



THE GEOGRAPHY OF CLIMATE JUSTICE

AN INTRODUCTORY RESOURCE

This resource is available to download from www.ria.ie/climatejustice.aspx





What is climate justice?

The climate is changing, human activities are contributing to this and the impacts are already being felt by people, plants and animals across the globe¹. However the impacts of climate change are not evenly distributed. The poorest countries and the most vulnerable people within them, particularly those whose economies are dependent on agriculture, will be most affected despite having contributed least to climate change. It is this unfair situation that has led to calls from NGOs and developing countries for climate justice.

Justice is generally understood to mean that which is right, fair, appropriate or deserved, with justice being achieved when an unjust act is redressed. Within the context of climate change this means that the poorest countries and people should be supported by those who have contributed most to climate change. As a fairly new concept there are multiple definitions of climate justice. One that is used by the Mary Robinson Foundation - Climate Justice states that 'climate justice links human rights and development to achieve a human-centred approach, safeguarding the rights of the most vulnerable and sharing the burdens and benefits of climate change and its resolution equitably and fairly'.

Essentially, climate justice means trying to ensure that people and the planet are treated fairly in the ways in which we: a) try to reduce further climate changes, for example by cutting down the amount of fossil fuels we burn to produce energy (known as mitigation); and b) adapt to the changes we have brought about in the climate, for example by developing crops that are resistant to droughts where rainfall levels have dropped as a result of climate change (known as adaptation).

¹IPCC Fourth Assessment Report: Climate Change 2007. Available online at: www.ipcc.ch/publications_and_data/ar4/syr/en/contents.html

Why is the geography of climate justice important?

Increasing climate change is predicted to have many negative impacts, such as reducing agricultural productivity, reducing access to water and affecting the viability of some species.

However, these impacts will not be evenly distributed across the globe because of:

a) Variable physical geography

Certain physical geographies such as height above sea level make some areas more vulnerable to the effects of climate change which include potential sea level rise. For example, the Republic of the Maldives is an island nation in the Indian Ocean. The islands that make up the nation are, on average, just 1.5 metres above sea level and are therefore exposed to even relatively small increases in sea levels. Arid and semi-arid locations such as Mongolia are likely to experience high incidences of drought while the high mountainous areas such as Nepal will become more vulnerable to glacial lake outbursts.

b) Different histories

Many of the richer nations of the world (such as European countries and the USA) have been using fossil fuels since the Industrial Revolution of the nineteenth century and have, as a result, been emitting climate changing gases for over 100 years. These countries have benefitted considerably from the exploitation of fossil fuels as indicated by their generally high levels of wealth and development. It is the case that these countries also tend to be among the largest current emitters of greenhouse gas emissions, although there are a set of emerging economies such as China, India, Brazil and Russia whose current emissions are rapidly rising. These historic and current patterns of responsibility for greenhouse gas emissions are recognised in the current United Nations Framework Convention on Climate Change (see box p6) which states that Parties to the convention (which includes Ireland) should act to protect the climate system “on the basis of equality and in accordance with their common but differentiated responsibilities and respective capabilities.”

Importantly, those countries that have contributed the least to creating current climate changes, because their emissions have been low historically, are often the most vulnerable to the effects of the changes. It is this situation that is at the heart of calls for climate justice and a way of doing things that ensures that already vulnerable people do not bear an unfair burden of responsibility for saving the planet.

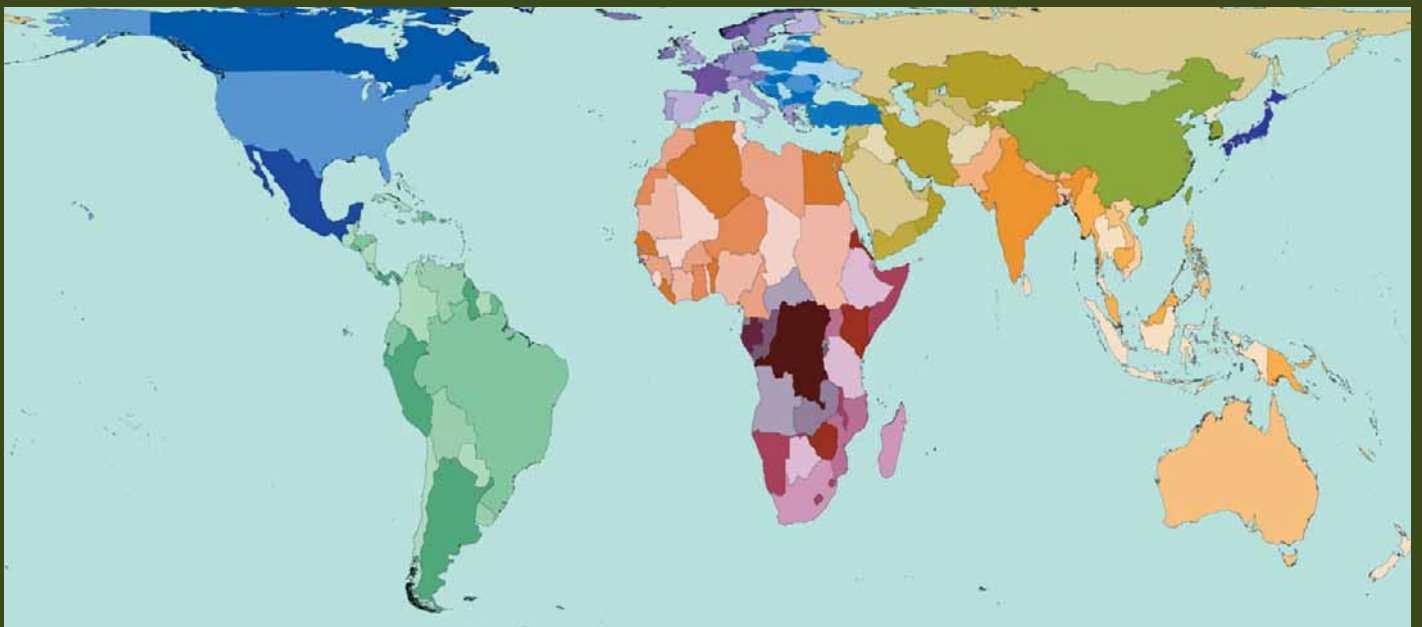
c) Uneven development between and within nations

At its simplest uneven development refers to ‘a process of economic and social development that is uneven in space and time’². As a result people in different places have unequal access to wealth, skills and resources. Using a combination of indicators such as life expectancy at birth, mean years of schooling and gross national income per capita the Human Development Index produced by the United Nations provides an indication of the differences between nation states in terms of development (see <http://hdr.undp.org/en>).

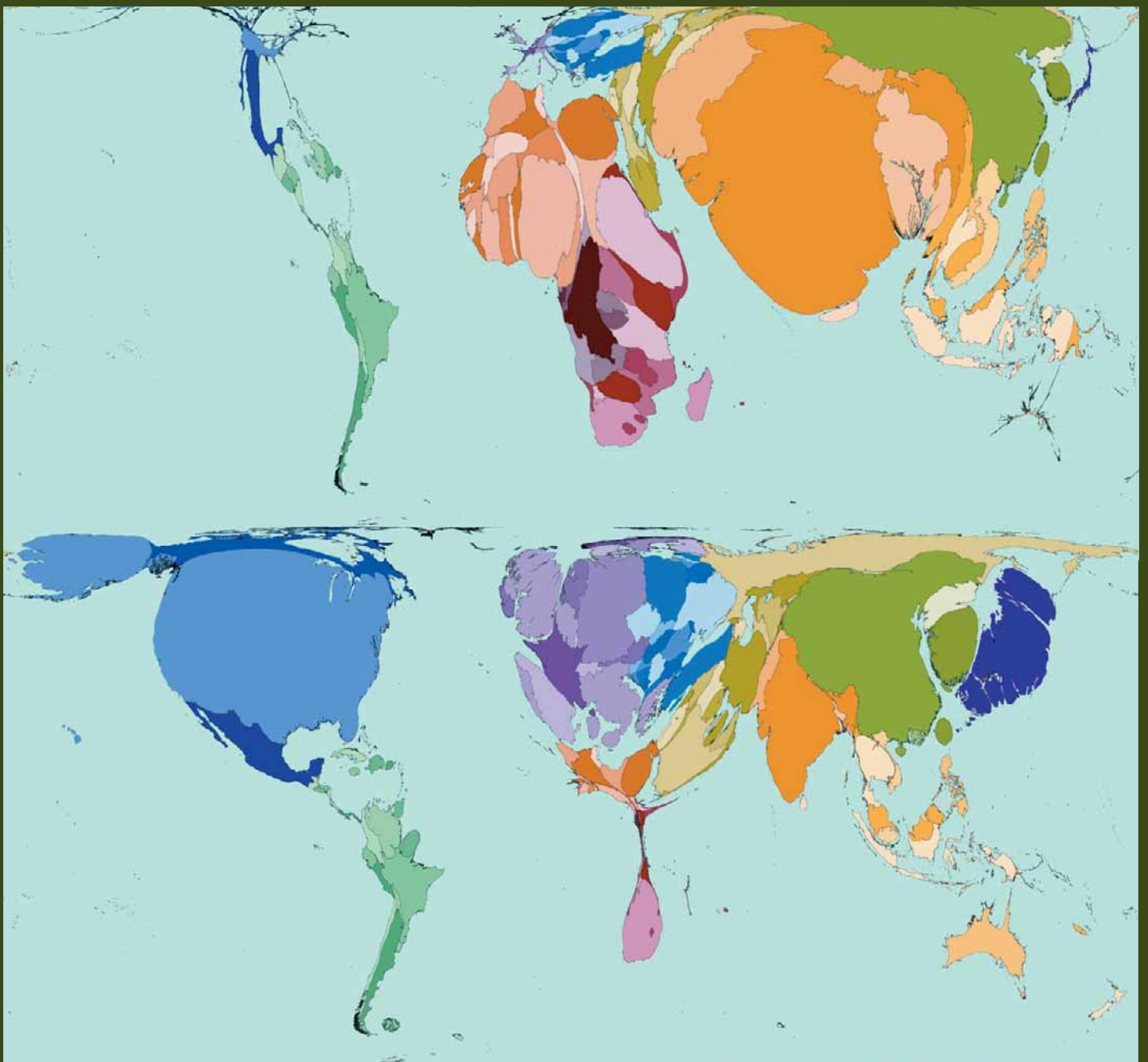
Within the context of climate change this uneven development means that some people are better placed to adapt to climate change than others (sometimes called ‘adaptive capacity’). For example in 2010 The Netherlands was ranked the 7th most developed country in the United Nations Human Development Index while Bangladesh was ranked 129th out of 169 countries. Both countries are low-lying and exposed to sea level rise but The Netherlands has a greater ability (e.g. engineering skills, financial support for development and implementation of coastal zone management plans) to make adaptations to its coastal zone in order to prevent flooding than Bangladesh. The Netherlands has a ‘high adaptive capacity’ compared to Bangladesh where tens of thousands of people will be displaced and lose their livelihoods. Inequalities also exist within countries (whether rich or poor) and it is the poorest sections of society that are most at risk from climate change.



² Johnston, R. E., Gregory, D., and Smith, D. (1994) Dictionary of Human Geography, Blackwell, Oxford, p.648

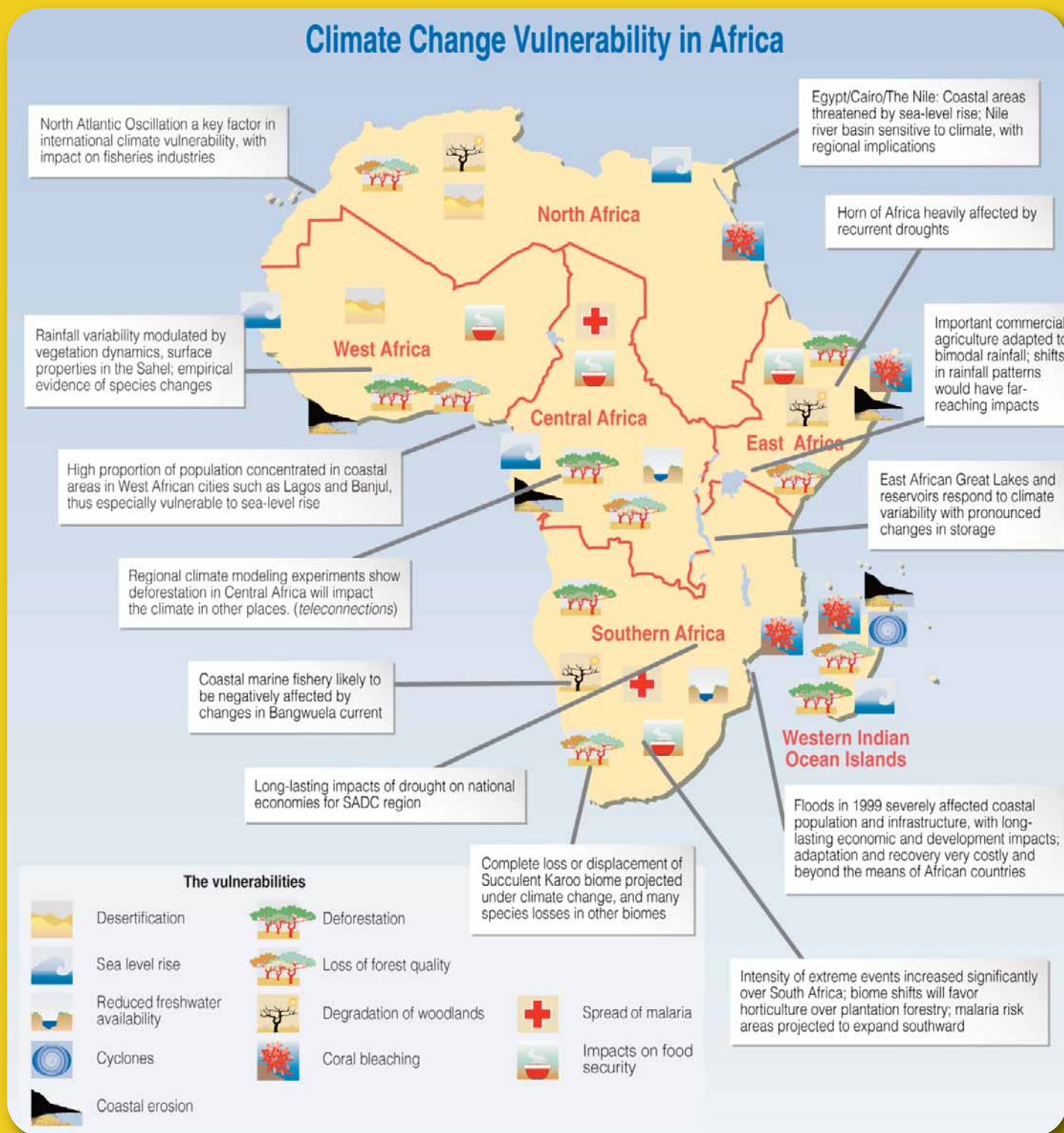


Look at the three different maps of the world, where the size of each country reflects levels of poverty, land area and carbon emissions (more maps available at: <http://www.worldmapper.org>). Can you guess which maps are which? Answers are at the end of this resource.



Climate change is already affecting people differently across the globe

Look at the areas of vulnerability within the countries of Africa in the map below. Think about other areas around the globe that might be struggling to deal with the effects of climate change already.



Climate change vulnerability in Africa. Source: Anna Ballance, UNEP/GRID-Arendal, 2002
www.grida.no/climate/vitalafrica/english/28.htm. Cartographer/Designer: Delphine Digout, Revised by Hugo Ahlenius, UNEP/GRID-Arendal. http://maps.grida.no/go/graphic/climate_change_vulnerability_in_africa.

How can climate justice be achieved?

Although the term climate justice has only recently been brought to general attention the underlying issues with which it is concerned (that is common but differentiated responsibilities for climate change and differential adaptive capacities amongst nation states to respond to climate change) have been identified in international agreements since 1992 through the United Nations Framework Convention on Climate Change (see UNFCCC box right). The Intergovernmental Panel on Climate Change (see IPCC box below) brings together international experts in fields related to climate change and its impacts and informs developments under the UNFCCC.

Both the UNFCCC and the IPCC conclude that industrialized countries must first and foremost take domestic action against climate change and are obliged to assist developing countries in mitigating and adapting to climate change through capacity building and technology transfer. Following the arguments debated and discussed under the UNFCCC, climate justice is only likely to be achieved when industrialised countries;

- i) reduce their greenhouse gas emissions, according to their common and differentiated responsibilities, to levels that will prevent dangerous human induced interference with the climate system
- ii) provide short- and long-term climate finance to help the most vulnerable countries adapt to climate impacts and pursue low carbon development strategies (a promise made at Copenhagen talks in 2009, and formalised in Cancun in 2010, states that wealthier nations will provide US\$ 10 billion a year for the period 2010-2012 increasing to US\$100 billion a year by 2020)
- iii) ensure capacity building and technology transfer (such as salt-resistant crops and clean energy solutions) to help the most vulnerable become more resilient to climate change and to benefit from green growth.

United Nations Framework Convention on Climate Change (UNFCCC)

In 1992 the United Nations Framework Convention on Climate Change (UNFCCC) was adopted at the United Nations Conference on Environment and Development (commonly called the Rio Earth Summit) by 194 Parties (Parties refers to nation states or supranational organisations such as the European Union who are eligible to sign up to international treaties) as the basis for a global response to humanly-induced climate change. The ultimate objective of the UNFCCC is to stabilise greenhouse gas emissions in the atmosphere at a level that will prevent dangerous human interference with the climate system. The UNFCCC is complemented by the 1997 Kyoto Protocol which has 192 Parties. Under this Protocol 37 industrialised countries and the European Community have committed to reducing their emissions by an average of 5% by 2012 against 1990 levels. For more information on the UNFCCC and the Kyoto Protocol see: www.unfccc.int

The Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) is the leading international body for the assessment of climate change. It was established in 1988 to assess the scientific, technical and socio-economic information relevant for the understanding of human induced climate change, its potential impacts and options for mitigation and adaptation. The IPCC has completed four full assessment reports, guidelines and methodologies, special reports and technical papers. For more information on the IPCC, its activities and publications please see: www.ipcc.ch

A number of organisations and networks of individuals have come together in recent years to work out principles for achieving climate justice. The Bali Principles of Climate Justice, for example, were established in 2002 by representatives of people's movements together with activist organisations working for social and environmental justice. The 23 principles are available at: www.ejnet.org/ej/bali.pdf. The Mary Robinson Foundation - Climate Justice has also developed a set of Climate Justice Principles which inform their mission to realise a world engaged in the advancing of climate justice available at: www.mrfcj.org/about

Fundamentally, all campaigners for climate justice agree that those who have contributed most to the problems have the greatest responsibility to help resolve them. As outlined by the Climate Justice Research Initiative at Trinity College Dublin: www.tcd.ie/iiis/research/climate-justice.php, those who can most easily afford it should contribute most to the solution of the climate change problem.

For climate justice to work we need:



Better ways of making decisions that include the voices of all those who are being affected by climate change (called 'procedural justice').



To ensure that costs and benefits of meeting the challenge of climate change are spread out fairly according to responsibility and ability (called 'distributive justice').



To think about how the needs of future generations and non-human beings, those who do not have a voice in current decisions, can be better considered in our decision-making (called 'just sustainability').

Those who are vulnerable to climate change need to be given a voice in discussions about what actions to take

Climate justice requires a global transition to a low-carbon economy which means finding new, less damaging ways of living (e.g. renewable energy and reduction in use of energy). This needs to happen in a way that is sensitive to the needs of everybody, rich or poor, wherever they live.



Find out how much you contribute to climate change by calculating your carbon footprint using the on-line carbon calculator developed by the EPA (Environmental Protection Agency), available at: <http://cmt.epa.ie/en/calculator/>

CASE STUDY 1: Climate change impacts and adaptation amongst fishing communities in Bangladesh

Rice cultivation was the only source of income for Goutom Mandal and his family. The farmer from Baroikhali, in Bangladesh, lived well enough, and was looking forward to a good future for his only child.

But all his hopes and only means of survival were destroyed when Cyclone Aila in 2009 washed away his rice crops and left his fields inundated in seawater. He was unable to plant new paddy in the saline land and lost his livelihood. And worse, he had to stop sending his daughter to school.

Facing poverty and frustration, Goutom was fortunate enough to benefit from the Aila rehabilitation project led by BRAC (Bangladesh Rehabilitation Assistance Committee), a large international non-governmental organisation that seeks to empower vulnerable people, which advised him to use the brackish water in his flooded fields for fattening crabs in pens as an alternative livelihood.

He received 15,000 takas worth of supplies, including nets, bamboo fencing, baby crabs and feed. He made a profit of 2,500 takas within 15 days, managing to meet his family's basic needs. His daughter has restarted school. And Goutom has again started dreaming of a prosperous future.

This is an example of how people can and do adapt their lifestyles in response to unpredictable events that are likely to be more frequent as a result of climate change, such as cyclones, provided they are given appropriate assistance, advice and support.

For more information on BRAC and their work see: www.brac.net



Photo: Uganda Carbon Bureau



Case Study 2: The multiple benefits of supporting responses to climate change in Uganda

National strategies in Uganda for both climate change adaptation and mitigation identify reducing deforestation and increasing reforestation as top priorities. Since 1990, Uganda has lost more than 25% of its forest cover and at current rates the remaining forest will be lost in another 30 years. Forests are an important carbon sink – soaking up CO₂ from the atmosphere – as well as stabilizing the soil, regulating the local climate and providing a livelihood to local people.

The use of fuel wood for cooking accounts for approximately half of Uganda's forest loss, with the average family consuming three tons of wood for that purpose each year. The Uganda Carbon Bureau, a carbon finance company, is working with communities to create a market for affordable, highly efficient stoves which use less wood and charcoal for household cooking. An additional benefit for the communities making and using the stoves is that they can tap into the carbon market – getting payments from the international community for the carbon savings they have made by using the new stoves. Not only do the new fuel efficient stoves reduce greenhouse gas emissions and demand for firewood, therefore slowing the rate of deforestation which can cause flash flooding, they also reduce exposure to indoor air pollution and the amount of time spent collecting firewood by women and children.

This case study illustrates how innovative interventions, working with and for vulnerable communities, can help to redress climate injustices. These activities and many others like them need to be scaled-up and rolled out with considerable financial and technical support from developed countries.

For more information on the Ugandan Carbon Bureau see: www.ugandacarbon.org

Over to you...



AT SCHOOL—look into the Green Schools initiative for reducing environmental impacts, including energy: www.greenschools.ie, and energy education: www.energyeducation.ie.



AT HOME—calculate your family's carbon footprint and talk to your family about how it could be reduced, say by 2% every year to aim for 20% reduction by 2020.



AT PLAY—think about how your leisure time might have an impact on climate change, for example through playing computer games (how much energy does that use per hour?), going to the swimming pool or being driven to sports training (could you share a lift with friends, get a bus, cycle or walk?).



AT THE SHOPS—think about how your purchases might be affecting climate change through the consumption of finite resources (how much fossil-fuel based fertilizer is used to grow your food?), or the production of pollution (how far does your food travel to get to your plate?).



IN GOVERNMENT—Ask your public representative what they are doing with respect to Ireland's international commitments under UNFCCC to support developing countries to undertake adaptation and mitigation actions through the provision of short and long term finance. Lobby your local elected representatives to make sure that Ireland provides this finance and that the money is new and additional to overseas development finance.



JOIN A CAMPAIGN FOR CLIMATE JUSTICE—one campaign that is representing a range of places and interest groups, including Save the Children, Amnesty International and WWF, is called tck tck tck, see: <http://tcktcktck.org> or follow it on twitter at: <http://twitter.com/tcktcktck>. Look at the iMatterMarch <http://imattermarch.org/> a campaign for young people focused on climate change and www.stopclimatechaos.ie.

Get informed about climate justice, climate change and its impacts

- Look at the work of the Mary Robinson Foundation - Climate Justice: www.mrfcj.org/about
- See what the National Waste Prevention Programme is doing to help reduce unnecessary emissions and waste in Ireland through initiatives such as Green Schools and Green Homes at: www.nwpp.ie
- Look at the fact sheets of the UNFCCC: www.unfccc.int and IPCC: www.ipcc.ch
- Examine the information on climate change and development on the Irish Aid website: www.irishaid.gov.ie
- Understand how Trócaire is working with communities on the causes and consequences of climate change both at home and overseas by looking at their website: www.trocaire.org/climatechange
- Visit the website of Concern to see how it works with the poorest people in the poorest countries of the world to enable them to transform their lives: www.concern.net



References and further resources

WWF Climate Change test:

www.worldwildlife.org/what/globalmarkets/Climate%20Change/Climate%20Curriculum/item5944.html

WWF Climate Change Curriculum for Teachers: Your Climate, Your Future.

15 lesson plans available for free download from:

www.worldwildlife.org/what/globalmarkets/Climate%20Change/Climate%20Curriculum/item5944.html

Trinity College Dublin Climate Justice Initiative: www.tcd.ie/iis/research/climate-justice.php

Sheffield Social and Spatial Inequalities Research Group:

www.sasi.group.shef.ac.uk/ : SASI (University of Sheffield, 2006).

UNEP Environmental Knowledge for Change: GRID-Arendal is a collaborating centre of the United Nations Environment Programme (UNEP). Established in 1989 by the Government of Norway as a Norwegian Foundation, to communicate environmental information to policy-makers and facilitate environmental decision-making for change. Contains extensive maps and graphics that have been prepared for publications and websites from the last 15 years in a wide range of themes related to the environment and sustainable development.

Available at: www.grida.no

ICARUS NUIM website: <http://icarus.nuim.ie/>

This resource is available to download from www.ria.ie/climatejustice.aspx

ANSWER TO MAP QUIZ: from top to bottom, maps show land area, poverty, carbon dioxide emissions.

