THE IMPACTS OF CLIMATE CHANGE ON THE WORLD'S POOREST AND MOST MARGINALISED COMMUNITIES

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INTRODUCTION

The founder of the International Institute for Environment and Development (IIED), Barbara Ward, pioneered the concept of sustainable development and envisaged a world where the "care and maintenance of a small planet" was realised through transformative action and research addressing complex environmental, social and economic challenges.[1]

IIED continues to work at the leading edge of sustainable development research today. Since I took up the directorship in the summer of 2015, I have been struck by the rich tradition of analysis, knowledge and evidence that IIED brings to bear on environmental justice, and also by the deeply embedded partnerships we hold with organisations in the global south. These mean our analysis and policy recommendations are rooted in the lived experience of those at the sharp end of climate change and environmental degradation.

CLIMATE INJUSTICE

Climate change is above all else an issue of social and environmental justice. Those most vulnerable to the negative impacts are, to a quite remarkable degree, those countries and people that are least responsible for causing the problem in the first place. This is a point that has been made many times, and Figure 1 is an effective illustration of this at the level of country responsibility and impacts.[2] Countries that are least responsible tend to be the most exposed. Further, new research indicates that some sources of natural wealth, such as populations of plants, trees and fish, are moving very broadly from the global south towards the global north, thereby benefitting richer countries at the expense of poorer ones.[3] We keep finding new ways to make the point that climate change is simply deeply unfair, which amplify but do not change the basic message.

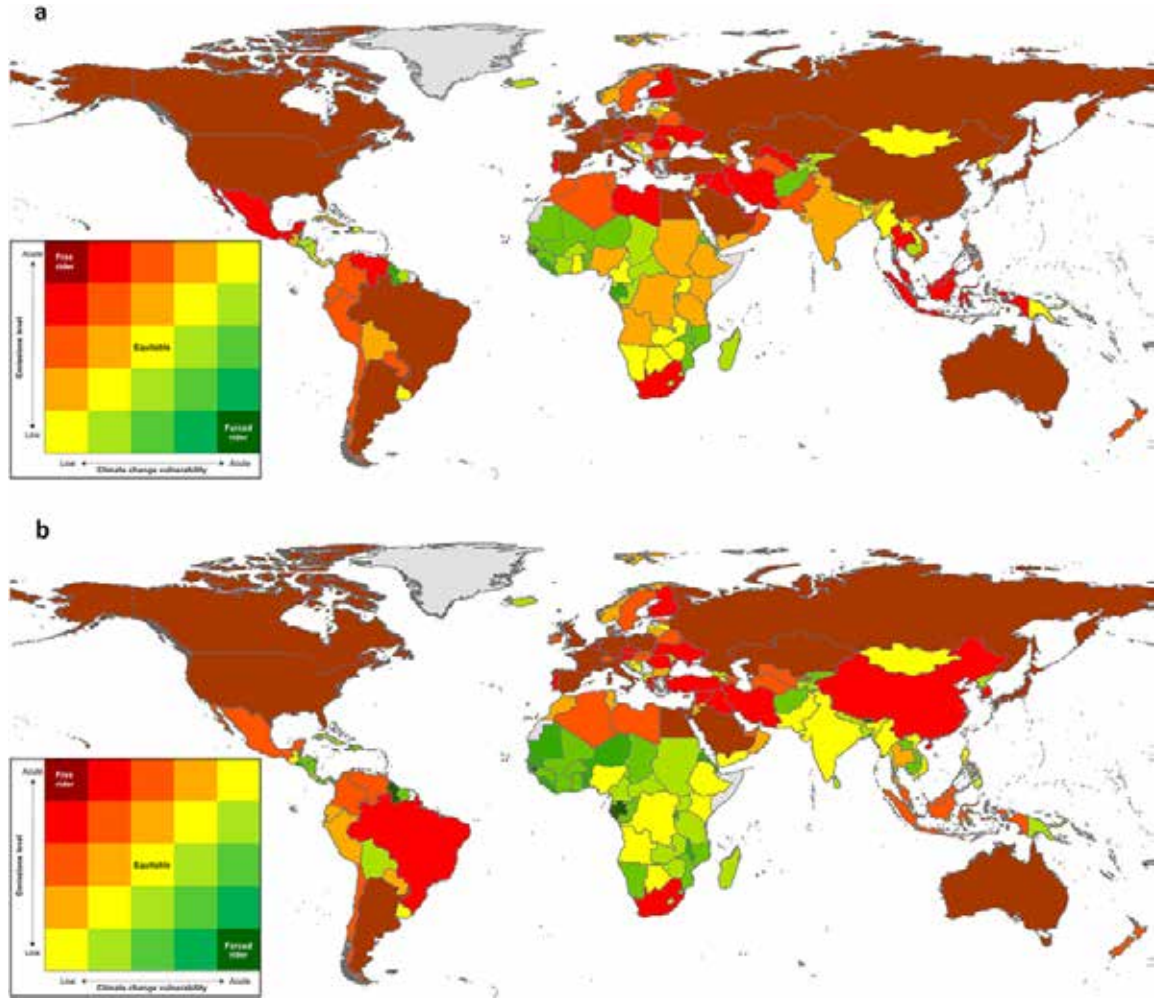
1 For a brief history see 'Barbara Ward and the Origins of Sustainable Development' David Satterthwaite, IIED, 2006, http://bit.ly/1T5sZyJ. 'Only One Earth: The Care and Maintenance of a Small Planet', Barbara Ward and Rene Dubois, 1973, was a seminal early statement of the imperative for environmental responsibility.

2 From 'Global mismatch between greenhouse gas emissions and the burden of climate change', Glenn Althor, James E M Watson and Richard A Fuller, Scientific Reports 6, Article number 20,281, 2016, http://bit.ly/1NTWRH5.

3 'Wealth reallocation and sustainability under climate change', Eli P Fenichel, Simon A Levin, Bonnie McCay, Kevin St Martin, Joshua K Abbott and Malin L Pinsky, Nature Climate Change 6, 2016, pp. 237-244, http://bit.ly/1OwJVY1.

At the country level, the least developed countries (LDCs), a group of 48 countries with low incomes and low institutional and human development, combine climate vulnerability with low levels of capacity for response to the negative impacts of climate change. Approximately two-thirds of LDCs are in Africa. Some LDCs are landlocked. Others are island nations or have large low-income populations in low-lying coastal areas that are vulnerable to rising seas and fiercer and more frequent tropical storms. This makes people vulnerable to coastal erosion, flooding and loss of farmland due to saltwater intrusion.

Figure 1. Global mismatch between greenhouse gas emissions and the burden of climate chang



(a) Climate change equity for 2010. (b) Climate change equity for 2030. Countries with emissions in the highest quintile and vulnerability in the lowest quintile are shown in dark red (the climate free riders), and those countries with emissions in the lowest quintile and vulnerability in the highest quintile are shown in dark green (the climate forced riders). Intermediate levels of equity are shown in graduating colours, with countries in yellow producing greenhouse gas emissions concomitant with their vulnerability to the resulting climate change. Data deficient countries are shown as grey.

The broad pattern of climate injustice is reproduced at the individual level. Lucas Chacel and Thomas Piketty concluded that globally, both greenhouse gas emissions and inequality are increasing. They found that the top 10 per cent of emitters contribute about 45 per cent of global emissions, while the bottom 50 per cent of emitters contribute 13 per cent of global emissions. The top 10 per cent emitters are on all continents, with one-third of them from emerging economies.[4] Meanwhile poor people have fewer resources to deploy when climate change threatens their livelihoods or homes, are often more directly dependent than the non-poor on natural resources, which may degrade as a result of climate change, and more often live in areas highly exposed to climate hazards, such as flooding or cyclones, than the non-poor.

A further dimension of inequality at the sub-national level is the question of group-based inequalities. Power relations lead to specific social groups suffering an excess of poverty, exclusion or discrimination, which undermines their ability to cope with or adapt to the negative impacts of climate change. These groups can be based on gender, age, ethnicity, religion or other more specific social status markers, such as caste. Women, for example, may be more exposed to climate hazards due to customary practices, or vulnerable to specific stress due their roles in household reproduction.[5]

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CLIMATE VULNERABILITY

Negative impacts are felt in multiple ways: in loss of lives; threats to livelihoods; increases in the prevalence and severity of diseases; constraints on and shocks to economic development; increases in the magnitude and frequency of floods, droughts and other disasters; human displacement; and disruptions to social and political systems.

Poor communities are considerably more exposed on a global scale to the impacts of extreme weather events. There are many reasons for this: it may be because they live in parts of urban centres most likely to flood, or because they are rural farmers and are highly affected by drought. Low income groups are less likely to have savings and safety nets, social protection, access to services, capacity and, simply put, options. And within those communities, some social groups are much more vulnerable than others. For example, in the Sahelian drylands of West Africa, women are typically responsible for gathering water and fuel wood. Water stress caused by drought can greatly increase the time and labour burden that falls on them in performing those tasks.

Sea level rise is increasingly causing displacements of populations. As vulnerable populations are often concentrated in low-lying flood plains, they are frequently the ones that will be forced to relocate earliest. This may be caused by the loss of land and habitat, or the degradation of farming land due to increasing salinity. For example, highly conservative scenarios in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, finalised in 2014, estimated that four degrees of global warming would lead to sea level rise of a metre by 2100. That, it is estimated, would displace 20 million people in Bangladesh alone. Meanwhile, recent administrative data demonstrates that such relocations away from vulnerable low areas to urban centres are already happening.

4 'Carbon and Inequality: From Kyoto to Paris' Lucas Chancel and Thomas Piketty, Paris School of Economics, 3 November 2015, http://bit.ly/1MhyNSy.

5 For a consideration of the gender dimensions of climate impacts and civil society approaches to building resilience, see 'Gender and Resilience', Virginie le Masson, Andrew Norton and Emily Wilkinson, BRACED Knowledge Manager, 2015. http://bit.ly/1ZG4kBl.

The links between climate change and conflict are complex. Some have argued that preceding years of drought contributed to the onset of violent conflict in Syria in 2011. It is never inevitable that violence will follow from climate impacts. But the devastation that follows on from conflict in once relatively prosperous environments such as Syria is a dramatic cause of increased human misery on many levels, and cannot be ignored in a discussion of vulnerability to climate change.

The challenge for climate vulnerable communities and countries is to adapt to the changing climate. However, efforts to respond to climate change are hindered by the range of other big issues countries such as LDCs face, from poverty and insecurity to rising environmental pressures, weak capacity in the private and public sectors, and depletion of natural resources. Taken together, these present sizeable barriers to building adaptive capacity and resilience.

TOWARDS CLIMATE JUSTICE – CIVIL SOCIETY ACTION AT THE LOCAL, NATIONAL AND REGIONAL LEVEL

Under the United Nations Framework Convention on Climate Change (UNFCCC), governments have a responsibility to implement both mitigation and adaptation policies and programmes, and developed countries also have responsibilities for the transfer of finance and appropriate technologies to developing countries.[6]

The Paris Agreement of December 2015 established a radical new framework for pursuing climate action, which the scientific evidence shows to be ever more urgent. The Paris Agreement established a set of provisions that oblige countries to have a plan for climate action, to update the plan regularly to make it stronger, and to communicate with citizens about how they are doing. This process has to be underpinned by credible and consistent data. All of this will provide a framework against which accountability dynamics can work through reputational incentives, peer pressure, policy advocacy and activist litigation. Further, both the Paris Agreement and the UNFCCC establish responsibilities for developed countries to assist developing countries, and particularly LDCs, with both finance and the transfer of technology.

Civil society has a leading role to play, in raising awareness, advocating for increased ambition and effectiveness of action by governments, donors, investors, companies and international organisations, and helping to plan for a future constrained by our changing climate.

Increasingly, civil society organisations and other stakeholders are coming together at national and regional levels to form civil society networks to advocate for progressive change, such as the Climate Action Network South Asia and Sustainability Watch Latin America. Much of the work they undertake is lobbying, which involves building relationships with those in authority and

6 The United Nations Framework Convention on Climate Change of 1992 remains the primary text in international law for guiding national climate change action.

speaking with them about particular issues and community needs. Campaigning is also a key role for civil society, with civil society mobilising the public, raising awareness and asking for action in line with increasing public demand.

Organisations such as the Bangladesh Centre for Advanced Studies, Local Initiatives for Biodiversity, Research, and Development in Nepal and the African Centre for Technology Studies in Kenya harness science, technology and innovation for sustainable development, capitalise on local initiatives for the sustainable management of renewable natural resources and work to improve the livelihoods of the resource-poor. These organisations and many like them conduct research, form alliances and implement strategies to generate support for progressive policy change and climate action.

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Because climate change is a global problem and climate action is a global public good, the role of civil society in countries that emit large amounts of greenhouse gases is equally important, whether in middle income countries such as China, or high income nations that are members of the Organisation for Economic Co-operation and Development. In wealthy countries, civil society has a vital role in campaigning for effective state policies to decarbonise economies and societies, the rapid removal of fossil fuel subsidies and changing practice in the private investment community to bring a massive shift of investment towards renewable energy technologies, and in encouraging support for the livelihoods of poor people in LDCs and other vulnerable countries.

On the question of resource flows to poorer countries, analysis by IIED has shown that the LDCs' climate action plans prepared for Paris would require US$93.7 billion per year to implement from 2020 to 2030.[7] The LDCs are the countries that will find it hardest to attract private investment at scale. This means that public climate finance will need to both increase and improve its targeting in order to make adequate global progress. Meanwhile the evidence at present suggests that climate and development finance flows to LDCs are declining, despite the various calls in international agreements, including the Paris Agreement, for this to increase.[8] Civil society has an important role in highlighting areas where commitments, whether collective or country-specific, are not being realised.

WHAT NEXT?

Whether the Paris Agreement can act as a powerful catalyst for radical change in a range of complex social, economic and political systems remains to be seen. Climate change increasingly influences the context for all development action, but the ways in which that influence is felt will not be static.

A big challenge for the coming years will be to find ways to link local action for rights and inclusion to climate action at the global scale. The potential for this is vast, and actions can include:

- Democratising energy access through distributed power systems that can combine economic empowerment with the decarbonisation of energy supplies;[9]

7 'A fair climate deal in Paris means adequate finance to deliver INDCs in LDCs', Neha Rai, Marke Soanes, Paul Steele, Andrew Norton, Simon Anderson and James McGregor, IIED Briefing Paper, December 2015, http://bit.ly/1TFqMpG.

8 'What's happening to aid to the Least Developed Countries', Andrew Norton, IIED, 18 January 2016, http://bit.ly/1SmDBu6.

9 'Shaping a Goal on Energy Access that leaves no-one behind', Sarah Best, IIED Briefing Paper, November 2013, http://bit.ly/1Wq3JFW.

- More equitable, inclusive and cleaner cities that address the substantial unmet needs for residents of low-income and informal settlements, in a way that limits additional emissions;

- Natural systems where local ownership rights are clarified to provide incentives for preserving and enhancing the world's vital carbon sinks, including forests and coastal ecosystems;

- Healthier and more equitable systems for the production and consumption of food, cutting down high-emissions foodstuffs that serve mostly richer consumers.

As always in relation to action that challenges the established political economy, the how is harder to identify that the what; if progress is to be made, we will need dynamic action across swathes of local and global civil society.

A WAY FORWARD

Civil society engagement in climate action potentially covers a very broad waterfront. In terms of its objectives it is as wide ranging as the territory of climate action itself. It may cover, for example: working collaboratively with governments to increase ambition and effectiveness in climate action planning and implementation, through litigation if necessary;[10] encouraging governments to engage constructively in climate diplomacy and decision-making to ensure effective global legal and policy frameworks; supporting governments to access finance and technology for climate action; encouraging citizens to engage in personal or political action to reduce emissions or demand assistance for the climate vulnerable; encouraging investors to disinvest from fossil fuel industries and shift their investments to renewable energy; and supporting poor communities to adapt or to make claims for assistance in dealing with the negative impacts of climate change.

In relation to the role of civil society in contributing to climate diplomacy and global decision-making processes, an example was the work done by several civil society groups, including IIED, the European Capacity Building Initiative and the Legal Response Initiative, to support the LDC negotiating group in the run up to the Paris climate conference of 2015. The activities were framed around: providing evidence, legal advice and technical inputs to LDC diplomats and delegates; helping LDC delegates to develop their capabilities; and supporting media outreach and alliance building activities.

Alongside other progressive counties and global civil society advocacy groups, the LDC group played a strong role and contributed to notable components of the Paris Agreement. These include: the incorporation of the more ambitious language of limiting global warming to 1.5 degrees over pre-industrial levels, alongside the established UNFCCC two degree goal; a global goal on climate resilience; frameworks to establish global legal architecture for transparency and compliance; and the continued recognition of the specific needs and special situations of the LDCs.

10 'Using the power of the judiciary to protect people from climate change', Achala Abeysinghe, IIED blog, 24 July 2015, http://bit.ly/1OnXBpH.

I would like to finish by highlighting the particular contribution that civil society can make to supporting climate justice by fostering the development of capacity in developing countries to engage in local, national and global debates. I will do this by describing one powerful example.

The International Centre for Climate Change and Development was set up in Bangladesh in 2009 through a partnership between IIED, the Bangladesh Centre for Advanced Studies and the Independent University of Bangladesh, with the aim of becoming a world-class institution that is grounded in local experience, knowledge and research in one of the countries most affected by climate change. IIED Senior Fellow Saleemul Huq is ICCCAD's Director and a motivating force in its development.

The stated goals of ICCCAD are:

- training future and current leaders on climate change and development;
- conducting research to generate peer reviewed publications on climate change and development;
- building capacity, specifically for LDCs;
- building and leading a network of partners, mainly consisting of institutes based in the global south.

Loss and damage refers to the impacts of climate change that go beyond what it is reasonable to expect people, communities and countries to 'adapt' to.

ICCCAD has diversified beyond this original set of objectives. It seeks to link communities in Bangladesh with financial and technical support to assist them to plan for adaptation to the negative impacts of climate change. ICCCAD has also played a role in sensitising public debate in Bangladesh, and particularly the media, about climate action, and used its position as a world-class climate institute located in a very climate-vulnerable LDC to generate a lot of coverage in the global media of the impacts of climate change in the run-up to the Paris meeting.

ICCCAD is able to engage with a powerful voice in the global political debate about the damage caused by climate change by linking local experience with global action. One of the most striking examples of this has been the role it has played in putting the contentious issue of loss and damage from climate change on the global agenda. Loss and damage refers to the impacts of climate change that go beyond what it is reasonable to expect people, communities and countries to 'adapt' to. Loss means impacts that lead to complete destruction, as in loss of life, while damage refers to degradation, for example, of infrastructure. Loss and damage has been a fraught issue in the UNFCCC negotiations in recent years, and definitions of the concept have been hotly contested. At Paris the concept moved from a somewhat taboo status for many developed countries to a mainstream part of the international legal framework. ICCCAD and its partners did a great deal of the groundwork for this striking change.[11]

By locating in an LDC the capacity to build and disseminate knowledge on climate action, network with other actors, speak with moral authority on the climate crisis, and offer the benefits of knowledge accumulated about adaptation to climate change to others, perspectives are changed and powerful new voices are brought to the debate. This is only one among many vital roles that civil society can play in helping poor people to engage in climate action - but it is an important one.

11 'Defining Loss and Damage: Key challenges and considerations for developing an operational definition', Alexis Durand and Saleemul Huq, ICCCAD, 2015, http://bit.ly/1Ymhu6f.