

Introduction: human rights and climate change

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Two starting points inform this collection of articles on human rights and climate change. The first is that, as a matter of simple observation, climate change will undermine – indeed, is already undermining – the realisation of a broad range of internationally protected human rights: rights to health and even life; rights to food, water, shelter and property; rights associated with livelihood and culture; with migration and resettlement; and with personal security in the event of conflict.¹ Few dispute that this is the case.

Moreover, the interlinkages are deep and complex. The worst effects of climate change are likely to be felt by those individuals and groups whose rights protections are already precarious.² This is partly coincidence. As it happens, the most dramatic impacts of climate change are expected to occur (and are already being experienced) in the world's poorest countries, where rights protections are too often weak for a variety of reasons. But the effect is also causal and mutually reinforcing. Populations whose rights are poorly protected are likely to be less well-equipped to understand or prepare for the effects of climate change, less able to lobby effectively for government or international action and more likely to lack the resources needed to adapt to expected alterations

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¹ On the rights of indigenous peoples under conditions of climate change, see IUCN (2008). On migration, see IOM (2008). On gender, see IUCN (2007). On conflict, see German Advisory Council on Global Change (2008); European Council Doc. 7249/08 Annex, *Climate Change and International Security*, Paper from the High Representative and the European Commission to the European Council (March 2008).

² The literature on climate change vulnerability is vast and raises significant human rights concerns. See, for example, Brooks *et al.* (2005); Guèye *et al.* (2007); Ribot (1995).

in their environmental and economic situation. A vicious circle links precarious access to natural resources, poor physical infrastructure, weak rights protections and vulnerability to climate change-related harms.

At another level, the close relation between climate change and human rights vulnerability has a common economic root. Rights protections are inevitably weakest in resource-poor contexts. But resource shortages also limit the capacity (of governments as well as individuals) to respond and adapt to climate change. Worse, where governments are poorly resourced, climate change harms will tend to impact populations unevenly and unequally, in ways that are *de facto* discriminatory because the private capacity of individuals to resist it and adapt to it differs greatly.

The construction of an international climate change regime, too, has rights implications. Mitigation policies have clear human rights dimensions. On the one hand, any strategy (or mix of strategies) that is successful at a global level will tend to determine the long-term access that many millions of people will have to basic public goods. On the other hand, choices made in the shorter term – such as whether and where to cultivate biofuels or preserve forests – will affect food, water and health security and, by extension, the cultures and livelihoods of particular persons in particular places.

Adaptation policies raise comparable human rights concerns. International funding for adaptation may be thought of as a compensatory or corrective response to potential or actual climate change-related human rights violations. Adaptive interventions before or during climate change impacts reduce the likelihood that rights infringements might result from those impacts; adaptation actions after the fact may provide redress where rights protection has already suffered. Indeed, discussions of adaptation at international and government level (as opposed to autonomous local measures) already assume a rights basis for policy construction, even if it is rarely articulated in those terms. At the same time, adaptation actions can themselves affect human rights; for example, if communities or individuals are forcibly removed from disaster or flood-prone areas, or, less forcibly, expected to conform to new economic policy imperatives (by adopting different cash crops or energy sources, for instance).

A second starting point is the observation that, despite the obvious overlaps outlined above, the mainstream climate change literature and debate has, until very recently, given little or no attention to human

rights concerns.³ This has been so even though the reports of the Intergovernmental Panel on Climate Change (IPCC) have examined the human impacts of climate change – in particular, on food, water and health – and have progressively expanded their sphere of reference to include the social as well as the physical sciences. Moreover, perhaps unavoidably, climate change analyses generally remain aggregated at continental or sub-regional level: the available information is still not sufficiently nuanced to cover the situation of individuals and communities who experience climate impacts directly as rights infringements. This, too, reflects the resource asymmetries that everywhere inform climate change discussion and research. Information is far more detailed for those areas likely to experience lesser impacts than for those where the consequences will be most devastating.

The paucity of rights-specific information is not, of course, merely a *cause* of the negligible analysis of the human rights dimensions of climate change, it is also a *consequence*. Given their salience to the main themes discussed in the IPCC's fourth assessment report (IPCC AR4), for example, it is remarkable that human rights are scarcely signalled in almost 3,000 pages of analysis.⁴ This would appear to indicate a near complete disciplinary disconnect, an impression borne out by a glance at the 10,000-strong participants' list for the thirteenth Conference of the Parties of December 2007, among whom no more than a tiny handful hailed from human rights backgrounds. Scanning for human rights 'language' is, of course, a poor analytical tool. Similar concerns may be addressed using different terms – and this appears to be at least partly true in this instance. Nevertheless, the choice of language and disciplinary lens will determine to some extent the relevance of certain kinds of information, orientation and response. Since the IPCC reports are

³ The situation is now changing. At its seventh session, in March 2008, the United Nations Human Rights Council passed a resolution on human rights and climate change. See UN Doc. A/HRC/7/L.21/Rev.1 (26 March 2008). The Office of the High Commissioner of Human Rights subsequently undertook 'a detailed analytical study of the relationship between climate change and human rights' for consideration by the Council. A series of projects investigating the link have been initiated at universities and non-governmental organisations and elsewhere.

⁴ Human rights are mentioned on a handful of occasions in the fourth assessment report (hereafter IPCC AR4, with each volume named after its relevant working group (WG)). The discussion of legal instruments for mitigation in ch. 13 (IPCC AR4, WGIII, 793–4) notes the existence of human rights litigation, without commentary. Passing references also appear, again without analysis, in IPCC AR4, WGII, ch. 15, 661; ch. 17, 736; and ch. 20, 818.

essentially literature reviews, the paucity of rights references no doubt indicates a mere vacuum rather than any conclusion, bias or failing on the part of the IPCC authors. That vacuum says as much about an absence of interest in climate change among human rights professionals to date as vice versa.

Why the silence on human rights?

What explains this mutual disinterest? The primary cause appears to be a kind of disciplinary path-dependence. The study of climate change began among meteorologists, became firmly entrenched in the physical sciences and has only gradually – if inevitably – reached into the social sciences, where the basic orientation has remained pre-eminently, though not solely, economic. Climate change negotiations have centred on consensus-driven welfare-based solutions, approaches that have historically thrived independently of, and in parallel with, the human rights register. Human rights organisations, for their part, are unlikely, as a matter of professional orientation, to take up issues framed as ‘hypothetical’ or scenario-based, quite aside from the disciplinary boundaries that have long existed between environmental and human rights law. It may be that consideration of new and additional *future* harms simply escapes the ordinary purview of human rights analysis. The confluence has consequently been marginal: on the few occasions that human rights are mentioned in the IPCC reports, it is almost exclusively in connection with harms that have already taken place.⁵

On reflection, scholars and practitioners in either discipline might identify plausible reasons for doubting that a ‘human rights approach’ would assist the formation of effective policies to address climate change. Five such reasons are set out below.⁶

The rights at issue are difficult to enforce. Climate change generally (if not exclusively) affects categories of human rights that have notoriously weak enforcement mechanisms under international law: social and

⁵ The ‘Inuit case’ is the primary example. See Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States, Submitted by Sheila Watt-Cloutier, with the Support of the Inuit Circumpolar Conference, on Behalf of All Inuit of the Arctic Regions of the United States and Canada (7 December 2005), 70 and the short discussion in IPCC AR4, WGIII, ch. 13.

⁶ These schematic points are not intended as expressions of legal doctrine or political fact.

economic rights; the rights of migrants; rights protections during conflicts.⁷ Even those rights that have strong protections, such as rights to life and to property, are not subject to their normal enforcement procedures, because the harms caused by climate change can be attributed only indirectly. In the absence of strong enforcement institutions, either at national or international level, it is not immediately obvious what human rights can add to a policy discussion that is already notably welfare-conscious, even if focused on the general good rather than on individual complaints.

Extraterritorial responsibility is hard to establish. Under human rights law, a person's government ordinarily has the primary duty to act when rights are violated. In the context of climate change, however, responsibility for impacts in the most vulnerable countries often lies not with the government nearest to hand, but with diffuse actors, both public and private, many of whom are located far away. Human rights law does not easily reach across international borders to impose obligations in matters such as these.⁸

Local accountability is hard to establish. Although countries that lack economic resources and infrastructure are least likely to be major emitters of greenhouse gases, they are most likely to suffer devastating effects of climate change – effects whose human consequences will be worsened by their low capacity to adapt. Resource constraints inevitably impair a state's ability to provide quality public goods to its population. This

⁷ Nevertheless, some human rights bodies, notably the European Court of Human Rights, have found rights violations due to environmental impacts, including of the right to health. See Shelton (2001), 225–31; Robb (2001). In a recent case, *Öneriyıldız v. Turkey* (App. No. 48939/99, decision of 30 November 2004), the Court found against Turkey for failing to act on an environmental impact assessment, thereby contributing to deaths caused by a methane explosion at a rubbish tip.

⁸ Existing case law suggests that states have responsibility for: (i) state actions taken in other countries; (ii) human rights protections in countries where they exercise 'effective control'; and (iii) some violations committed abroad by private actors who fall under their jurisdiction. See, for example, *Lopez Burgos v. Uruguay*, HRC Comm. No. R12/52 (1979), Views of 29 July 1981; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, ICJ Advisory Opinion of 9 July 2004; *Coard et al. v. United States*, IACHR Case No. 10.951, Reports No. 109/99, 29 September 1999; *Banković v. Belgium* (App. No. 52207/99, Decision of 12 December 2001). However, the case law is sparse and its applicability to climate-related harms is unclear. Alternative mechanisms involving 'long-arm' domestic jurisdiction – such as the US Alien Tort Claims Act – may be of limited value. Although state responsibility for extraterritorial violations of social and economic rights has not been widely discussed, the particular harms caused by global warming may generate plausible claims of this kind.

problem, which underpins the inadequate fulfilment of social and economic rights in some countries, has led to the notion of ‘progressive realisation’ of those rights under international law. Under existing circumstances, however, climate change is likely to lead to a *progressive deterioration* of those same rights. If a government cannot be held accountable for failing to fully protect those rights in the ordinary course, it will surely be even harder to hold it responsible for circumstances it did not create.⁹

Emergency conditions limit the application of human rights law. The most severe climate change impacts will be catastrophic – drought, floods, famines, mass migration, wars – and will affect large numbers of people. In such circumstances, a common response is to declare an emergency. International human rights treaties and most national constitutions typically allow for the suspension (‘derogation’) of many human rights in times of emergency.¹⁰ Emergency regimes are habitually critical or dismissive of human rights constraints, tending instead to adopt an ends-oriented and charity-centred language of humanitarian relief. Governments are empowered to act expediently, with less regard to individual rights and interests that might act as a brake on achieving the greater good. Human rights, traditionally conceived as a bulwark against expansive state discretion, become less relevant as *legal* tools at such times (although their rhetorical force may increase). Indeed, some human rights traditionalists might be expected to seek limits on climate action on precisely the grounds that it will empower government, both nationally and internationally, at the expense of individuals.¹¹

*Rights may conflict.*¹² Human rights protect others besides those who are potentially harmed by climate change. Economic actors are also rights-holders and it is foreseeable that some of them will invoke the human right to property or peaceful enjoyment of their possessions to

⁹ Some of these vulnerable countries are themselves becoming significant GHG emitters, notably China and to a lesser extent India and Brazil. In these cases, the relevance of human rights law will depend increasingly on the legal expression and enforcement capacity of human rights norms in the countries in question, which varies dramatically from place to place.

¹⁰ For accounts of the applicability of human rights during emergencies see IASC (2006) and OHCHR (2003), ch. 16.

¹¹ It has become increasingly common to adopt the language of emergency when referring, not only to climate change effects, but to the phenomenon in its entirety. Even if this language is intended to be emotive rather than literal, it tends to remove climate change impacts from the ordinary reach of human rights law, at least rhetorically.

¹² Thanks to Dinah Shelton for much of the substance of this paragraph.

prevent or reduce action on climate change. The right to property has been given a broad interpretation by international tribunals and could be asserted by those who have been licensed to act in ways that harm the environment. Other human rights claims too – such as to culture, or freedom of religion, or family reunion – may bring individuals into conflict with climate change policies. All of these rights, like other rights, may be limited for the public good, and struggles can be expected over exactly where the line should be drawn in such cases. Adversarialism is, of course, part of the ordinary human rights landscape. As climate change policies will necessarily generate choices about the distribution of costs and benefits, the invocation of human rights can be expected to produce struggles, pitting interest groups against one another in a way that is markedly different from the consensus-building and compromise that has traditionally guided climate negotiations.

The above objections are not negligible. Legal scholars in particular will quickly recognise a long-standing dichotomy between formal and substantive justice: the hard rule of law formalism of international human rights law, on the one hand, versus the softer, substantivist, policy orientation of the UN Framework Convention on Climate Change (UNFCCC), on the other hand. The ethical language of ‘equity’ and ‘common but differentiated responsibilities’ (CBDR) of the UNFCCC has a quite different texture from the moral certainty and universalism of statements like the Universal Declaration of Human Rights (UDHR) and the international human rights covenants. Indeed, ‘equity’, as it appears in the UNFCCC, might be thought difficult to reconcile with the formal equality that underpins human rights law, much as the UNFCCC’s distinction between ‘Annex I’ (wealthy or ‘developed’) and ‘non-Annex I’ (‘developing’) countries seemingly runs counter to the universal obligations held by all countries under human rights law. Climate change law and policy have striven to avoid absolute or universalist claims of a kind that pepper human rights law and writing, in favour of a flexible and discretionary ‘framework’ language better suited to guiding compromise and consensus.

Yet these distinctions need not necessitate a sharp divide between the disciplines; indeed, as these two areas of law and practice are forced into contact by circumstance, the distinction between them is likely to narrow. A first response to the concerns outlined above might thus be assertive: human rights law is relevant to climate change for the simple reason that climate change affects and will increasingly impinge upon human rights. A second might be predictive. As harms due to climate

change are felt, it is likely that those affected will turn to the hard language of human rights enforcement mechanisms for protection. Indeed, this is already happening.¹³ At the same time, while neither of these factors comes with a ready-made account of the appropriate posture to take at the interface of the two regimes, the unavoidability of negotiation between them is likely to bring cross-fertilisation. There is plenty of scope for exchange and evolution.

The present book is a first attempt to examine this interface from an interdisciplinary perspective, by picking out some areas where interaction between these two disciplines is to be expected, examining where it is already taking place and forecasting the sort of techniques and strategies it may engender or adopt. Before summarising the book's contributions, this Introduction provides some further background on the extent to which rights language has already featured in the climate change debate and the legal framework within which human rights and climate change must negotiate – before turning to the human rights relevance of the evolving climate change adaptation and mitigation frameworks.

Rights, needs, development and the state

Human rights and climate change draw on quite different vocabularies, each with their own referential history and associations: terms familiar from one register may jar in the other, or mean different things to different audiences. A quick review of the key terms as they appear in this and subsequent articles may, therefore, be useful.

'Human rights', as used here, refer to a specific set of claims about the entitlements of all human beings regardless of 'race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status'.¹⁴ These claims, initially laid out in the 1948 Universal Declaration of Human Rights (UDHR), are understood to carry both a widespread moral authority, on the one hand, and a (somewhat more circumscribed) legal authority, on the other hand. As the UDHR is not legally binding, the primary source texts under international law are the 1966 International Covenants on Civil and Political Rights (ICCPR) and on Economic, Social and Cultural Rights (ICESCR). The two Covenants are legally binding on all states that have ratified

¹³ See, for example, the Inuit case (footnote 5 above).

¹⁴ Common Article 2(1) of the International Covenant on Civil and Political Rights and the International Covenant on Social, Cultural and Economic Rights.

them – that is, the vast majority of the world’s countries – and are supplemented by further binding treaties that protect the rights of children, migrant workers and people with disabilities, and that prohibit torture as well as racial and gender discrimination. Regional binding human rights treaties also exist within Africa, the Americas and Europe. All these texts are supported by the case law of international, regional and national tribunals, by a body of ‘soft law’ (that is, non-binding resolutions and other texts from international bodies such as the UN General Assembly), and, to a degree, by the doctrinal analyses of international lawyers and scholars.

The human rights laid out in these documents are generally referred to as ‘civil and political’, on the one hand, and ‘social, economic and cultural’, on the other hand. The former include rights to life, liberty, property, freedom of expression and assembly, political participation, a fair trial, privacy and home life and protection from torture. The latter include rights to work, education, social security, as well as ‘enjoyment of the highest attainable standard of physical and mental health’ and ‘adequate food, clothing and housing, and ... the continuous improvement of living conditions’. Whereas the former rights are typically guaranteed through judicial mechanisms, including at international level, the latter have generally been achieved through domestic welfare mechanisms rather than courts.¹⁵ Social security has typically been more available in wealthy than poorer countries; the latter are exhorted, under the ICESCR to achieve the ‘progressive realization’ of these rights within the bounds of the means available to them.

Human rights, therefore, capture a range of concerns that are evidently relevant to climate change, including many that have elsewhere been framed as ‘basic needs’. For example, the assertion in the first Article of both Covenants that ‘[i]n no case may a people be deprived of its own means of subsistence’ is clearly relevant where a changing climate is having precisely this effect.¹⁶ To speak of basic subsistence needs (water, food, healthcare, shelter and so on) in terms of rights does not merely mean adopting a legal vocabulary in place of a charitable one. In principle at least, it also implies referral to a body of internationally agreed norms that have raised those needs to the level of entitlements for

¹⁵ Social rights have increasing traction in some national and regional judiciaries, however, and a new Optional Protocol to the ICESCR would create an international forum for individual complaints. See footnote 7 above.

¹⁶ My thanks to Kate Raworth for this observation.

all. Nevertheless, these entitlements do not translate unproblematically into corresponding obligations, much less into fulfilled demands. Under human rights treaty law, duties lie with states toward citizens – they are not straightforwardly attributable to other corporate (non-state) actors or to the ‘international community’ at large. Each state that has ratified the ICESCR has a duty to ‘respect, protect and fulfil’ the rights laid down in the treaty for those within their jurisdiction.¹⁷ The obligation to *respect* a right is understood to mean that the state must take no steps that would violate that right; the obligation to *protect* requires that states act to ensure that other actors, including private and international, are not permitted to violate the right; the obligation to *fulfil* requires that states take steps over time to ‘progressively realize’ rights to food, shelter, health, education and so on.¹⁸ The Committee on Social, Economic and Cultural Rights, the UN body that oversees the ICESCR, commonly requests that states demonstrate steady progress in the fulfilment of these rights.

The ICESCR is not entirely silent on the role that wealthier countries might play in securing the social and economic rights of those living in poorer countries, where protection of these rights is often weak. Article 2 of the ICESCR requires states to ‘undertake steps individually and through international assistance and cooperation’ to fulfil these rights and to use ‘the maximum available resources’ to that end. But while the treaty, reinforced by the Committee’s commentaries, thus encourages wealthier states to assist other states to fulfil social and economic rights, the extent to which this exhortation comprises an obligation remains deeply contested. Although social and economic rights are clearly relevant to economic development in ‘developing countries’, the language of rights has been only partially integrated into development discourse. (The Committee provides guidelines on the integration of human rights assessments into development planning.¹⁹) In practice, however, international financial institutions, multilateral development banks and

¹⁷ There are 149 states parties to the ICESCR. The United States is not among them, having signed but not ratified it.

¹⁸ See, for example, UN Docs, E/C.12/1999/5, CESCR General Comment No. 12, The right to adequate food (Article 11) (12 May 1999); E/C.12/2002/11, CESCR General Comment No. 15, the right to water (Articles 11 and 12) (2002); E/C.12/2000/4, CESCR General Comment No. 14, the right to the highest attainable standard of health (Article 12) (11 August 2000).

¹⁹ UN Doc. E/C.12/1991/1, Revised general guidelines regarding the form and contents of reports to be submitted by states parties under Articles 16 and 17 of the International Covenant on Economic, Social and Cultural Rights (17 June 2001).

private foreign investors have largely refused to treat international human rights law as legally binding upon their activities, and there is little recourse under international law to require them to do so. Indeed, the very applicability of international human rights law to these actors has often appeared uncertain, given that they are neither states nor, so it is argued in some cases, subject to specific territorial jurisdictions.

More than any previous issue, climate change places the question of human rights fulfilment firmly within the context of development policy.²⁰ This is because tackling climate change will require revisiting development models and making far-reaching decisions about access to and use of resources, questions which in turn have direct human rights consequences. But international law does not provide a clear means by which to evaluate development activities for their impacts upon human rights nor to hold the principal development actors to account on this basis.²¹ This partly explains, no doubt, the relative neglect of human rights in climate change discussions. However, it also alerts us to the importance, as we examine climate change, of the first, ethical, deployment of the language of 'human rights' – for it is frequently used in situations where hard legal obligations are unavailable or disputed. Indeed, the assertion of universal human rights is not, at base, a legal assertion at all; it is first a moral or political assertion, and as such frequently carries greater weight and authority than its narrower legal cousin. In the context of climate change, the fact that it is precisely this moral or ethical force that is most frequently invoked does not, of course, indicate that hard human rights law is inapplicable; rather, it draws a focus to the potential for a significant gap between human rights as proclaimed and discussed, and human rights as practised in law.

From this perspective, state obligations under the human rights and climate change regimes – though they differ markedly – may turn out to be complementary. Under the UNFCCC (as with most international treaties) states' primary obligations are held toward one another. Whereas human rights also carry formal interstate obligations, their duties are primarily held toward citizens (and, in some cases, other inhabitants or entrants), and so are generally kept, broken, or challenged at national level. States' human rights duties toward their citizens do, however, carry into the international arena. This is apparent not only in ICESCR Article 2, but also

²⁰ This argument is followed in more detail in Chapter 1 below.

²¹ The literature on the human rights obligations of the main development actors is voluminous. For a good recent overview, see Tan (2008).

in the Aarhus Convention, which guarantees human rights to information and public participation in environmental matters; Article 3(7) requires that its parties ‘promote the application’ of its principles in ‘international decision-making processes’ and international organisations. State responsibility for protecting human rights thus extends, in principle, into the negotiation of other regimes, particularly where these will have direct human rights consequences, such as in finding a solution to climate change. Meanwhile, as we shall see in what follows, wealthy states have concrete obligations in the climate change regime to assist poorer states in achieving developmental goals – which turn out on inspection to have much in common with basic human rights.

A final note on language: here and elsewhere in this book, the text follows the UNFCCC in speaking of ‘developed’ (or Annex I) and ‘developing’ (non-Annex I) countries even though these categories are clearly simplistic. Neither category is monolithic: each contains countries that have very different characteristics in terms of those who need most protection from climate change harms and those who bear most responsibility. Similar differences exist within individual countries, both rich and poor. Elite groups in poor countries occupy a disproportionate share of the environmental space as they do in rich countries, and these groups are often allied. Powerful political and economic links exist between ‘North’ and ‘South’; and the major companies in large developing countries are increasingly significant global producers in their own right. Finally, the responsibility and negotiating stances of outlier countries, particularly those, ‘developed’ and ‘developing’ (or ‘emerging’) alike, that have been acting with least apparent regard for the shared environment need to be viewed in a distinct and nuanced manner.

Rights language in the climate change debate to date

Several attempts have been made to place rights at the centre of the climate change debate. These have not, however, generally been *human rights*-focused: that is, they have not been based upon or referred to human rights law, jurisprudence, policy experience or practice. When human rights have been invoked, it has been in a schematic fashion, as a set of background ethical assumptions that, for example, everyone has an equal entitlement to ‘fair treatment’ in a ‘just’ climate change regime, particularly in the context of mitigation options.

A general premise underlying many rights-based approaches to climate change mitigation is the distinction between ‘luxury emissions’ and

'subsistence' or 'survival emissions' first put forward in 1991 by the India-based Centre for Science and the Environment and further consolidated by the political philosopher Henry Shue.²² Rather than assuming that everyone has an equal right to emit greenhouse gases in a world where overall emissions must be limited, this approach distinguishes the usage of carbon fuels (and other greenhouse gas (GHG) sources) to fulfil basic human needs from those used to perpetuate luxurious lifestyles. Whereas the former might be regarded as a fundamental (or human) right, the latter cannot be. This view has proved helpful by contrasting excess GHG use among some populations with continued need for future GHG use in others. The problem then becomes one of redressing an imbalance, which in turn involves inter-state obligations. This case might arguably be strengthened by linking 'subsistence emissions' to the satisfaction of basic human rights, such as to food, health, water and so on – on the grounds that these rights are already widely accepted and governments are already bound by them. However, there have been curiously few attempts to explore this connection. One reason for caution in reading human (that is, social and economic) rights into any right to 'subsistence emissions' might be a concern that obligations would then be deflected from the governments of countries producing excess luxury emissions onto those in low-emission countries, who are less responsible for climate change.

The best known rights-based approach to climate change mitigation is the 'contraction-and-convergence' (C&C) framework presented by the Global Commons Institute (GCI) at the second Conference of the Parties to the UNFCCC in 1996. The idea, very briefly, was to articulate a long-term mitigation strategy that, while reducing the overall amount of GHG in use over time, would *also* tend toward equalising GHG emissions per person on a global scale. In such a regime, as overall global emissions dropped, the fall would be more precipitate in wealthy countries, while usage in poorer countries would continue to rise for a period in line with their greater development needs – toward convergence between rich and poor countries at some point in the future. Initially, GCI abjured the term 'rights' in reference to C&C, because they regarded the atmosphere as a global commons that 'cannot be appropriated by any state or person'.²³

²² Agarwal and Narain (1991); Shue (1993).

²³ AGBM/1.9.96/14, 'Draft Proposals for a Climate Change Protocol based on Contraction and Convergence: A Contribution to Framework Convention on Climate Change', Ad Hoc Group on the Berlin Mandate, 1996, available at: www.gci.org.uk/contconv/prot-web.html. The authors suggest using 'quotas' rather than rights.

Today, however, GCI claims that C&C ‘establishes a constitutional, global-equal-rights-based framework for the arrest of greenhouse gas emissions’.²⁴ This new formulation appears to be in line with a general shift toward the language of rights in the climate change arena.

Whereas the ‘rights’ at issue in models such as C&C amount to speculative universal ‘rights to emit’ GHGs, with no obvious basis in human rights law, they might be framed as deriving from the ‘right to development’, which is mentioned somewhat obliquely in the UNFCCC.²⁵ Such a derivation would depend on demonstrating that ‘subsistence emissions’ were in fact required to achieve basic human rights, a claim that is at least plausible. The right to development is a difficult and somewhat confusing notion. In international law, it has had, since 1986, declaratory (non-binding) status, and has been a subject of protracted and sometimes polarising discussion within the United Nations.²⁶ But whatever its doctrinal status, discussion of the right to development has evolved with time, albeit rather as a space for negotiating the differing interests of different parties in the international system rather than as law in the ordinary sense. For many, particularly in countries most vulnerable to climate change, it still provides a natural hook for assessing the rights implications of climate change and the policy premises that should underlie solutions.

One recent model for GHG mitigation is explicitly based upon the right to development: the ‘greenhouse development rights’ (GDR) framework put forward by Tom Athanasiou, Paul Baer and Sivan Kartha in 2007.²⁷ They suggest that any climate change regime should, while curbing GHG emissions, give priority to assuring the long-term fulfilment of human rights (to food, water, health and shelter) associated with current low levels of development. In terms of allocating rights and duties, the GDR framework is less concerned with convergence toward equivalent emissions than with ensuring that all countries are permitted (and aided, where necessary) to reach a comparable ‘development

²⁴ See www.gci.org.uk.

²⁵ UNFCCC, Article 3(4): ‘The Parties have a right to, and should, promote sustainable development.’ In this ambiguous wording, however, the guaranteed right appears to be the state’s ‘right to promote’ development.

²⁶ See Salomon (2005); contributions to Andreassen and Marks (2006); also Alston (2001), 283.

²⁷ Baer *et al.* (2007). The report was co-produced by the Stockholm Environmental Institute, EcoEquity and Christian Aid.

threshold' at which basic rights might be fulfilled.²⁸ The GDR framework offers pointers for determining the level at which different countries should cap their GHG emissions and emphasises the importance of technology transfer, swift and substantial adaptation funding and other forms of assistance. These require levies on wealthy countries, which the authors calculate on the basis of excess GHG usage. In common with C&C and the luxury/survival emissions frameworks, the GDR authors do not examine vulnerability beyond state level; the 'development threshold' is based on national gross domestic product (GDP) per capita and does not account for distribution within states. From this perspective, GDR is not truly human rights centric: it works with aggregate rather than individual effects and harms.

Finally, a rights-based approach has, in fact, been adopted at the heart of the climate change regime through the construction of emissions markets, as introduced in the Kyoto Protocol. The capacity to buy or sell emission reductions amounts in effect to a right to emit GHGs for those who obtain emission credits. As noted above, when rights to the atmosphere were put forward in the early climate change debates, they were consistently treated as fundamental, universal and inalienable. Yet, the legal incarnation of use-rights to the atmosphere has instead taken the very different form of exclusive tradable commodities. These rights are not human rights – they are alienable, as opposed to inalienable, and they are not conceived of as universal, but bestowed upon only a comparatively tiny section of the global population. (Nevertheless, in practical terms, such rights amount to quite concrete 'rights to develop' as it is access to GHGs that currently, and for the foreseeable future, drives development). Moreover, since rights to emit are themselves a source of income, the creation of these rights appears to bestow rewards upon the perpetrators of climate change, who have so far been the overwhelming beneficiaries of this innovation. The ease with which exclusive alienable rights to emit have passed into international law (through the Kyoto Protocol) arguably demonstrates the comparative facility of establishing new property rights under international law as compared with new human rights.

In summary, although human rights appear to play a more prominent role in each successive rights-sensitive proposal on climate change, the relevant accounts have remained generally utilitarian, relying on cost-benefit and other welfare analyses. They have drawn on human rights

²⁸ The 'threshold' is schematically set at US\$9,000 per capita at purchasing power parity.

primarily for their normative value, to underpin models involving various kinds of distributional justice, but have given little weight or effect to their achieved status as positive international law. Existing approaches mobilise human rights rhetoric to underpin a just global climate change regime; they do not examine specific human rights violations resulting from climate change or seek to inject human rights principles into climate change law. At bottom, they invoke human rights in order to spur action on climate change rather than advocating climate change action in order to prevent human rights consequences.²⁹

Human rights and climate change adaptation

In thinking through the human rights implications of climate change, it appears sensible to begin with the scientific and policy terminology that has already evolved within the climate change arena to describe the phenomenon and responses to it, and to examine where human rights considerations might fit within these realms, even if they have been absent to date. This and the following section look, respectively, at two key policy areas of climate change discussion: adaptation and mitigation.

Climate change ‘adaptation’ refers to actions taken to adjust lives and livelihoods to the new conditions brought about by warming temperatures and other physical and weather-related events associated with climate change.³⁰ It is commonly used in three distinct ways. It refers, first, to actions that individuals take on their own initiative. Confronted by warmer weather or more severe storms, for example, people may choose to use new materials in home construction or switch crops or livelihoods. Second, to government measures designed to achieve the same or similar ends (the Netherlands plans to build sea-walls to protect against rising tides, for example). Third, adaptation has a more technical meaning derived from the UNFCCC and subsequent negotiations. Because the resource imbalance between the perpetrators of climate change and its victims was recognised from the outset, the UNFCCC included a requirement that wealthier countries should provide ‘new and additional funding’ to poorer countries

²⁹ Some have called for adaptation funding as ‘compensation’ for harms inflicted by the actions of the rich world. This model, too, invokes human rights as an ethical rather than legal imperative. See, for example, Oxfam International (2007).

³⁰ The third IPCC Assessment Report defined adaptation as ‘adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. [Adaptation] refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change’. Smit and Pilifosova (2001), 877–912.

to enable them to address climate change.³¹ This funding was to be ‘additional’ to official development assistance (ODA). The practical content of ‘additionality’, as it is called, has remained elusive, however. This is partly because there is no clear baseline, since few wealthy countries have reached the agreed international ODA target of 0.7 per cent of GDP, and partly because very little adaptation funding has ever materialised. In what follows, adaptation is used in this third sense, to refer to the elaboration of an international policy that will deliver adaptation funding to the countries that most need it, and to programmes that such funding might support.

Extrapolating from existing ‘climate sensitive’ ODA, the World Bank estimates that adaptation is likely to cost anywhere from US\$4 billion to \$37 billion each year.³² Yet, at present adaptation funding has not approached even the lower end of this scale; and what has been pledged has not been committed or spent. Four adaptation funds exist, all managed by the Global Environmental Facility (GEF), a World Bank-hosted entity that works through three implementing agencies (the Bank, United Nations Development Programme (UNDP) and United Nations Environment Programme (UNEP)) to channel multilateral funding for projects related to the principal multilateral environmental treaties.³³ Climate change is one of six GEF focal areas, but adaptation has consistently been a much lower priority for the GEF than mitigation.³⁴ Expenditure has been, and remains, excruciatingly slow, application procedures are complex and many eligible countries are not aware of what is on offer or how to access these funds.³⁵

³¹ UNFCCC Article 4(3). This paragraph, and much of the section, relies on Mace (2005); Müller (2006) and (2007).

³² Cited in the *Stern Review* (2006), Part V, Chapter 20, 442.

³³ See for a good overview, *Stern Review*, Part VI, 557. Known as the Rio Conventions because they were all signed in Rio in 1992, these are the UNFCCC, the UN Convention on Biodiversity and the UN Convention to Combat Desertification.

³⁴ Partly to address criticism of its lack of an effective adaptation policy, the GEF introduced a Special Priority on Adaptation (SPA) fund in 2005. The SPA (which never graduated beyond a ‘pilot’ phase), was available to developing countries on application, subject to a complex assessment of their capacity. An original allocation of US\$50 million to the SPA had still not been spent by the end of the initial pilot period in 2006, but no further funds were added for the next ‘replenishment’ period (2007–2010). See FCCC/CP/2007/3, Report of the Global Environment Facility to the Conference of the Parties, 13th session Bali, 3–14 December 2007 (27 November 2007), para. 8.

³⁵ For example, only one of ten GEF-supported climate change projects in FY 2006–2007 concerned adaptation through the SPA, amounting to just US\$1 million of a total US\$81 million spent on climate change projects. The rest was geared toward mitigation (developing countries do not have mitigation obligations). *Ibid.*, paras. 16–17. On the other funds – the Special Climate Change Fund (SCCF) and Least Developed Country Fund (LDCF) both created under the UNFCCC – see *ibid.*, paras. 19–27 and Mace (2005).

The GEF has also provided US\$200,000 to individual countries for the preparation of National Adaptation Programmes of Action (NAPAs), designed in-country to address urgent and priority adaptation needs (thirty-two have been finished to date).³⁶ On the basis of NAPAs existing at the time, the *Stern Review* projected that US\$1.3 billion would be required for the 'immediate' adaptation needs of the forty-seven least developed countries (LDCs).³⁷ Again this has not been forthcoming.³⁸

It is widely recognised that adaptation funding cannot be delivered effectively until it is known where assistance will bring the most benefit. Unfortunately, it is just this information that is generally lacking. The reason, as with so much in the climate change debate, is resource related. Because expertise and financing are concentrated in wealthy countries, the latter have much more complete information about the likely impacts of climate change and suitable responses to it, compared with sub-Saharan Africa, for example. The IPCC reports cite countless practical examples of adaptation in rich countries, many of which are already under way; forecasts for poorer countries, by contrast, remain vague and sweeping. The *Stern Review* makes the point as follows:

Adaptation will depend on comprehensive climate monitoring networks, and reliable scientific information and forecasts on climate change – a key global public good ... [D]eveloping-country governments should provide information to their own citizens but currently lack the capacity to do this, demonstrated by the shortage of weather watch stations. The international community should therefore support global, regional and national research and information systems on risk, including helping developing-country governments build adequate monitoring and dissemination programs at the national level. Priorities include measuring and forecasting climatic variability, regional and national floods, and geophysical hazards.³⁹

³⁶ Another Adaptation Fund was created through the Kyoto Protocol, to be replenished from a 2 per cent levy on clean development mechanism (CDM) projects. The GEF acts as the Fund's Secretariat, subject to a Board with strong developing country representation, a compromise reached at Bali. To these funds might be added the World Bank's Pilot Program for Climate Resilience, one of its Climate Investment Funds introduced in 2008.

³⁷ *Stern Review*, 442.

³⁸ By late 2007, US\$0.6 million (of a pledged total of US\$163 million) had been allocated to preparing NAPA projects in four countries. The GEF notes that 'approximately US \$150m remains to be programmed to meet the urgent and immediate adaptation needs of the LDCs under the LDCF'. FCCC/CP/2007/3, para. 27.

³⁹ *Stern Review*, Part VI, 563.

The list of priority areas identified in the *Stern Review* demonstrates the scale of the challenge. Physical science data must necessarily precede, and provide a base for, research on social and rights impacts. But the latter, too, are critically important, since the primary purpose of policy in this area is to reshape the human, social and economic environment. In this context, human rights may provide a compass for policy orientation, helping to decide where research should be directed and how to prioritise policy. So while it is vital to know at what temperature increase we might expect severe droughts to occur or sea levels to rise, for example, it is no less important to learn who these events will affect and where precisely, what institutional or other support is available and where further support will be most useful.

These considerations fit naturally within the agenda outlined in the Bali Action Plan of December 2007, which calls for:

Enhanced action on adaptation, including ... International cooperation to support urgent implementation of adaptation actions, including through vulnerability assessments, prioritization of actions, financial needs assessments, capacity-building and response strategies, integration of adaptation actions into sectoral and national planning, specific projects and programmes, means to incentivize the implementation of adaptation actions, and other ways to enable climate-resilient development and reduce vulnerability of all Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and ... countries in Africa affected by drought, desertification and floods.⁴⁰

Each of the priority areas identified here arguably touches upon human rights concerns; but this not only indicates the likely fruitfulness for human rights scholars and organisations of attending to climate change, it also points to the potential usefulness to the climate change policy arena of attention to the phenomenon's human rights implications.

The human rights dimensions of mitigation policies

Perhaps inevitably, the greater part of climate change negotiation has been devoted to 'mitigation'. This term refers to the actions and policies that seek to prevent global warming from causing 'dangerous

⁴⁰ Decision -/CP.13, Bali Action Plan (Advance Unedited Version), Article 1(c)(i).

anthropogenic interference' with the climate, as required by the UNFCCC.⁴¹ Although no 'dangerous' threshold is mentioned in the treaty, a rise of average global temperatures by no more than 2°C above pre-industrial levels was until recently cited in most policy documents (it seems increasingly unlikely that this target will be achieved). Before investigating the human rights dimensions of mitigation policies, the scientific and policy context is briefly set down in the following two paragraphs.⁴²

In the IPCC's 2007 Fourth Assessment Report (AR4), GHG emission levels in the atmosphere were estimated at 455 parts per million of carbon dioxide equivalent (ppm CO₂e),⁴³ almost double pre-industrial levels and rising fast. Current concentrations of GHGs have already warmed the globe and will lead to further warming even if emissions were stopped immediately. However, high levels of emissions are certain to continue in the short to medium term, and discussion has, therefore, centred on identifying a point at which emissions concentrations might be stabilised in future to keep warming to a minimum. There is little agreement on the appropriate stabilisation level: different studies reach different conclusions, and all are couched in the language of probability. Recent estimates suggest that if emissions levels are stabilised at 445–490 ppm CO₂e there will be an even chance (50 per cent) that the average global temperature rise will still exceed 2–2.4°C.⁴⁴ At 550 ppm CO₂e, the probability of temperatures exceeding 2°C is closer to 80 per cent, and there is an even chance that average global temperatures will rise by 3°C over pre-industrial levels.

Keeping emissions to 450 ppm CO₂e presents an immense political challenge and few rich country governments are currently aiming at national emissions targets consistent with a global peak of 2°C. The consequences of overshooting will be much worse for some, however, than for others, and is likely to destroy life and livelihoods on some small islands and certain Arctic regions (none of those affected can take the needed policy steps alone). According to IPCC AR4, even a loose target

⁴¹ For a discussion, see the *Stern Review*, Part III, ch. 13, 289.

⁴² This account relies on IPCC AR4, WGIII, Technical Summary, and on the *Stern Review*, Part III, especially ch. 7–10. More detailed information is provided in IPCC AR4, WGIII, ch. 1–3.

⁴³ The figure of 455 ppm CO₂e accounts for the intensity of *all* GHGs in the atmosphere, measured as equivalents of carbon dioxide. The amount of carbon dioxide itself is estimated at 379 ppm. IPCC AR4, WGIII, Technical Summary, 27.

⁴⁴ See Table TS.2 in IPCC AR4, WGIII, Technical Summary, 39. Also UNDP (2007), 46.

of 490–535 ppm CO₂e is formidably daunting. For that, total global emissions must still peak by 2020, and then fall sharply by 2050, by between 50 and 85 per cent from 2000 levels.⁴⁵ Over that same period, the world's population is expected to increase by about 50 per cent, to 9 billion or so, while economic growth, particularly in fast growing economies such as China's, will drive energy demand ever higher. Viewed in this light, the mitigation task is truly gargantuan. Despite multiple upward pressures – population, economic growth and development – emissions will need to fall dramatically between 2020 and 2050, by at least 85 per cent from 2000 levels in rich countries, given that elsewhere they must initially rise. By about 2030 it is unlikely that emissions levels can increase anywhere: in developing countries, too, they will need to have peaked.⁴⁶

It is a widely accepted principle, entrenched in the UNFCCC, that developed countries – which historically contributed most to the problem – have greater obligations to mitigate than developing countries. Greenhouse gas emissions can be reduced in several ways. At present, negotiations seek to establish emissions caps. Though these have yet to be agreed, binding national targets were accepted by those developed countries that ratified the Kyoto Protocol.⁴⁷ Having accepted commitments, individual countries can meet their obligations in a variety of ways. Mitigation strategies may include fuel switching (to biofuels, renewable energy sources or possibly nuclear), carbon taxes and forestry growth or preservation. But while there is general consensus that developing countries should not have to compromise their future economic growth, there is little agreement on how sharp global cuts are to be achieved while growth, especially in poorer countries, continues.

⁴⁵ Even these figures may be optimistic. Jim Hansen, a leading climate commentator, now claims that current CO₂ levels are already unsustainable: 'If humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted, paleoclimate evidence and ongoing climate change suggest that CO₂ will need to be reduced from its current 385 ppm to at most 350 ppm [CO₂ (not CO₂e)] ... If the present overshoot of this target CO₂ is not brief, there is a possibility of seeding irreversible catastrophic effects'. See Hansen *et al.* (2008).

⁴⁶ IPCC AR4, WGIII, Technical Summary, 90.

⁴⁷ Developed country parties to the Kyoto Protocol agreed to reduce their emissions by varying amounts from 1990 levels by 2012. Not all will reach their targets. At time of writing, no framework has been agreed for the post-2012 period.

What does the choice of mitigation policies imply for human rights? Human rights fulfilment in any given state depends upon a basic level of economic wherewithal and stable access to resources. However, a mitigation regime – or mix of regimes – will work only if it succeeds in reorienting productive capacities and access to resources on a massive scale. Whatever the mix of mitigation strategies arrived at, if effective it will have two broad effects. First, it will drastically reduce access to and dependence upon fossil fuels – currently the most reliable and cost-effective fuel source available (measured in terms of energy yield against cost of extraction/generation). Second, it will curtail the development policy options available to governments everywhere – an implication that matters especially in those countries that have not yet reached a level of economic growth sufficient to guarantee basic needs. Not only will climate change mitigation policies profoundly influence the allocation and use of scarce resources, they will do so far into the foreseeable future. In short, climate change mitigation efforts will reorient and fix national development paths over the long term, and these in turn will tend to set limits on the capacity of countries to fulfil basic human rights, albeit to different degrees.

This linkage between climate change mitigation, development paths and human rights fulfilment is recognised explicitly in IPCC AR4:⁴⁸

Development paths underpin the baseline and stabilization emissions scenarios discussed [elsewhere in the report] and are used to estimate emissions, climate change and associated climate change impacts. For a development path to be sustainable over a long period, wealth, resources, and opportunity must be shared so that all citizens have access to minimum standards of security, human rights, and social benefits, such as food, health, education, shelter, and opportunity for self-development.

Ultimately, as the IPCC report acknowledges here (without elaboration), the ability to orient and implement any mitigation policy depends upon identifying and prioritising acceptable social outcomes in advance, human rights among them. Human rights fulfilment depends upon development capacity, and that consideration must in turn guide the choice of paths toward carbon stabilisation. Latent within this view is the understanding that human rights protection is costly.⁴⁹ It is not so much a question of a right *to* development but a more basic concern: without development there can be only limited

⁴⁸ IPCC AR4, WGIII, 696.

⁴⁹ For a good account, see Holmes and Sunstein (1999).

fulfilment of human rights (indeed, this is the principle underlying ‘progressive realisation’).⁵⁰

Moreover, although there is consensus that any mitigation strategy will have distributional consequences, to date these have remained largely underexplored. The fourth IPCC report is explicit on this point too. It suggests that distributional outcomes should be one of four criteria for evaluating mitigation policies, but admits that comparison in terms of this criterion ‘has proved difficult – and ranking impossible’ because, according to the report’s authors, assessment is inevitably subjective.⁵¹ This is no doubt true, although it is also true that there is a degree of subjectivity in evaluating *any* of the criteria. Even so, the charge of subjectivity takes little account of the relation between resource distribution and human rights fulfilment, on the one hand, and the fact that the parties to any agreement also (for the most part) already *have* binding human rights obligations to which they must attend, on the other hand. Indeed, human rights standards may offer a way to manage the dilemma of subjectivity – in principle, they provide benchmarks of acceptable outcomes based on widely-agreed principles and, moreover, on legal stricture. If a global regime proceeds without integrating human rights, it might be argued, it will not only miss an opportunity to promote and fulfil human rights but will also be blind to countless possible harms that might otherwise be foreseen and averted.

Those with human rights expertise, therefore, have good reason to think through the human rights consequences of different mitigation strategies – at national and local, but perhaps especially at international level – given that the effects will be profound, of long duration and probably irreversible. At national level, for example, what will be the consequences in human rights terms of large forest conservation efforts, extensive biofuel cultivation for export markets, or nuclear power

⁵⁰ See Baer *et al.* (2007), 23:

[T]here is no road to development, however conceived, that does not greatly improve access to energy services. Yet, as economies are now structured, as development is now envisioned, and as long as we rely on today’s energy technologies, this will imply increases in CO₂ emissions that are entirely incompatible with a precautionary climate policy. And thus our dilemma: There is simply not enough ‘environmental space’ for the still-poor to develop in the same way – or in anything like the same way – as that which was taken by the already-rich.

⁵¹ IPCC AR4, WGIII, 752. The other three criteria are environmental effectiveness, cost efficiency and ‘political acceptability’, each of which has a better established role in mitigation choices. All, of course, are ‘subjective’ to some degree.

dependence? Who will be affected and how? Are institutional forms of redress available in cases of rights violations? Can long-term development be maintained if carbon use is restricted? How will hard choices be decided? At international level, how will differential access to the 'global carbon dump' affect local development paths?⁵² Where the effect is harmful, are compensatory mechanisms available, and are they effective and appropriate? In principle, the likely human rights and developmental consequences of different mitigation strategies should be built into forecast scenarios for comparative purposes, something that has not been done systematically to date.⁵³

Any such analysis will need to take account of the particular role that developing countries are likely to play in any global mitigation regime. It is generally agreed that it is cheaper to cut emissions in poorer than richer countries (as transitions to new energies, for example, involve fewer infrastructural shifts). As the *Stern Review* states, '[s]preading the mitigation effort widely across sectors and countries will help to ensure that emissions are reduced where it is cheapest to do so, making policy cost-effective'.⁵⁴ Of course, this provides an incentive for wealthy countries (and their companies) to try to meet their targets through actions undertaken in developing countries. The *Stern Review* is quick to point out that social and other factors must be taken into account in making decisions about where and how to make cuts. Yet, the absence of such data to date has not stopped a surge in efforts to achieve cuts in developing countries – efforts which may, in consequence, have deleterious human rights outcomes in those very countries, either in the immediate or in the longer term. Deforestation, biofuel cultivation and emissions trading will in different ways each operate to alter the economic stakes and capacities of persons who already, in many cases, lack secure access to basic needs. Assessing the possible human rights impacts of strategic decisions in these areas, though urgent, nevertheless requires considerably more knowledge than is currently available.

⁵² The term 'global carbon dump' captures the notion that the atmosphere can support only a limited amount of GHGs – and so there can be no unrestricted right to send carbon into it. See Lohmann (2006).

⁵³ Climate change narratives have traditionally focused on *impacts* in developing countries and *mitigation* in developed countries. While this seems sensible, because carbon emissions are concentrated in rich countries while poorer countries suffer the brunt, it leaves one vital issue undiscussed – the future development of poor countries under global emissions constraints.

⁵⁴ *Stern Review*, 239. See also 245–6: 'some countries can cut emissions more cheaply than other countries, so 'what' flexibility is important'.

By extension, it would be useful to analyse the likely impact of given mitigation strategies on the potential for *alternative* development paths for poorer countries. Is clean technology transfer facilitated? If so, is this done in a sustainable and equitable manner, geared to a country's development needs rather than to the economic interests of the exporting country alone? Does the policy mix shift development paths, stimulate wealth creation and *also* consolidate basic threshold rights for all? Clearly such questions go beyond the ordinary scope of human rights inquiry. Clearly, too, they imply a need for significant new research.

Human rights and climate change at the confluence of law, science, ethics and policy

The various chapters in this book are a first attempt to look systematically at the relevance of human rights for climate change and vice versa. They begin from a broad angle, opening up difficult framing questions: what is the ethical case for introducing human rights to climate change? How adequate is the dominant human rights framework to climate change? How might inter-state claims draw upon intra-state human rights norms? How can the moral and legal obligations that climate change raises be aligned and addressed? What about the obligations of private companies? Other chapters then turn to a specific set of rights and policy areas that climate change raises: the nascent forestry regime, emissions trading under the Kyoto Protocol, the right to health, the contribution of human rights fulfilment to climate change vulnerability.

Chapter 1 raises some background justice questions presented by climate change, and assesses the availability and adequacy of human rights instruments to address them. I contend that four divergent justice questions arise in climate change, each emphasising different interests and underpinning different solutions. The nascent climate regime incorporates elements from each of these perspectives and uses flexible conciliatory language – ‘equity’ and ‘common but differentiated responsibilities’ – to mediate between them. Nevertheless, these terms do not in themselves determine the shape of a final regime; in practice different elements of the regime have moved ahead at different speeds and, in the process, certain justice claims have been prioritised, often following the perspectives of better resourced and positioned actors. The chapter examines whether and how consideration of human rights law and priorities, which have hitherto been largely absent, might rebalance

or reorient these initial questions. Much as human rights principles do not provide clear-cut answers – and might, indeed, be used to support most or all justice claims – there are clear areas where the human rights and climate regimes complement and corroborate certain pictures of an ‘equitable’ regime over others.

Dinah Shelton draws upon a similar intuition in her contribution, arguing that, when it comes to climate change, the formal sovereign autonomy of states in the international arena dovetails with their human rights obligations under international law. Shelton examines the recent US Supreme Court case, *Massachusetts v. EPA*, in which the Court recognised Massachusetts’ standing on the basis of its sovereign right, as ‘*parens patriae*’, to protect the health and welfare of its citizens from the harmful actions of others in the absence of federal regulation. Such a principle might also apply at international level, Shelton suggests, for states whose inhabitants experience the harms of climate change due to the actions and failures of other states to regulate their domestic pollution. The corollary of such a sovereign right to protect citizens, in the international order, is a duty on states not to abuse their sovereign right to pollute – a duty that Shelton identifies in the famous *Trail Smelter* case, in which an international arbitrator required the Canadian province of British Columbia to stop cross-border pollution into the United States. Similar principles apply in the case of global climate change: where human rights are at risk due to climate change, affected states arguably have a right under international law to challenge the pollution of other states. The global stakes of climate change thus alters a familiar context in which sovereignty and human rights are generally perceived as being at loggerheads (perhaps most strikingly illustrated in the recent debates over the ‘responsibility to protect’).

In his chapter, Simon Caney provides the ethical case for attending to the human rights implications of climate change. His argument has three phases: first, he shows that climate change does in fact affect the full enjoyment of certain key human rights, such as to life and health and what Caney calls the ‘human right to subsistence’. Second, Caney suggests that an approach to climate change that attends to its human rights implications carries significant advantages over other, currently more widespread, approaches – such as those that prioritise cost–benefit analyses or threats to security – in determining what particular impacts should have priority attention. Third, Caney proposes that ‘a “human rights” centred analysis of the impacts of climate change has far-reaching implications for our understanding of the kind of action that should be

taken and who should bear the costs' of action. It is clear, Caney concludes, that the burdens should fall largely on those actors most responsible for creating the problem, including the costs of treating the impacts of climate change on actors who are not so responsible. Viewing human rights as 'minimum moral thresholds to which all individuals are entitled, simply in virtue of their humanity, and which override all other moral values' provides a means to assess the distribution of the burdens of treating climate change.

A different approach is taken by Sam Adelman. Like Shelton, Adelman regards unrestrained sovereignty as the principal underlying obstacle to addressing the human rights violations caused by climate change; unlike her, however, he regards the doggedly state-centric dominant discourse of human rights as itself part of the problem. For Adelman, the currently leading solution to climate change (the creation of a market in carbon emission reductions) reproduces and reinforces the most undesirable traits of state sovereignty – self-interest and excess – rather than providing a basis for a more just global governance. The underlying rationality of each is nevertheless quite different: paradoxically, although the carbon market is the outcome of a state-centric decision-making process, it is also an abdication of sovereign responsibility. Adelman suggests, however, that human rights may yet help to mobilise the regenerative evolution within international law that climate change must ultimately require – perhaps through the eventual establishment of a new meta-right or *gründnorm* that would recognise the close interlinkage between human rights and the environment, and finally curb the excesses of the present global economic order, in the mutual interests of greater justice and environmental stewardship.

Peter Newell examines the key role of the private sector in relation to responses to climate change and asks whether human rights norms and law might provide a useful means of ensuring the accountability of such actors for their contribution to the problem. Historically, human rights instruments have not proved effective in holding corporations to account for actions undertaken abroad. While Newell notes the ongoing progress in defining the nature of corporate responsibilities, notably in the work of the UN Secretary General Special Representative, John Ruggie, it is unclear, he argues, that even were legal mechanisms stronger, they would be available in anything other than a limited number of cases. Moreover, private actors have played an active part in shaping the international climate change regime, which consequently places few direct regulative burdens on the private sector. The obligations of

corporations tend to depend on the jurisdiction of operation, but this may mean little in a context where operations can easily be moved between jurisdictions. Beyond this, various forms of private regulation have emerged, but while useful, these do not have effective means of sanctioning non-compliance. Under these conditions, the scope for private accountability in cases where activities which contribute to climate change result in actual human rights violations appears weak.

Frances Seymour provides a concise yet informed picture of the human rights implications of forest governance, given in particular the rise of 'reduced emissions from deforestation and [forest] degradation' (REDD), a set of policy directions endorsed at the Bali COP in late 2007. Forests provide important 'sinks' for GHGs, with the result that their conservation has become a priority for climate change mitigation. As Seymour points out, forest preservation is also critical to adapting to climate changes in many parts of the world. Although the details are still to be decided, REDD schemes will reward the preservation of forests either through direct monetary incentives or emissions credits. In both cases, forests stand to become an even more significant and desirable resource than they already are, which may in turn exacerbate the often fraught relationship that frequently obtains between forest dwellers and forest-dependent peoples, on the one hand, and well-resourced, sometimes state-backed, loggers or other large corporate concerns, on the other hand. Seymour outlines several human rights risks that arise in a context of complex governance and property rights arrangements that exist in many of the world's remaining large forests, and in particular notes the potential trade-offs that may arise where forest protection measures must also incorporate the costs of rights protections. All else being equal, where private ordering is preferred over public, resources will flow to forests with maximum carbon-storage potential and minimal rights implications rather than to those forest communities most in need. Such trade-offs might be avoided by building strong safeguards into REDD regimes from the outset and ensuring that a clear view of the public interest – both global and local – remains uppermost in forest management systems as they evolve under REDD.

Philippe Cullet's thoughtful contribution to this volume reflects upon the notions of vulnerability and equity, two significant planks of the nascent climate regime, and examines their human rights dimensions. An association between human rights and vulnerability has long been established in international instruments, notably the ICESCR, even if there is little agreement on the precise legal obligations of governments

toward vulnerable populations. Vulnerability to the effects of global warming, by comparison, has long been front and centre of the climate change debate, in part because predicting and assessing vulnerability is the key to any successful adaptation policy. Equity is a more difficult principle, as human rights instruments rarely encourage differential treatment, tending rather to a formalist equalitarian approach to law. Cullet, however, notes that climate change solutions that exacerbate or worsen basic human rights protections for any given group, particularly those who are already vulnerable, cannot be viewed as 'equitable'; attending to 'equity' thus involves accounting for human rights, at a minimum to establish legitimacy. However, Cullet observes that the Kyoto Protocol's 'flexible' mechanisms – emissions trading and the clean development mechanism – have not (so far) been constructed with a view to prioritising the rights and needs of vulnerable persons or the development needs of vulnerable countries. Using India as a case study, Cullet suggests how the regime might look if vulnerability resided at its heart. Pursuing the argument further, he suggests the need for a radical rethink of rights over the use of the air – as a common heritage of mankind – in place of the default rights to emit GHGs assumed by the Kyoto mechanisms and distributed narrowly among existing polluters.

Paul Hunt and Rajat Khosla give an overview of the international right to the highest attainable standard of health ('right to health') in the context of climate change, and show that this fundamental human right not only encompasses access to timely and appropriate medical care, but also to the underlying determinants of health, including a safe environment. Observing that climate change represents an extremely grave risk to the health of individuals, communities and populations, especially those living in poverty in developing countries, they argue that states have an obligation, arising from the right to health, to take reasonable steps to slow down and reverse climate change. They give particular attention to four elements of the right to health that are especially important in the climate change context: attention to the vulnerable and disadvantaged; active and informed participation; international assistance and cooperation; and monitoring and accountability. Regarding international assistance and cooperation, Hunt and Khosla argue that high income countries have a human rights responsibility to help developing countries establish healthy environmental conditions. They also argue that the right to health requires that monitoring and accountability mechanisms be strengthened in relation to climate change, including measures to check whether high income countries

are fulfilling their responsibility of international assistance and cooperation in health matters.

Jon Barnett also identifies vulnerability to climate change as a central human rights concern. Using three case studies, Barnett examines how poor human rights fulfilment in a country can itself exacerbate vulnerability to climate change impacts. In East Timor and, in quite different ways, in China, inadequate access to human rights protections has left ordinary citizens poorly equipped to prepare for the expected ravages of a changing climate, Barnett contends. By contrast, the extreme vulnerability of populations in the Pacific atolls, Barnett's third case study, cannot be attributed to human rights weaknesses in those countries, essentially because their extremity – the possible disappearance of the territories themselves – poses existential problems that transcend the political or legal terrain.

John Mutter and Kye Mesa Barnard examine the effects of economic and social vulnerability in the context of natural disasters. While neither of their two case studies, Hurricane Katrina in New Orleans nor Cyclone Nargis in Myanmar, can be ascribed with certainty, much less solely, to climate change, they provide good studies of our current preparedness to deal with events of a kind that will increase in frequency and intensity as climate change takes hold. Mutter and Barnard describe the conditions and phases that transform 'natural extreme events' into 'human disasters': the evolution of vulnerability before an event; the event itself; and the recovery that follows. The first and last phases depend upon human agency: both are exacerbated where human rights protections are poor or absent, as they were in the case of both Nargis and Katrina. In New Orleans in particular, mortality rates were higher in poorer areas – the worst effects of the hurricane were exacerbated by poor rights protections – low rates of healthcare, poor housing and low levels of education which combined with poor access to information and inadequate transport, to produce far higher levels of risk for a section of the population who were, in any case, disproportionately exposed to discrimination. A plausible link can be drawn, although the authors do not do so, between the inaction of the United States government on climate change, as sanctioned in *Massachusetts v. EPA*, on the one hand (at time of writing in late 2008), and the absence of strong protections of basic social rights (rights to health, shelter, food and water, for example), on the other hand. The dearth of legal responsibility at any government level, for either cause or effect, allows for policies that do not merely neglect, but actively harm, vulnerable populations.

Finally, in conclusion, on the basis of these and other sources, I provide an overview of the potential fit between human rights and climate change, as two mediating languages of justice and two differing arenas of international law. I begin with a glance at Thomas Pogge's analysis of the structural exacerbation of global poverty in international law and its potential application to the climate change phenomenon. I then turn to two areas of overlap between climate change and human rights – one where common themes are easily neglected (emissions trading) and one where they are readily exploited (procedural rights), before finally following up the theme of human rights as thresholds, suggested by Simon Caney, for its potential policy applications. While the scale of the climate change challenge is recognised within, and indeed drives, environmental scholarship and negotiation, its transformational power has largely passed the world of human rights law by. This book is intended as a contribution to opening discussion about the challenge climate change holds out for human rights, a challenge which, if inevitable, does not appear, at this juncture, easily manageable.

References

- Agarwal, Anil and Sunita Narain, *Global Warming in an Unequal World: A Case of Environmental Colonialism* (New Delhi: Centre for Science and Environment, 1991).
- Alston, Philip, 'People's Rights: Their Rise and Fall' in Philip Alston (ed.), *People's Rights* (Oxford University Press, 2001).
- Andreassen, Bård A. and Stephen P. Marks (eds.), *Development as a Human Right: Legal, Political, and Economic Dimensions* (Cambridge, MA: Harvard University Press, 2006).
- Baer, Paul, Tom Athanasiou and Sivan Kartha, *The Right to Development in a Climate Constrained World* (Washington, DC: Heinrich Böll Foundation, 2007).
- Brooks, Nick, W. Neil Adger and P. Mick Kelly, 'The Determinants of Vulnerability and Adaptive Capacity at the National Level and the Implications for Adaptation', *Global Environmental Change*, 15 (2005), 151.
- Craven, Matthew, *The International Covenant on Economic, Social and Cultural Rights: A Perspective on Its Development* (Oxford: Clarendon Press, 1998).
- German Advisory Council on Global Change, *Climate Change as a Security Risk* (London: Earthscan, 2008).
- Guèye, Cheikh, Abdou Salam Fall and Serigne Mansour Tall, 'Climatic Perturbation and Urbanization in Senegal', *The Geographical Journal*, 173 (2007), 88.
- Hansen, James, Makiko Sato, Pushker Kharecha, David Beerling, Valerie Masson-Delmotte, Mark Pagani, Maureen Raymo, Dana L. Royer and James C. Zachos,

- 'Target Atmospheric CO₂: Where Should Humanity Aim?' (2008). Available at: www.columbia.edu/~jeh1/2008/TargetCO2_20080407.pdf.
- Holmes, Stephen and Cass Sunstein, *The Cost of Rights: Why Liberty Depends on Taxes* (New York: Norton, 1999).
- Inter-Agency Standing Committee, *Protecting Persons Affected by Natural Disasters: IASC Operational Guidelines on Human Rights and Natural Disasters* (Brookings–Bern Project on Internal Displacement, 2006).
- International Council on Human Rights Policy, *Beyond Voluntarism: Human Rights and the Developing International Legal Obligations of Companies* (ICHRP, 2002).
- Climate Change and Human Rights: A Rough Guide* (ICHRP, 2008).
- IOM, *Migration and Climate Change*, IOM Migration Research Series, 31 (2008).
- IPCC, *Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the IPCC* (Cambridge University Press, 2007).
- Climate Change 2007: Mitigation of Climate Change, Contribution of Working Group III to the Fourth Assessment Report of the IPCC* (Cambridge University Press, 2007).
- Technical Summary: *Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the IPCC* (Cambridge University Press, 2007).
- Technical Summary: *Climate Change 2007: Mitigation of Climate Change, Contribution of Working Group III to the Fourth Assessment Report of the IPCC* (Cambridge University Press, 2007).
- IUCN, 'Gender Aspects of Climate Change' (2007). Available at: www.iucn.org/en/news/archive/2007/03/7_gender_climate_change.pdf.
- Indigenous and Traditional Peoples and Climate Change*, Issue Paper, March 2008.
- Lohmann, Larry, *Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power* (Uppsala: Dag Hammarskjöld Foundation, 2006).
- Mace, M. J., 'Funding for Adaptation to Climate Change: UNFCCC and GEF Developments Since COP-7', *Review of European Community and International Environmental Law (RECIEL)*, 14 (2005), 225.
- McCarthy, James J., Osvaldo F. Canziani, Neil A. Leary, David J. Dokken and Kasey S. White (eds.), *Climate Change 2001. Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2001).
- McGray, Heather, Anne Hammill, Rob Bradley with Lisa Schipper and Jo-Ellen Parry, *Weathering the Storm: Options for Framing Adaptation and Development* (Washington, DC: World Resources Institute, 2007).

- Müller, Benito, 'Climate of Distrust: The 2006 Bonn Climate Change Adaptation Fund Negotiations' (Oxford Institute for Energy Studies, 2006).
- 'The Nairobi Climate Change Conference: A Breakthrough for Adaptation Funding', OIES Working Paper (2007).
- OHCHR, *Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers* (United Nations, 2003). Available at: www.ohchr.org/Documents/Publications/training9chapter16en.pdf.
- Oxfam International, 'Adapting to Climate Change: What's Needed in Poor Countries and Who Should Pay', Oxfam, Briefing Paper, 104 (2007).
- Ribot, Jesse, 'The Causal Structure of Vulnerability: Its Application to Climate Impact Analysis', *GeoJournal*, 35 (1995), 119.
- Robb, Cairo A. R. (ed.), *International Environmental Law Reports Vol. 3, Human Rights and Environment* (Cambridge University Press, 2001).
- Salomon, Margot E, 'Towards a Just Institutional Order: A Commentary on the First Session of the UN Task Force on the Right to Development', *Netherlands Quarterly of Human Rights*, 23 (2005), 409.
- Sands, Philippe, *Principles of International Environmental Law* (Cambridge University Press, 2003).
- Shelton, Dinah, 'Environmental Rights' in Philip Alston (ed.), *People's Rights* (Oxford University Press, 2001).
- Shue, Henry, 'Subsistence Emissions and Luxury Emissions', *Law & Policy*, 15 (1993), 39.
- Smit, B. and O. Pilifosova, 'Adaptation to Climate Change in the Context of Sustainable Development and Equity', *Climate Change 2001, Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change*, James J. McCarthy, Osvaldo F. Canziani, Neil A. Leary, David J. Dokken and Kasey S. White (eds.) (Cambridge University Press, 2001).
- Stern, Nicholas, *Stern Review on the Economics of Climate Change*, HM Treasury, Office of Climate Change (Prepublication) (2006).
- Tan, Celine, 'Mandating Rights and Limiting Mission Creep: Holding the World Bank and the International Monetary Fund Accountable for Human Rights Violations', *Human Rights and International Legal Discourse*, 2 (2008), 79.
- UNDP, *Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World* (UNDP, 2007).

