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Is Distributive Justice Sufficient for a Climate Finance Regime?

A Climate Justice based approach to Climate Funds

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ABSTRACT

This article develops a framework of different aspects of climate justice, specifically tailored at climate finance of mitigation and adaptation actions based on the assumptions that such funding should consist of a fair and just process in which all affected parties are recognized and included in the decision-making processes; the funding should be raised according to the responsibility for past greenhouse gas emissions and allocated by putting the most vulnerable first. Moreover, all information concerning funding and the impacts on environment and society should be shared openly and inclusively, and mechanisms to support compensation should be constructed. In defining the justice framework for this research, first this paper explores climate justice and its focus on the principles of distributive justice, thereby justifying an enxtended climate justice approach of international climate finance including procedural and compensatory justice; and on their bases construct specific criteria which serve as benchmarks for assessing public climate finance. Additionally to test the robustness and investigative potential of this research and the framework developed, the aforementioned criteria are used to evaluate the fairness of selected climate funds.

Keywords: Climate change, Climate finance, Climate justice, Climate finance regime, Adaptation, Mitigation, Climate fund

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ACRONYMS

AF	Adaptation Fund
AOSIS	Alliance of Small Island States
COP	Conference Of Parties
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Safeguards
GCF	Green Climate Fund
GEF	Global Environment Facility
GHGs	Greenhouse Gas Emissions
IPCC	Intergovernmental Panel on Climate Change
LDC	Least Developed Countries
LDCF	Least Developed Country Fund
SCCF	Special Climate Change Fund
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
UNFCCC	United Nations Framework Convention on Climate Change

DEFINITIONS

Adaptation	Initiatives and measures to reduce the vulnerability or increase the resilience of natural and human systems to actual or expected climate change impacts. Different types of adaptation: anticipatory and reactive, private and public, and autonomous and planned (IPCC, 2014a). Adaptive capacity: the ability to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with the consequences (IPCC, 2007).
Climate change	The United Nations Framework Convention on Climate Change (UNFCCC), in its Article 1, defines climate change as: "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." Thereby making a distinction between climate change attributable to human activities and to natural causes (IPCC, 2014a).
Climate Finance	Although a definition of the term is still not internationally agreed upon, climate finance refers to the financial resources mobilized to help developing countries mitigate and adapt to the impacts of climate change, including public climate finance commitments by developed countries under the UNFCCC (ODI, 2014). The types of finance are varied; ranging from grants and concessional loans, to guarantees and private equity. 66 percent of total climate finance is dedicated to mitigation, 24 percent to adaptation and 10 percent mixed (Climate Funds Update, 2017).
Developed country	The working classification for developed and developing countries in this research will be based on the definitions of the UNFCCC and used in the Paris Agreement in order to determine the providers of climate finance in the context of the $100 billion a year goal. Developed countries are countries included in the UNFCCC Annex II parties and their functions are summarised as: "Countries required to provide financial resources to enable developing countries to undertake emission reduction activities under the convention and help them adapt to adverse effects of climate change, and who are required under the convention to provide information on financial resources provided." (UNFCCC, 2017).

Developing country	This study considers the developing country recipients of climate finance. This includes any country that is not part of the UNFCCC Annex I parties list and/or is an OECD DAC ODA eligible recipient. The Annex I Parties are the industrialized countries who have historically contributed most to climate change, including the relatively wealthy countries that were members of the OECD in 1992, and countries with "economies in transition" (UNFCCC, 2017).
Least Developed Countries	The Least Developed Countries (LDC) are 49 parties specifically classified as by the UN and given a special status under the Convention accounting for their limited capacity to respond to climate change and adapt to its adverse effects. Countries should take in account the special situation of LDC when considering funding and technology-transfer activities (UNFCCC, 2017).
Mitigation	Technological change and changes in activities that reduce resource inputs and emissions per unit of output. In the area of policy-making, mitigation means implementing policies to reduce greenhouse gas emissions, to enhance sinks and cease further global warming (IPCC, 2014b).
Small Island Developing States	The 39 nations classified as Small Island Developing States (SIDS) by the UN form a distinct group of developing countries. Most are middle-income countries, but nine are part of the LDC (ODI, 2016a).
Vulnerability	The propensity to be negatively affected. Vulnerability encompasses a variety of concepts including sensitivity and lack of capacity to cope and adapt (IPCC, 2014a).

1. INTRODUCTION

Climate change is not a new phenomenon; however, its consequences have not been as exacerbated as in recent years. The increasing temperature, melting polar caps and glaciers, rising sea-levels, long-term extreme droughts and floods are just some examples of the impact a changing climate has. Evidence reported by the Intergovernmental Panel on Climate Change (IPCC) (2007) has now directly and unequivocally linked the increasing levels of carbon dioxide and other greenhouse gas emissions (GHGs) in the atmosphere to global climate changes and as the world urbanizes, the effects of climate change will become more extreme and grow in number.

The concept and idea of global warming and climate change has changed over time, from a pure focus on CO2 emission reducing actions and policies (IPCC, 1990) to a vision in which climate change is seen as a public good which needs a collective action approach (Adger, 2003; Grasso, 2004). This is mirrored in the recent recognition of climate change as the biggest threat to development and inclusion of Climate Action as an individual Sustainable Development Goal (SDG) (UN, 2017) and in the reaffirmation of the promise by developed countries to provide $100 billion annually in climate finance by 2020.

Debates on climate change usually involve dimensions of responsibility and resilience capacity. While certain countries are more vulnerable to climate change impacts and in need of more assistance, other less-vulnerable developing countries argue they are not responsible for the current situation and place financial responsibility solely on the emitters and others believe they too have the right to develop according to the previous developments and emissions of others. These different beliefs lead to different climate policy agendas and therefore to situations in which it is difficult to support justice.

The global character of climate change requires cooperation of all countries in order to build resilience and adaptation capacity, increase reduction efforts of GHGs and create a sustainable low-carbon future. However, keeping global warming below a rise of 1.5-2°C and maintaining course on the low global emissions path, not only requires cooperation but also immense financial contributions. On the one hand, activities for low-carbon and climate-resilient development need scaling up to use the scarce public financial resources efficiently and effectively; on the other hand, correctly attributing financial resources to those most in need and maintaining a fair balance between mitigation and adaptation are also crucial. As diverse the channels of climate finance are, so are their structures of governance, approaches and objectives (ODI, 2014), making it increasingly difficult to monitor, report, and verify climate finance and account for effective and equitable use. This has created an opportunity to analyze the climate finance regime and learn how the distribution of climate finances can be structured best to maximise impacts and environmental and social benefits. This paper solely focuses on climate funds financing mechanisms because of the increased importance climate funds have been given after Paris Climate Summit and the well documented public branch in climate finance.

Most research is focused on scientific contributions to climate change (IPCC, 1990, 2007; Holdren, 2008), the economic impact of climate financing (Stern, 2007), concerning efficiency outcomes of funds (ODI, 2013a) and private sector involvement (CPI, 2015). However, there has been less attention on the environmental and social consequences of climate finance. Therefore, this research takes a different approach by looking to what extent the variation of climate funds support a climate justice approach. By evaluating the decision-making mechanisms in place in climate funds and analyzing whether financial contributions reserved for the repayment or compensation of such injustice through climate change projects, support the correct distribution and implementation to prevent further injustices and conflicts and actually contribute to justice.

The majority of justice literature on climate finance focuses on distributional justice, examining how adverse effects of climate change and benefits of projects are distributed across groups of people and over time, focusing mostly on equity and fairness (Rawls, 1971). However, certain authors such as Fraser (1998), Young (1990) and Sen (1999, 2011) developed support for including procedural criteria as a complementary view on justice, thereby introducing key concepts such as recognition, participation and legitimacy. Schlossberg's (2004, 2012) contribution to the incorporation of the distributional and procedural justice dimensions in the development of climate justice, provides a crucial base for this research. Deriving from the above, my research questions is as follows: Is distributive justice sufficient in an international climate finance regime? Which leads to the following sub-question: Do climate funds provide climate justice when the approach is based solely on distributional justice or should other dimensions be included?

To explore and answer these questions accordingly, this paper is divided into four sections. The first section will briefly introduce international relations theories related to the climate regime and discuss key issues in the current climate change debate. The second section will encompass a thorough review of Climate Justice Theory and its distributive justice dimension in climate finance. The third section comprises a discussion of limitations to distributional justice in climate justice and climate financing, thereby providing support for the creation of an extended climate justice analysis including procedural and compensatory justice criteria for climate funds focusing on its negotiation and decision-making processes. The fourth section comprises the application of this analytical framework to selected climate funds and a discussion of the results found. Lastly, I will discuss the general conclusions of this research, evaluate shortcomings of the applied methodology and provide suggestions for further research.

2. THEORETICAL FRAMEWORK

2.1. International Climate Regime: Collective Action and Regime Theory

Climate finance can be described as a classic public goods problem (Grasso, 2004). Therefore, collective action at the global level must be mandated to enforce effective regulations and control GHGs (Adger, 2003). However, the high costs mitigation investments and the non-exclusionary nature and uncertain future of environmental and social benefits they generate, leads to free-rider behaviour where finances are allocated to other areas (Olson, 1965; Grasso, 2004). This is considered to be the main cause for the seemingly incapability of states and actors to come together in protecting the climate.

In addition, mobilizing collective action to deal with climate change is difficult, and increasingly so when the group is larger, as many states have different opinions and agendas on the climate change problem. Large, powerful hegemonic states such as the USA, China, Russia are more likely to play a greater role in international climate change negotiations than smaller states due to their greater economic and political power (Okereke et al., 2016). Similarly, many small nations are often ill-represented. For a large number of less developed countries, influence and power in international negotiations only come through forming coalitions (Karns and Karen, 2004). As demonstrated through the collective efforts of the Alliance of Small Island States (AOSIS) and V20, respectively a coalition of small island and low-lying coastal countries with similar development and environmental issues and an alliance of the 20 most vulnerable economies in the world, which when jointly undertaking negotiation rounds were able to influence the agenda of the Paris Agreement and defend their position in the climate change regime by successfully including adaptation as a specific goal (Okereke et al., 2016).

Therefore, ideally these collective actions should be overseen at the supranational level. Hence, based on the Regime Theory (Keohane, 1982), climate change requires a global climate regime to resolve it; to find balance between climate finance distributions and create a framework of principles, norms, rules and decision-making behaviour processes and policy guidelines for all states to adhere to. The main idea in global climate governance remains that through regulation and control for carbon activities via institutional agreements and governmental decisions, the issues concerning GHGs are attempted to be addressed and mitigated. Since the 1970s, there has been a gradual rise in environmental policies worldwide and an increasing awareness of climate change, resulting in the creation of the United Nations Framework Convention on Climate Change (UNFCCC) in 1994. Followed by the well-known Kyoto Protocol, signed in 1997 and activated in 2005, an international treaty extending the objective of the UNFCCC in which countries have to reduce or limit their level of GHGs through market mechanisms. Succeeded by other Conference of Parties (COP), such as COP 15 which other than promising a more significant role in climate change financing for developed countries by designating $100 billion/year by 2020 solely for climate change action to meet the needs of developing countries, consecutively failed to develop a binding framework and highlighted the ill-alignment of states' agendas and resulted in no new international agreements concerning climate change until the Paris Agreement in December 2015. Despite the awakening and increased efforts of states and policymakers, international climate negotiations on emissions reductions have not yet led to substantive policy plans bringing all nations to a clear and feasible path towards significantly slowing the causes of contemporary climate change.

a) Responsibility

A major problem in the global climate regime is that while the stringent international commitments are interdependent of each other, states vary widely in both their emissions and climate change impacts, and their interest and capability to implement commitments (Keohane and Victor, 2011). Additionally, there is the matter of an equitable commitment in the climate change debate stemming from the following questions (Grasso, 2004): Which countries are responsible for causing climate change and should they solely carry the burden of response? Are new high emitters also to be held accountable for their development? How do we allocate the burden fairly? And how to develop a fair international climate regime on a national and regional level? These concerns will be shortly discussed to highlight the importance of a climate justice analysis of the finance mechanisms that are currently in place.

The IPCC's first report in 1990 indicated specific responsibilities of developed countries, noting that limiting their emission level would influence the climate change majorly. In addition, they drew attention to the complex situation in permitting developing countries to develop further, thus increasing their emissions, while limiting global levels. This introduced a new stage in which climate change became a political issue. While some Western governments wanted to depoliticize climate change by presenting it as purely scientific, other states called for international climate justice, leadership of industrialized countries or equality between North-South (Okereke et al., 2016).

The burden-sharing debate is based on historical contributions to global warming, whether being early or late emitters and the stark difference in emissions between countries (Skeie et al., 2017). At the end of last decade, the US, EU, Russia and Japan were considered to be the main contributors to rising GHG concentrations. Therefore, many developing countries have argued that they should not be punished for historical emissions by more developed countries (Najam, Huq and Sokona, 2003) and expect developed countries to provide compensation and introduce actions against climate change. This belief of distributive fairness in determining the necessary financial contribution has played a key role in the international climate policy debate, leading to the principle of Common but Differentiated Responsibilities and Respective Capabilities. This principle established in 1992 by the UNFCCC and agreed upon by all countries, proclaims that it is a country's duty to assist if it has the capability to assist and for those who have limited capability to tackle climate change the right to request assistance (Paavola and Adger, 2006). Although remaining rather limited in a definitive stance on responsibility and the level of assistance to be provided, it firmly establishes the duty of developed countries to provide financial and technical assistance and insurance.

b) Mitigation vs. Adaptation

However, there is also a need to discuss the current climate change and who is contributing to it now. During the last decade the relative contributions to global warming have been changing rapidly, notably due to the accelerated industrialization of emerging economies. Therefore, developed countries have argued that the UNFCCC's principles should change according to geopolitical realities, leaving behind the sole focus on historical responsibility, and all key emitters should pay (Cameron, Shine and Bevins, 2013). Introducing a new period wherein also developing countries are urged to undertake mitigating actions to halt further global warming and environmental decline (Dellink et al, 2009). Without a doubt certain countries such as China and India finally are, as seen in the 2015 Paris Agreement (Okereke et al, 2016). However, this new participation in international climate negotiations can be regarded as a threat for others: economically and politically weaker developing countries in equal or more need of climate finance. China and India's eligibility to request significant amounts of climate financing for mitigation purposes to lower their GHGs, has led to the question as to what extent are they accepting responsibility and to what extent are they using their power to direct climate financing away from poorer countries and away from mainly adaptation actions, thereby primarily negatively influencing SIDS and LDC.

Both emissions and the capabilities for mitigation and adaptation are unequally distributed among countries (Grasso, 2004). Therefore, when allocating the burdens fairly and determining what countries should receive climate change finance, it is critical to mention that reports from the IPCC (2007, 2014a) have concluded that global climate temperature has unequivocally risen and introduced the threat of increased occurrence and severity of weather, rains, droughts; thereby putting the sheer survival of communities at risk. Additionally, it stated that climate change is already negatively affecting the most vulnerable countries and populations, in particular the Least Developed Countries (LDC) and the Small Island Developing States (SIDS). All bear little responsibility for climate change, but their geographical, socioeconomic and climate profiles make them particularly vulnerable to the impacts (ODI, 2016a). Thus, according to a burden-sharing agreement regime a large amount of climate finance should be directed solely towards SIDS and LDC (Dellink et al., 2009).

c) Climate Finance Regime

Overall climate finance is rising due to increasing national commitments, nevertheless a significant gap remains. Public climate finance is rather limited, resulting in a clear trade-off in governments and institutions between the priority of climate change problems and actions.

Although in the UNFCCC processes, mitigation and adaptation are both given the same priority, mitigation has been the dominant framework in international climate policy (Michaelowa, 2001). Mitigation is portrayed as a global public good, long-term solution and if efforts are not directed at this action, climate change will not be stopped. While adaptation actions are generally seen as short-term public goods on local or national scale, but never on the global level (Paavola and Adger, 2002). This approach is problematic for low income and vulnerable countries since adaptation for them is of the highest priority regarding their duties to their citizens. This lacking support for adaptation has led the LDC to push for specifically reserved finances and led the global discussion on climate change justice (Okereke et al, 2016). Both scientific and academic literature has now established that adaptation to the impacts of climate change is necessary and complementary to mitigation (IPCC, 2007; Holdren 2008). Climatic signals such as the occurrence of extreme climate and weather has played a role in the awakening of public and private sectors in the world of climate policy and in bringing adaptation more to the forefront. However, the narrative for a mitigation focus obviously contains a strong argument, in the sense that if finances are not directed at mitigation, than the current climate situation will not be halted and all states and citizens will increasingly experience the dreadful consequences. This clearly shows the need for increasing mitigation activities in developed countries to prevent more GHGs and further global warming. Furthermore, the situation has developed so far that actors are posing the urging question about developing countries' mitigation actions (Okereke et al, 2016). Lastly, many authors emphasize that integration of mitigation and adaptation is the key element for an optimal climate change approach and all effective climate change policies should contain portfolios of both actions (Klein, Schipper and Dessai, 2007).

3. JUSTICE IN CLIMATE FINANCE

Different beliefs in responsibility and priority can impact the outcome of international climate policy debates and climate financing actions. Limited public resources makes the choice between mitigation and adaptation strategies, and in which region, dependent on the different actors involved in the distribution of finances and the climate funds' framework (Michaelowa, 2001). Accordingly, it is relevant to examine the context of these climate funds, to determine whether the allocation of funds and projects mirrors fairness and justice. These elements are best analyzed through Climate Justice Theory, because it is critical to investigate whether the funds that are in the front seat of climate change financing and are the implementers of climate change assistance through either mitigation, adaptation or both, actually strive to bring about climate justice.

3.1. Justice and Fairness

The issue of justice and fairness is a major point in the current international debate on climate change regarding responsibility and priority of finance. Within climate policy literature these terms are often used interchangeably and there is no clear consensus on the differences between these concepts. However, since they are used to frame our analysis, we need to briefly establish clarity with regard to its terminology. In this article justice is used to refer to a just treatment, but will be developed more below. In general, literature often distinguishes between four forms of justice: distributive, procedural, retributive and corrective. Fairness can be conceptualized as the subjective experience of division respecting the distinct situations of every individual (Klinsky and Dowlatabad, 2009). Applied to the specific frameworks used in this article(Rawls, 1971; Young, 1990, Schlosberg and Collins, 2014), justice and fairness are intrinsically linked, as fairness is viewed as a concept of justice and a society can only be just if it is fair.

3.2. Climate Justice

a) Uncovering Climate Justice

Debates on the first Climate Justice Summit in 2001 between multiple environmental justice groups, academics, advocacy and climate justice groups led to the creation of ten principles of climate justice based on the US Environmental Justice Movement and to the realization that climate change was another environmental condition leading to injustice for the poor, vulnerable and minority communities (Schlosberg and Collins, 2014). The unjust distribution of climate change impacts, together with the inequity of climate change, lack of recognition and participation of those affected in the decision-making of the global climate regime, indicates a clear case of social injustice.

Climate justice is focused on halting climate change and therein limiting emissions or increasing resilience and adaptive capacity through financial contributions based on the idea of retribution for caused injustice. However, it also calls for equitable allocations with a people-centred focus, protection for the most vulnerable and poor and an equal sharing of the benefits and burdens of any climate change problem response (Okereke, 2010; Cameron et al., 2013; Schlosberg and Collins, 2014).

b) Distributive Justice

Social justice literature is mainly focused on the equity of the distribution of social rights and goods. One of the most influential academic contributions is Rawls Theory of Justice (1971:9), in which justice is defined as 'a standard whereby the distributive aspects of the basic structure of society are to be assessed'. The theory, further developed as Justice of Fairness (1985), is based on two key principles of liberty and equity, through which a just society is created. The general concept of this theory on distributive justice is that all social primary goods, such as liberty and opportunity, income and wealth are to be distributed equally unless an unequal distribution of any or all of these goods is to the advantage of the least favoured, guarantying a fair deal for those worst off in society. Essentially, equity and fairness are viewed as key concepts of distributive justice, in which equity refers to the allocation process and brings about the concept of impartiality in decision making contexts (Paavola and Adger, 20002).

Academic literature around climate change and distributional justice most often discuss the just and fair allocation of rights to states to emit GHGs into the global atmosphere and thereby propose the following solutions of climate justice: pay according to historical responsibility (Agarwal, Narain and Sharma, 2002; Ikeme, 2003; Skeie et al, 2017) or carbon egalitarianism (Baer et al., 2000). These narratives are all based on one single belief: property rights on the global atmosphere are the key to achieve justice (Paavola and Adger, 2002). The three key arguments of the first distributive climate justice model are: responsibility, vulnerability and ability to pay. The first argument is that certain states have brought the world to the current state of climate change crisis and those parties should now pay the current cost for the transitions needed to halt or reverse set crisis. Secondly, those already vulnerable in developing countries (the poor, children and women), will become increasingly vulnerable and encounter increased difficulties, compared to those in developed countries. Lastly, their capabilities to pay for climate change burdens are much lower than those of developed countries. Therefore, based on basic fairness, the theory posits that states with historical responsibility are to play a more important role in preventing or mitigating the impacts, leading to the basic polluter-pays model, in which the burden is placed on long-industrialized states (Okereke, 2010). The second one, known as carbon egalitarianism, is a fair share model based on an equal allocation of emissions rather than on historical responsibility. However, this approach only incorporates present emissions and not retribution of past injustices, therefore this research excludes it from the distributive dimension of climate justice. Thus, the principle of equity in the climate justice regime relates to the just and fair allocation of climate finances to developing and vulnerable countries and the mitigation vs. adaptation trade-off.

In climate funds, it is the operational framework surrounding the allocation mechanism of financial projects which should establish the just distribution of burdens and benefits of the funds available in the climate fund. Therefore, climate injustice can be understood as when a majority decides for an unequal allocation of climate change solutions. Hence, through researching how the beneficial mitigation and adaptation projects are distributed across states, one can discover the narrative behind the allocation strategies and see whether unfair outcomes of climate change solutions are implemented. Pursuing the historical responsibility model, makes it imperative that those that are affected most by climate change are to be helped more than those who created this climate injustice. Thus the criteria is that developed countries are the main contributors, while vulnerable countries are the main receivers. Additionally, climate justice is equally focused on mitigation and adaptation, reducing emissions and halting climate change, and providing support for the adverse effects of climate change. So it strives for a fair and equal balance between mitigation and adaptation.

4. LIMITATIONS TO DISTRIBUTIVE JUSTICE IN CLIMATE JUSTICE

4.1. Procedural Justice

International climate regime decisions on environmental regulations and allocation of climate finance, flow automatically to states and consequently to their regional and local levels. However, when financial resources are sent to states, it is imperative to know that money is not wasted at the level of the national government. Due to inefficient governing institutions, these finances might not get allocated to the correct beneficiaries or due to national ill-representation, local problems can be incorrectly presented on the national level or key groups can be excluded from the national decision making processes concerning climate change related activities (Adger, 2003). Secondly, knowledge and expertise are highly important for government efforts in issues that have become increasingly complex (Karns et al., 2004) and as such the presence of experts in climate change debates and policy negotiations are undeniably critical. However, too many strategies for governing the environment are designed in capitals or by financial donors, who are unaware of the local conditions and technologies (Dietz, Ostrom, Stern; 2003), leading to inaccurate solutions and exacerbating the problems (Cleaver, 1999). While local communities often comprehend the problem better and including local knowledge can lead to better fitted solutions (Forsyth , 2014).

Therefore, it is incorrect to narrow down climate justice to solely distributional justice and neglect the social elements that cause the injustices, such as social structures, cultural beliefs and institutional contexts leading to acts of oppression and institutionalized domination (Young, 1990). Young also argues that distributional injustice originates from a lack of political recognition, leading to social and economical vulnerability and inequality, and can only be eliminated through political participation. The critical element of recognition for climate justice is the political and social status that coincides with recognition. When analyzing the current context of climate change this narrative provides us with two main dimensions. Firstly, the domination over and misalignment of several affected individuals or cultures. And secondly, the non-recognition of these affected individuals, communities, cultures in the environmental processes. Even when these groups are recognized, there is a consistent failure in recognizing and acknowledging their interests in the decision-making processes and policy changes in climate change issues (Fraser, 1998; Schlosberg, 2012).

Recognition and participation, the elements to deflect these limitations to distributional justice, are conceptualized as procedural dimensions of justice because they influence how procedures and policies are established taking into account all perspectives and concerns, inducing fairness and transparency (Ikeme, 2003). Therefore, procedural justice is defined as justice in the distribution process and refers to the representation of all who have a stake in the outcomes of negotiations or decision-making processes (Klinsky and Dowlatabad, 2009). This clearly shows that distributive and procedural justice are not independent of each other and both forms of justice are complementary.

One way to implement these elements of procedural justice in climate justice is based on the rights and responsibilities arguments (Caney, 2010; Johl and Lador, 2012). Many authors have argued that climate change threatens basic human rights, because individuals have the right to not suffer from climate change impacts, the right for sustainable development which can be jeopardized through climate change and the basic right to develop in an environment that allows them to function and flourish, including a stable climate system. Therefore, the climate regime needs to apply the no-harm principle and transparency in its procedures if to ensure climate justice. The first is critical because responses to climate change problems should not cause any harm to communities or ecosystems, thereby introducing more environmental and social problems. The second principle requires that people are informed about climate change problems and the possible or imminent responses, so that participation and accountability is encouraged. This argument is closely linked to cultural self-determination of non-Western societies, indicating that local communities affected by climate change have the right to determine how to adapt to changes in their environment and climate by relying on their cultural heritage. Clearly these models move beyond an equity/distributional focused approach of climate justice through encompassing the environmental and social conditions individuals, communities and states need to function, live and develop.

However, Schlosberg (2012) argues that these models do not take into account social and political misrecognition of the poor, vulnerable and affected communities and hence, advocates for the application of a capabilities approach as well. This approach first developed by Sen (1999), denotes that injustice occurs when individuals have limited access to the resources and capabilities needed for functioning. Thereby emphasizing the necessity of the capacity to have the political opportunity to decide its own capabilities and recognizing the environment individuals move in. Ultimately, Sen (2011) goes as far as to state that environmental conditions can limit personal development, which clearly is the case for climate change impacts limiting the resources previously available and threatening the survival of identities of certain communities. Schlosberg's (2012) applies this capabilities approach by focusing on the specific needs and capabilities an individual requires to function, thereby addressing local vulnerabilities and needs to response to climate change impacts.

Climate justice needs to be established by narratives that centre around social and political participation and recognition, while enabling the protection of human rights, development of people and opportunities. Therefore, this research strives for a reassessment of the implicit use of Rawls' Model of Justice (1971) concerning climate justice resulting in the fair allocation of solutions and moves towards a human rights and capabilities approach for procedural justice. In climate justice this relates to the procedures surrounding the financial distributions of the climate finance regime to solve the climate injustices done. Although public institutions in the climate regime generally maintain similar policies and procedures for managing the allocation of finances and outlook of climate projects, they follow different models which can lead to different outcomes of climate justice.

4.2. Compensatory Justice

The element of compensation and correction of injustices in climate justice is not fully delivered through the financial contributions in climate regime. Because climate policies and finance can lead to adverse effects, even exacerbating climate problems. People have the right to have their rights respected and not violated or harmed through others or policies. Therefore, individuals and states need access to a structure that enables them to hold the international climate regime or climate funds accountable; that enables them to not only request compensation for past injustice, but also for injustices and rights violations done during and through the implementation of climate finance mechanisms. This highlights the key difference with the historical responsibility narrative of distributional justice in climate justice.

Accordingly a third dimension, which is not yet covered through distributional or procedural justice, needs to be added to the climate justice approach. The dimension applicable to this situation is corrective justice, which concerns the idea that liability can undo injustice inflicted on a person by another person. In environmental situations corrective justice refers to the obligation to restore nature when damage has been inflicted upon it due to human activities (Adler, 2007). However, since this research is focused on correcting injustice done through ways of compensation and halting future damage, and not on repairing nature; this article focuses on compensatory justice in the context of climate change financing. Which emphasizes the priority of compensating people fair and just for losses and damages experienced by actions of others, including past actions (Klinsky and Dowlatabad, 2009). Thus, compensatory justice in the climate justice regime leads to the principle of democratic accountability (Johl and Lador, 2012), through which those affected can hold those who caused it accountable and request aid and compensation through complaint mechanisms.

4.3. Three Climate Justice Dimensions

This research argues that these three forms of social justice are intrinsically linked and justice cannot be fully reached if they are not simultaneously addressed. Therefore, recognition of cultural identity and human rights, democratic political participation and democratic accountability has to be integrated with distributive equity as well if all dimensions of justice demanded by the global climate justice regime are to be encompassed.

Thus, a climate justice approach concerning the correction of injustices leads to the creation of a climate justice framework based on three key dimensions of justice: distributive, procedural and compensatory. Which in the context of climate finance needs to ensure that justice considerations are taken into account in the development, implementation and monitoring of financing allocation processes and mechanisms.

4.4. Climate Justice Analytical Framework

This article argues there is a need to develop a new framework that contains all elements of climate justice, including the previously discussed dimension of distributional justice (see Distributive Justice b)), and establish its criteria for analyzing climate funds.

Secondly, as decision making processes depend on the power of different actors involved and their positions, it is critical to analyze how and by which actors decisions in climate finance are made. Therefore, this research analyzes the procedural framework of climate funds which provides the policies and regulation for the funds' negotiation processes and allocation mechanism. The key narratives of procedural justice used in this framework are Schlosberg's capabilities approach and the Human Rights approach, both with their corresponding principles. If decision-making of climate fund procedures and activities is to be just than cultural recognition of the diverse participants is crucial, since it serves as a precondition for membership in any decision-making process (Fraser, 1998). Not only do different participants or affected communities in the climate fund negotiations need to be politically recognized, also their cultural identities need to be respected and not ill-constructed based on stereotypes, and their needs and vulnerabilities need to be identified. Rawls (1971) stated that a fair process should lead to a fair result; the perceived fairness of an outcome of a decision-making process is thus fundamentally dependent on broad-based participation (Schlosberg, 2004). Clearly indicating that in climate finance processes political participation of all those affected is necessary and thus participation in the negotiation processes of climate funds. Furthermore, opportunities for climate action input and monitoring throughout the negotiation processes has to be provided and situations supporting active community participation. Schlosberg (2004) argues that the construction of an inclusive, participatory decision-making framework is critical. Throughout this, respecting human, development and environmental rights by providing transparency and applying the no-harm principle in all climate finance actions.

Lastly, the dimension of compensatory justice and principle of democratic accountability can be achieved through grievance and complaint mechanisms. It is critical to establish safeguard mechanisms in the climate finance institutions to ensure affected participants' rights are respected and ensure fair addressing of concerns through complaint mechanisms; supporting accountability and increasing legitimacy of the climate fund. Furthermore, effects of fund's projects and climate policies might exceed the immediately foreseen objectives and create negative impacts. Therefore, access to a grievance mechanism through which legal responsibility of the climate financing institutions can be generated is critical to voice concerns of those affected and request compensation (Richard, 2016).

An overview of these climate justice principles and its criteria can be seen in the following analytical framework: Table 1. The table also includes the assessment criteria for the analysis of climate funds below.

Climate Justice					
Dimension of Justice	Domain of Justice in Climate Finance	Theory of Justice	Principle of Climate Justice	Criteria	Analytical measurement
Distributive	Allocation Mechanism	Rawls Theory of Justice as Fairness (1971)	Equity (Historical Responsibility Theory)	1. Transfer resources to the most vulnerable in climate injustice	For whom does the climate fund provide financial aid? Who are the contributing countries?
				2. Ratio mitigation vs. adaptation	What is the ratio of the climate fund (#projects and Mil USD$)?
Procedural	Negotiation Process	Schlosberg Capabilities Theory (2012)	Social and Political Recognition	3. Recognition of diversity of participants, their experiences, needs and vulnerabilities in decision-making processes	Are indigenous cultures and local communities recognized? Are vulnerabilities recognized?
				4. Fair construction of identities	Are their identities fairly constructed?
		Schlosberg Capabilities Theory (2012)	Social and Political Participation	5. Inclusive and equal decision-making process	Who is included in the decision making process? How is the decision-making power distributed (voting procedure)?

Climate Justice					
Dimension of Justice	Domain of Justice in Climate Finance	Theory of Justice	Principle of Climate Justice	Criteria	Analytical measurement
				6. Civil Society Participation in decision-making process and throughout the implementation	Can local communitites or individuals map their vulnerabilities through country- or community-based projects? Is input of local issues requested? Is their continuing participation throughout the implementation processes?
				7. Social and local opportunities	Are opportunities created for community participation? Is there a mechanism to support local participation?
		Rights-based Theories (Human Rights, Development and Environment)	Transparency	8. Open Reporting mechanism	Is there a reporting mechanism that provides open (to third parties, online) information sharing, thereby supporting transparency?
				9. Inclusive Transparency	Is there a reporting mechanism that provides inclusive (for all participants and affected) information sharing?

Climate Justice					
Dimension of Justice	Domain of Justice in Climate Finance	Theory of Justice	Principle of Climate Justice	Criteria	Analytical measurement
			No-Harm Principle	10. Policy to ensure climate financing activities do not cause harm socially and environmentally	What entails the funding's environmental and social impact policy? Is there a mechanism in place that analyzes social and environmental impacts of climate change solutions? Does this mechanism allow local feedback, information provision towards affected communities?
Compensatory	Allocation Framework	Accountability and Liability	Democratic Accountability	11. Complaint mechanisms to address injustices	Is there a mechanism in the climate fund that provides a possibility to report negative consequences of climate change solutions and request compensation?
				12. Grievance mechanisms to address inequitable or adverse impacts	Is there a mechanism in the climate fund that provides a possibility to request for local projects?

Table 1: Climate Justice Analytical Framework **(Source: Author)**

5. METHODOLOGY

To investigate the research questions and new framework a qualitative approach is taken and this research focuses on a few selected financial mechanisms to analyze the climate justice criteria for climate change. In what follows I won’t enter into the technical, scientific or policy details of the architectures analyzed, but rather after a brief description of their relevant characteristics, I will evaluate them solely against the previously developed climate justice framework. This exercise will ultimately provide a significant test of its robustness and investigative potential.

5.1. Qualitative Research

a) Case Selection

Public climate financing flows through several channels, as can be seen in ANNEX 1, Figure 1. Distinctions are made between multilateral and bilateral climate financing initiatives, of which the former can be subdivided in UNFCCC (Global Environment Facility, Adaptation Fund and Green Climate Fund) and Non-UNFCCC financial mechanisms (Multilateral Development Banks and Climate Investment Funds). For this research three multilateral climate funds are selected based on their increasing significance in climate finance and availability of climate fund information. The three UNFCCC's financial mechanisms are selected, due to its instrumental role in delivering climate finance and implementation of the Paris Agreement and SDGs (ODI, 2014). Resulting in the following cases: The Green Climate Fund (GCF), Adaptation Fund and the Global Environment Facility (GEF). An additional argument for the selection of these funds is their share in total climate fund finance. These three main climate funds have the highest amount of climate finance pledges and mitigation and adaptation projects officially approved (ODI, 2016a). Thus, researching climate justice in these climate funds increases the relevancy of the results, since they encompass a bigger share of projects and give a better overview. Lastly, the selected funds all belong to UNFCCC' financial mechanisms, adhere to the same Convention's principles and are held accountable by COP. However, they all have a diverse operational framework and mandate, so it is critical to analyze their actions.

b) Investigative sources

The following sources were consulted to achieve the most thorough analysis as possible: funds' operational framework and policies, project database, newsletters and self reported briefings. Additionally, their mandates (mission statement and objective) were analyzed since the key element of this research is the justice dimension of climate funds and whether they implement what they proclaim. Lastly, to include a critical aspect in the analysis, independent research concerning the selected funds were also used.

c) Internal and External Validity

To ensure internal validity in this research, exhaustive studies were undertaken to achieve an accurate overview of the underlying international relations narratives, the concept and dimensions of justice and climate justice, and to remain as objective as possible in the development of the analytical framework and the climate fund analyses.

This article's case study selection does introduce a selection bias. However, the reason behind selecting exclusively public and multilateral financial mechanisms in climate finance is due to the lack of valid and official information available from private or bilateral mechanisms. Additionally, these institutions have previously been extensively researched and this study aims to provide a different angle of analysis on UNFCCC's climate fund functioning.

Regarding external validity, not all findings of this study can be freely generalized, since only UNFCCC financial mechanisms of the climate finance regime were selected and analyzed. Nonetheless, by applying a self-developed analytical framework to all three climate funds, comparisons between climate finance mechanisms concerning climate justice can be made, which is ultimately the goal of this research.

5.2. Data analysis: Case studies

a) Global Environment Facility

The fund, established in 1991 and operational since 1994 through the GEF Trust Fund, is the longest serving operating entity of the UNFCCC financial mechanism (ODI, 2013b). The fund's main objective is to help developing countries and economies in transition reach UNFCCC's objective to mitigate and adapt to climate change, while supporting sustainable economic development. To execute this objective more effectively, the COP decided in 2001 to additionally establish two special trust funds, managed by the GEF: the Special Climate Change Fund (SCCF) and the Least Developed Country Fund (LDCF). While these funds focus on adaption, the GEF Trust Fund targets mitigation. The GEF has follow-up fundraising every four years and each replenishment process coincides with reforms in the operational framework, therefore this case analysis concerns only the 5th (2010-2014) and 6th (2014-2018) project cycles.

When assessing the equity principle, it is found that the GEF's overall project allocation mechanism does not provide a just distribution of the funds. Both developed and developing countries have contributed to the GEF over years and although the latter provided $28 million to GEF 5, developed countries have made much larger contributions (Figure 13and Figure 14). As seen in Figure 7 and Figure 8 the main recipients are developed countries. However, regarding the distribution of financial support to adaptation and vulnerable countries, the GEF has been known to insufficiently support both.

Research shows that for GEF 5 adaptation and mitigation strategies were almost equal, while in GEF 6 adaptation lacked support again (Figure 5 and Figure 6). Due to the LDCF, which is specifically aimed at financing vulnerable countries, more financing was directed in GEF 5 to the SIDS and LDC (Figure 11 and Figure 12).

Although GEF's objective states to provide financial assistance to people in need, it does not clearly recognize diverse communities or actors or their vulnerabilities. They promote continuous collaboration with Indigenous Peoples (IPs) since 1991 and founded an Indigenous People Advisory group in 2012 to provide advice to the GEF concerning its policies and to raise awareness among the IPs on opportunities for engagement. Furthermore, the GEF invests in building capacity in indigenous and local communities to participate in legal, policy and decision-making processes (GEF, 2014), thereby adopting a rights-based approach and supporting human right agreements (Johl and Lador, 2012). However, it does not recognize their needs and vulnerabilities in terms of the negative impacts climate change has had.

When analyzing procedural justice dimensions regarding GEF's level of social and political participation, it was found that although they claim to have a high level of inclusive participation and equal voting in the negotiation processes, the fund is regarded as a donor-driven institute. Despite the decision-making structure of the GEF Trust Fund's Council of 16 developing countries, 14 developed countries and two Annex-I representatives, and the consensus voting procedure, which both reflect equality and justice, to date, the projects selected seem to reflect the unequal financial contributions and the Implementing Entities (IEs) instructions. The SCCF and LDCF' Councils share a governing body; which supports developing countries more with a balance of 14 donor representatives and 18 recipients. Focusing on their operating procedures and IAs, all funds use those of the umbrella organization GEF (Climate Funds Update, 2017). This leads to the project proposal mechanism that promotes public participation through country and regional driven projects and through their extensive civil society platform (ODI, 2013b). The first, relates to the creation of national stakeholder ownership by engaging national institutions as GEF focal points through which government officials become the supervisor, and by making country-endorsement a requirement for receiving GEF-funding, thereby aligning it with national priorities. Additionally, GEF 5 reforms led to the establishment of Direct Access for the developing country institutions, whereby they can propose projects without working through IEs (Climate Funds Update, 2017) or they can work through the extended list of accredited IEs that contain national institutions of developing countries (GEF, 2011a). Also, its Small Grants Program has facilitated the provision of support to projects that empower communities in climate change activities and in creating a GEF presence at community level (ODI, 2013b). However, when it comes to civil society involvement or consultation from NGOs and local stakeholders in the decision context, we find diverse results. Firstly, the fund has a large CSO Network involved in the execution of projects and through that provide an angle of consultation, but regarding monitoring and questioning overall policy and operational framework there is less active presence. Although, there is the possibility of five NGOs (representing developing countries) participating as observers in Council Meetings (ODI, 2013b). Secondly, the fund's Safeguards Policy specifically states that free, prior and informed consent for projects is necessary, thus for these projects, IEs must ensure a local consultation process and evidence of agreement (GEF 2011b). Especially continuous participation of affected IPs in the project lifecycle of designing, implementing and monitoring is obligatory (Johl and Lador, 2012).

The fund aims to reach a relatively high degree of transparency by publicly providing information regarding its operational framework, decisions, accepted and cancelled projects and partners. Additionally, in 2013 they signed the International Aid Transparency Initiative, thereby aligning its information sharing standards and increasing their level of accountability (ODI, 2013b). Not only does it hold itself up to high transparency standards, also its partner agencies and IEs need to uphold the same transparency policy and regulation. However, most publications and information are only found online and in English, the working language of the fund. Occasionally French and Spanish are also available. When it concerns impact assessments, or local consultation is required, documents are, however, made available to the affected stakeholders in their language and made accessible to them (GEF, 2011b). But, it is important to note that a while these documents are made readily accessible to those affected by the projects, a timeframe detailing when these documents will be made public is not available. Possibly leaving little time for those affected to voice their opinions on the projects which can cause discrepancies between the communities and the funders.

Regarding the No-Harm principle, the GEF adheres to the Policy on Agency Minimum Standards on Environmental and Social Safeguards (ESS) (GEF, 2011b). This revision spawned out of the substantial amount of comments from civil society actors, council members and GEF agencies and entails heightened ESS the GEF partners need to comply with to become accredited and principles of social conduct. However, it does not specifically mention the detailed steps the IEs need to execute for just Environmental and Social Impact Assessments (ESIA). Neither does it detail the requirements for fair information sharing and the inclusion of local consultation concerning these impact studies.

Lastly, the compensatory dimension of climate justice entails GEF's generation of grievance and complaint mechanisms. Since 2013 a complaint mechanism tackles issues from affected or unsatisfied recipients in the fund's projects process, which consists of two key systems: accountability and grievance mechanisms of individual GEF Agencies and a complementary GEF Conflict Resolution Commissioner (GEF, 2011b; 2017). The fund’s Safeguard's Policy obligates IEs to have complaint and grievance mechanisms available that are publicly announced and promoted to project stakeholders. The latter handles complaints or grievance issues when no agreement can be reached on an agency level, thereby bringing the dispute to an independent and higher institution. However, it is critical to mention that little information is available about the nature of its previous disputes.

b) Adaptation Fund

The AF was founded under the Kyoto Protocol of the UNFCCC in 2001 with the mandate to assist developing countries that are particularly vulnerable to the adverse effects of climate change in meeting the costs of adaptation through financing adaptation projects and programmes that are country driven and based on the needs, views and priorities of the developing countries (UNFCCC, 2009). Its key objectives are reducing vulnerability and increasing adaptive capacity, while giving special attention to the most vulnerable communities. The fund is mainly financed from a 2% share of the proceeds generated by the Clean Development Mechanism and also receives voluntary pledges from donor governments, resulting in one of the smallest multilateral climate funds.

The fund has committed $417 million in 93 projects to climate adaptation and resilience activities since 2009 (AF, 2017). The main donors are developed countries and thus supports the historical responsibility approach (Figure 17). Furthermore, the distribution of projects is mainly focused on Africa, as can be seen in Figure 15. Evidently, this fund solely focuses on adaptation, thereby surrendering those most vulnerable to the impacts of climate change. Half of the AF's total finance is directed to LDC and SIDS (Figure 16). However, when compared to other funds, this amount is much lower due to its limited financial abilities.

When analyzing the procedural justice criteria it was found that the fund is specifically designed to support sub-national adaptation activities, thereby explicitly recognizing the importance of local needs, vulnerabilities and impacts of projects (AF, 2016a). Its policy states that for any project, marginalized, vulnerable or indigenous groups, must be consulted and protected from any adverse impacts. Therefore, all projects include a sub-national focus and attempt to include sub-national or community-level institutions. To increase ownership and assure projects fit within the country's priorities and policies, the fund has followed the principle of Direct Access, through which projects of eligible countries can be proposed by anyone when endorsed by a national designated authority and supported by an accredited IE. In total there are six Regional, 12 Multilateral and 25 National accredited IEs (AF, 2016b). Furthermore, the AF increasingly supports latter via the provision of extra funding for concept development assistance and evidence suggests that partnering with local knowledge and technical institutions has increased local opportunities (ODI, 2013a). However, issues have also risen concerning the political recognition and corresponding participation level such IE has in the national political context and thus its capacity to implement the projects justly and fairly (ODI, 2013a). Also, an independent analysis of the AF NGO Network (2013) has highlighted that there is a need for more stakeholder engagement on a community level to ensure project effectiveness and that local people share in the benefits of the programs. Moreover, there is an issue with justly recognizing the vulnerabilities and needs of all participations. The fund decides its fund allocation based on uniform national funding caps, which introduces trade-offs between projects of sub-national communities and thus ignores the vulnerabilities of some stakeholders (Persson and Remling, 2014). The formal decision-making processes of the board provides developing countries, including the LDC and SIDS as constituencies, with a majority of 11 against 5 developed countries. This is the first multilateral fund where contributing countries do not have the greatest formal voice. Generally, decisions are taken by consensus. However, when no agreement can be reached, decisions are made by a 2/3 majority of present members based on one vote per member (UNFCCC, 2009). Not only do these facts reflect a wide stakeholder engagement, but also a wide stakeholder recognition and a willingness to continuously include more input of all stakeholders. However, full stakeholder participation of civil society in the funds governance is not the case, as the fund does not assign them an official role and there is no sign of continuous consultation and participation throughout the whole execution of the project. On the other hand, informal involvement of NGOs does exist. The fund provides a platform for civil society to actively engage in policy and project design and opens board meetings to observers.

In the same vein, the fund aims to establish a significant level of transparency and inclusiveness through formal and informal mechanisms. These formal mechanisms contain the online publication of information on board meetings, project proposals, allocation and reviews, newsletters, etc. . However, some limitations on their full disclosure in the decision-making processes are noted in closed sessions of the following bodies: the Accreditation Panel, Ethics and Finance Committee, and Project and Programme Review Committee (AF, 2013). Furthermore, all reports including decisions taken by the Board are made publicly available online in all six official languages of the UN but this does not apply for project documentation, studies or reviews (UNFCCC, 2009). Also, their Open Information Policy states that all information, such as the environmental impact studies, will be publicized in a timely and inclusive manner, made available to those most affected by the projects (AF, 2016b). However, no specific guidelines or rules are developed or communicated, introducing the same issue as in GEF.

The final principle of procedural justice in climate justice: the No Harm principle, relates to AF's Environmental and Social policy. The policy, adopted in 2013 and revised in 2016, requires that all adaptation projects and programmes are analyzed to identify environmental and social impacts, and categorized according to its potential impacts (AF, 2016a). Additionally, the reform requests formal evidence of ESS policies in first time or re-accreditation of its IE, including an obligatory assessment of the IE's commitment and capability to develop ESIAs or ESMPs. However, when few details are publicised concerning fair information sharing and the inclusion of local consultation concerning these impact studies, it might be more valuable to execute these analysis itself.

Regarding compensatory justice, in the AF the IE are responsible for providing a grievance mechanism that allows people to access a transparent and fair process to address their complaints concerning environmental and social harms inflicted upon them. These mechanisms can be project specific or based on national or local rules and are publicised on the AF's website. Additionally, any complaint can be filled with the fund's secretariat , who will investigate the corresponding IE and handle the issue (ODI, 2013a). However, critiques on the differences between IE grievance mechanisms and the absence of an independent grievance mechanism in the fund led to the board's decision to establish the complementary Ad Hoc Complaint Mechanism, which can be employed when the IE's grievance mechanism does not lead to a consensus within a year (AF, 2016c).

c) Green Climate Fund

The GCF was founded in 2010 by the COP as a means to manage and guide the substantial financial flows for climate financing. This new fund is not only the largest multilateral climate fund, but will also play an increasingly important role under the Convention after 2020, as has been confirmed in the Paris Agreement (ODI, 2016c). Its mandate clearly establishes the image of a climate fund focused on support for the urgent needs of LDC, SIDS and African countries and for local private sector actors while striving for a 50/50 balance in funding mitigation and adaptation projects and implementing the principle of a country-driven approach for investment decisions (GCF, 2017a).

The fund started its endeavours officially in year 2015 and currently accommodates a total of 43 projects for $7.48 billion (GCF, 2017b). Figure 23 and Figure 20 demonstrate that developing countries are the main donors and all is invested in developing countries. Also, the GCF has directed most finance to Global and African projects. However, the priority focus of the GCF is not clearly seen in the financial presence of the SIDS, LDC (Figure 22). Lastly, when reviewing the mitigation/adaptation ratio in terms of projects, it is found that more projects are focused towards adaptation (Figure 18). However, the amount invested appears to be significantly lower and demonstrates that the fund does not achieve its 50/50 ratio (Figure 19). Therefore, it is imperative to look at the financial flows and not solely count its projects, which can be misleading. Additionally, when focusing on the diversification of mitigation, adaptation or mixed projects on regional level and directed to the vulnerable, it is found that mitigation is mostly directed to Latin America & Caribbean and Africa, while adaptation to Africa and Asia Pacific (Figure 21).

The GCF broadly defines stakeholder as private-sector actors, civil society organizations, vulnerable groups, women and indigenous peoples who support social and political recognition. While there are no specific descriptions in their policies on the identification of vulnerable groups, aside from a gender and indigenous group focus, it is clear that analyzing and addressing these groups’ needs and vulnerabilities is their main task (GCF, 2017f).

When looking at the procedural justice criteria for climate justice in GCF, it is found that the fund values a high degree of stakeholder and observer input and participation. The two main mechanisms the fund relies on are their country-driven project approach and on the engagement of national or regional implementing entities and intermediaries (ODI, 2016c). The first approach assures country approval through the fact that private entities or governments can develop a proposal for the fund, which first needs to be approved by the National Designated Authority (NDA) through the no-objection approval procedure. The NDA has to confirm that projects seeking funding are in line with the sustainable development strategies of the countries and that stakeholders have been appropriately consulted during the design of the project (GCF, 2014b). The second approach is also effective, since this increases the feeling of ownership in the climate change projects. However, critiques are delivered concerning the selection of the accredited entities and intermediaries, which appear to be disproportional for regional and developing countries' entities (ODI, 2016c). Additionally, there is no mechanism that promotes stakeholder participation throughout the whole process of project proposal, selection, implementation, monitoring and evaluation (Carbon Market Watch, 2015). When specifically looking at the decision-making processes, evidence shows that GCF is just in social participation. Concerning refinement of the decision-making processes, the fund often relies on multi-stakeholder involvement by putting out a request for input of its stakeholders. However, in terms of the fund allocation, it is the board that ultimately decides. Although, there are 24 board members with equal representation of developed and developing countries, their voting system remains to be decided on. Currently, it is said to be a decision in consensus, and if all manners are exhausted and no decision is reached they will develop a fixed decision making schedule.

The procedural branch in climate justice demands inclusive transparency and reporting mechanism. The fund's Information Disclosure Policy (2017c) clearly states it recognizes the need for public access and stakeholder participation and therefore needs to ensure the greatest level of transparency. The fund seems to implement what it preaches, as can be seen in the high degree of official documents provided online in terms of selection procedures, policies, project funding proposals, monitoring and evaluation reports, board decisions, environmental and social reports, newsletters, etc. . Additionally, after critiques in 2016 the selection procedures for accreditation of the implementing entities is now also made public (ODI, 2016c). Furthermore, one can request explanations of decisions and use their right to review a denied request in front of a Panel. However, the policy also notes limitations to transparency in terms of broadcasted board meeting and future decisions concerning internal grievances and complaint mechanisms. Furthermore, the previously mentioned documents are only available online in English, the working language of the GCF, which evidently limits the information available for many countries and more specifically for diverse local communities.

Regarding the No-Harm principle, the GCF executes and publicizes ESIA depending on the adverse effects category the projects receive (GCF, 2017e), holds consultations with the affected people and discloses documents in the local language and in locations convenient to them. Additionally, the IEs are accredited with the ESS in mind. All these actions are based on the board's 2014 decision to adopt on an interim basis the environmental and social performance standards of the World Bank's International Finance Corporation and meanwhile develop their own ESS with inclusive multi-stakeholder participation (GCF, 2017e). However, anno 2017 this is still in development and the GCF is also behind on developing its own environmental and social policy and management system.

Lastly, the compensatory justice dimension of climate justice leads us to the presence of grievance and complaint mechanisms. The GCF has set up its own grievance mechanism: The Independent Redress Mechanism (IRM). It is mandated in paragraph 69 of the GCF's Governing Instrument and receives complaints related to the operation of the Fund which are evaluated and followed by recommendations (GCF, 2014a). The IRM has two distinct functions. Firstly, to provide developing countries the chance to file complaints or request reconsiderations if they are denied funding. Secondly, grievances or complaints can be submitted by communities and individuals who are directly affected by adverse impacts of projects resulting from failure to implement its operational policies and procedures, such as the ESS (Carbon Market Watch, 2015). The IRM is not yet operational because its applicable standards and procedures still need to be completed and revised (Richard, 2016). However, during the 15th and 16th board meetings it was disclosed that the IRM will start its complaint processing end of 2017 (GCF, 2017d). Clearly, the GCF has shown signs of contributing to climate justice in this respect, however, if the mechanism does not work properly and does not first serve the people affected, there is no point in maintaining it.

5.3. Results and Empirical Discussion

The previous case studies provide an assessment of existing climate finance mechanisms and policies from a climate justice-based perspective. An overview of the three funds and its corresponding results is provided in Table 2 (ANNEX 3: Overview of Results Analytical Framework).

Analyzing solely the distributional dimension of justice in the funds, we find that the AF is the most climate just because it allocates most finance to the most vulnerable developing countries and its main focus is adaptation. While both GEF and GCF understate vulnerable countries and adaptation strategies. When including procedural and compensatory justice dimensions in the analysis, we find that while for the procedural principle of recognition the AF is the most climate just, the GEF provides a climate just level of social and continuous participation and the GCF excels in the no-harm and transparency procedural principles and provisionally in the democratic accountability compensatory principle. Although effectiveness of the latter is still to be demonstrated.

In assessing our research questions, results stemming from the extended climate justice framework demonstrate that solely focusing on the distributional dimension of climate justice in the climate finance regime is not sufficient to receive a complete overview of the actions and impacts of climate finance. Furthermore, we found that encompassing a climate just allocation mechanism, does not necessarily lead to climate just procedural and compensatory mechanisms. When climate finance is allocated through individually created frameworks and standards, it is difficult to be aware where funds end up and to assess the impacts on the environment and society. Therefore, this research argues that to support climate justice protection in the climate finance regime, it is critical to establish systems that ensure and maximise social and political recognition and participation, recognize needs and vulnerability of those influenced by the adverse effects of climate change and climate financing.

Analyzing climate justice through this lens, found that although many reforms have been executed to increase justice and fairness in climate finance, certain issues remain to be solved in the new GCF or reforms in the GEF and AF. Such as a broader participation of civil society throughout the entire lifecycle of the climate projects and the framework supporting the formation of opportunities for local communities. Furthermore, in terms of transparency limitations are recorded in availability regarding language and timeframe and in the diversity and lack of details concerning ESIA. Therefore, I argue that a uniform model for ESIA has to be developed for the UNFCCC mechanisms, which then can to be executed by either the aforementioned funds or their IEs, as to provide a method of comparison and increase accountability. Aligned with the previous argument is the creation of a uniform complaint and grievance mechanism, which existence is critical for the delivery of climate justice in the climate finance regime. However, the manner in which it is developed and the future application has to be carefully thought off and needs civil society input to ensure full protection and delivery of justice by the compensatory mechanisms.

6. CONCLUSION

The overarching threat and grand scale of climate change calls for collective action and an international climate regime that collaborates in the just and fair delivery of climate finance. Although the institutions in the international climate regime that channel climate finance generally maintain certain policies and procedures for the allocation of funds and projects, they also follow different models which created the need to analyze whether these different frameworks and applications of policies led to a difference in the delivery of climate justice and to analyze whether these funds implement what they proclaim. Through applying climate justice theory, this research argues that the vision of distributional justice in the international climate regime and climate policy is too narrow. The analysis demonstrates that there is a need of an extended climate justice framework, that not only includes the principle of equity, but also the principles of social and political participation, supported by recognition of cultural identities, vulnerabilities and human rights, and ensured through grievance and complaint mechanisms providing accountability. These three forms: distributive, procedural and compensatory justice need to be simultaneously addressed to achieve climate justice in climate finance.

This research contributes to climate justice and climate finance literature, by providing a different analytical approach for analyzing the impact of climate financing on justice. However, certain limitations to this research can be mentioned such as the exclusion of a discussion on intergenerational justice in the distributional dimension and the focus on intergenerational differences. Furthermore, the limited analysis of public climate financing mechanisms to only UNFCCC financial mechanisms and not non-UNFCCC multilateral or private efforts in climate finance. However, these are interesting areas to develop in future research. Other research could include linking the developed climate justice framework to an in-depth analysis of climate funds project effectiveness.

ANNEX 1: OVERVIEW OF TOTAL CLIMATE FINANCE

Figure 1 provides an overview of the full climate finance structure to highlight the section in public, multilateral climate finance this research analyzes. While Figure 2, 3 and 4 demonstrate the spending patterns of total climate finance regarding private vs. public, mitigation vs. adaptation and domestic vs. foreign investments.

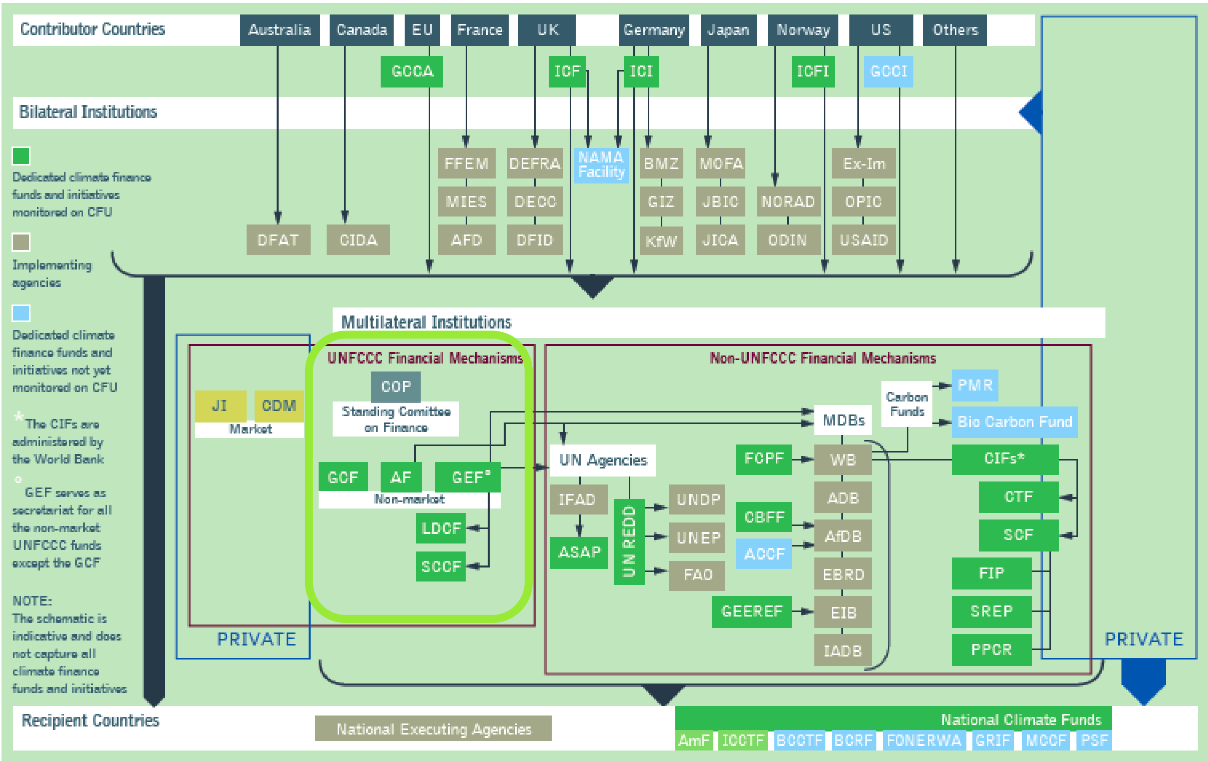

Figure 1: Channels of Climate Finance
(Source: ODI, 2014)

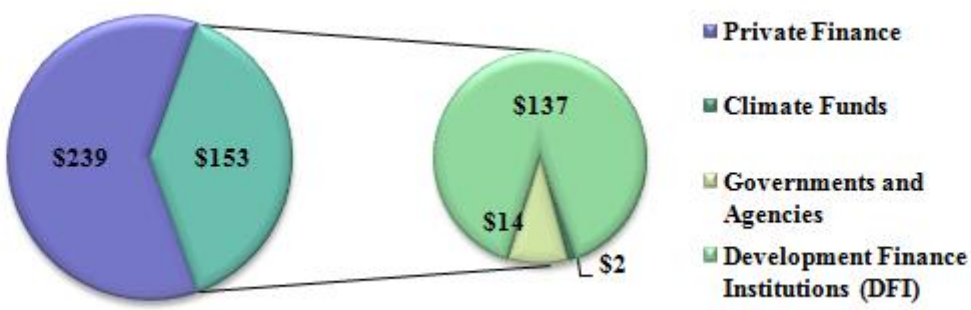

Figure 2: Total Public Climate Finance in $ Billion **(Source: Author. Data based on CPI, 2015)**

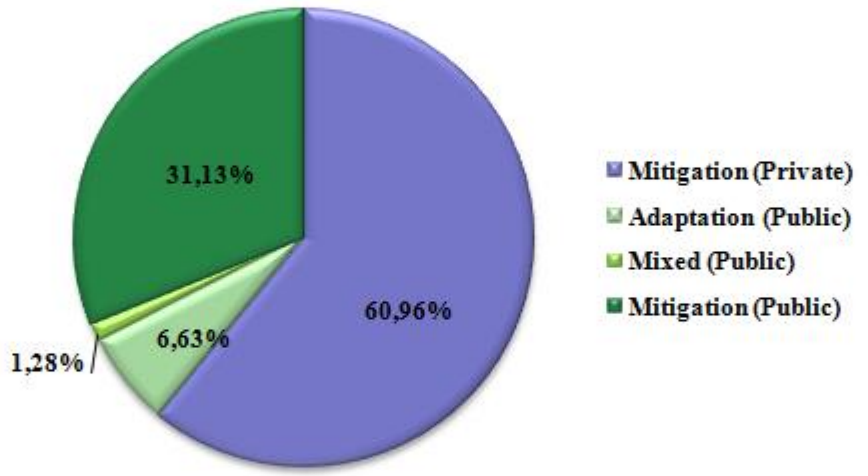

Figure 3: Total Climate Finance - Mitigation, Adaptation and Mixed (Source: Author. Data based on CPI, 2015)

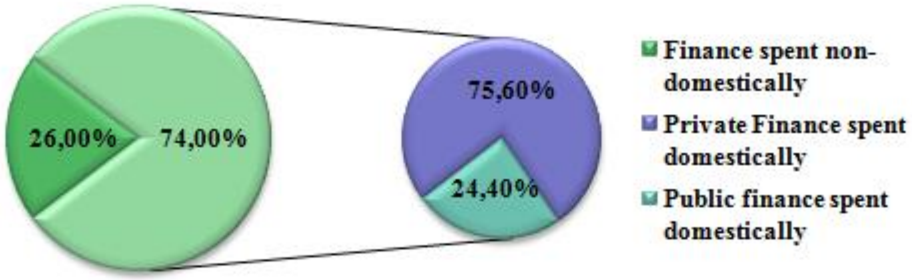

Figure 4: Total Climate Finance - Spending pattern (non)domestically (Source: Author. Data based on CPI, 2015)

ANNEX 2: GRAPHS FOR DISTRIBUTIONAL JUSTICE IN CASE STUDIES

a) Global Environment Facility

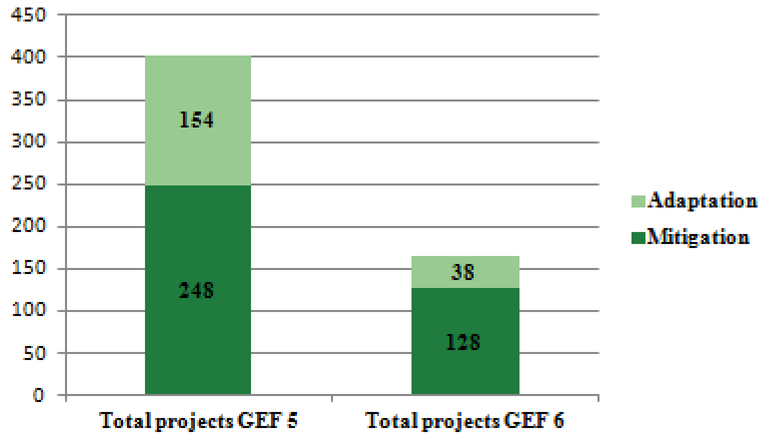

Figure 5: GEF Total Projects - Adaptation vs. Mitigation **(Source: Author. Data based on GEF, 2017)**

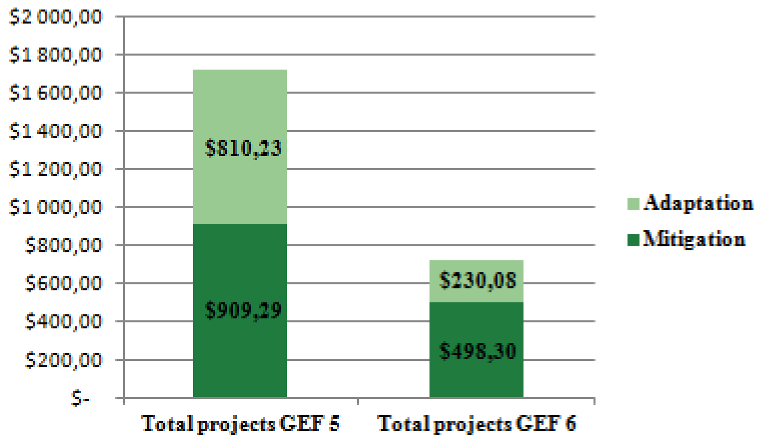

Figure 6: GEF Total Projects in $ Million - Adaptation vs. Mitigation **(Source: Author. Data based on GEF, 2017)**

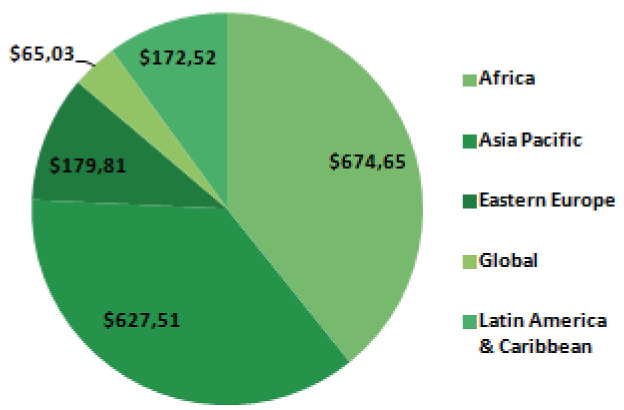

Figure 7: GEF 5 Total Funding per Region in $ Million **(Source: Author. Data based on GEF, 2017)**

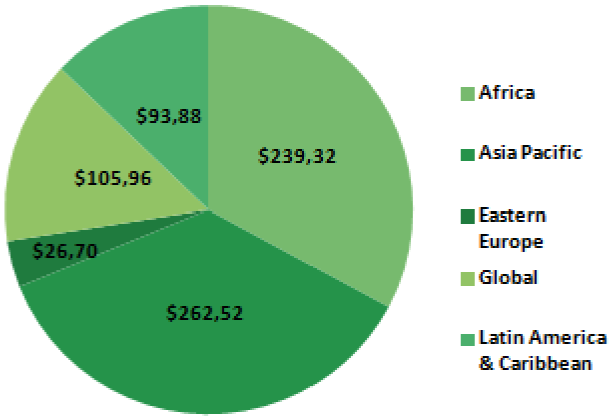

Figure 8: GEF 6 Total Funding per Region in $ Million (Source: Author. Data based on GEF, 2017)

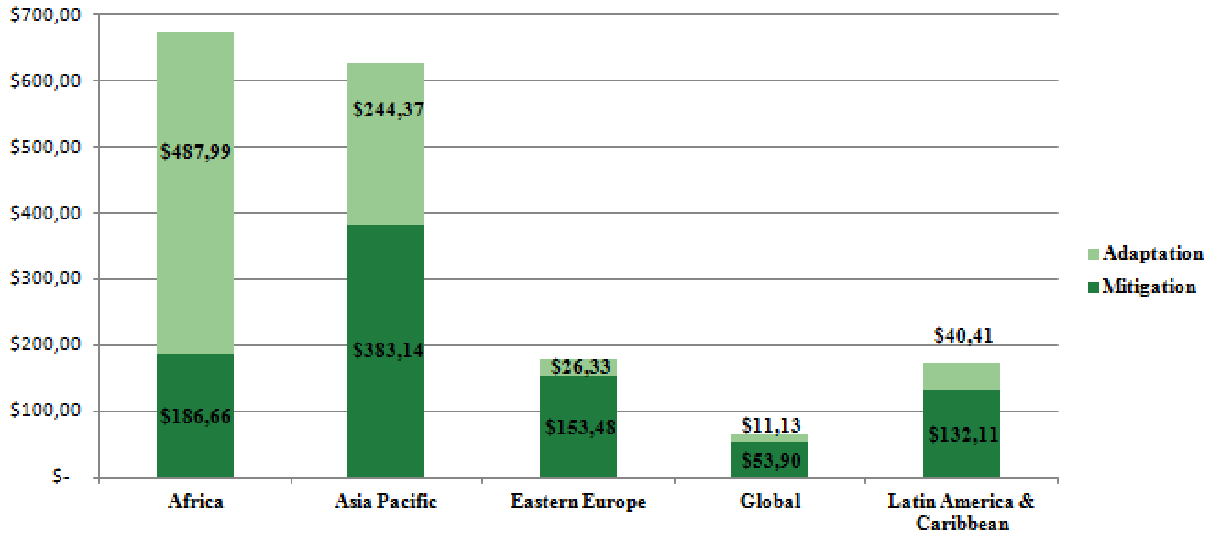

Figure 9: GEF 5 Total Funding per Region - Adaptation vs. Mitigation in $ Million (Source: Author. Data based on GEF, 2017)

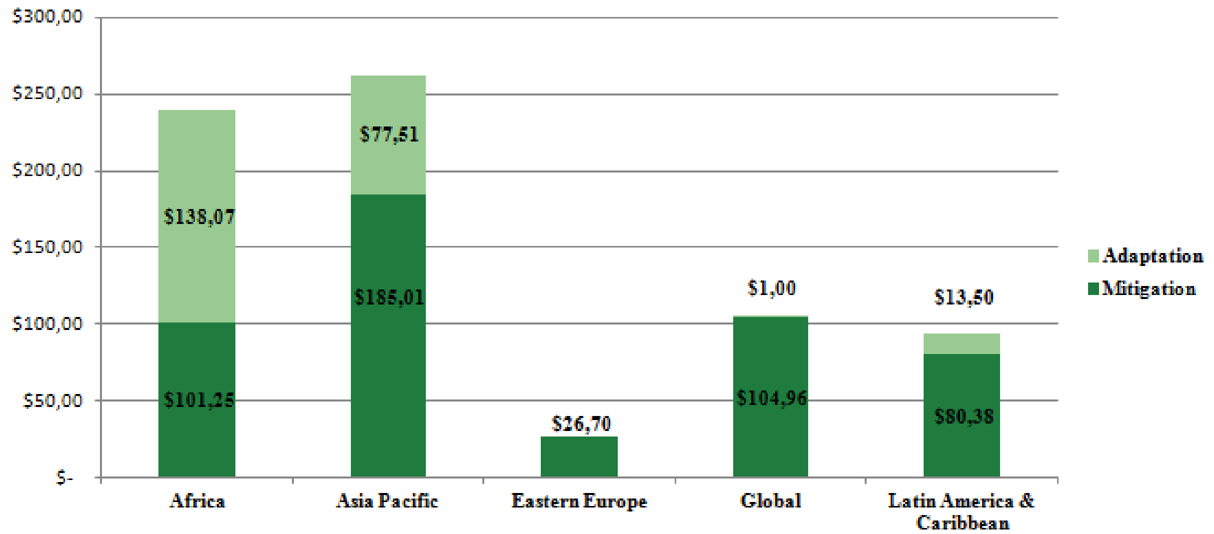

Figure 10: GEF 6 Total Funding per Region - Adaptation vs. Mitigation in $ Million (Source: Author. Data based on GEF, 2017)

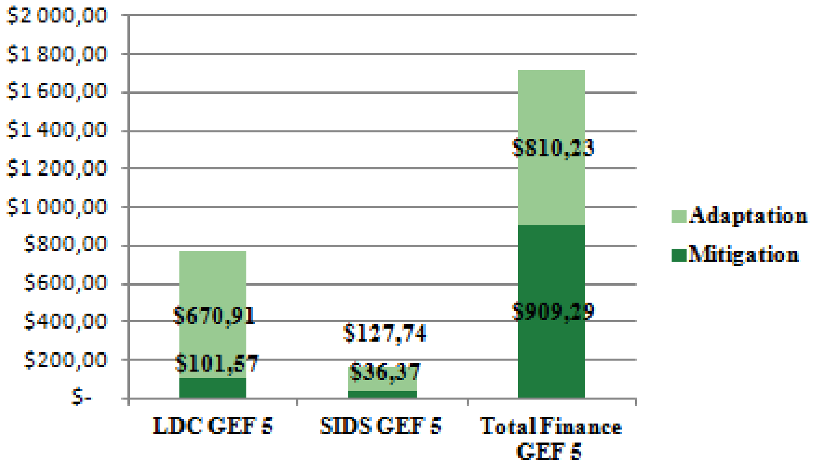

Figure 11: GEF 5 Total Funding for LDC and SIDS - Adaptation vs. Mitigation in $ Million (Source: Author. Data based on GEF, 2017)

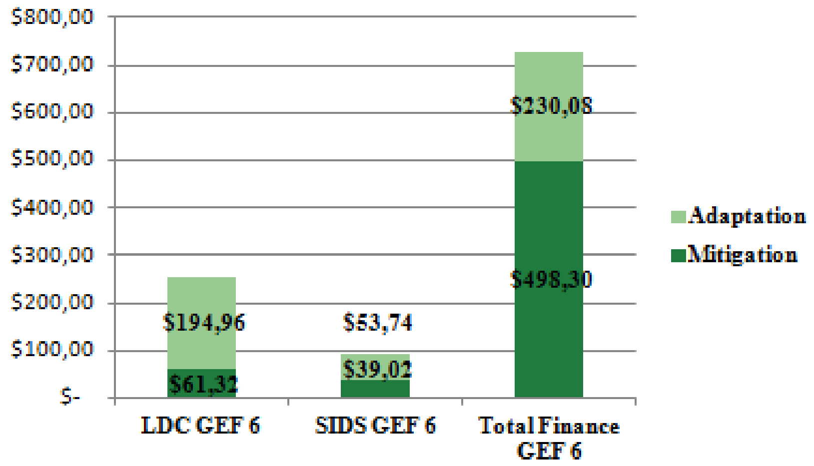

Figure 12: GEF 6 Total Funding for LDC and SIDS - Adaptation vs. Mitigation in $ Million (Source: Author. Data based on GEF, 2017)

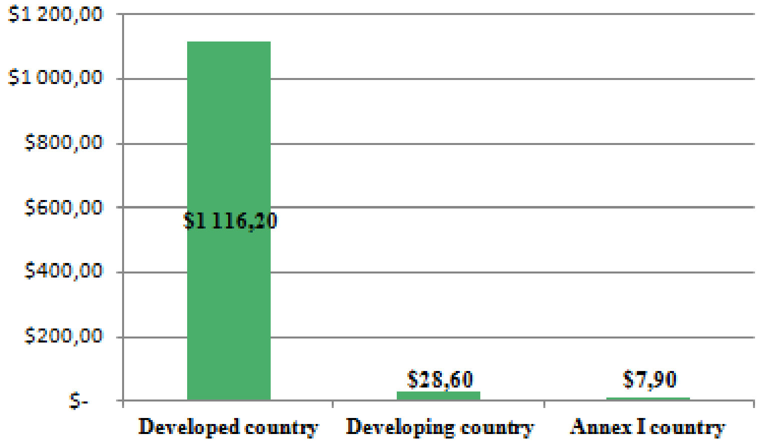

Figure 13: GEF 5 Total Funding Donors in $ Million (Source: Author. Data based on GEF, 2017)

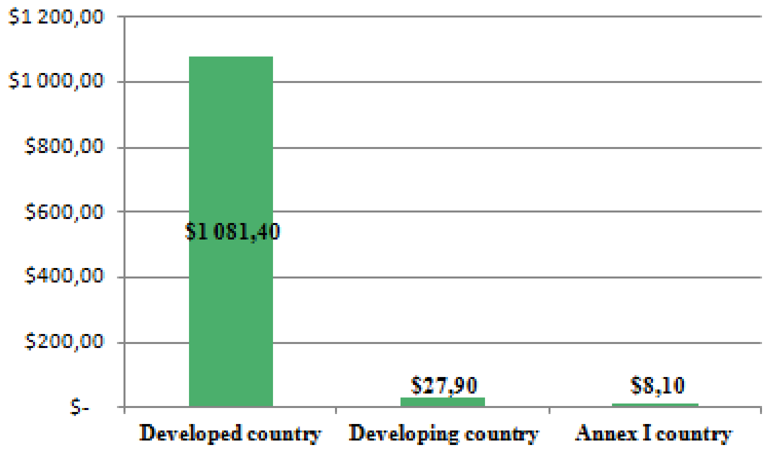

Figure 14: GEF 6 Total Funding Donors in Million USD$ (Source: Author. Data based on GEF, 2017)

b) Adaptation Fund

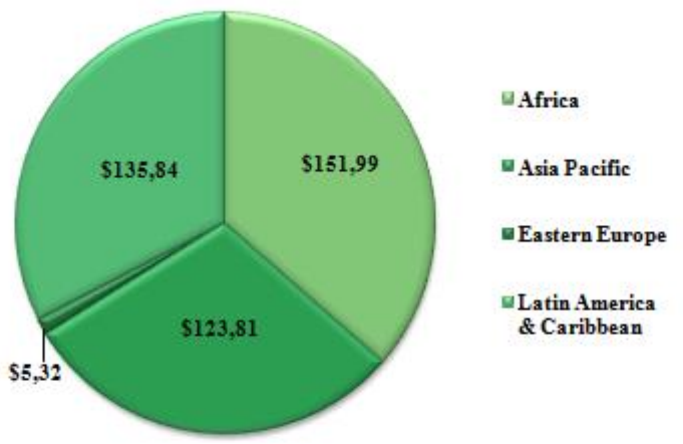

Figure 15: AF Total Funding per Region in $ Million (Source: Author. Data based on Climate Funds Update, 2017)

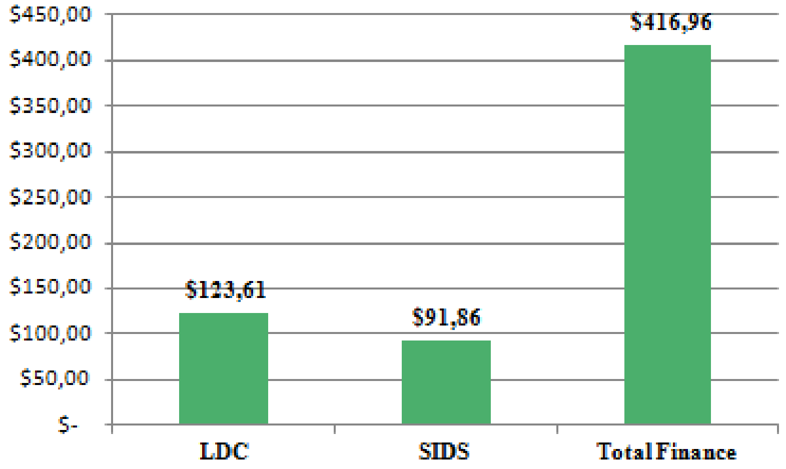

Figure 16: AF Total Funding per LDC and SIDS in $ Million (Source: Author. Data based on Climate Funds Update, 2017)

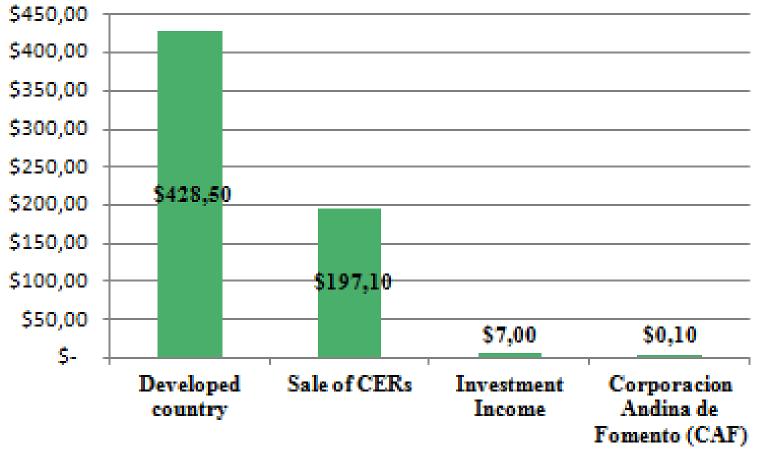

Figure 17: AF Total Funding Donors in $ Million (Source: Author. Data based on Climate Funds Update, 2017)

c) Green Climate Fund

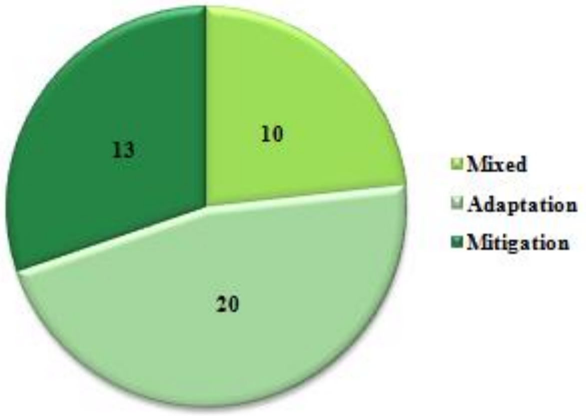

Figure 18: GCF Total Projects (Source: Author. Data based on GCF, 2017)

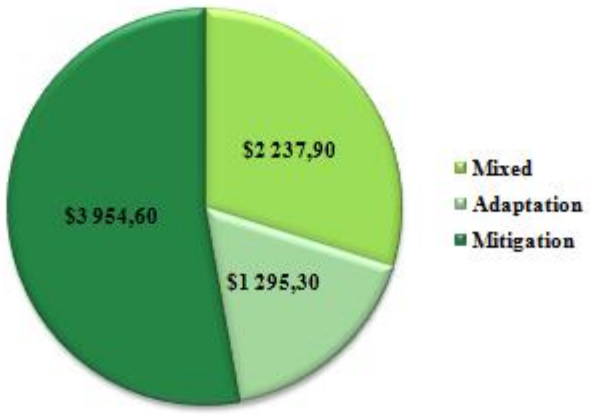

Figure 19: GCF Total Projects in $ Million (Source: Author. Data based on GCF, 2017)

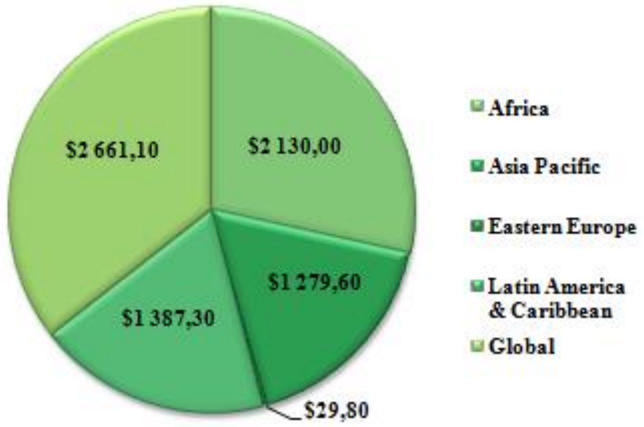

Figure 20: GCF Total Funding per Region in $ Million (Source: Author. Data based on GCF, 2017)

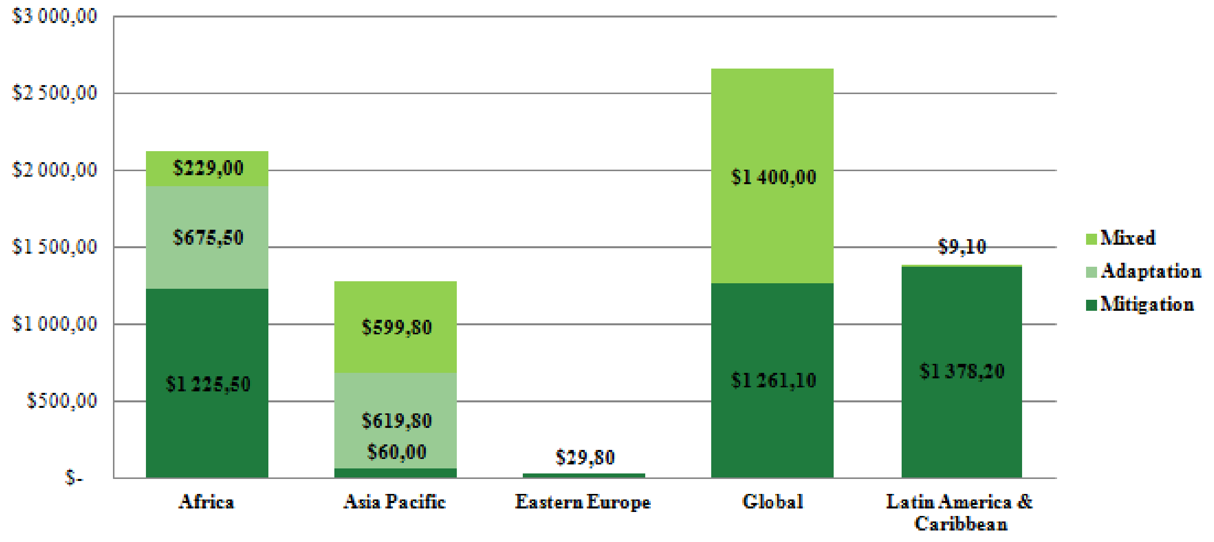

Figure 21: GCF Total Funding per Region - Mitigation, Adaptation and Mixed in $ Million (Source: Author. Data based on GCF, 2017)

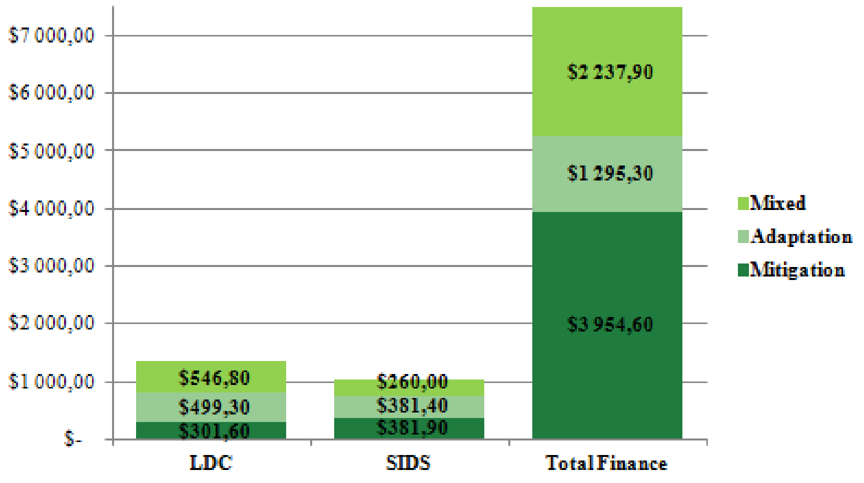

Figure 22: GCF Total Funding per LDC and SIDS - Mitigation, Adaptation and Mixed in $ Million (Source: Author. Data based on GCF, 2017)

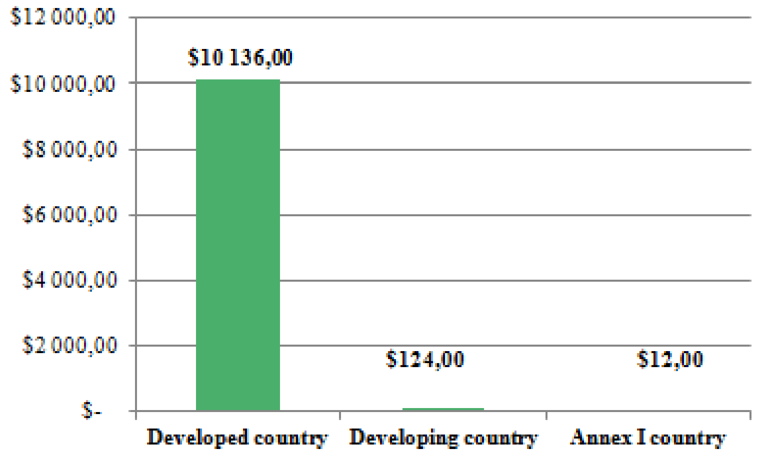

Figure 23: GCF Total Funding Donors in $ Million (Source: Author. Data based on GCF, 2017)

ANNEX 3: OVERVIEW OF RESULTS ANALYTICAL FRAMEWORK

Dimension of Justice	Principle of Climate Justice	Global Environment Facility	Adaptation Fund	Green Climate Fund
Distributive	Equity	1. Historical Responsibility & Most Vulnerable		
		Climate finance flows from developed to developing countries. However, not per se to the most vulnerable.	Climate finance flows from developed to developing countries and flows to the most vulnerable (LDCs and SIDS)	Climate finance flows from developed to developing countries, most of which to the vulnerable African states. However, little flow to the LDCs and SIDS.
		2. Adaptation-Mitigation Ratio		
		GEF 5 was close to a 50/50 balance, however GEF 6 clearly undersupports adaptation.	Adaptation only fund	Adaptation is financially undersupported, however in terms of projects GCF strive for a 50/50 balance.
Procedural	Social and Political Recognition	3. Recognition of All Participants and Vulnerabilities		
		Clear recognition of affected parties, especially IPs. However, no indication of specific climate change vulnerabilities.	Clear recognition of all affected parties and their vulnerabilities.	Clear recognition of all stakeholders and their vulnerabilities.
		4. Identity Conceptualization		
		Reatively well constructed	Well constructed	Less clearly constructed

Dimension of Justice	Principle of Climate Justice	Global Environment Facility	Adaptation Fund	Green Climate Fund
	Social and Political Participation	5. Inclusive and Equal Voting Procedure		
		GEF Council of 32 members: 16 developing, 14 developed, and 2 economies in transition. Voting by consensus, but donor-driven.	Board of 16 member: 11 developing and 5 developed. Voting by consensus.	Board of 24 members: 12 developing and 12 developed; including 1 seat for LDCs and 1 for SIDS. Voting by consensus, however alternative instrument remains to be decided.
		6. Participation Civil Society		
		Country- and regional-driven through focal points, few national IEs, Direct Access and the Small Grant Program. Extensive CSO network, which is active in implementation but not in observation. Free, prior and informed consent of local communities and continuous participation of IPs required.	More Country- than sub-national or community-driven, through Direct Access, NDAs and mainly national IEs. Extensive NGO network, with informal role on project design, implementation and policy involvement. No continuous stakeholder participation.	Country-driven trhough NDAs, regional and national IEs and intermediaries. Extensive CSO network, with policy involvement when requested. No continuous stakeholder participation.

Dimension of Justice	Principle of Climate Justice	Global Environment Facility	Adaptation Fund	Green Climate Fund
		7. Social, local Opportunities		
		Capacity building for legal, policy and decision-making processes for IPs and local communities.	Low level of capacity building through inclusion of local technology and expertise.	No local capacity building opportunities.
	Transparency	8. Open Information		
		High level of publication of GEF's and IEs' documents concerning operational decisions, projects, policies.	High level of publication of AF's documents concerning operational decisions, projects and policies.	High level of publication of documents concerning operational decisions, projects, policies and accreditation of IEs.
		9. Inclusive System		
		However, the main language is English and little details are provided concerning timeframe sharing and local contestations.	Many documents are provided in 6 languages, although some limitations. Furthermore, few closed sessions limiting full disclosure and little details are provided concerning timeframe sharing and local contestations.	However, all documents are in English, except requested impact assessments. A detailed timeframe is established for publishing information.

Dimension of Justice	Principle of Climate Justice	Global Environment Facility	Adaptation Fund	Green Climate Fund
	No-Harm Principle	10. Environmental and Social Impact Policy		
		Revised policy includes higher requirements for GEF projects and IEs impact assesments. Little details on publication and appeal.	Revised policy includes higher requirements for AF projects and IEs impact assesments. Little details on publication and appeal.	Fund executes own assessments by applying the WB's extensive framework, while developing own. Highly detailed on publication and appeal.
Compensatory	Democratic Accountability	11. Complaint mechanism		
		All disputes dealt with at IE level or independent Conflict Resolution Commissioner. Little information available.	All disputes dealt with at IE level or AF Secretary. Independent grievance mechanism established to investigate 1y old disputes. Little information available.	The IRM allows parties to file complaints for violation of their rights or to request for climate projects.
		12. Grievance Mechanism		
		No seperate grievance mechanism climate project compensation.	No seperate grievance mechanism climate project compensation.	This mechanism also allows individuals or groups to raise a dispute concerning adverse effects of climate projects. Not yet operational.

Table 2: Results Climate Justice Analysis (Source: Author)

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