Justice to cool the planet

The current global recession may end up being a blessing in disguise for the world, since less growth implies less stress on the environment and emissions need to be slowed down. It offers a golden opportunity to deliver on social and environmental justice. Only a fairer deal will lead to sustainability, and a bail-out to eradicate world poverty, rehabilitate the environment and stabilize the climate is mandatory for this. It will not be possible, however, until the rich change the way they produce and consume and learn to live within sustainable limits. At the same time, developing countries should avoid the path taken by the industrial ones and shift to clean production and consumption right away.

PRRM/Social Watch Philippines Isagani R. Serrano

The human signature on current climate change is much clearer now. How to undo what has already been done and avoid catastrophe are what the UN Framework Convention on Climate Change (UNFCCC)¹ and its derivative the Kyoto Protocol² and accords are all about. However although action needs to be taken, the standoff between developed and developing countries continues with no clear end in sight. Meanwhile even the best scientists seem to be underestimating how fast the climate is really changing. For example, while the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) projected that the Arctic Ocean would retain some ice year-round until about 2050.3 it was shown shortly afterwards that this greatly underestimated the extent of sea-ice decline, and the ocean is expected to lose its summer sea ice much sooner.4

It is clear something has got to give here, before the threshold is passed where climate change is irreversible. Yet neither side will give way. Not the rich countries because they think that they are being pressured to meet difficult and demanding targets before the poorer countries do anything. And not the poorer countries either because they think they are being asked to adhere to the same targets as rich countries before they have had a chance to catch up.

Game over?

In the 1880s, after we started burning fossil fuels and had built today's industrial society, the concentration of carbon dioxide (CO₂) in the atmosphere was 280

- 2 United Nations. "Kyoto Protocol to the United Nations Framework Convention on Climate Change." 1998. Available from: <unfccc.int/resource/docs/convkp/kpeng.pdf>.
- 3 IPCC. "Climate Change 2007: Synthesis Report." Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva: International Panel on Climate Change.
- 4 Lovett, R. "Arctic Ice Melting Much Faster Than Predicted." National Geographic News, 1 May 2007. Available from: < news.nationalgeographic.com/news/2007/05/070501arctic-ice.html>.

parts per million (ppm). By the 1950s, it had already reached 315 ppm. When NASA scientist James Hansen first sounded the alarm on climate change in the late 1980s, he established 350 ppm as the highest affordable level "if humanity wishes to preserve a planet similar to that on which civilization developed and to which life on Earth is adapted".⁵

However we are past that point already. It is 380 ppm now and counting, with CO_2 in the air said to be increasing by about two ppm each year. In fact, there is no consensus yet on the level of safety. Some say 450 ppm. Others say it should be much lower. At the Poznan Conference of the Parties in December 2008, the former Vice-President of the United States, AI Gore, unsuccessfully tried to reach consensus around 350 ppm. Rajendra Pachauri, chairman of the UNFCCC/IPCC has said that, without basic reforms by 2012 we may find the climate system spinning out of control and that global CO_2 emissions must start to decline by 2050.⁶

The IPCC avoids prescription, however, and limits itself to offering policy makers a portfolio of scenarios. Since 1990 it has drawn up 40 such scenarios, built on four major storylines. These scenarios are categorized according to whether the future is focused on economic (denoted A) or environmental (denoted B) development and whether it is oriented on the global (number 1) or regional (number 2) level. So A1 is economic/global, A2 economic/regional, B1 environmental/global and B2 environmental/regional. The A1 scenario is further divided into three different scenarios: fossil fuel intensive (A1F1); balanced between fossil and non-fossil (A1B); and a transition to non-fossil fuels (A1T). Business-asusual (BAU), the scenario that assumes doing nothing on Greenhouse Gas (GHG) emission reduction, is of course out of the question.

Meanwhile, the signs are mounting that the worst-case scenario may come earlier than imagined. Extreme events such as storms, floods and droughts have devastating impacts on water resources, food security, agriculture, ecosystems, biodiversity and human health. In August 2003 there was a heat wave in Europe that killed nearly 15,000 people in France and 35,000 in nine other European countries. There were recently California and Australian forest infernos alongside unprecedented floods elsewhere. Such events have been anticipated in all IPCC assessments; however they are now common everywhere and happen when least expected. The prolonged droughts in major food-producing countries could cause a 20%-40% decline in food production in 2009. Diseases against which progress was being made, such as TB, malaria and dengue fever, are having a resurgence in many places. Deforestation, which accounts for about 17% of GHG emissions, has recently been exacerbated by the rising demand for biofuels. Primary forests were lost at the rate of 6 million hectares a year between 2000 and 2005, and biodiversity declined steadily along with them.

Justice in climate

A more even-handed world stands a better chance of surviving and adapting to climate change. Setting limits to growth (regardless of whether feared thresholds may have been crossed), and establishing equity between and within nations and communities, between women and men, present and future generations, should make the world more resilient.

The principle of climate justice derives directly from the UNFCCC, whose article 3.1 establishes that countries should act "on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities". This is complemented by two other principles in the Rio Declaration on Environment and Development and Agenda 21 that resulted from the Earth Summit in 1992: precaution and polluters pay. The first says that if you are not sure about the benefit and consequences of what you are going to do, do not do it. The second is self-explanatory. Climate justice is also explicitly stated or implied in many other UN declarations and agreements.

Although climate change spares no one, rich or poor, it has a greater impact on the poor even though they have less to answer for. Developing, or so-called Non-Annex I, countries contributed far less to GHG emissions than developed or Annex I countries, but they are destined to suffer more. The Least Developed Countries (LDCs), who contributed the least in pollution, will suffer the most. Many small island developing states may one day just disappear from the map.

Sharing the effort to stabilize GHG concentrations in the atmosphere at whatever emission

United Nations. United Nations Framework Convention on Climate Change. 1992. Entered into force 1994. Available from: <unfccc.int/resource/docs/convkp/conveng.pdf>.

⁵ Hansen, J. Testimony to the US Congress, 23 June 1988.

⁶ McKibben, B. "Think Again: Climate Change." Foreign Policy, January/February 2009. Available from: <www.foreignpolicy. com/story/cms.php?story_id=4585>.

⁶⁴ In Colombia, there are about 84 indigenous tribes with 64 distinct languages, who live in the border regions of Colombia with Venezuela, Peru, and Brazil, precisely where the most precious reserves of natural resources are located. We fight for the defense of our territory and the preservation of our culture. Due to this fight, since the 1970s, more than 1,400 of our leaders have been killed. Right now, many indigenous regions are militarized and where they aren't militarized, there are paramilitary forces present. The Government is trying to displace our communities so they can negotiate with transnational companies to exploit the natural resources, such as timber and oil, in these areas. Indigenous peoples in Colombia are opposed to free trade agreements, because these treaties cause greater displacement of our communities and instead of opening markets, only increase the frontier of US power.⁹⁹

Jesús Avirama (Regional Indigenous Council of Cauca, Colombia)

CHART 1. Annual global emissions of carbon from fossil fuels and cement production, 1850–1999, and concentration of CO₂ in the atmosphere, parts per million volume (ppmv), 1850–2000



stabilization scenarios may be decided – 350 ppm, 450 ppm, 550 ppm, 650 ppm – must be based on the differentiated share of responsibilities for what has happened and continues to happen, and on the different levels of development. Countries and peoples of the world can be divided into three groups: overconsumers or high emitters; under-consumers or under-emitters; and sustainers or those living within sustainable limits. This classification corresponds respectively to (a) industrial countries – all of the Organisation for Economic Cooperation and Development (OECD); (b) least developed countries, including most of Africa; and (c) advanced developing countries such as Brazil, China, India and some other East and Southeast Asian countries.

In every country, rich or poor, however, there will be some who do not neatly fit these categories: a rich Filipino, for example, has a similar lifestyle to and therefore the same CO_2 emission level as – his rich American counterpart. The 600 or so million of non-poor, middle class and rich Chinese and Indians

would be a mix of sustainers and high consumers. The excluded under-consumers or under-emitters would be the over 2 billion people who are poorly fed, poorly educated, jobless, voiceless, lacking access to health care, water and sanitation, and living in degraded environments. They must have primacy in the right to development and should be the main beneficiaries of resource transfers between and within countries.

To avert catastrophe the deal is fair and simple: the rich in both rich and poor countries must give up much more so that the poor and all of us may live sustainable lives.

Mitigation, the heart of justice

There are many proposals on the table regarding the "fair share" principle, for example, the green development rights, common but differentiated convergence, contraction and convergence by 2050, etc. They are all basically about climate stabilization.

High-emission countries must commit to drastic, deep and binding cuts on their GHG emissions from their 1990 levels and help developing countries with "soft" money and clean technology. The contraction required from them is huge whatever the agreed emission stabilization scenario. This ranges between a 25%–50% cut or more between 2020 and 2050. The reduction covers all six gases of the Kyoto Protocol: CO₂, methane (CH₄), nitrous oxide (N₂O), hydroflourocarbons (HFC), perflourocarbon (PFC) and sulphur hexafluoride (SF₆) – which are translated into CO₂ tons equivalent (CO₂teq) in each country's GHG inventory.

Developing countries have a right to development, but this right should not be taken as a license to pollute the environment. The right to development under the climate justice principle is not only about growing the economy; more importantly, it is about the satisfaction of basic needs leading to a decent level of security and well-being for all. The authors of the *Greenhouse Development Rights Framework* suggest an income of USD 9,000 per person per year as the level at which all countries could converge.⁷ falling below that line, should be entitled to transfers (ODA, technology, etc.) and allowed to increase their emissions as they shoot for that income goal.

What is the equivalent carbon footprint of USD 9,000 GDP per capita? Probably about 9 tons of CO_2 per person. Even if rich countries agreed to come down to that level and poor countries succeeded in reaching it, and even if our lives run on a mix of fossil fuels and renewable energy, imagine how much energy and carbon that would mean, especially considering world population projections of 7.6 billion for 2020 and 9.1 billion for 2050.

Against that income level the targets set under the Millennium Development Goals (MDGs) look inadequate even if met by 2015 (something that at current pace is not going to happen). Developing countries must avoid the unsustainable path taken by industrial countries. The earlier they shift to production and consumption of clean energy the better for the planet and all of us. With sustainable agriculture and fisheries, conservation of water and forest resources, development of renewable energy and a reduction in poverty and inequality, they stand a chance of adapting to climate change. A truly green revolution in both agriculture and fisheries and avoiding deforestation can contribute to carbon capture and reducing the carbon footprint.

Non-Annex 1 countries are spared from binding mitigation commitments but they can help, for instance, by levying a progressive carbon tax on their own rich over-consumers and by moving early on towards soft energy and low-carbon paths to development. Keeping to its carrying capacity⁸ should be every nation's goal. Stabilizing the population at sustainable levels should be a particular concern for countries such as the Philippines, which is projected to grow to over 100 million in 2020 and to nearly 150 million by 2050.

High-emission countries insist that the deck is stacked in favour of the more advanced developing countries, where emission levels are rising fast. At the 13th Conference of the Parties in Bali, Indonesia, in 2007 they suggested that binding emission reduction targets should equally apply to the likes of China and India. This is a tricky and problematic issue and says a lot about the complexities of "negotiating" justice. It is true that China's emissions are rising fast because of its high growth levels and reliance on dirty coal. But the current carbon concentration in the atmosphere has been the result of a continuous build up over many generations, and China or India had relatively smaller contributions to this (although their carbon imprint, because of their current high growth, will show up later).

Moreover, China's emission level on average is still way below that of the US on a per person share. China is using up the world's raw materials, but it is also accepting mountains of waste that other countries do not want to keep in their own backyards. It is recycling the world's waste and undertaking

⁷ Baer, P., Athanasiou, T., Kartha, S. and Kemp-Benedict, E. The Greenhouse Development Rights Framework: The Right to Development in a Climate Constrained World. 2nd Edition. Berlin: Heinrich Böll Foundation, 2008. Available from: <www.ecoequity.org/docs/TheGDRsFramework.pdf>.

⁸ The number of individuals who can be supported in a given area within natural resource limits and without degrading the natural social, cultural and economic environment for present and future generations. See <</p>

sustainable agriculture and massive tree planting. In fact, China probably has the highest carrying capacity anywhere on the planet – taking care of one of every six members of humanity in a comparatively small space. However one might question who is paying for the fact that China produces cheaply for all of us. Another question is why Beijing cannot shift at once to clean production and produce more durable goods. If China can help bail out the global economy with its surplus money, why not spend it in cleaning up its own mess and shift to a low-carbon path of development?

US carbon emissions, a quarter of the world's total, remain at very high levels. Its per capita CO, emission level has seen little or no reduction at all since 1990. The World Development Report 2006: Equity and Development put it at 19.8 tons/person that year.9 Europe, Japan and other industrialized nations may have succeeded in cutting down but their efforts still fall short of the Kyoto Protocol's minimal standard. Overall, annual global CO₂ emissions have not let up since 1990. To some this a sign of prosperity, meaning an indication that economies are continuing to grow. To others it is ominous, as it brings us closer to the point of no return. Contraction and convergence efforts must result in preventing an average global temperature rise of more than 2 degree Centigrade by 2050 - the threshold we are advised to respect or die. This is not much time, obviously.

Adapt or perish

Poor countries cannot afford to wait for dramatic mitigation efforts to happen. They might perish before they get justice. With or without assistance, they have to find ways to adjust to climate change before it is too late.

Defined in the IPCC's *Third Assessment Report*, but already inherent in the agency's original mandate from 1988, adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects or impacts.¹⁰ It refers to changes in processes, practices or structures to moderate or offset potential damages or to take advantage of opportunities associated with changes in climate. It involves adjustments to reduce the vulnerability of communities and regions to climate change and variability.

The User's Guidebook on the Adaptation Policy Framework (APF) of the UNDP-Global Environmental Facility defines adaptation as "a process by which strategies to moderate and cope with the consequences of climate change – including climate variability – are enhanced, developed and implemented".¹¹ The APF includes seven components: defining project scope; assessing current vulnerability; characterizing future ⁴⁴ The current crisis is global, so policies to end it must also be global but linked with local movements. We believe that stimulus packages should be invested in things like green infrastructure and social infrastructure, which would allow for the creation of green jobs, an acknowledgement of the disproportionate impacts of the crisis for women workers, and the recovery of the care economy. These kind of policies are spelled out in the ILO Global Jobs Pact. The UN is the only place for the countries bearing the brunt of the crisis to have a representative voice. The labor movement is working within the framework of the UN and trying to bring in the Decent Work and Green Jobs Agenda. It is not just a question of increasing development aid and being a bit more generous – as some industrialized countries would like to assert. There is a need for social transformation. Multilateral institutions need to be systemically reformed and we need specific mechanisms to ensure that we have enduring solutions to the financial and economic crisis.

Gemma Adaba (International Trade Union Confederation)



risks; developing an adaptation strategy; continuing the adaptation process; engaging stakeholders; and enhancing adaptive capacity. Decisions about how to use this framework will depend on a country's prior work, needs, goals and resources.¹²

According to the IPCC, the requirements that need to be met for a country to have a high adaptive capacity include: a stable and prosperous economy; a high degree of access to technology at all levels; well-delineated roles and responsibilities for implementation of adaptation strategies; systems in place for the national, regional and local dissemination of climate change and adaptation information; and an equitable distribution of access to resources. This basically excludes non–Annex I countries.

Growing concern about adaptation has been addressed by decisions of the Conference of the Parties (COP). The Marrakesh Accords that came out of COP-7 delineated instruments and mechanisms for supporting adaptation, including the creation of three new funds: (a) The Special Climate Change Fund under the UNFCCC for supporting the "implementation of adaptation activities where sufficient information is available"; (b) the LDC Fund dedicated to the preparation and implementation of national adaptation programmes of action (NAPAs), which "will communicate priority activities addressing the urgent and immediate needs and concerns of the LDCs relating to adaptation to the adverse effects of climate change"; and, (c) the Adaptation Fund set up under the Kyoto Protocol and getting advice from the Global Environmental Facility on its operations.

Sustainable agriculture and fisheries, sustainable forestry and watershed management, and ecological waste management are adaptation paths that can help cool the planet. Ensuring food security calls for a radical change in the way farming is done, a view that has long been advocated by farmers' movements worldwide. This got a strong boost from the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)

⁹ World Bank. World Development Report 2006: Equity and Development. Washington, DC.

¹⁰ IPCC. "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: Cambridge University Press.

¹¹ Dougherty, B. and Spanger-Siegfried, E. User's Guidebook on the Adaptation Policy Framework. Boston: Stockholm Environment Institute US and United Nations Development Programme (UNDP), 2005.

¹² Available from: <maps.grida.no/go/graphic/projectedimpact-of-climate-change>.

In El Salvador, we have been facing for years now the impact of climate change, suffering floods and droughts, hurricanes, the drying of major rivers, the collapse of communities. Each year the material costs are high, and so is the loss of human lives and the emigration of our people, especially the youth. We must work for a new era in which development is measured by the well-being of humanity and that of Mother Earth, and not just by material wealth.

Marta Benavides (GCAP Feminist Task Force, El Salvador)

⁴⁴ While industrialized Northern countries are mainly responsible for greenhouse gas emissions causing climate change especially in per capita terms, countries of the South, and the poor and women in particular, will bear a bigger burden of the adverse environmental effects of climate change and its socio-economic impacts. Some of these effects are the displacement of people living in low-lying coastal areas; the loss of sources of livelihood; food insecurity; and reduced access to water. From an ecological debt perspective, rich, industrialized countries do not only have the responsibility of drastically cutting greenhouse gas emissions down, but they also have an ethical and moral obligation to provide compensatory and reparative finance to developing countries to fund climate change mitigation and adaptation efforts.

Athena Peralta (World Council of Churches)

at a conference held in April 2008 in Johannesburg, South Africa. The IAASTD admitted to the shortcomings of the Green Revolution technology and recognized the critical role of indigenous knowledge and sustainable agriculture in attaining food security. It released a report indicating that modern agriculture will have to change radically from the dominant corporate model if the world is to avoid social breakdown and environmental collapse.¹³

The report – opposed by Australia, Canada and the US – also criticized genetic modification (GM) and the conversion of farmlands to biofuel production. It said that the so-called GM technology was not the way to feed the world's poor, and that growing agrofuels to feed cars on land that should be used to feed people will surely worsen world hunger and an already very fragile human security situation.¹⁴

Although adaptation has emerged as a key policy question in negotiations on climate change, the issue has not yet been addressed forcefully in policy development planning at all levels. Building adaptive capacity, or meeting MDG targets, is very different from growing the economy and working for development as usual. It is about delivering social and environmental justice – a necessary condition for securing the path to sustainability.

Justice in finance and technology transfers

The UNFCCC states that rich countries are dutybound to make transfers to developing countries, but nobody should be a beggar. If poor peasants shifted to organic farming or municipal fishers managed their coastal resources properly, they would be doing it not only for themselves but for all of us. If a poor country takes care of its biodiversity, it is doing a great service not only to itself but also to humanity. These efforts deserve to be compensated or reciprocated somehow through, for example, a carbon tax on the rich, untied ODA, unconditional debt relief, fairer trade terms, technology or other forms of resource transfers.

Financing climate stabilization requires huge amounts of money. Oxfam International¹⁵ has said that the cost of adaptation for developing countries will be at least USD 50 billion a year, in addition to the current ODA level, which already includes funding commitment for the MDGs. However in his presentation of the Fourth Assessment Report in Bali, IPCC chair Pachauri said that "the cost of mitigation is really not all that much" as it is estimated annually to be less than 1% of global GDP. Rich countries are bailing out the big banks that caused the current global financial mess. It is only fair for developing countries to ask for an equivalent bail-out for the eradication of world poverty, rehabilitation of the environment and stabilization of the climate system.

Although Annex 1 parties agree that climate change is the most serious threat to sustainable development, their actions up to now have been simply disappointing. Decisions that truly matter for eradicating poverty and redressing global disparities take too long, often ending up in insufficient or even negative net transfers with heavy strings attached. Moreover, the rich themselves must begin to dramatically change the way they see the world and how they produce and consume. In other words, they must give up on their unsustainable lifestyle.

Slow down, cool the earth

What scenario can cool an overheating planet and spare us from disaster -350 ppm, 450 ppm? Whichever is the answer, the action should be the same: we all must slow down. Strictly speaking, scenarios are not predictions; they are a range of possibilities that can lead to different alternative futures. As the future is inherently unpredictable, there is no certainty on what will come out of the action of so many. However scenarios are useful because one of the causes of unpredictability and uncertainty is human action - or the possibility of it - to change the course of events. The future is shaped by what we believe it will be and by what we do to make it happen.

Oddly, the current global recession may turn out to be a blessing in disguise. Perhaps the deeper it cuts and the longer it lasts, the better it will be for all of us. Less growth implies less emissions and less stress on the environment. Cleaner production and universal reduction in per capita consumption means less carbon footprint and – maybe –healthier living. Perhaps all these things will happen regardless of what comes out of the climate negotiations in Copenhagen and beyond.

Is there any time to save ourselves? Maybe yes, maybe no. In any case, let it not be said that our generation did not do enough for justice.

¹³ IAASTD. Agriculture at the Crossroads: Global Report. Washington, DC: Island Press. 2008

¹⁴ Vidal, J. "Change in Farming Can Feed World – Report." *The Guardian*, 16 April 2008.

¹⁵ Oxfam International. "Adapting to Climate Change: What's Needed in Poor Countries and Who Should Pay." Oxfam Briefing Paper 104, May 2007. Available from: <www. oxfam.org/sites/www.oxfam.org/files/adapting%20to%20 climate%20change.pdf>.