According to Zolnikov (2019), climate change threatens four key sectors: agriculture, coastal ecosystems, public health and freshwater resources. Food production, along with food security is threatened in the poorest areas of South-America. Significant floodings are projected to increase in the coastal regions due to sea level rise. Human health is affected by increases in the incidence of diseases such as malaria, yellow fever and cholera. In addition, poverty is a major problem in the region, with millions of South Americans living under the minimum income level. In spite of this, some nations in the region have medium to high development levels, including Bolivia, Guyana, Paraguay and Suriname (Zolnikov, 2019). Zolnikov (2019), however, does not mention any groups that are specifically susceptible to the impact of climate change in South-America.

2.4 Potential adaptation strategies

This chapter brings forward the research of Biagini et al. (2014) to describe climate adaptation strategies that are advanced in adaptation activities throughout the world. Their typology of adaptation strategies is preferred for the purposes of this research because, like the findings of this research, it is derived from empirical data. Nevertheless, their observations correspond to existing theory (Biagini et al., 2014). The aim is to link these empirical findings with the vulnerability assessments of chapter 2.3 in order to develop assumptions. In these assumptions, the justice themes of the nations included in the discourse analysis of this research are predicted.

In their research, Biagini et al. (2014) reviewed 92 adaptation projects in 70 different nations. Though it should be noted that the analysis is limited only to projects that are financed by the Least Developed Country Fund and the Special Climate Change Fund. Hence, there is a larger focus on African (42) and Asian (28) nations than European nations (10). Through grounded theory analysis, the authors discovered 158 distinct adaptation activities, which they merged into ten broader types of adaptation strategies (Biagini et al., 2014). Even though the writers do not provide information on the allocation of these adaptation strategies between the included continents, they do provide descriptions for them. These ten adaptation strategies, along with their descriptions, are presented in the table below, listed on frequency.

Adaptation typology	Description
Capacity building	Developing human resources, institutions, and communities, equipping them with the capability to adapt to climate change
Management and planning	Incorporating understanding of climate science, impacts, vulnerability and risk into government and institutional planning and management
Practice or behaviour	Revisions or expansion of practices and on the ground behavior that are directly related to building resilience.
Policy	The creation of new policies or revisions of policies or regulations to allow flexibility to adapt to changing climate.
Information	Systems for communicating climate information to help build resilience towards climate impacts (other than communication for early warning systems)
Physical infrastructure	Any new or improved hard physical infrastructure aimed at providing direct or indirect protection from climate hazards
Warning or observing systems	Implementation of new or enhanced tools and technologies for communicating weather and climate risks, and for monitoring changes in the climate system
Green infrastructure	Any new or improved soft, natural infrastructure aimed at providing direct or indirect protection from climate hazard
Financing	New financing or insurance strategies to prepare for future climate disturbances
Technology	Develop or expand climate-resilient technologies

Table 1 – ten potential adaptation strategies (source: Biagini et al., 2014)

The authors mention a few remarks about the adaptation strategies that are of interest for this research. First, most of the analysed adaptation activities fall under the strategy of capacity building. That is understandable according to Biagini et al. (2014), because developing nations are vulnerable and knowledge/skills development is a precondition for implementing adaptation actions. Capacity building can therefore be seen as a first step in the adaptation process. According to the writers, capacity building is also among the least expensive forms of adaptation measures. Another thing worth noting is that interviewees remarked that capacity building often coincides with a community based approach. This implies that project managers help communities to find the adaptation measures that are feasible (Biagini et al., 2014).

Another key remark is that so-called ‘soft’ measures are featured most frequently throughout the projects. These include capacity building, planning & management and policy reform. This is the case because these measures are least expensive. More expensive forms of adaptation action, such as technology, early warning systems and physical infrastructure feature less frequent because they are more expensive (Biagini et al., 2014).

2.5 Assumptions on justice in NAPs

Based on the insights of chapter 2.3 (vulnerabilities) and chapter 2.4 (potential adaptation strategies), there are some assumptions that can be made regarding the presence of justice positions in European, African and South-American NAPs.

The first assumption draws on the facts that GNP levels are low in Africa, whereas economies in Europe are stronger (Zolnikov, 2019). Thus, it is expected that African NAPs will advance less expensive adaptation actions as a way to achieve justice than European NAPs. These cheaper measures include capacity building, planning & management and policy reform (Biagini et al., 2014). As regards South-America, the literature is contradictory because despite widespread poverty, some nations have medium-high development levels (Zolnikov, 2019). Therefore, no assumptions can be made regarding this topic for South-America.

Using the first assumption as a starting point, the second assumption is that African NAPs will rely more on a community-based approach. According to Biagini et al. (2014), capacity building often coincides with a community-based approach.

The third assumption is that vulnerability is generally higher in Africa and South-America, because these are among the regions that are most impacted by climate change (IPCC, 2022; Zolnikov, 2019). Thus, the expectation is that the NAPs of these two continents focus more on specific groups or communities that are vulnerable.

Finally, the assumption is that African nations resort to non-governmental financing of adaptation action, due to low GNP levels. Hence, it is also expected that the stronger European economies (Zolnikov, 2019) enable governmental financing.

2.6 Conceptual model

The conceptual model sets out to visualize the way in which this thesis aims to categorize justice positions in the six included NAPs. It uses the framework of Biermann & Kalfagianni (2020) with its five philosophical positions on justice that are described in the theoretical chapter. As briefly mentioned in chapter 2.2., these positions will be identified using the five indicators that the authors propose in their article. The five indicators bring to light the key differences between each of the positions. They are operationalized in chapter 2.7 of this research.

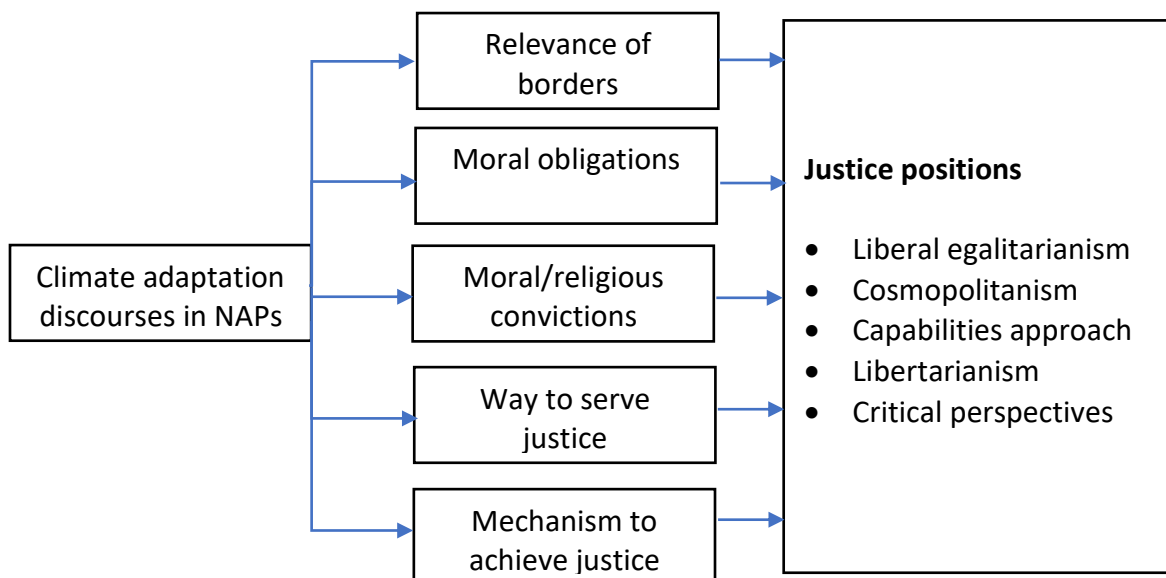


Figure 1 – conceptual model of the five indicators and the associated justice positions

2.7 Operationalization

This thesis draws on the planetary justice framework proposed by Biermann & Kalfagianni (2020) as its tool of empirical analysis. The determinant variables that are proposed by the authors to categorize the five justice positions are operationalized in the sections below. Additionally, the five positions and their determinant variables are summarized in the operationalization table.

Relevance of national borders

According to Biermann & Kalfagianni (2020), a key difference among the five positions on justice is their way of conceptualizing the normative relations among people. In other words, the question here is if the justice position also considers outcomes elsewhere in the world, or if it is restrained to issues within the nation state.

To begin with, liberal egalitarianism frames subjects of justice based on membership as shared nationality and citizenship. Hence, borders do matter in this conceptualization. That is because the structure of society is defined as a self-contained national community. Cosmopolitanism, instead, uses the idea of global interdependencies between individuals, groups or even states. Therefore, borders are meaningless in this conceptualization of justice. Important here is the idea that all members of global society are obliged to support and care for one another, to cooperate across borders and to redistribute wealth internationally. Next, the capabilities approach describes justice topics based on the common features of humanity. This includes, among others, the capacity to care for others, altruism, compassion and dignity. Borders are not mentioned to be of relevance here.

Libertarianism, on its part, approaches justice topics through the concept of individual freedom, with no specific references to national boundaries or particular societies. Therefore, national borders are irrelevant, also considering the focus on global free trade. Contrary to cosmopolitans, libertarians are opposed to international organizations or global institutions. Finally, critical perspectives focus on class structures that run across nations. These class structures are not framed in terms of citizenship or legal rights, but in terms of forms of domination related to gender or class (Biermann & Kalfagianni, 2020).

Moral obligations towards the poor

As stated by Biermann & Kalfagianni (2020), the five justice positions all say something about if and how money should be redistributed from the rich to the poor. For liberal egalitarianism, the national welfare state is the preferred mechanism to achieve justice. In this sense, governments should use taxes to burden the wealthier classes in order to assure the protection of poor communities. Thus, the rich only have moral obligations towards the poor within their own national society. For cosmopolitanism, the rich are once again obliged to help poorer communities. But according to cosmopolitans, borders are meaningless. Hence, there should be international redistribution of wealth through transnational transfers of funds, including donor aid. The capabilities approach argues that income or economic means should not be redistributed by themselves. Thus, the rich do not have direct obligations to send money to the poor. Rather, the idea is that human dignity should be promoted. According to libertarians, the state should play a very limited role in addressing inequality. Hence, no redistributions of wealth through taxes should be forced upon the wealthy. Instead, redistribution only follows from voluntary, philanthropic, donations. Last, critical perspectives argue for oppressive class-structures to be broken down, but say nothing about the redistribution of wealth (Biermann & Kalfagianni, 2020).

Moral/religious convictions

The next indicator proposed by Biermann & Kalfagianni (2020) is the importance of personal moral and religious convictions for assessing justice. However, out of all the indicators, the authors of the article are least specific on what this concretely implies. In particular, they do not digress further on the possible roles of religious convictions. And as regards the moral convictions, these are closely related to the previous indicator 'Moral obligations towards the poor'. In the end, the authors simply conclude that moral/religious convictions are important for the capabilities approach and critical perspectives, and that they do not matter for liberal egalitarianism, cosmopolitanism and libertarianism (Biermann & Kalfagianni, 2020).

Way to serve justice

As stated by Biermann & Kalfagianni (2020), discourses on justice topics all use their own systems and principles to define what justice is and when something can be called 'just' in the first place. On this matter, the five justice positions all provide their unique takes.

First, liberal egalitarianism advocates the maximum possible liberty within a nation, but accepts the distribution of wealth in case this benefits the least advantaged members of society. Thus, it advocates for national redistributive policy that provides benefits for the least from national policies. Cosmopolitan theories agree with a large portion of these ideas, but extends liberal egalitarianism to the global level, arguing for global redistributive governance. Ultimately, the idea is that justice is best served when all worldwide individuals, including the least advantaged, can satisfy their basic human needs. Next, the capabilities approach rejects the redistributive views of liberal egalitarianism and cosmopolitanism. Instead, it argues that justice is about enabling all individuals to live a rich life by fully developing their individual capabilities and virtues. A just society, for that matter, implies that all humans can make most out of their own reason and capabilities in favour of the common good. The capabilities are understood as a set of basic requirements that include health, control over one's environment, access to healthcare, education, political security and community well-being. Libertarians instead take a different route. According to them, justice is served when human liberties are protected, when markets can function freely as the main mechanism of exchange and when the role of the government is minimized. Finally, for critical perspectives, justice is all about overcoming class structures within society. These class structures deny certain groups, including marginalized groups such as women and ethnic minorities, access to an equal position in society. An important objective of critical perspectives is to recognize these groups, and to allow them to participate in political processes (Biermann & Kalfagianni, 2020).

Mechanism to achieve justice

Finally, Biermann & Kalfagianni (2020) discuss the different mechanisms through which the five justice positions aim to achieve just outcomes. These are important because they fundamentally show how justice should be achieved and who is responsible for addressing injustices in the first place.

First, liberal egalitarianism is largely concerned with creation a national welfare state, in which the government is held responsible for the social and economic welfare of the nation's inhabitants. Hence, the national welfare state is also the primary way to achieve just outcomes. Since cosmopolitans extends this idea from the national to the global level, their main mechanism to achieve justice is to redistribute economic means globally, from the rich countries to the poorest. Cosmopolitans have proposed a range of measures to achieve this, including global taxation and transnational

financing through donor funds. Next, the capabilities approach argues for the improvement of people’s quality of life as defined by their capabilities. In this sense, the role of the government is no longer to redistribute wealth, but to secure people’s freedom and self-determination. Hence, collective institutions like schools, churches and other cultural institutions feature eminently in this approach. The idea here is that richer nations must also help poorer nations to meet their capabilities. This can be done through international treaties that dictate norms and responsibilities on civil society within a nation. Important here is collective political participation, public interaction and collaboration. Libertarianism is fundamentally different from the others, because it rejects the role of the government and opposes redistributive policy that is grounded on taxation. Instead, free markets should be the core mechanism to achieve justice within societies. Thus, this position also resists any form of global redistributive governance whatsoever. Last, critical perspectives pursue justice by overcoming and dismantling the institutionalized class structures within societies. A key argument here is that societies lack representativeness in their policy making. For this reason, critical perspectives argue that marginalized groups should be recognized and allowed to participate in policy making processes around justice (Biermann & Kalfagianni, 2020).

	Liberal egalitarianism	Cosmopolitanism	Capabilities	Libertarianism	Critical perspectives
Relevance of national borders	No	Yes	Yes	Yes	Yes
Moral obligations towards the poor	Within own society	Yes	Yes	Only voluntarily	Yes
Importance of moral and religious convictions	Do not matter	Do not matter	Are important	Do not matter	Are important
Way to serve justice	The least advantaged benefit most from national policies	Worldwide, all individuals can satisfy their basic human needs	All individuals can live a life worth living, based on requirements that fit their capabilities	Secure freedom of choice and no governmental interventions	Break down oppressive structures so that all people are recognized and can participate
Mechanism to achieve justice	National welfare system	Global redistributive governance	Decentralized support systems to advance individual dignity	Global free markets	Destruction of oppressive class structures

Table 2 – operationalization table of the five philosophical positions and their determinants (source: Biermann & Kalfagianni, 2020)

3. Methodology

After having explained the relevant theories and how they are processed into the conceptual model, this chapter covers the steps and decisions that have been made during the research process. It includes the type of research design, data collection methods and tools of analysis.

3.1 Research design

The aim of this research is to compare underlying conceptualizations of justice in the Global North and South. In order to satisfy the aim of this research, a qualitative research design is used. This implies that the data is expressed in words instead of numbers. The typical feature of qualitative research is that it is mostly appropriate for small samples, as its outcomes are not measurable and quantifiable. As a result, the outcomes of qualitative research have only limited generalizability. Furthermore, the effectiveness of qualitative research is depended on the skills and abilities of the researcher, because the outcomes come from the researcher's personal judgments and interpretations (Bell, 2005). The major advantage of a qualitative research design, as compared to quantitative research, is that it provides a complete description and analysis of a research subject, without limiting the scope of the research (Collis & Hussey, 2003). Critical discourse analysis is particularly suited for the aim of this research because it considers how social and cultural perceptions are grounded in spoken or written language. Values, beliefs and assumptions are communicated through discourse and a close examination of the text can reveal underlying conceptualizations of justice. Discourse analysis is a well-established and proven research method in the social sciences (Gee, 2014).

3.2 Data collection

The research approach that was followed for the goals of this research was the deductive one. With this approach, knowledge is derived from existing documents. This thesis uses a selection of six National Adaptation Plans as its research material. Given the comparative focus of this research, three of these were selected from nations located in the Global North and three were selected from nations in the Global South. The reason for making the distinction between the Global North and South is that it likely reveals contrast in justice positions more sharply. As explained in chapter 2.3.2, there are large differences in vulnerability and development between the included continents of Europe for the Global North and the included continents of South America and Africa for the Global South. Thus, it is likely that this will yield different adaptation actions and justice positions (see chapters 2.4 & 2.5). Additionally, perspectives from the Global South are often neglected in academic

literature (Williams et al., 2014). Southern perspectives can challenge the prevailing discourses of the North by showing alternative interpretations of, in this case, justice and vice versa. This in turn helps to achieve the aimed objective of introducing state actors to alternative positions on justice (see chapter 1.3).

3.2.1 Selection of NAPs

The NAPs of the North were collected from the climate department websites of the three individual nations. The three NAPs of the Global South were collected from a database accessed through the United Nations Framework on Climate Change (UNFCCC) website (for the sources, see chapter 8.5). Selected for this research are the NAPs of Austria, Scotland and Switzerland in the Global North. As for the Global South, the NAPs of South Africa, Sudan and Suriname were selected. In the process of selecting these cases, two points of interest were taken into consideration.

The first of which is the (un)availability of the NAPs in English or German. Of the 34 NAPs of the Global South, seven were exclusively available in French or Spanish and were thereby unsuited for analysis. As for the Global North, this issue was bigger because the NAPs of France, Cyprus, Chechia Estonia, Latvia, Lithuania, Luxembourg, Romania, Spain and Sweden could all not be assessed for similar reasons. That left only 11 out of 21 countries of the Global North with NAPs suitable for analysis.

The second of which is a sufficient number of references to key concepts that set aside the five positions on justice. Not all of the collected NAPs attributed similar attention to justice issues. In fact, the term justice by itself was barely used in any of the NAPs. That's why the choice has been made to instead search for the usage of words closely related to justice. The selection of words is derived from the determinants in the operationalization section of this research. 'Funding' is representative for the 'Moral obligations towards the poor' determinant and proves to be used more often than 'financing'. 'Distribution' would have also been highly relevant, but is either barely used or used in a different context. The choice for the word 'international' follows from the fact that it says something about the 'Relevance of national borders'. Other possible options would have included 'borders', but this was almost never used, or 'national'. However, the latter was often used in irrelevant contexts because the term National Adaptation Plan already has national in it. 'Institution' refers to both the 'Way to achieve justice' and 'Moral obligations to the poor' in the sense of how governmental action should be shaped. Finally, 'communities' relates primarily to the 'Way to achieve justice'. The word 'group' is often used in irrelevant contexts in NAPs. In the end, six countries were selected from two tables consisting of English/German NAPs; one for the Global North and one for the South. The selected countries have the overall highest numbers of references to the key words. Both tables are presented below.

Global North					
	Number of matches				Number of pages
Country	Funding	International	Institution	Communities	
USA	11	9	0	50	33
Japan	0	3	1	0	13
Austria	38	60	89	16	150
Belgium	1	20	8	6	40
Denmark	8	11	2	0	32
Germany	9	27	12	8	73
Finland	25	34	5	4	42
Netherlands	0	5	3	0	44
Scotland	11	50+	70+	80+	229
United Kingdom	28	15	3	32	128
Switzerland (in German)	45+	30+	8	50+	102

Table 3– case selection for countries in the Global North (list of countries retrieved from EEA website)

Global South					
	Number of matches				Number of pages
Country	Funding	International	Institution	Communities	
Brazil	20	12	44	15	310
Armenia	10	37	0	7	38
Cambodia	16	39	0	7	63
Chad	10	43	27	53	111
Ethiopia	26	18	57	12	86
Grenada	17	32	49	22	128
Kenya	5	16	55	13	68
Kiribati	11	31	19	22	178
Kuwait	1	22	12	12	174
Liberia	5	18	42	32	110
Nepal	0	0	0	0	53
Palestine	5	33	19	7	217
Sierra Leone	12	37	69	35	84
South Africa	15	31	73	25	94
South Sudan	8	50	86	42	122
Sri Lanka	12	22	22	22	178
Sudan	3	23	88	95	122
Suriname	21	31	52	16	176

Table 4 – case selection for countries in the Global South (list of countries retrieved from UNFCCC website)

3.2.2 Possible biases in the selection of NAPs

There is, however, some possible bias that results from using the selection procedure outlined above. For one, it naturally favours extensive NAP documents over smaller ones, because longer documents yield higher number of matches. There are no strict regulations on the lengths of the documents according to the UNFCCC website (2022). When looking at tables 3 and 4, this bias is particularly evident for the Global North. The selected countries are almost exactly the ones that contain most pages. Surprisingly, this bias seems to apply less to the Global South. Many documents that were longer did not contain as many keywords as the ones selected for the discourse analysis of this research. Another probable bias is that the selection procedure favours NAPs that tend towards certain justice positions. The word 'international', for instance, belongs to cosmopolitanism rather than liberal egalitarianism or libertarianism. Likewise, the word 'communities' moves towards the capabilities approach or critical perspectives. And it is unlikely that 'institution' is promoted in libertarian NAPs, that propose a limited role of the government. In fact, the absence of any statements on justice can be a large part of libertarianism (limited role of the state, freedom etc). Ultimately, it is likely that the selection procedure has favoured some justice positions over others. Though this compromise had to be made in order to guarantee that sufficient attention to justice issues is paid in the NAPs, so justice positions can be successfully identified.

3.2.3 Additional interviews

After the discourse analysis of this research was finished, it became clear that some quotations needed explanations that could not be obtained from the NAPs themselves. For this purpose, the governmental departments that were responsible for writing the NAPs were contacted via email and asked to provide a contact person who was involved in the development of the NAP.

For the Global North, the departments were respectively: Federal Ministry for Sustainability and Tourism (Austria), Eidgenössisches Departement für Umwelt, Verkehr, Energie und Kommunikation (Switzerland) and the Environment, Climate Change and Land Reform Committee (Scotland). For the Global South, these were: Ministry of Environment, Natural Resources and Physical Development (Sudan), Government of Suriname (Suriname) and Ministry of Forestry, Fisheries and Environment (South Africa).

In the end, three contact persons were willing to clarify questions relating to the results of the discourse analysis. They worked for the governmental/ministerial departments of South Africa, Suriname and Switzerland. The interviews were conducted online with the use of Skype and had to be kept brief (20-35 minutes) due to time constraints. Unfortunately, also due to time limits, they could not be

transcribed in full detail and the main answers had to be summarized. Summaries are made available in the appendices of chapters 8.1-8.3. Finally, it should be noted that the names of the interviewees are kept anonymous. This decision has been made in correspondence with their preferences.

3.3 Data analysis

This thesis uses a deductive analysis method because it relies on existing policy documents established by states. The analysis is conducted using Atlas.ti, and all six NAPs were downloaded into the programme. Atlas.ti was the preferred choice because it provides the opportunity to code systematically and categorize the codes into the five justice positions. Additionally, the programme allows the researcher to create tables that present frequencies for each of the documents. Hence, it could be assessed how dominant the justice positions were in each of the NAPs. This provided an excellent way to compare them and draw conclusions.

3.3.1 Coding process

The coding process started with assigning the codes of the operationalization table to fragments of text in the NAP. All the while keeping the definitions of these concepts as explained in the theoretical framework closely by hand. The five justice positions were used as code groups, with the indicators as coding variables. However, it soon became clear that the framework of Biermann & Kalfagianni (2020) had to be adjusted in order to better fit the nuance of the empirical material. How the framework has been modified is explained in chapter 4.1. After the framework had been adjusted, the coding table contained almost precisely the justice indicators that were presented in the NAPs and remained unchanged for a long time. Somewhat unexpectedly, there did not seem to be any justice topics presented in the NAPs that were not covered in the table. It was only during the analysis of Scotland's NAP that the private sector was added to the variable 'Group of interest', because it was referred to so often. After that, I reviewed all the previously analysed NAPs to see if I had missed that topic during my first reading.

What proved more difficult was to decide on what criteria to apply a code to a piece of text. To give an example, in many instances the word national popped up in one the NAPs. The question was whether to apply the code 'National' to this or not. The same goes for the word individual or capacity building. All of these words were often used in isolation, without further description or explanation. In order to remain consistent, I decided on this matter early on. I chose to only apply respective codes to them when the writers added to it from a relevant justice context. To illustrate, I applied the code 'National' to the sentence: "We are now considering a National Forum for climate change in light of the global climate emergency". And not to 'The outputs are embedded in the National Flood Risk Assessment'. Likewise, I applied

the code 'Individual capacity building' to the sentence "Capacity building among rural health personnel (...) and increased access to standard vaccines". And not to 'Focus on national technical capacity building by filling gaps in knowledge fields'.

Regarding the variables 'Strong national institutions' and 'Strong international institutions', I was at first uncertain how the word institution should be defined and coded. As it is, the word has two different meanings and both turned out to be applicable to NAPs. According to Cambridge Dictionary, an institution can either refer to a large and important organization or to a law/legal system. In their article on the planetary justice framework, Biermann & Kalfagianni (2020) refer to both "Institutions such as schools and cultural and religious institution" and "Global redistributive institutions (...) in the form of networks of international treaties". These definitions have been adopted in this thesis for the sake of consistency. Thus, the codes for strong institutions in the NAPs are applied to organizations as well as laws.

Furthermore, it should be noted that I analysed the NAPs from beginning to the end, with the inclusion of summary tables, forewords and partial conclusions. The result of this is that the same substance of information on justice is sometimes coded multiple times in one NAP. I decided this was the best course of action because it is very time consuming to check for doubles. Next to that, summary tables and conclusions can also be regarded as restatements of points that the NAP attempts to convey.

The analysis of the six NAPs was conducted over the course of two weeks, beginning with the Global South and ending with the Global North. For most NAPs, it sufficed to carefully read through them once. This can be owed primarily to the comprehensiveness of the adjusted operationalization framework. The exceptions were Sudan and Switzerland. The former because it was the first NAP that I analysed and I had to make some decisions about the coding which I have explained in chapter 4.1. The latter because it was written in German and covered a lot of technical information between justice topics. Consequently, I had to make sure not to miss out on relevant information.

3.3.2 Data assessment

It was only after all the NAPs had been analysed individually that I began to compare the results of the coding. I thought it best fit to start the comparison quantitatively, using the Code-Document Table function in Atlas.ti. With this function, the researcher can assess what code groups are most frequently represented in the analysed document. The usefulness of this function shows itself in figure 2, because it immediately becomes visible what justice positions are dominant in which NAPs. The only downside of this function is that the outcomes cannot be ranked numerically. Therefore, I copied the results into newly ranked tables for the sake of readability, highlighting the justice position that is most dominant in the NAP.

	1 Sudan NAP-2...	2 Suriname Final...	3 South-Africa_...	4 climate-ready-...	5 anpassung_an...	6 NAS_Context_...	Totals
Capabilities	62	10	13	3		3	91
Cosmopolitanism	7	43	23	15	34	24	146
Critical perspectives		23	24	1		15	63
Liberal egalitarianism	16	8	22	41	5	21	113
Libertarianism		2	1	68	4	21	96
Totals	85	86	83	128	43	84	509

Figure 2 – overview of Code-Document Table in Atlas.ti

Even though the Code-Document Table gives a good impression of the results by itself, it fails to capture the qualitative substance behind the numbers. For illustrative purposes, I have supplemented these numbers with quotes from the NAPs themselves, to pinpoint more precisely where the NAPs differ from one another. Additionally, I have added tables with key words that signify justice positions in the chapter 8.5. So, to conclude, the results are presented combining the illustrative strengths of quantitative data and explanatory strengths of qualitative data.

4. Results

Before diving into the specific results for the six coded NAPs, this chapter first presents an adjusted version of the framework of Biermann & Kalfagianni (2020). There were some problems with their operationalization that became clear partially beforehand, and partially during the coding process. Where and why these problems and points of improvement emerged is explained in chapter 4.1.

After that, the results of the six examined NAPs are presented individually, with sections for each of them. First to cover are the countries of the Global North, followed by those of the Global South. Each section begins with an overview table that presents the frequencies of the justice positions in the NAP. Some brief statements are made about which positions are more dominant and which are less so. After that, the numbers are supplemented with statements and quotes from the NAP that explain the outcomes. In addition, the insights from the three conducted interviews are added to give further meaning to the observations. The discussion of the results is supplemented with a quantitative table that shows key words for each of the justice positions along with their frequencies for the respective NAPs. Finally, qualitative tables are provided for each of the NAPs with the indicators filled in according to the contents of the documents.

4.1 Adjusted operationalization & framework

The original framework of Biermann & Kalfagianni (2020) had to be modified in order to meet the specific purposes of this research. Modifications were made both before the analysis started and during the coding process. This chapter discusses five changes made to the framework.

1. Removal of ‘moral and religious convictions’

To begin with, one of the five indicators proposed by Biermann & Kalfagianni (2020) was removed from the operationalization table. In fact, the ‘moral/religious convictions’ variable proved hard to operationalize in chapter 2.7. It was unclear what the authors implied on a concrete level and how this variable relates to ‘moral obligations towards the poor’. The only hint towards the meaning of religious convictions that the authors give is “schools and cultural and religious institutions” (Biermann & Kalfagianni, 2020, p2), but this is very vague. While analysing the NAPs, it also became clear that religion was also something that was put forward in relation to justice. Moral convictions, on its part, is an exceptionally broad term that can have many different contexts. Hence, the decision was made to remove the variable.

2. Adjustment of ‘Relevance of borders’ into ‘Scale of approach’

In the article on their framework, Biermann & Kalfagianni (2020) only distinguished between relevance of borders and irrelevance of borders. Thus, this distinction was limited to setting liberal egalitarianism aside from the other justice positions. However, this conclusion is strange, given that the authors provide a more nuanced picture in the article itself. The new variables are as follows (drawn from chapter 2.2):

For, liberal egalitarianists justice should be approached within ‘national borders’. Cosmopolitanism, instead, uses the idea of ‘international’ interdependencies between individuals, groups or even states (Biermann & Kalfagianni, 2020, p2). The capabilities approach focusses on ‘collective’ responsibility to ensure that the individual/community has capabilities, with prominence of “schools and cultural and religious institutions” (Biermann & Kalfagianni, 2020, p7). Libertarianism approaches justice topics through the concept of individual freedom and individual responsibility, with no specific references to national boundaries or particular societies. Thus, libertarianism directs itself to the ‘individual’. Finally, critical perspectives exclusively focus on class structures that run across nations. Therefore, the position also frames and addresses justice in terms of the ‘broad class structures’ (Biermann & Kalfagianni, 2020).

3. Adjustment of 'Moral obligations towards the poor' into 'Redistributor of wealth'

Similar to the previous variable, the conclusions that Biermann & Kalfagianni (2020) draw from the descriptions of the justice positions is somewhat unnuanced. Concerning moral obligations towards the poor, they only make strict distinctions between 'Yes', 'Only voluntarily' and 'Within own society'. However, this misses the subtleties of who is responsible for the money transfer and what the precise scale of redistribution is.

For liberal egalitarianism, the national welfare state is the preferred mechanism to achieve justice. This means that '[national governments](#)' are responsible for redistributing wealth within society. For cosmopolitanism, the rich are once again obliged to help poorer communities on a global scale. Hence, they propose "[transnational transfer of funds](#)", "including [development aid](#)" (Biermann & Kalfagianni, 2020, p5). In their discussion on the capabilities approach, the authors mention that "governments and public policies are needed to improve the quality of life for all people as defined by their capabilities" (Biermann & Kalfagianni, 2020, p7). More importantly, they say that "the focus here is not on means (e.g., income) but on ends (e.g., human dignity)" (Biermann & Kalfagianni, 2020, p3). Strictly speaking, the capabilities approach does not argue for a redistributor of wealth: '[none \(only provision of services and knowledge\)](#)'. As for libertarianism, the authors state that the government should play a very limited role in addressing inequality. Hence, no redistributor of wealth should tax the wealthy: '[none](#)'. Finally, critical perspectives do not mention anything about redistributing wealth to the poor. The focus lies on "political agency of those suffering injustices and how to address them" (Biermann & Kalfagianni, 2020, p.4). Hence, the redistributor of wealth is also '[none](#)'.

4. Adjustment of 'Way to serve justice' into 'Group of interest'

Another problem with the framework of Biermann & Kalfagianni (2020) was that there is a lot of overlap between the last two indicators 'Way to serve justice' and 'Mechanism to achieve justice'. Take critical perspectives, for instance, where it says that justice is served "when oppressive structures are broken down" and that the mechanism to achieve justice is "global destruction of oppressive institutionalized structures of subjugation" (Biermann & Kalfagianni, 2020, p.5). This is virtually the same thing. When reading the descriptions of the justice positions carefully, a more useful distinction can be made. In fact, all justice positions direct themselves to specific groups or individuals. Hence, the new indicators are as follows:

For liberal egalitarianism, '[poor / disadvantaged communities](#)' deserve primary attention and the government should "provide access to health care, education, minimum wage, and support to the unemployed and disadvantaged" (Biermann & Kalfagianni, 2020, p.6). For cosmopolitanism, this is essentially the same, but

“extends it to the planetary level” (Biermann & Kalfagianni, 2020, p.5). The capabilities approach mainly aims to “advance the dignity of individuals” (Biermann & Kalfagianni, 2020, p.5). Thus, it is concerned with ‘[humans lacking dignity](#)’, which implies poor health, no control over one’s environment, no access to healthcare, lack of education, political insecurity and community well-being (see Biermann & Kalfagianni, 2020, p.6). Next, libertarians are proponents of individual freedom and a limited role of the state. This logically implies that the government instead puts high weight on the role of the ‘[private sector](#)’, which comprises businesses and NGOs. Finally, critical perspectives want to break down the oppressive structures in society by recognizing ‘[marginalized groups](#)’ such as women and ethnic minorities and helping them to participate (Biermann & Kalfagianni, 2020).

5. Changed variables for ‘mechanism to achieve justice’

The only indicator that has been conserved in its original state is ‘mechanism to achieve justice. That said, the variables for this indicator had rather long descriptions in the framework of Biermann & Kalfagianni (2020). This makes them very specific and hard to apply to pieces of text. Hence, the decision was made to attempt to capture the essence of the mechanisms more concretely. The changes have been based on the descriptions of the justice positions by Biermann & Kalfagianni (2020).

First, liberal egalitarianism the mechanism to achieve justice is the creation of a national welfare state in order to “assign fundamental rights and duties as well as economic opportunities in society” (Biermann & Kalfagianni, 2020, p.3). This translates into the creation of ‘[Strong national institutions](#)’. For, cosmopolitanism the way to achieve justice is through “global redistribution to support the needs of the poorest within and among countries” (Biermann & Kalfagianni, 2020, p.7). In other words, it advocates for creation of ‘[Strong international institutions](#)’. As regards the capabilities approach, the focus is to enable “all people to live a rich life by fully developing their individual capabilities and virtues” (Biermann & Kalfagianni, 2020, p.6). Hence, the variable has been renamed into ‘[individual capacity building](#)’. Libertarianism, instead, advocate for a limited role of the government regarding markets and to provide citizens with as much individual freedom as possible. Therefore, the variable has been named ‘[Individual freedom / Free markets](#)’. Critical perspectives aim to break down oppressive class structures Biermann & Kalfagianni (2020). The variable has thus been named ‘[Combat class-structures](#)’.

	Liberal egalitarianism	Cosmopolitanism	Capabilities	Libertarianism	Critical perspectives
Scale of approach	National	Global/ European	Collective	Individuals	Broad class structures
Redistribution of wealth	National government	Transnational funds/development aid	None (only provision of tools and knowledge)	None	None
Group of interest	Poor / disadvantaged communities	Poor / disadvantaged communities	Humans lacking dignity	Private sector	Marginalized groups
Mechanism to achieve justice	Strong national institutions	Strong international institutions	Individual capacity building	Individual freedom / Free markets	Combat class-structures

Table 5 – adjusted research framework

4.2 Austria

First on the list is Austria, whose NAP covers 19 chapters spread over 150 pages. Codes were distributed over a total of 82 quotes. As can be seen in table 4, there is no justice position that stands out in particular. Instead, there is a mixture of primarily cosmopolitanism and liberal egalitarianism. Though traces of critical perspectives and libertarianism can also be found. Interestingly, each of the justice positions are mostly covered in separate chapters. Almost all cosmopolitan codes were applied to text in chapter 14, covering the global context. Likewise, chapter 7 on the social aspects of climate change contained many codes of critical perspectives.

Justice position	Frequency
Cosmopolitanism	23
Libertarianism	21
Liberal egalitarianism	20
Critical perspectives	15
Capability approach	3
Total	82

Table 6 – frequency table of justice positions in Austria's NAP

As indicated, chapter 14 contained the highest number of **cosmopolitan** views. The chapter considers climate change in a global context. The Austrian government has a strong sense of international responsibility and is willing to provide aid to vulnerable countries. Austria recognizes that “climate change increases the risk that

global poverty and social conflict will intensify” (p.110). Therefore, the country is prepared to use “international climate finance as an import instrument for supporting developing countries” (p.111). In fact, Austria has committed to make \$US100 billion available annually through 2020 to support climate-relevant adaptation measures in developing countries. A special institution was established to oversee international finance called “The Working Group International Climate Finance (AGIK)” (p.111). The government reflects on its international climate finance in “a report (that) is presented yearly” (p.111). In table 18, it can be seen that the NAP also contains a large quantity keyword for cosmopolitanism; ‘European / Europe’ and ‘Global’ are included 140 and 56 times respectively. And thus, it can be shown that Austria’s is **Global /European** in scope due to consideration of vulnerable nations and that it advocates for **strong international institutions** through the AGIK working group.

There are also traces of **liberal egalitarianism** in Austria’s NAP. For instance, the institutions that were created to help marginalized groups mentioned above were funded by the **national government**. On page 54, the NAP says that “the impact of heat on vulnerable groups was the subject of the projects funded by the Climate and Energy Fund”, which directly falls under the government. Hence, the Austrian government itself is the redistributor of wealth in this case. Additionally, the NAP pays special attention to **poor / disadvantaged communities** that “have fewer opportunities of preventing or avoiding undesirable developments” (p.55). There is some possible overlap here with critical perspectives because it is plausible that marginalized groups are simultaneously those that have lower incomes.

Next, **libertarianism** is represented hither and thither throughout the NAP. To give an example, the Austrian government aims to examine the possibilities of “private adaptation in agriculture, tourism and private households more closely” (p.31). There are also other instances when the NAP directs itself to **individuals**. Individual responsibility to take safeguarding measures is accentuated on pages 9 and 12. In total the word ‘individual / individual responsibility’ is used 52 times in the NAP of Austria, which is quite significant when compared to the other NAPs (table 18). Libertarian ideas are further presented in chapter 6 on challenges to adaptation: “Measures should not lead to increased consumer prices, displace competitors from the market, or lead to not the best solutions but the strongest market participants winning out” (p.50). This is a clear example of **individual freedom / free markets**.

Chapter 7 on the other hand puts emphasis on issues that are related to **critical perspectives**. One of the first sentences calls for “respecting fundamental rights and cultural diversity, guaranteeing the equality of men and women, and fighting against discrimination of any kind” (p.53). Austria is also the only nation of the Global North in this research that addresses gender and women in specific (table 18). The Austrian government has brought to life several institutions to assist in achieving these goals. For instance, the GIAKlim assesses the impact that climate change enacts on gender minorities. There are also funding programmes to help other

marginalized groups including STOPHOT for the elderly in urban environments and EthniCityHea for creating resilience among migrant groups. According to the NAP, socially weaker groups are “more exposed to the effects of climate change due to low income, low social capital and poor housing conditions” (p.53). The Austrian government also identifies the continued existence of **broad class structures** within the country: “There are still differences in income between men and women. Single older women and single mothers experience a higher-than-average risk of poverty”. The NAP sets out to **combat these class structures** by creating laws that deal with “fundamental rights, economic concerns of individuals, gender equality and discrimination” (p.53).

All in all, it can be concluded that the NAP of Austria is primarily a mixed bag with a fairly balanced representation of all justice positions, save the capability approach.

4.3 Switzerland

The NAP of Switzerland, on its part, was fairly technical in its character and did not digress that much on justice issues (only 45 quotations). It was more concerned with describing adaptation measures themselves, rather than their impact on the Swiss population. Much attention was paid to ecosystems, agriculture coordination between levels of government. In total, the NAP, which was written in German, covered 102 pages spread over 9 chapters. It is worth noting that almost all of the codes were applied to chapter 7, the title of which translates to International Corporation in Climate Adaptation. It shouldn't then come as a surprise that around 80% of the applied codes belonged to cosmopolitanism.

Justice position	Frequency
Cosmopolitanism	36
Liberal egalitarianism	5
Libertarianism	4
Critical perspectives	0
Capability approach	0
Total	45

Table 7 – frequency table of justice positions in Switzerland's NAP

Chapter 7 of Switzerland's NAP is entirely dedicated to **cosmopolitan** thought. The Swiss government expresses a strong sense of international responsibility in the NAP. Hence, the document does not confine itself to the Swiss border, but considers climate change in a **Global/European** context. Within the context of the European Union, Switzerland is "a partner in the European Environment- information- and observation network EIONET" (p.52). There is also intensive collaboration between Switzerland and other EU member states in other fields (p.52).

Interestingly, the Swiss government seeks for additional opportunities to collaborate with countries in the stream of the Rhine River. Switzerland is well-aware that heavy rainfall upstream can cause problems in the countries downstream. For that reason, they have joined the International Commission for Protection of the Rhine (IKSR) (p.52). Next to that, there is also the Commission for Hydrology in the Rhine- area (KHR). "We also take part in the Alpine Space Network, which is led by the Austrian country" (interview 3: 23rd of June). When asked about international collaboration, the coordinator of the Swiss NAP further remarked that "we do share knowledge; we are part of the European Environmental Agency Network (ENAP). In the beginning we were profiting a lot from Germany, the Netherlands and England. And now others learn from us. So, it's a good discussion, always" (interview 3: 23rd of June). Thus, it can be shown that the Swiss government is aiming for **strong international institutions** through international knowledge sharing, the Alpine Space Network and the ENAP.

From a global perspective, Switzerland is also aware that developing countries require outside financial aid in their fight against climate change. The writers of the NAP recognize that developing countries "experience exceptional negative consequences from climate change" (p.52). By means of "multilateral funds, like the Adaptation Fund and the Green Climate Fund" (p.52), Switzerland supports developing countries in the Global South. In this manner, there is no direct financial support coming from Switzerland, but rather indirect support through intermediary **transnational funds**. When the interviewee was asked if Switzerland sends direct development funds, he responded: "Frankly, no. The foreign ministry is responsible for that. What I do know is that we help indirectly by contributing to the Adaptation and Green Climate funds" (interview 3: 23rd of June). Still, the Swiss government is often more insistent on "adjusting its policy in accordance with neighbouring countries" (p.53), rather than with distant countries. The Swiss government is also keen on "finding a shared vision among Alpine countries and to share Good-Practises with them" (p.53).

Five of the codes have applicability to **liberal egalitarianism**. Most of these have something to do with the funding of adaptation measures in Switzerland. In fact, the Swiss **national government** is the main redistributor of wealth when it comes to adaptation. A view that is confirmed by the interviewee who says that the funding of measures in Switzerland is "strictly done by the government" (interview 3: 23rd of

June). In the period 2014-2015, the government provided “between 5-7 million Francs” to support adaptation measures (p.56). This sum has been greatly improved in the years thereafter, now accumulating into 40 million Francs in the period 2016-2019 (p.56). The interviewee, however, calls this a “low estimate” and says that “more money is invested into climate adaptation”. When asked to give more specific numbers, he replied that “numbers are hard to specify” (interview 3: 23rd of June). There are no indications for [strong national institutions](#) within the NAP itself. The interviewee contradicts this by saying that “the priority of adaptation is strongly safeguarded by institutions and Swiss law” (interview 3: 23rd of June).

Compared to the other NAPs, it is rather striking that there is no reference to [marginalized groups](#) or [poor / disadvantaged](#) communities whatsoever. Vulnerability seems to be discussed more in terms of sectors and not in terms of social groups. For instance, the NAP pays a lot of attention to the agricultural sector, tourism and water management. When confronted with this question, the interviewee responded that “we do recognize them, but we do not specifically spill it out. This becomes more and more an issue, which we are not denying, please do not misunderstand me” (interview 3: 23rd of June). There is also no further consideration of the private sector or individuals as possible contributors to successful climate adaptation. The interviewee explained this by saying that “we provide the knowledge so that the private sector can take adaptation action itself” (interview 3: 23rd of June). This statement hints towards the idea of [individual](#) responsibility.

4.4 Scotland

The NAP of Scotland was the most extensive document out of the six included in this research. It was comprised of 229 pages, spread over three parts with special sections dedicated to climate justice and the economy. The document touched on a lot of different justice topics and 127 quotations have been created altogether. Nevertheless, it can be concluded that the NAP was predominantly liberal egalitarianist and libertarian. Of particular interest is a strong focus on the Scottish business sector and the role of individual responsibility to adapt climate change.

Justice position	Frequency
Libertarianism	68
Liberal egalitarianism	44
Cosmopolitanism	15
Capability approach	2

Critical perspectives	1
Total	127

Table 8 – frequency table of justice positions in Scotland’s NAP

Libertarianism is the most prevalent justice position in the NAP of Scotland. There is an eminent consideration for the role of the **private sector** in adapting to climate change. This conclusion can also be drawn from table 18, as the Scottish NAP addresses businesses often when compared to other NAPs. Anyway, the NAP itself states that “Adaptation Scotland has worked with Scottish businesses to increase their awareness of climate change and help them adapt” (p.92). In addition, measures are taken to safeguard the functioning of the private sector because “to support Scotland’s economy, it is important that the buildings in which businesses operate are resilient to the changing climate” (p.60). As to why this is important, the NAP says that “the Scottish Government recognises the importance of behaviour change and we want to ensure that everyone in Scotland is informed, prepared, and ready to adapt to the changing climate” (p,27) and that adaptation “not only improves business efficiency, but can make businesses more competitive” (p.126).

In this sense, the NAP also states that climate change is will not only create risks, but also “opportunities for Scotland’s businesses, with changing demands for goods and services presenting opportunities for innovation” (p.9). However, the Scottish Government does not commit to obligate sustainable practises to businesses, but rather aims to “encourage the uptake of renewable technologies where appropriate” (p.108). There is also support for **free markets** in the Scottish Nap, or at least undisrupted markets. For instance, it addresses the “risks to business from disruption to supply chains and distribution networks” as well as the “risks and opportunities for business from changes in demand for goods and services”. Both these sentences indicate faith put into well-functioning free markets, be it indirectly. The importance of free markets becomes more explicit on page 199: “there may also be opportunities for Scottish businesses to sell adaptation products and expertise internationally and make use of new trade routes to sell their goods”.

Scotland’s NAP often directs itself to **individuals**. For instance, “homeowners in areas at risk of flooding are encouraged, where they can, to consider investing in measures to reduce the impact of a flood event” (p.62). The Scottish NAP recognizes the potential accumulated individual action and “raises awareness to the consumer of the importance of undertaking good food hygiene practices in the home through targeted media campaigns and a range of consumer engagement activities” (p.85). But raising awareness does not equal to forcing adaptation actions upon individuals. It is still entirely up to them to conform or not. Similarly, on page 109 the NAP calls “businesses to consider the range of measures they could adopt to improve their own efficiency”. Hence, there is **individual freedom** in deciding to take adaptation

action. In addition to encouragement, the Scottish Government also provides “households and businesses” with “specialised services and skilled trades” (p116). As before, it is more about providing individuals with knowledge or tools, so that they may use their own freedom to take action towards adaptation.

The tendency towards liberal principles in Scotland’s NAP is once again highlighted in the frequency of codes concerning **liberal egalitarianism**. This is mainly due to two reasons. First, the NAP has a **national** tone and is directed towards the Scottish nation in specific, often with little reference to countries elsewhere. For instance, on page 11 the government immediately sets out “to prepare Scotland for the challenges that we will face”. The strong focus on the national borders becomes more explicit in part 2 of the NAP: “we are now considering a National Forum for climate change in light of the global climate emergency” (p.28). Remarkably, it almost reads as if the Scottish government is willing to prioritize itself whilst downplaying the problems of other countries. To illustrate, one of the targets related to Scotland’s international framework is “to influence the world around us on the issues that matter most in helping Scotland flourish” (p.198). Second, it becomes clear that the Scottish **national government** is responsible for funding climate adaptation measures. For instance, ‘£42m is provided annually by the Scottish Government for flood protection” (p.9). Similarly, “by 2021 the Scottish Government will have allocated more than £1 billion since 2008 to improving energy efficiency.” (p.45). Considering that the estimated nominal gross domestic product of Scotland is \$205 billion, these sums do not seem to be that substantive altogether. Additionally, the Scottish Government is responsible for funding the adaptation indirectly. They have established both the Scottish Flood Forum (p.38) and the Infrastructure Commission for Scotland (p.123), which are primarily funded by the government itself.

That said, it should be noted that other key characteristics of liberal egalitarianism are less evident in the NAP than the national focus and governmental funding. The writers do recognize that “income is a strong determinant for people’s ability to respond to and recover from climate change impacts” (p.70). But as can be seen in table 18, the NAP does only make reference to poor communities on fourteen occasions.

The final position that reoccurred in the Scottish NAP is cosmopolitanism. At first glance, this may appear contradictory given the strong national sentiment described above. Though all cosmopolitan utterances are largely confined to one chapter that considers Scotland in a **Global/European** context. As it turns out, Scotland provides the International Development Fund (IDF) with an annual funding of £10 million. The main of which is “to support and empower our partner countries: Malawi, Rwanda, Zambia, and Pakistan” (p.198). Unlike the other included countries of the Global North, Scotland apparently has a close connection with partner countries in the Global South. What’s more, the Scottish Government, together with SCIAF (Scottish

Catholic International Aid Fund), also sends direct funds to its partner countries in the Global South. For instance, “The Climate Challenge Programme Malawi is a 3-year, £3.2 million, strategic and integrated programme to help vulnerable communities in Malawi build resilience to the effects of climate change” (p.206). Hence, the aim is to create **strong international institutions** through the SCIAF and the Malawi programme. Even though the relationships with partner countries form a large part of Scotland’s foreign investment, the NAP also takes the broader context into account: “climate change will impact how Scotland interacts and engages with the international community, and Scottish Ministers continue to participate in international climate change conferences, including championing climate justice” (p.198). In this sense, the Scottish Government also “wants to be an active partner in international governance helping to influence the world around us on the issues that matter most”.

4.5 Partial conclusion for the Global North

On the whole, the included countries of the Global North positioned themselves predominantly as libertarian, cosmopolitan and liberal egalitarian. The exception is Switzerland, whose NAP was nearly confined to cosmopolitanism.

Justice position	Frequency
Libertarianism	93
Cosmopolitanism	73
Liberal egalitarianism	67
Critical perspectives	16
Capability approach	6
Total	255

Table 9 – frequency table of justice positions in NAPs of the Global North

Libertarianism is represented most in the NAPs of the Global North. All of the documents (and the interviewee for Switzerland) refer to the **individual** responsibility of businesses or homeowners. Even though they are encouraged to take adaptation actions, there is a sense of **individual freedom** in making the decision to practically do it. The NAPs of Austria and Scotland also put weight on the functioning of **free**, or otherwise undisturbed, **markets**. The **private sector** was of particular interest in Scotland, with many references to Scottish businesses (see table 18).

All included countries of the Global North featured signs of **cosmopolitanism**. For, Austria and Switzerland, the NAPs are written from more of a **European** perspective.

Scotland instead follows a **global** perspective in one of its chapters and does not mention the European context that often (see table 18). All of the countries in the Global North also seek to create **strong international institutions**; the Alpine Space Network & ENAP for Switzerland, the Alpine Space Network & AGIK for Austria and the SCIAF & Malawi programme for Scotland.

There are signs of **liberal egalitarianism** in all of the included nations of the Global North. Climate action is funded by the **national governments** of the respective nations. This finding is in line with the assumption on financing that was derived from the theory of chapters 2.3 & 2.4. The expectation was that, due to strong economies (Zolnikov, 2019), European nations are able to fund measures through governmental financing. Many of the included countries also take a **national** scale of approach for most of the plan. This may be due to the fact that, as the name suggests, National Adaptation Plans are inherently national in their character. Though this cannot be said for certain. Another point of remark is that relatively few (13) of the 67 codes were applied to the mentioning of **poor communities**. In a truly liberal egalitarian justice position, wealth is redistributed from the rich to the poor.

In hindsight, the relative lack of **critical perspectives** and the **capability approach** in the NAPs of the Global North can be explained with the theory. Though this was not explicitly part of the assumptions. The European continent does not belong to the regions that are most vulnerable to climate change (see IPCC, 2022). Also, the economies of Europe are generally strong (Zolnikov, 2019). It is thus plausible that citizens enjoy relatively high living standards. Hence, there will be less **humans who lack dignity** (no education, lack of health services, poverty) and hence fewer needs to **build** basic **individual capacity**. None of the European countries were explicit in pointing out marginalized groups. That does not automatically mean that their existence is denied, as illustrated by the coordinator of the Swiss NAP.

	Austria	Switzerland	Scotland
Scale of approach	Global / European, international responsibility and support for developing nations Individual responsibility, private adaptation Incidentally class structures of marginalized groups	Global / European context, collaboration with EU member states	Individual responsibility, consumer hygiene and homeowner adaptation Strong focus on national borders, addresses Scottish nation Minor consideration for global context, limited to partner countries in Global South

Redistributor of wealth	National government within Austrian borders Transnational funds / development aid for developing countries	National government responsible for funding adaptation measures	National government responsible for funding adaptation measures
Group of interest	Primarily poor communities and disadvantaged groups Marginalized communities including gender minorities, elderly and migrants	No references to poor communities marginalized groups, undignified humans or the private sector	Large consideration of private sector, protecting businesses and opportunities for innovation
Mechanism to achieve justice	Strong national institutions Strong international institutions Incidentally undisturbed free markets	Some references to strong international institutions within the Rhine region	Free markets, undisturbed by effects of climate change, resilient economy

Table 10 – summary table of justice discourses in three NAPs of the Global North

4.6 Sudan

Sudan's NAP was comprised of 131 pages, spread over seven chapters that go in detail close about the specific needs of each region in the country. One thing that is obvious in the NAP of Sudan, is that it centres around the capability approach, more than any of the other countries. A lot of effort is dedicated to the survival and well-being of Sudanese communities. Aside from the capability approach, there is some content relating to liberal egalitarianism and there are a few cosmopolitan statements. As can be seen in table 11, there are no codes that apply to libertarianism or critical perspectives whatsoever.

Justice position	Frequency
Capability approach	62
Liberal egalitarianism	16

Cosmopolitanism	7
Libertarianism	0
Critical perspectives	0
Total	85

Table 11 – frequency table of justice positions in Sudan’s NAP

All throughout the NAP of Sudan, there is adherence to the **capability approach**. As early as on page 2, there is attention for **humans lacking dignity**, particularly “those in rural communities who are the most vulnerable”. Human development is low in Sudan, due to “factors such as life expectancy, school enrolment, and GDP per capita” (p.20). Sudan’s main livelihoods “are agriculture and livestock raising” (p.38). What makes farming communities extra vulnerable is the “lack of alternative livelihood systems, lack of technology and know-how for better agricultural practices” (p.39). Another risk factor is the spread of “water-borne diseases”, “vector-borne diseases” and “epidemic diseases” (p.115). And even though the NAP admits that 85% of these farmers are living below the poverty line, it can be thus concluded that the problems in Sudan far extent poverty alone. Hence, we should not just speak of poor communities, but of communities lacking dignity altogether. In other words, they do not have the appropriate means to live a decent life in accordance with their own choices.

The solution that is proposed in the NAP for tackling the dignity problem is **individual capacity building**. In Sudan, capacity building covers multiple fields of attention. As regards agriculture, it aims to “discourage malcultivation practices and introducing improved crop varieties, shelterbelts, crop rotation and water harvesting and irrigation technologies” (p.27). From a medical perspective, the objective is to provide “basic health services and health education among locals will be a necessary element to adaptation” (p.28). And concerning the spread of diseases, “the adaptation measures focus on vaccination campaigns and awareness raising program on key preventable diseases such as schistosomiasis” (p.26). All these examples illustrate well that, as is typical for the capability approach, capacity building is all about the provision of tools and knowledge so that people can improve their livelihoods by themselves. So instead of direct money sums, the vulnerable communities receive non-monetary aid from the government.

Something that is typical for the NAP of Sudan is the desire for a sense of **collective responsibility** within the country. Decisive action should come through “partnerships ranging from state governments to international donors; from the household sector to the private sector; and from one end of the national institutional spectrum to the

other” (p.22). And the capacity building should be initiated from all societal levels because the government recognizes “state-level, local and civil society organizations as crucial partners in building resiliency to the impacts of climate change (p.21)”.

The presence of **liberal egalitarianism** can be explained because of two reasons. First, the NAP often addresses humans lacking dignity. And since these communities have low livelihoods, they are also **poor communities** in many cases. In some occasions, poverty is addressed separately from the other livelihood problems. For instance, on page 23: “The underlying goal for developing Sudan's National Adaptation Plan is to contribute to (...) and poverty reduction”. Or on page 35, where the NAP considers the factors for vulnerability, “namely poverty levels among nomadic tribes and their lack of household income diversification”. Second, the document emphasizes the importance of **strong national institutions** since the “primary objective of Sudan's NAP is to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience among state- and national-level institutions” (p.22). Though despite this being the primary objective, the NAP only mentions it one more time on page 84 where it sets out to “improve the quality of the adaptation planning at the state level, including the policies and programmes”.

Finally, the codes that involve **cosmopolitanism** should also be considered briefly. Sudan hopes for the support of **transnational funds** through donor aid to obtain sufficient funds for adaptation measures. The NAP states that “additional capital needed from international donors to address climate change” (p.62) and is engaged in “fund raising for NAP implementation activities targeting government, UNFCCC funds, and other multilateral and bilateral sources” (p.82).

4.7 Suriname

With 176 pages, the NAP of Suriname is the most extensive document of those included countries that are located in the Global South. The justice-related content of Suriname’s NAP was primarily cosmopolitan, featuring many statements on international collaboration and funding methods through transnational funds. Apart from that, there was also close consideration of gender rights and the vulnerability of women. Hence, critical perspectives is secondary on the list.

Justice position	Frequency
Cosmopolitanism	43
Critical perspectives	23

Capabilities approach	10
Liberal egalitarianism	8
Libertarianism	2
Total	86

Table 12 – frequency table of justice positions in Suriname’s NAP

Cosmopolitanism is a key part of Suriname’s NAP. Even though a National Adaptation Plan is designed to address adaptation within the country’s borders, Suriname immediately points out that “international cooperation is also important” (p.10). The government of Suriname aims to be a **global** contributor in the field of climate adaptation through “international climate change diplomacy” and “international expert exchanges” (p.131). In this context, Suriname is also insistent on “meeting its international responsibilities in the climate change arena” (p.15) Of particular interest in the case of Suriname are the new funding methods for financing adaptation. That is to say, “the financing for development has become more diversified and complex with new sources of finance such as South-South Cooperation, international climate funds and impact investors” (p.41). As regards South-South collaboration, the interviewee mentions “knowledge sharing with small island states, a programme organized by Japan”. According to the interviewee, these are all ‘Caribbean Community and Common Market’ (CARICOM) countries (interview 2: 22nd of June).

That these new investment methods involve **transnational funds** becomes clear on page 42: “sources of finance such as South-South Cooperation, international climate funds and impact investors”. The more traditional funding by the government is not an option in Suriname because “increasing debt levels have placed a drag on economic growth and development in Suriname, while constraining the allocation of resources for productive and new investments” (p.41). Therefore, Suriname is forced to look for other options to finance adaptation such as “commercial market finance, traditional bi-lateral development assistance, and finance from international development banks” (p.44). The international origin of these funds is again emphasized on page 42: “Suriname retains access to concessional public finance from the international community and multilateral development banks”. The interviewee particularly mentions the Adaption Fund to find financing resources. “There are problems in the national treasury due to debts”. In Suriname, having financial means does not mean that these can be implemented. Currently, we are completely dependent on donor aids” (interview 2: 22nd of June).

Suriname also exerts effort to build **strong international institutions** in the process surrounding adaptation. For instance, the aim is to create “more communications and exchanges with international climate finance mechanisms” (p.94). How this should be carried out exactly is more clearly stated elsewhere in the NAP. Namely on page 73, which says that Suriname is establishing “an officially approved system for inter-governmental collaboration on climate change information ownership and sharing including protocols for usage”.

In contrast to the countries previously discussed, Suriname’s NAP also touches upon **critical perspectives**. As early as on page 3, the NAP sets out to include “gender inequalities into Climate Change adaptation initiatives”. This principle of gender equality is repeated several times throughout the NAP (p. 11, 16, etc.). As to what the current gender inequalities comprehend is explained later on page 29: “gender differences, include differences in time use, access to assets and credit and treatment by markets and formal institutions”. The main **marginalized group** that is considered in the NAP are women. The “cumulative effects of poverty and social, economic and political barriers indicate that women will often be disadvantaged in coping with the adverse impacts of the changing climate” (p.29). Additionally, “socio-cultural norms could also limit women from acquiring the information and skills necessary to escape or avoid hazards”. An example is that “women have responsibility for small children who cannot swim or outrun disasters, who are further negatively affected by climate change” (p.29). Another example is that “the threat of physical and sexual violence often increases” after disasters. And “this threat is being increased in shelter camps” (p.30). The interviewee remarked that women are particularly vulnerable to climate change in Suriname because they “take care of the household”. Rural women are the most vulnerable because they are dependent on the crops they harvest themselves” (interview 2: 22nd of June).

The quotes stated above simultaneously indicate the **broad class-structures** between men and women in Suriname. And the government of Suriname is also insistent on combatting these class-structures by “including gender awareness training for volunteers working in disaster areas including crisis management and sexual and gender-based violence” (p.30) and by strengthening “formal legal and institutional avenues for women to access natural resources and leverage such natural resources for direct economic gain and increased quality of life” (p.89).

The **capabilities approach** plays a minor in Suriname’s NAP. In the document, there is attention for “existing vulnerabilities among certain groups in society, such as farming communities and women in the interior” (p.18), thus referencing to **humans lacking dignity**. There are also minor references to **individual capacity building**. Investments into “human capacity development” are addressed on page 41 and the “improvement of education at various levels” is mentioned on page 20. The interviewee puts higher emphasis on capacity building and says that “human capacity building is one of the main issues on which we focus. “Training sessions for

capacity building are also provided by the UNFCCC institute of Educator and Training, which includes “climate smart agriculture” (interview 2: 22nd of June).

Furthermore, the NAP points out a **collective** “responsibility” (p.25). The government of Suriname is also a proponent of “public-private partnerships” and “provides budget towards PPP efforts” (p.52). One of the key indicators to examine the effectiveness of adaptation policy is the “number of collaborative agreements signed” (p.51). The interviewee also mentioned the role of civil society organizations that work in the rural areas of Suriname, “who focus on raising awareness” (interview 2: 22nd of June).

4.8 South-Africa

The final country that is covered in this research is South-Africa. The NAP of which features an almost equal mix of critical perspectives, cosmopolitanism and liberal egalitarianism (see table 13). Important themes in the NAP are recognition of marginalized groups (particularly women and gender inequality) and international funding for adaptation. The NAP consists of 94 pages that cover a total of 13 chapters, the topics of which ranging from vulnerability reduction and capacity building to finance.

Justice position	Frequency
Critical perspectives	24
Cosmopolitanism	23
Liberal egalitarianism	22
Capabilities	13
Libertarianism	2
Total	83

Table 13 – frequency table of justice positions in South-Africa’s NAP

The justice position **critical perspectives** is a prominent part of South-Africa’s NAP. In a similar way to Suriname, the NAP of South-Africa considers the injustices posed to **marginalized groups**, particularly women. In terms of gender, “women in South Africa are still more vulnerable to the impacts of poverty and face different challenges to men in the workplace, in society and at home” (p.14). “Generally, you

find that women have a lot of tasks to them. In our assessment we did not focus on specific groups of women, but I'm sure that women in rural areas would be more vulnerable to the impacts of climate change" (interview 1, 22nd June). And considering **broad class structures**, the NAP also notes that "poverty is higher in woman-headed households and that women continue to earn less than men" (p.18). Women in South Africa are also often less educated than men and have less knowledge about potential climate disasters (interview 1, 22nd June). The government of South-African takes decisive action to **combat these class-structures** by "enhancing the knowledge of agricultural extension officers, facilitating their access to and ability to support women in vulnerable communities and increasing the number of female extension officers". These types of capacity building are the main ways to improve the situation of women in relation to climate change impact (interview 1, 22nd June).

But women are not the only **marginalized group** that is considered in the document: "since vulnerability to climate change differs depending on gender, age, wealth, social status and other factors, adaptation actions must be targeted in ways that ensure equitable benefits for the individuals and communities that are most vulnerable" (p.27). These include "the poor and/or rural women; children, especially infants and child headed families; the aged; the sick; and the physically challenged" (p.27).

The other two justice positions that are present in the NAP of South-Africa are **cosmopolitanism** and **liberal egalitarianism**. That is primarily the cause of one reason alone; there is much attention for **poor communities**. The interviewee confirms this by stating that "the unemployment rate and slow economic growth are also problems in South Africa that hinder development goals" (interview 1, 22nd June). And since the variable poor communities belongs to cosmopolitanism as well as liberal egalitarianism, both positions take an equal share in the NAP of South Africa. The government is of the view that "the effects of climate change and environmental degradation fall most heavily on those living under conditions of poverty" (p.4). On closer consideration, the actual policy that South Africa aims to implement targets **stronger national institutions**: "as South Africa we need to strengthen our social and economic resilience to the effects of climate change" (p.4). This focus on the national level is again mentioned on page 18: "South Africa remains a dual economy with one of the highest Gini coefficients in the world, perpetuating both inequality and exclusion. The continued social and economic exclusion of millions of South Africans, reflected in high levels of poverty and inequality, is identified as South Africa's biggest challenge". Thus, it can be shown that South Africa's NAP is more **liberal egalitarian** (national focus) than cosmopolitan (international focus) when its group of interest. But when it comes to **redistributing wealth**, the NAP is more oriented towards **cosmopolitanism**. This becomes clear in the funding methods that the South African government applies. The "principal source of public sector finances" in Africa are international

“Environment Facility, Development Finance Institutions (DFIs) such as the Development Bank of Southern Africa (DBSA), the World Bank and Official Development Assistance Institutions and Climate Funds, including the Green Fund and the Adaptation Fund” (p.55). South Africa itself is “constrained in the economic resources for taking adaptive measures. We rely on all possible financial resources that are available” (interview 1, 22nd June).

Finally, the **capabilities approach** is referred to on a few occasions. For instance, there is an emphasis on the **collective**: “a wide range of stakeholders, including government, communities, civil society organisations, research community and private sector actors will be involved” (p.23). A topic that returns on page 28: “stakeholders that have been key implementers of climate adaptation projects include: government actors, provincial stakeholders and municipalities, state entities, non- governmental organisations and business, among others”. Such a governance-like approach is again mentioned on page 54, where the government seeks to “support to community-based organisations, academic organisations, NGOs, business organisations and civil society organisations”. The interviewee for South Africa confirms the collective approach: “There are a lot of relations between the government, the world bank, NGO’s and the private sector in South Africa. We need to come with African solutions, for Africans, by Africans” (interview 1, 22nd June).

There are a few minor instances where the NAP speaks of **individual capacity building**. One of the courses of action is to “support farmers (male and female) to use and manage water more sustainably” (p.64). And another course of action is to “support rural livelihoods through knowledge and capacity building” (p.30).

4.9 Partial conclusion for the Global South

As is shown in table 18, the most dominant justice positions in the countries of the Global South covered in this research are the capabilities approach and cosmopolitanism. The position of the capability approach on top of the list is mostly due to the NAP of Sudan, which included 62 codes on the position. Cosmopolitan thought was brought up in the NAPs of Suriname and South Africa, and less so in the one of Sudan. Minor attention was also paid to ideas related to critical perspectives and liberal egalitarianism. Out of these two, critical perspectives played a role in the NAPs of all countries, save Sudan. Liberal egalitarianism was present in the NAPs of South-Africa and Sudan, but missed in the NAP of Suriname.

Justice position	Frequency
Capabilities	85

Cosmopolitanism	73
Critical perspectives	47
Liberal egalitarianism	46
Libertarianism	3
Total	254

Table 14 – frequency table of justice positions in the Global South

First, the appearance of the **capabilities approach** is in agreement with the assumptions that followed from the theory and hypotheses of chapters 2.3 & 2.4. The expectation was that there would be a focus **individual capacity building** in Africa, because African nations generally have lower GDPs. That’s why they likely have to resort to cheaper adaptation actions, including capacity building (Biagini et al., 2014). This indeed is certainly the case for Sudan and South Africa (see also individual capacity building in table 18). The NAP of Suriname mentioned about capacity building for farming communities and women in the interior. Capacity building for rural communities was also one of the main priorities according to the interviewee for Suriname.

All of the countries in the Global South gave reference to a **collective** responsibility when it comes to adaptation. Many fields of society, ranging from state governments to civil organizations, are involved in the process. Thus, it can be concluded that there is high stakeholder participation. This finding is interesting, because the assumption was that there would a community-based approach (Biagini et al., 2014). Still, the findings do not necessarily contradict the theory here, because training sessions for capacity building are done with rural communities in the cases of Sudan, Suriname and South Africa. It likely means that a lot of stakeholders are involved in community-based capacity building, as evidenced by the interviewee for Suriname: “training sessions for capacity building are also provided by the UNFCCC institute of Educator and Training” (interview 2: 22nd of June).

Some aspects of **cosmopolitanism** were prominent in the NAPs of the Global South, and others weren’t. In order to fund adaptation, all three NAPs rely on **transnational funds / development aid** such as the Development Banks and senders of donor aid. This is in line with the theory of chapters 2.3 & 2.4, where research from Zolnikov (2019) indicated that African countries are limited in governmental funding options, due to low GNP. Suriname was also searching for **global** opportunities to collaborate in the field of climate adaptation and was involved in

international climate diplomacy, particularly with CARICOM countries. The two NAPs of the African continent do not share this inclination towards international cooperation and focussed on the level of their own nation: “We need to come with African solutions, for Africans, by Africans” (interview 1, 22nd June). Likewise, it was only the NAP of Suriname that targeted the establishment of **strong international institutions**. Finally, none of the countries located in the Global South paid attention to **poor communities** in a cosmopolitan global context. Yes, there was regard for poverty, but this only applied to poor communities within the nations.

With regard to **critical perspectives**, the justice position was absent from the NAP of Sudan, but played a strong role in those of Suriname and South Africa. The latter two countries acknowledge (particularly rural) women as the main **marginalized group** in their respective NAPs. A view that was confirmed by both interviewees. According to these two NAPs, there exist structural **class structures** between men and women, with the result that women are more vulnerable to the impacts of climate change than men. The NAPs of Suriname and South Africa also announce various measures to **combat class structures**. These findings are in accordance with the theory of chapters 2.3 & 2.4 and the derived assumptions. Namely, it was assumed that there would be vulnerable groups in Africa and South America because climate change impacts are most severe in these continents (IPCC, 2022; Zolnikov, 2019).

The final justice position that was featured in the NAPs of the Global South, specifically those of Africa, is **liberal egalitarianism**. Both documents make frequent references to **poor communities** and the problem of poverty in general. However, such was not the case for Suriname. The African NAPs of Sudan and South-Africa aspired to create **stronger national institutions** in order to increase economic and social resilience. For Suriname it was more about the international institutions.

Libertarianism, then, is as good as unrepresented in the NAPs of the Global South. That may partially be explained by the fact that African economies, and hence their private sectors, are weaker (Zolnikov, 2019).

	Sudan	Suriname	South Africa
Scale of approach	Collective approach, includes state-level, local and civil society organizations	Global: international collaboration, mainly South-South and specifically CARICOM states Broad class structures between different genders	Broad class structures between men and women Collective approach, includes government, civil organizations and research community
Redistributor of wealth	Donor aid and other forms of transnational funding	Reliance on international development aid and	Transnational financing, including the Green Fund, Adaptation Fund, and development aid

		climate funds due to national debts	
Group of interest	Humans in rural communities who lack dignity. I.e., no education, ineffective farming methods, disease risks etc. People living in poverty	Gender minorities, specifically women in rural areas. These are simultaneously groups that lack dignity	Marginalized groups, particularly women, children and disabled people People living in poverty
Mechanism to achieve justice	Individual capacity building. I.e., new farming methods, health services and vaccination programmes	Overcoming the broad class structures between men and women Strong international institutions, sharing of knowledge, international climate finance etc.	Combating class-structures between men and women Strong national institutions, strengthen social and economic resilience

Table 15 – summary table of justice discourses in three NAPs of the Global South

5. Conclusion & discussion

The objective of this thesis is to compare underlying justice positions in NAPs of the Global North and Global South. A total of six countries were included in the analysis of this research. These are Austria, Switzerland and Scotland for the Global North and Sudan, Suriname and South Africa for the Global South. In order to categorize the justice positions, this thesis draws on the planetary justice framework developed by Biermann & Kalfagianni (2020). This framework included the mainstream justice positions of liberal egalitarianism, cosmopolitanism, the capabilities approach, critical perspectives and libertarianism. The aim was to validate if the broad framework is applicable to justice in the context of climate adaptation.

5.1. Theoretical assumptions

Based on the theoretical chapters 2.3 and 2.4, the following four assumptions were made regarding the justice positions of the included continents. First, it was expected that, due to low GNP levels, African nations will advance less expensive actions in order to achieve justice. Cheaper measures include capacity building, planning & management and policy reform ((Biagini et al., 2014; Zolnikov, 2019). Secondly, it was predicted that African NAPs will rely more on a community-based approach, a typical feature of capacity building (Biagini et al., 2014). Thirdly, theory stated that climate vulnerability is generally higher in Africa and South-Africa (IPCC, 2022; Zolnikov, 2019). The assumption was that the NAPs of these two continents are

more likely to address specific groups or communities that are vulnerable. The final expectation was that African nations have to rely on non-governmental financing of adaptation action because of low GNP levels. Hence, it was also expected that the stronger European economies (Zolnikov, 2019) enable governmental financing.

5.2. Main results & comparison

The main research question that this thesis sets out to answer is: *How are fundamental positions on justice reflected differently in National Adaptation Plans developed by countries in the Global North and South?*

It can be concluded from the results that **libertarianism** is the dominant justice position in the Global North. This is mostly due to the NAPs of Scotland and Austria, in which free / undisturbed markets and individual freedom were promoted along with great consideration for the role of the private sector in adapting to climate change. **Cosmopolitanism** is second on the list, with supposed alliances between the Alpine nations of Austria and Switzerland and collaboration between Scotland and its partner countries in the Global South. the European Union. Finally, the orientation towards **liberal egalitarianism** can be partially explained by the relatively strong economies of Europe that enable governmental funding. It should nevertheless be noted that other liberal egalitarian aspects were not manifested in the NAPs of the Global North. Poor communities, for instance, were not addressed specifically.

As for the Global South, the **capability approach** is most prevalent. This can largely be attributed to the NAP of Sudan, which centred on individual capacity building for humans who lack dignity. But capacity building is also a priority in the NAP of Suriname and plays a minor role in the NAP of South Africa. **Cosmopolitanism** is the secondary justice position in the Global South. All of the included countries are largely reliant on transnational funds / development aid to finance adaptation measures. Suriname also looked for opportunities to cooperate globally and particularly with CARICOM states. The African countries showed less cosmopolitan thought in this sense, because they were more inclined to focus on collective approaches on the community level within the nation. The role of **critical perspectives** was unique to the Global South, save Austria, and played a role in the NAPs of Suriname and South Africa. Women were recognized as the main marginalized group that is negatively affected by class structures. **Liberal egalitarianism** was also featured because Sudan and South Africa addressed the problem of poverty on a national scale. Hence, it was important for the African countries to build stronger national institutions to develop economic resilience.

So, when comparing the Global North with the Global South, the following remarks can be made. First, nations of the Global South generally take a collective approach, involving state actors, NGOs and local communities. In contrast, nations of the

Global North put more emphasis on individual responsibility of the private sector as well as homeowners in adapting to climate change. Yet, these efforts are voluntarily. Second, it can be concluded that countries of the Global South are more explicit in addressing vulnerable groups, including gender minorities and poor communities. However, that does not mean that gender issues, and marginalized groups, are denied by countries of the Global North. Third, the nations of the Global North all take into consideration the global or European contexts of climate change. For some countries of the global South, the context is limited to the nation's border. Fourth, governmental funding of adaptation action is not an option for countries of the Global South. They have to resort to transnational funds or development aid instead. Countries of the Global North do in fact use governmental financing in order to fund adaptation action. That said, the relative significance of the money that is provided remains obscure.

5.3. Advice for policy makers

As explained in paragraph 1.3, the findings of this thesis are of particular interest to state actors because it acquires them a stronger sense of the justice positions that are currently prevalent in different parts of the world. With this new knowledge, they can position their ambitions better in relation to the current justice outcomes in the field of climate adaptation. For instance, the vulnerability of marginalized groups such as women in the Global South can inspire policy makers in the Global North to critically consider this topic in their own context. As also indicated by the Swiss coordinator of the NAP: "This seems to be more and more an issue, which we are not denying" (interview 3; 23rd of July). However, since most of the NAPs of the Global North do not explain this, the reader may interpret it differently.

Another point of remark is that some NAPs appear to focus on one justice position, which maybe come at the cost of others. For Sudan, for instance, the capabilities approach is dominant because it is solely about building capacity for rural communities. However, by only acknowledging the vulnerability of farmers in general, other possible intersections of vulnerability may be overlooked. The interviewee for Suriname, for instance, said that vulnerability is nuanced because "rural women are the most vulnerable" (interview 3; 23rd of July). This may be the same for Sudan and other countries in the Global South. Another example is the NAP of Scotland, which focusses very strongly on the liberal egalitarian idea of addressing adaptation within national boundaries. And even though the country works together with partner countries in the Global South, the exclusive consideration of Scotland's own interests may undermine the goodwill it receives from diplomats on an international level.

The final comment applies to the NAPs of the Global North. For the most part, they focus on individual choices of businesses and homeowners to adapt to the changing

climate. However, by trickling down the responsibility to the individual level, it may be hard to monitor if measures are actually taken in practice. This likely requires governments to conduct quantitative research on the local level in order to keep track of the efforts. That may become expensive or unachievable to coordinate.

5.4. Reflection on the framework of Biermann & Kalfagianni

One of the aims of this research was to test if the framework of Biermann & Kalfagianni (2020) was applicable to the context of justice in climate adaptation. This did not prove to be the case, however, because the operationalization of the framework that is suggested by the authors is flawed in some aspects. There is a considerable lack of nuance with regard to the variables 'Relevance of national borders' and 'Moral obligations towards the poor', so that justice positions are not clearly set apart from one another. The descriptions of other variables were sometimes too long or too nuanced to be effectively used in the analysis and had to be shortened into keywords. And when talking about climate justice in specific, the framework is somewhat limited in comprehensiveness because it does not consider climate justice-related topics such as historical responsibility and emission rights. In conclusion, there is still room to improve upon the framework.

6. Limitations & future research

Despite the fact that this research uses a framework that has been applied before, there are some shortcomings that should be critically addressed. The first one has to do with the framework itself, because its indicators had to be adjusted slightly to yield more nuanced results for the context of climate adaptation. In other words, the broadness of the framework of Biermann & Kalfagianni (2020) could not be maintained. The result of this is that the framework used in this thesis may have become issue-specific after all. And that is something this thesis initially aimed to avoid, as explained in the scientific relevance. It is therefore as yet uncertain if the justice framework that is used in this thesis can be applied successfully to policy documents that are not related to climate adaptation. Furthermore, it should also be noted that the framework is not completely staunch in its current state. There is for instance some overlap between liberal egalitarianism and cosmopolitanism. For both of these positions, poor communities are the group of primary interest. In hindsight, it would have been better to add further nuance to this. It would be advisable for future that uses this framework to distinguish between poor communities in a national context and poor communities in an international context. There may also be other justice frameworks available that are more suitable for assessing climate justice. In retrospect, it would have been better to look for alternative options other than the ones discussed in the academic relevance (chapter 1.4).

Another limitation of this research is that not all NAPs were included in the sampling procedure because many were not written in English, Dutch or German. In the final analysis, some continents were overrepresented and others were underrepresented. When considering the Global North for instance, this research focusses exclusively on European countries. The justice positions of North America and Australia thus remain unknown. This has major consequences for the generalizability of the findings when speaking of the Global North as an entity. Similarly, the Global South in this research was only represented by one South American country and two African countries. Yes, this is more diverse than Europe for the Global North, but it still is far from representative. Asia was not included at all. Then again, considering the time constraints that applied to this thesis, it would have been impossible to do qualitative analyses for all major parts of the Global North and South. And the six NAPs that were covered in this research did in fact hint towards some general patterns that are explained in the conclusions. For future research it is advisable to use a different starting point than the Global North-South divide. One option would be to distinguish between poorer and richer countries, or conservative and progressive governments. In this way, the question as to why certain countries follow certain justice ideals may be answered more clearly than it currently is.

The final limitation of this research has to do with the fact that it researches National Adaptation Plans, which are inherently meant to be national in their design. The consequence of this is that it could have led to biases in the results, particularly with regard to the scale of approach for cosmopolitanism and liberal egalitarianism. In principle, the whole idea of a National Adaptation Plan is more oriented towards liberal egalitarianism since it focuses on policies on the scale of the nation. That said, this bias seems not to have posed a major problem because cosmopolitanism featured prominently in the frequency tables of the results. Future research can apply the framework to international adaptation agreements, of for instance the EU, to test if that yields different results.

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8. Appendices

8.1 Interview 1: South Africa

Date: 22nd of June

Interviewee: Policy maker Department of Environment, Forestry and Fisheries / Driver National Adaptation Strategy South Africa

Meeting medium: Online Skype conversation

Length of interview: 17 min

Language: English

Summary interview

Interviewee recognizes the problem of gender marginalized groups in South Africa, particularly women. When asked about the most vulnerable groups, she refers to women and children. They are vulnerable because women are often unemployed or have low incomes, which affects adaptive capacity. Generally, you find that women have a lot of burdens attached to them in terms of family care. Women in rural areas would be most vulnerable to climate change. Capacity building is the main way to improve the situation of women in relation to climate change impact. South Africa is mainly looking for community-based strategies to achieve this. The unemployment rate and slow economic growth are also problems in South Africa that hinder development goals. South Africa is constrained in the economic resources for taking adaptive measures. Hence, the country relies on all possible financial resources that are available. Public-private partnerships are important, with involvement of private sector. There are a lot of relations between the government, the world bank, NGO's and the private sector in the country. NGOs implement adaptation actions at the community level. "We need to come with African solutions, for Africans, by Africans". She says that South Africa really relies on a collective approach to achieve the best outcomes "All stakeholders have a role to play in the implementation". South Africa collaborates internationally and shares information. She can't point out specific treaties or collaboration plans.

8.2 Interview 2: Suriname

Date: 22nd of June

Interviewee: Indirectly involved in writing the NAP – Directorate for Environment - Former colleague was the coordinator of the plan. She herself reviewed the plan for approval.

Meeting medium: Online Skype conversation

Length of interview: 29 min

Language: Dutch

Summary interview

Regarding international collaboration, she particularly mentions the Adaption Fund to find financing resources. Immediately points out that the plan has been made gender-responsive. But when asked about why is the case she nuances her previous statement by saying that Suriname doesn't consider gender as much as other NAPs she read. Internationally, Suriname shares knowledge with small island states, a programme organized by Japan. According to the interviewee, these are all 'Caribbean Community and Common Market' (CARICOM) countries. When asked about financing, she says that the plan is not truly being implemented in practise because a change of government has taken place. She cannot tell if this is a shift from progressive to conservative. She only mentions a "shift in priorities". Women are particularly vulnerable to climate change in Suriname because they "take care of the household". Interestingly, she also mentions that "rural women are often the ones who notice climate consequences in, for instance, soil first." She admits that rural women are more vulnerable than women in urban areas, because "they are dependent on the crops they harvest themselves". Currently "there are many civil society organizations that work in the rural areas of Suriname, who focus on awareness". For Suriname, "human capacity building is one of the main issues on which we focus, particularly during shifts of government when people's safety is not guaranteed". "Training sessions for capacity building are also provided by the UNFCCC institute of Educator and Training". These include "climate smart agriculture". Regarding the level of development in Suriname, she says that "there are problems in the national treasury due to debts". In Suriname, "having financial means does not mean that these can be implemented". Currently' they are completely dependent on donor aids".

8.3 Interview 3: Switzerland

Date: 23rd of June

Interviewee: Employee Swiss Office for the Environment – Coordinator of both the first (2014) & second (2020) NAP of Switzerland and NAS

Meeting medium: Online Skype conversation

Length of interview: 35 min

Language: English

Summary interview

Interviewee admits that Scotland does “not focus on social groups at all”. Switzerland instead uses a “cross-sectoral approach”. Measures are “financed within sectoral policies”. When asked about collaboration within the Rhine sector, he said: “We do not collaborate particularly with the Rhine region border nations”, but “the water sector collaborates with the Rhine region”. “We do share knowledge; we are part of the European Environmental Agency Network (ENAP)”. In the beginning we were profiting a lot from Germany, the Netherlands and England. And now others learn from us. So it’s a good discussion, always”. Furthermore, he remarked that “we also take part in the Alpine Space Network, which is led by the Austrian country”. When asked the question, is there a way you try to help countries in the Global South, he responded: “Frankly, no. Our foreign ministry is responsible for that. Our focus is mainly on our nation itself”. However, he also says that Switzerland is “contributing financial means to the Adaptation and Green Climate funds. When asked about individual responsibility versus a collective approach, he mentioned: “We mainly try to provide a knowledge base in order to have other entities to take actions”. Regarding the private sector, he said that “we provide the knowledge so that the private sector can take adaptation action itself”. The funding of measures in Switzerland is “strictly done by the government”. And when asked about the 40 million Franks that are provided for climate adaptation, he calls this a “low estimate”. “More money is invested into climate change”. He also remarked that the “Swiss government is very stable” and that “the priority of adaptation is strongly safeguarded by institutions and Swiss law”. Regarding the absence of regard for specific vulnerable groups he stated that: “we do recognize them, but we do not specifically spill it out”.

8.4 Keyword table NAPs

Justice position	Keyword	Austria	Switzerland	Scotland	Sudan	Suriname	South Africa
Liberal egalitarianism	Government	171	280 (Search term = Bundes)	394	22	108	128
	Poor / poverty	22	11	14	116	9	19
	Institution	90	9	4	94	87	73
Cosmopolitanism	International	37	45	115	23	50	31
	European / Europe	140	42	11	1	2	0
	Global	56	14	45	11	25	32
	Poor / poverty	22	11	14	116	9	19
Capabilities approach	Capacity / capacity building	19	10	25	128	87	97
	Education	56	19	15	15	55	35
	Livelihood	0	0	1	37	16	3
	Collective	0	17	6	3	0	3
Libertarianism	Market	5	2	8	8	28	1
	Individual / individual responsibility	52	3	59	9	9	15
	Business	20	0	170	3	25	50
	Economy	11	? (Wirtschaft used in other contexts)	78	16	6	17
	Private	27	12	23	5	87	50
Critical perspectives	Gender	16	0	0	2	62	29
	Women	13	0	0	12	41	18
	Class	9	0	6	5	6	4

Table 18 – table of reoccurring keywords in NAPs of the Global North and South

(Noticeable patterns marked red)

8.5 Source links NAPs

List of all National Adaptation Plans in the Global South, including Sudan, South Africa and Suriname:

<https://www4.unfccc.int/sites/NAPC/Pages/national-adaptation-plans.aspx>

National Adaptation Plan Austria:

<https://climate-adapt.eea.europa.eu/countries-regions/countries/austria>

National Adaptation Plan Scotland:

<https://climate-adapt.eea.europa.eu/metadata/publications/national-adaptation-strategy-scotland>

National Adaptation Plan Switzerland:

<https://climate-adapt.eea.europa.eu/metadata/publications/national-adaptation-strategy-switzerland>