

# Equity in Adaptation to Climate Change

François Gemenne (IDDRI)

Most observers agree that equity has become a key condition for the success of a global agreement on climate, and that any deal that would seem inequitable would be doomed to fail. The UNFCCC (United Nations Framework Convention on Climate Change) makes a distinction between developed countries, developing countries, and least advanced countries; as well as between vulnerable countries and particularly vulnerable countries. The first distinction has to do with equity in mitigation efforts, whereas the latter is concerned with equity in the allocation of adaptation funding (Mace 2006). Adaptation itself is poorly defined: the IPCC (Intergovernmental Panel of Climate Change) doesn't go further than defining it as the adjustment of human or natural systems confronted to a new or changing environment (IPCC 2007).

It took a very long time for adaptation to be acknowledged as a key aspect of the fight against global warming. Funding mechanisms were long overdue when they were finally implemented, and remain heavily discussed. A sufficient amount of funding for adaptation appears today as the *sine qua non* condition for the participation of developing countries to a global deal on climate. This amount has been estimated at US\$ 100 billion at least on a yearly basis, including support for mitiga-

tion efforts. However, though equity concerns have been placed at the core of the negotiation on mitigation efforts, they have been little addressed in the discussions on adaptation. As a result of this, the criteria that will be used to allocate the adaptation funding remain unclear and vague, which could be detrimental for the negotiation process as a whole. This paper aims to offer a new perspective on this issue, departing from the traditional perspective inspired by retributive justice.

## The injustice of climate change, and two perspectives on how to fix it

The fundamental injustice of climate change is well known: the countries that will be first and most affected by its impacts are those that bear the least responsibility for the atmospheric concentration of greenhouse gases. Most of these countries are located in the global South, as the worst effects of global warming will be felt in the lower latitudes. For reasons that have a lot to do with the history of colonisation, these countries are also poorer, and thus often have very few resources to implement adaptation strategies. The injustice of climate change is not just a geographical one, but is also intergenerational, as the worst impacts are expected to be felt by the generation of our grandchildren. Unless the current generation makes today a provision of funds to help future generations deal with the impacts of

climate change and compensate its damages – an option that is not being discussed at the moment – the only way to fix intergenerational injustice is to reduce now our greenhouse gas emissions. In order to fix geographical injustice, however, transfers from the North to the South will be needed to cope with and adapt to the impacts of global warming. On which criteria should such transfers be operated? Borrowing an expression from Baer (2006), who owns what to whom? I will present here two different possible answers that can be provided to this question.

These two possible answers would both address the geographical injustice, and other authors have shown that different conceptions of justice could co-exist in the same system (Roberts et Parks 2007; Rawls 1993). The first answer derives from retributive justice, which is the perspective on justice most commonly referred to in Western countries. Retributive justice is based on the idea that the damages should be repaired by those who have caused them. Jails are a typical application of a retributive take on justice: criminals will spend time behind bars in order to ‘repay their debt to society’. In environmental law, the polluter-pays principle is another application of this conception of justice.

The philosophy behind UNFCCC and the Kyoto Protocol is also directly inspired by retributive justice, epitomised in the concept of ‘common but differentiated responsibilities’. Those that have most contributed to the problem are supposed to be the ones that should bear of the mitigation efforts, and those that bear little responsibility for global warming – the non-Annex I countries – are exempted from capping their greenhouse gas emissions.

It is a well-known fact that the Kyoto Protocol does not really address adaptation and remains focused on mitigation. With regard to adaptation, recent campaigning for climate justice or the emergence of the concept of ‘ecological debt’ also derive from a retributive view on justice. A strict application of retributive justice to adaptation would imply that the countries with the greatest responsibility in global warming would transfer funds to compensate for the damages they have caused in countries that bear the least responsibility for these damages, and are the first and most affected. Though such a principle might seem a logical consequence of the principles presiding over mitigation, I’ll show in the next section that some difficulties prevent its straight application.

Another perspective on the problem is one deriving from distributive justice. Unlike retributive jus-

tice, distributive justice is not concerned with the identification of responsibilities, but rather with the equalisation of resources and benefits, according to the needs and capacities of each party. Equity lies at the core of distributive justice, which mostly seeks to resolve distributional issues. The concept of ‘respective capacity’, mentioned in the Kyoto Protocol, where each country would contribute to the mitigation effort according to its capacity to do so, is an application of distributive justice. A distributive view on justice, with regard to mitigation, would not seek to impose most of the effort to the most polluting parties, but to those that have the most capacities to undertake such an effort. How would distributive justice work for adaptation? The central matter would no longer be the issue of responsibility, but rather of vulnerability. The allocation of adaptation funds would no longer be based on the levels of responsibility, but rather on the levels of vulnerability and adaptive capacity. The funds would not necessarily be provided by those that are most responsible for climate change, but rather by those that have the biggest capacity to do so. This, too, doesn’t go however without practical problems, as I will now aim to show.

### Operational problems

The concept of ecological debt has rapidly gained currency amongst civil society and advocacy groups, as well as with an increasing number of developing countries. It is an application of retributive justice, where the countries that are the most responsible for climate change would compensate for the damages they have created in developing countries, which are at the same time the least responsible for global warming and the most affected by its impacts. As a concept, ecological debt faces however a quadruple problem:

- The first problem has to do with the nature of the transfer. The money transferred to developing countries would be a compensation for the damages induced by climate change, and not funding for adaptation. The funds could of course be used to develop and implement adaptation strategies, but there’s no guarantee that the compensation value of the damages and the amounts needed for adaptation would be identical. Given the low economic value of goods in the South, one can even expect that the compensation value would be lower than the funds needed for adaptation.
- The second problem is linked to the time scale. Retributive justice assumes that polluters are distinct from sufferers, and that both can be clearly

identified. For now, industrialised countries are the main polluters, and developing countries the main sufferers. The former, however, will continue to curb their emissions, and will be increasingly affected by the impacts of climate change. As for developing countries, some of them will increasingly be considered as key polluters. Hence it will no longer be possible, in a near future, to draw a clear-cut distinction between polluters and sufferers. As sufferers will become polluters, and *vice versa*, the distinction needed for the application of retributive justice will be challenged.

- Retributive justice does not account for the differences in vulnerabilities of the different countries, and simply assumes that poor countries have the least adaptive capacity. The adaptive capacity of a country, however, does not only depend on its level of development – and hence of its contribution to climate change – but also on geographical, political, demographic and socio-cultural factors (Adger et al. 2003).
- The fourth and last problem has to do with political realism. In the current state of negotiation, industrialised countries are unwilling to acknowledge a responsibility linked to specific impacts of climate change, which could pave the way to litigation.

For these four reasons, a strict application of retributive justice seems difficult in the context of adaptation, despite ethical arguments to acknowledge an 'ecological debt'.

An application of distributive justice, however, does not go without difficulties either. In particular, distributive justice assumes that resources are directed towards those who most need them. With regard to adaptation, the countries that require most funding are those with the least adaptive capacity to the impacts of climate change, a notion that is linked to their respective vulnerabilities. Both the adaptive capacity and the vulnerability remain poorly defined however. Vulnerability indices are often rooted in environmental determinism, without taking into account other variables such as demographics or the mode of governance (Magnan 2009). The UNFCCC does not provide further help in differentiating the levels of vulnerability, as its article 4.8, defining the countries where adaptation strategies should be developed in priority, is so wide that it can almost encompass all countries. With regard to the countries that are supposed to contribute to adaptation funding, distributive justice recommends that countries with the largest capacity, rather than with the greatest responsibility, should contribute in priority.

This bears the risk that commitments to adaptation funding might turn up as empty pledges, as it has often been the case for development aid.

## Conclusion

It appears clearly that significant funding for adaptation is a key condition for the participation of developing countries to a global deal on climate. Whereas the issue of equity is central to the debates on mitigation, it remains poorly addressed in the discussions on adaptation, both with regard to the provision and the allocation of the funds. The paper sought to show different perspectives that could compete when introducing the idea of equity in the debates on adaptation, and the difficulties that are inherent to these perspectives.

For now, retributive and distributive justice would end pretty much to the same result, as the countries that are the most vulnerable to the impacts of climate change are also those that are the least responsible for it. However, when current sufferers will also become polluters, the differences between retributive and distributive justice will prove crucial in the way equity in adaptation is envisioned. For now, any deal on adaptation is likely to incorporate a bit a both perspectives: funding would be provided by industrialised countries, and allocated – on criteria that remain to be decided – to vulnerable countries, which happen to be developing countries. Additional funding could come from a tax on market mechanisms established in the framework of a global deal on climate. Such a deal might be efficient for now, but leaves the question of equity unanswered. ■

## References

- Adger, W. N., S. Huq, K. Brown, D. Conway, et M. Hulme. 2003. "Adaptation to climate change in the developing world" *Progress in Development Studies* 3 (3):179-195.
- Baer, P. 2006. "Adaptation: Who Pays Whom?" In W. N. Adger, J. Paavola, S. Huq et M. J. Mace (Ed.), *Fairness in Adaptation to Climate Change*. Cambridge (MA): MIT Press.
- Intergovernmental Panel on Climate Change. 2007. "Summary for policy-makers" In M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden et C. E. Hanson (Ed.), *Climate Change 2007: Impacts, Adaptation et Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- Mace, M. J. 2006. "Adaptation under the UN Framework Convention on Climate Change: the International Legal Framework" In W. N. Adger, J. Paavola, S. Huq et M. J. Mace (Ed.), *Fairness in Adaptation to Climate Change*. Cambridge (MA): MIT Press.
- Magnan, A. 2009. "La vulnérabilité des territoires littoraux au changement climatique: mise au point conceptuelle et facteurs d'influence", *Analyses Iddri* 01/2009. Paris: Institut du Développement durable et des Relations internationales.
- Rawls, J. 1993. «The Law of Peoples» *Critical Inquiry* 20 (1):36-68.
- Roberts, J. T., et B. C. Parks. 2007. *A Climate of Injustice. Global Inequality, North-South Politics, et Climate Policy*. Cambridge (MA): MIT Press.

## Equity in Adaptation to Climate Change

François Gemenne (IDDRI)

# IDDRI

 SciencesPo.

**FOUNDED IN PARIS IN 2001**, the Institute for Sustainable Development and International Relations (IDDRI) is born from three assumptions: the global changes resulting from human activities are unsustainable over the long-term; a complete transformation of development models is needed; this is possible if coherent policies are soon implemented at the global level to bring about changes in lifestyles.

IDDRI is an independent institute which aims to bridge the gap between research and decision-making: it uses scientific research to shed light on

political issues which have an impact on sustainable development and on key challenges to the transformation of development models. By coordinating dialogue between stakeholders whose interests are often at odds and mobilising teams of researchers through an extensive international network, IDDRI promotes a common understanding of concerns, while at the same time putting them into a global perspective.

IDDRI issues a range of own publications. With its *Idées pour le débat* collection, it quickly circulates

texts which are the responsibility of their authors; *Synthèses* summarize the ideas of scientific debates or issues under discussion in international forums and examine controversies; *Analyses* go deeper into a specific topic. IDDRI also develops scientific and editorial partnerships, among others *A Planet for Live. Sustainable Development in Action* is the result of collaboration with the French Development Agency (AFD) and editorial partnership with Les Presses de Sciences Po.

To learn more on IDDRI publications and activities, visit [www.iddri.org](http://www.iddri.org)