

# Justice in Funding Adaptation under the International Climate Change Regime

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# Chapter 1

## Introduction

**Abstract** This introductory Chapter first outlines the role of justice in climate change and then explains the ethical approach to international climate adaptation funding adopted by the book. It is an approach which can be framed within the liberal accounts of justice that authoritatively underpin many of the ethical issues raised by climate change because it posits that, in order to alleviate injustice, the more powerful responsible subjects should support and assist the weaker vulnerable ones. The Chapter then specifies the book's main aims, namely to develop a framework of justice for the funding of adaptation to climate change within the United Nations Framework Convention on Climate Change regime, and to evaluate its funding architecture against the ethical framework developed. The Chapter closes with an outline of the book's contents.

**Keywords** Adaptation funding · Climate change · Justice · Liberalism

Shortwave radiation from the sun heats up the Earth's surface, which then re-emits the energy as long-wave infra-red radiation. Some naturally occurring gases and particles in the Earth's atmosphere absorb part of the outgoing energy and return it to the Earth. This phenomenon, known as the natural greenhouse effect, creates the conditions for life as it exists on Earth. Water vapour is the most important of the greenhouse gases (GHG), followed by carbon dioxide and, to a lesser extent, methane, nitrous oxide, and other minor GHG resulting solely from human activities.

Geological records show dramatic fluctuations in atmospheric GHG concentration. The relationship between GHG and the climate system is, however, a highly complex one because it is determined by a variety of physical processes. Nonetheless, there are two undisputed scientific findings: GHG are rapidly accumulating in the atmosphere, and air and sea temperatures are rising. For instance, the average global temperature has increased by 0.76°C since 1850, and large part of the rise has occurred in the last few decades. Furthermore, according to the International Panel on Climate Change (IPCC), if GHG emissions are not tackled, the average global surface temperature is likely to rise by a further 1.8–4.0°C by the end of this century (IPCC 2007). At the same time, scientists believe that a temperature

increase of between 2 and 3°C is a point of no return that may determine irreversible and disastrous changes in natural and social systems.

The scientific community largely agrees that the changes observed are related to alteration of the carbon cycle and to the consequent augmented concentration of GHG – especially carbon dioxide – in the atmosphere, but there is still considerable uncertainty as to how much of the changes that have occurred are due to anthropogenic GHG emissions, which increased by 70% between 1970 and 2004. However, the most recent evidence strongly suggests that the effect of human activity on the atmosphere is almost undoubtedly a net positive forcing: ‘[t]here is *very high confidence* that the net effect of human activities since 1750 has been one of warming’ (IPCC 2007, p. 5, emphasis in the original). Basically, the combustion of fossil fuel and long-term deforestation have significantly increased the atmospheric concentration of carbon dioxide and other GHG since the advent of the industrial revolution, thickening the GHG layer around the globe, altering the carbon cycle and, ultimately, changing climatic patterns. These variations are expected to generate an array of impacts on the planet, and especially on poorer countries (IPCC 2007, Stern 2007), which are made more vulnerable, besides physical and geographic reasons, by their closer dependence on agriculture, lack of financial resources, technological and institutional backwardness, and low knowledge and research capacities. Poverty-related climate effects include reduced crop yields, which give rise to food insecurity, lower incomes, scant economic growth, the displacement of people from coastal areas, exposure to new health risks, and an increase in the frequency and severity of extreme climatic events. Moreover, in most cases, developing countries make the least contribution to the generation of such impacts, and furthermore, they are the least able to make their voices heard and their interests count in the international arena. This produces an exceedingly unbalanced distribution of negative impacts and of bargaining power which will widen the gap between the North and the South even further, thereby confirming the view that climate change is essentially an ethical question.

## 1.1 Justice and Climate Change

Justice concerns play a role in every kind of international negotiation at all levels. For instance, if dilemmas related to the provision of global public goods, or the conservation of common resources such as those associated with environmental assets, are to be solved, it is necessary for the parties involved to cooperate voluntarily. Since there are no supranational authorities able to enforce cooperative behaviours, justice is fundamental in fostering collaboration among states in international environmental negotiations for a number of reasons. In fact, issues such as allocation of the costs of environmental protection or the exploitation and preservation of finite and scarce resources raise controversial questions of justice regarding the consumption of, and access to, environmental assets. This requires, in turn, the fair involvement of all the parties concerned, as well as the equitable distribution of the

relative benefits and burdens. These are issues which should be resolved on ethical grounds so that an international agreement can be made more feasible.

The ethical approach to international climate adaptation funding embraced by this book can be framed within liberal accounts of justice. In fact, the liberal perspective authoritatively underpins many of the ethical issues raised by climate change insofar as it posits that if injustice is to be remedied, the stronger responsible subjects should support and assist the weaker vulnerable ones. As made clear in what follows, these are the main assumptions of distributive justice in international adaptation funding, and they underpin the ethical argument of this book. Liberal theories of justice are, in fact, centred on shared ethical responsibility, and they are predicated on equality, needs, opportunities, freedom, and redistribution. They give equal or impartial consideration to the interests of all, and they display a general concern for the least well-off subjects, who should be given sufficient means, and whose improvement becomes the most ethically important objective: a conception which constitutes the core of liberalism.

It is widely acknowledged that ethical considerations should perform a central role in climate change. The focus to date has been mainly on mitigation, but unless considerations on justice in adaptation are expressly taken into account, international climate policy will produce ethically-dubious outcomes which will very likely be disregarded by states that believe that policies are unjust and/or that they have been treated unfairly. Consequently, I assume that climate change is a matter of international justice, and not one of applied lifeboat ethics (Hardin, 1974) in which each country is concerned to prevent harms to its citizens or, at most, engaged in bilateral negotiations with other countries. Global problems such as climate change require global solutions and hence the broadest possible consensus. Ethical considerations should accordingly play a major role as unifying principles that facilitate collective actions against climate change: the more international climate negotiations are informed by principles of justice, the more numerous the participants will be, and the more a manageable international solution can in principle be achieved.

The fundamental ethical issues in climate change concern the distribution of the burdens and benefits of addressing it, as well as fair participation in the processes of distributing them. Climate burdens are of two kinds: related to mitigation and related to adaptation. Mitigation burdens derive from the cost of cutting GHG emissions or, in a different perspective, from the opportunity costs that actors incur by not engaging in activities that contribute to climate change (they forgo benefits that they could have obtained if they were unconcerned about emitting GHG). Adaptation burdens originate from the adoption of measures to cope with climate impacts and to compensate for residual damages.

Each country in the international arena pursues different interests and objectives, and has different perspectives on climate change strategy. In the policy domain, ethical considerations are not, in fact, the main drivers or goals of international agreements. The parties concerned, especially when a global public good like climate stability is at issue, pursue their own interests and priorities in order to minimize their contribution (or to free-ride). Nonetheless, I believe that ethical issues

represent, protect and promote the needs and concerns of parties, and it has almost always been necessary to take them into account to achieve acceptable agreements.

In fact, the United Nations Framework Convention on Climate Change (UNFCCC) requires that national egoism must not hinder collective actions against climate change. Although both rich and poor states are in principle willing to act cooperatively against climate change, the voluntary consent implied by the Westphalian principle, to the effect that obligations may be imposed on a sovereign state only with its consent, suggests that no international institution can, unilaterally and legitimately, adopt a climate treaty and bind states to comply with it: such a treaty can only depend on voluntary agreements. Moreover, appeals to global economic efficiency are not sufficient on their own to mobilize countries, given the wide welfare disparities due to different mitigation capacities and vulnerability levels, and the diversified costs of adapting to climate impacts. Therefore, since there is no intergovernmental institution enforcing an international climate agreement, the latter should be self-enforcing. And a self-enforcing commitment is, in general, more likely to arise when the risk is clear and present, when the stakes are relatively low, and when the incentives for free-riding are negligible. Regrettably, this is not the case of climate change. Consequently, any climate agreement should be widely shared: a situation which is certainly more likely when the agreement is informed by principles of justice, shaped by equity criteria, and perceived to be fair in its processes. Justice, in fact, implies greater legitimacy and can persuade parties with conflicting interests to cooperate more closely on collective actions.

In the climate debate, moreover, justice concerns are rooted in fundamental differences in the balance of power and the perception of climatic issues between the developed and developing countries. Power results from natural and historical processes, and it is unevenly distributed in favour of rich countries, which can in principle use their greater influence to define international positions convenient to them. Widespread in the industrialized North is an ecological view of the effects of climate change, which is consequently seen as essentially a threat to the environment. Accordingly, environmental effectiveness is a key criterion in assessment of the appropriate measures. In the South, by contrast, climate change is perceived as an issue that most affects human well-being: the harm is caused to humans, who must suffer the physical impacts generated primarily by others, namely the rich countries of the North. Hence, the North's usual conception of justice as the sharing of mitigation costs is at least incomplete. It must be supplemented with the South's conception, more closely centred on the right to use the atmosphere's capacity and on the disproportion between the contributions, and efforts of adapting, to climate impacts, as well as on its recognition and participation in negotiations on the basis of a balanced distribution of power.

The dimensions of justice in the climate context are, as mentioned above, the procedural and the distributive ones. Procedural (or formal, or abstract) justice concerns the fairness of the process by which any possible agreement, be it on mitigation, on adaptation, or on both, is attainable and relates to the level of participation and recognition of all the actors involved in decision processes, as well as on the distribution of power among them. A viable climate treaty should grant all parties

equal access, and ensure that issues raised by subjects who believe that they have interests at stake are dealt with fairly. Another, more problematic, aspect of procedural justice is the effective ability of parties, even through the support of the stronger ones, to participate in the negotiation processes. Climate negotiations are extremely complex, with the consequence that it is usually only richer countries that can afford platoons of skilled negotiators, while poor parties can field only a handful of negotiators, if not just one. The climate change debate is mostly conducted by institutions, scholars and activists from the richest industrialized countries, whereas procedural justice requires that all the parties involved must have equal opportunities to protect and pursue their objectives.

Distributive justice regards the allocation among the parties involved of the costs and benefits both of mitigation efforts to reduce carbon emissions, and of adaptation attempts to prevent the harmful effects of climate change and to compensate for residual non-adapted impacts. Regrettably, despite the logically equal importance of these two domains of justice that springs from the complementarity of mitigation and adaptation strategies to cope with climate change, climate justice has been viewed mainly, if not solely, as a problem of mitigation. Mitigation, however, is only one side of the justice issue. Adaptation and the compensation of residual damages constitute the other.

The first issue concerns the minimization of global mitigation costs by equalizing the marginal cost of abatement, and the use of (that is, the possibility of releasing GHG into) a common resource like the atmosphere. The second issue concerns the distribution of adaptation actions in terms of prevention measures, adaptation activities and compensation for residual damages. More specifically, adaptation initiatives are highly differentiated because they cover a great number of individual and collective choices in the context of local economies and societies, whose fragmented actors are less prone to incorporate adaptation into decision-making because of uncertainty, free-riding and other concerns. This implies that adaptation is not dealt with solely at the international or the individual levels: it also involves national and local governments and non-governmental organizations. Accordingly, adaptation decision-making entails four main issues of justice (Paavola & Adger, 2006) relevant at different spatial levels and for different actors:

- the planning of, and decisions about, adaptation, which implies both issues of international procedural justice and ethical dilemmas between state and non-state actors;
- the extent of the responsibility of developed countries for their GHG emissions, which is relevant in terms of international distributive justice as well as of justice between states and vulnerable communities;
- the amount of aid that developed countries should make available to developing countries, which chiefly involves considerations of international distributive justice;
- the distribution of assistance between developing countries and adaptive measures, which entails both issues of international distributive justice and of justice among states and non-state actors.

In sum, adaptation initiatives concern elements of procedural and distributive justice at the international level, between the international and the sub-national levels, and at the sub-national one, and they involve both state and non-state actors. This book focuses on procedural and distributive international justice between state actors and the relevant international institutions that represent them, for it is centred on the definition of a set of ethical principles and criteria which can be used to construe the international processes of adaptation funding, and on the evaluation of its architecture against them.

International climate justice can ultimately be framed within the following domains,<sup>1</sup> which refer to both procedural (the first domain) and distributive issues related to mitigation and adaptation strategies:

- a distribution of resources and power which allows a fair international negotiating process;
- a just initial allocation of endowments;
- a just exchange of endowments;
- a just allocation of the costs of adapting to climate impacts (Table 1.1);
- a just allocation of the benefits (that is, resources) for adapting to climate impacts.

**Table 1.1** Strategies, domains and dimensions of justice in climate change

Strategy	Domains of justice	Dimensions of justice
Mitigation and adaptation	1) A distribution of resources and power which allows a fair international negotiating process	Procedural justice
Mitigation	2) Initial allocation of endowments 3) Exchange of endowments	Distributive justice Distributive justice
Adaptation	4) Allocation of costs of adapting to climate impacts 5) Allocation of the benefits (that is, resources) for adapting to climate impacts	Distributive justice Distributive justice

The first (limited to adaptation strategy), fourth and fifth domains of the above taxonomy constitute the focal areas of the analysis conducted by this book and the three pillars of the ethical framework in international adaptation funding that it puts forward.

<sup>1</sup>This taxonomy is similar, and indeed inspired by, the one put forward by Shue (1993), who identifies four domains of distributive justice: the allocation of GHG emissions; the allocation of wealth that would allow fair bargaining on GHG emission quotas; the allocation of the costs of preventing avoidable changes; the allocation of the costs of coping with unavoidable changes.

## 1.2 Aims of the Book

The book has two main objectives: (i) to develop a framework of justice specifically tailored to the funding of adaptation within the UNFCCC regime; (ii) to evaluate the current UNFCCC adaptation funding architecture and its evolution against the ethical framework developed. The book therefore has a twofold nature which derives from the objectives just stated. On the one hand it is a theoretical analysis of the ethical foundations and implications of international adaptation funding that culminates in definition of ethical benchmarks for its empirical assessment. On the other hand, it is an interpretative analysis of the ethical dimensions of the existing UNFCCC architecture on adaptation funding, and to some extent also of its future developments, conducted by applying the framework of justice proposed to different areas of empirical investigation.

As regard the first objective, the book conducts ethical analysis of both procedural and distributive justice in international adaptation funding. On the procedural side, justice concerns are necessary to underpin the legitimacy of the entire international adaptation funding regime, for they allow all countries, and especially the weaker ones, to protect and promote their interests in international negotiations. On the distributive side, the developing countries vocally demand that the developed ones recognize their responsibility for climate impacts. Although responsibility is almost unanimously acknowledged as being a sound theoretical basis for a just distribution of climate burdens among those who have produced them, it is not yet acceptable in the current climate realpolitik. Understandably, the developing countries demand more support for adaptation, especially since the need for larger scale funding is becoming urgent as climate impacts make the necessity of adaptation more widespread, particularly in the most vulnerable countries. On the allocative side, moreover, ethical considerations demand that more vulnerable countries be given privileged access to adaptation resources because of their lesser economic, institutional and social capacities to cope with climate change.

The book thus critically examines the three following assumptions in the current literature which, I argue, should be taken into account when defining a just approach to adaptation funding at the international level:

1. the processes of raising and allocating funds should ensure the fair involvement of all parties;
2. the raising of adaptation funds should be carried out according to the responsibility for climate impacts;
3. the allocation of funds raised should put the most vulnerable first.

The discussion of these issues in Chapter 3 leads to the development, in Chapter 4, of a framework of justice intended to be both a critical synthesis of the theoretical investigation and a normative reference in terms of the fairness and equity criteria put forward, which also serve as benchmarks against which to evaluate the procedural and distributive justness of the international adaptation funding regime.



The use of the ethical framework in this latter role constitutes, as said, the second major objective of the book, and it is applied in Chapters 6, 7 and 8 and in Appendices B and C. This empirical part of the work is interpretative in nature in so far as it examines UNFCCC official documents, governance systems, formal meetings, and the envisaged structures and procedures of some of the multilateral proposals advanced for the post-Kyoto period to identify the emergence of the fairness and equity criteria comprised in the ethical framework of Chapter 4, and determines what their occurrence entails in context.

In sum, the goal of the book is to develop a theoretical reference framework for the analysis of the ethical dimensions of international adaptation funding.

### **1.3 Outline of the Book**

Chapter 2 focuses on adaptation. However, before analyzing the challenges raised by adaptation's multifaceted nature, it describes the reasons for the prominence, to date, of mitigation within the climate debate. It then clarifies the complex notion of adaptation, since this is still ambiguous in the climate change literature, given that any adaptive strategy is a combination of different actions carried out by diverse subjects interacting with each other and motivated by various factors. Furthermore, this Chapter spells out the notion of social vulnerability to climate change, which is one of the ethical cornerstones of the book. It then scrutinizes adaptive capacity because this notion helps specify social vulnerability more precisely. Finally, this Chapter analyzes adaptation in the UNFCCC regime and examines some relevant adaptation policies externally to it.

Chapter 3 explores, from a liberal standpoint, the ethical bases of the international-level funding of adaptation to climate change. The Chapter begins with an overview of theories of justice which organizes and explains the complex concept of justice. It then focuses on aspects of liberal justice so as to provide a framework for the subsequent ethical analysis of international adaptation funding. First, it makes some specifications to clarify the relevant dimensions of distributive justice. Second, it spells out the rationale for the approach taken to international justice. Third, it justifies on ethical grounds the state-centred (or statist) focus of the book within a liberal account of justice. This Chapter concludes with analysis of the extensions needed to apply liberal theories of justice to international adaptation funding.

Chapter 4 develops a framework of justice for international adaptation funding. It opens with investigation of justice in international adaptation funding, whose main dimensions are explored in light of the broad definition of it adopted. The Chapter then develops a framework for both procedural and distributive justice in funding adaptation at the international level, furnishing fairness and equity criteria based on two significant liberal theories of justice: John Rawls's theory of justice as fairness (RTJF), and Amartya Sen's capability approach (SCA). Specifically, procedural justice is based on principles of Recognition, Participation, and Distribution of power

that can be operationalized through fairness criteria of Inclusion of all countries, Possibilities to specify the terms of participation, and Commitment to assistance from richer to poorer. Distributive justice is intended, as far as the raising of adaptation resources is concerned, in terms of principles of Equality and Difference, which give rise to the equity criterion of Differentiated historical responsibility, and on the allocation side, in terms of the principle of Basic capability equality operationalized by the equity criterion of Lack of human security.

Chapter 5 analyzes the main international governance body concerned with the funding of adaptation to climate change, the UNFCCC, an international agreement which gave rise to the Kyoto Protocol; the UNFCCC's financial mechanism, the Global Environmental Facility (GEF); and the funds specifically created to finance adaptation. First it investigates the rationale and the different objectives and options for funding adaptation. Then the attention turns to the instruments governing adaptation funding under the UNFCCC regime: the GEF Trust Fund, the GEF Strategy and Priority on Adaptation (SPA), the Special Climate Change Fund (SCCF), the Least Developed Countries Fund (LDCF), and the Adaptation Fund (AF). Finally, the Chapter also outlines financing options alternative to the UNFCCC regime.

Chapters 6 and 7, respectively, employ the fairness and equity criteria put forward by the framework of justice described in Chapter 4 to evaluate the current international regime for funding adaptation under the UNFCCC. Chapter 6 adopts three different perspectives to assess procedural justice in international adaptation funding in light of the emergence and meaning of the fairness criteria. First, it uses the textual analysis approach to evaluate the relevant documents of the UNFCCC architecture. These documents belong to seven categories grouped into two families: that of Principal Documents and that of Non-Principal Documents. The former comprises the Convention, the Kyoto Protocol and other general UNFCCC and GEF documents, such as declarations. The latter family consists of five categories of more specific texts grouped according the UNFCCC classification for documents related to the financial mechanism. The second perspective focuses directly on the governance structures, procedures and practices of the institutions of the climate change regime governing adaptation funding. It evaluates the elements of Recognition, Participation and Balance of power in terms of compliance with fairness criteria within these institutions' governance systems. The third perspective involves observation of significant selected formal negotiations and is centred on meetings concerning the AF – which is the most controversial, yet promising, financial instrument – and points out the effective level of procedural fairness involved. Chapter 7 carries out a similar analysis, related to the evaluation of distributive justice in terms of the equity criteria of Chapter 4. Obviously, this assessment is performed only on the seven categories of documents, and on the Subsidiary Body for Implementation (SBI) and COP/MOP (Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol) formal meetings on the governance of the AF. Finally, the Chapter conducts critical analysis of the role of the fairness and equity criteria and of the broader aspects of justice within the international adaptation funding regime.

The concluding Chapter 8 extends the application of the fairness and equity criteria of the framework of justice put forward in Chapter 4 to evaluation of the structures and procedures of some of the multilateral climate adaptation funding proposals for the post-Kyoto period. It concludes by summarizing the book's main contributions, and by putting forward some policy ideas prompted by the analysis conducted.

Appendix A lists Non-Principal documents examined in the book; Appendices B and C conduct textual analysis on the five, Non-Principal, categories of documents set out in Appendix A in order to highlight the emergence, respectively, of the fairness and equity criteria proposed.

## References

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