

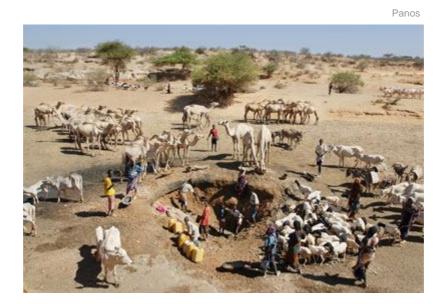


Climate change and the poor

Adapt or die

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Environmentalists have long said the world should concentrate on preventing climate change, not adapting to it. That is changing



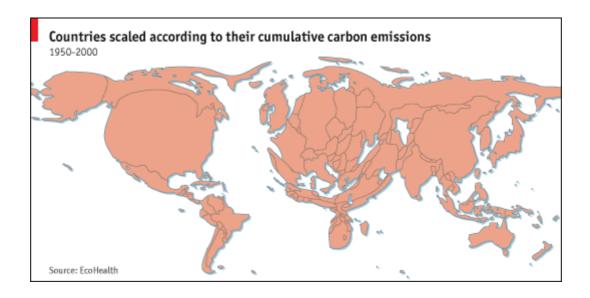
"I USED to think adaptation subtracted from our efforts on prevention. But I've changed my mind," says Al Gore, a former American vice-president and Nobel prize-winner. "Poor countries are vulnerable and need our help." His words reflect a shift in the priorities of environmentalists and economists.

For years, greens said adaptation—coping with climate change, rather than stopping it—was a bit like putting out a fire on the Titanic: desirable, no doubt, but the main thing was to change course. In July, however, a committee of America's Senate set aside \$20m for international adaptation efforts. That was peanuts; and nothing will come of it anyway because there is no comparable legislation in the House of Representatives. But it was the first time American legislators had showed willingness to put money into global efforts at coping. In June, the United Nations hammered out the details of how to control spending of the first carbon tax earmarked for international adaptation.

Two things have changed attitudes. One is evidence that global warming is happening faster than expected. Manish Bapna of the World Resources Institute, a think-tank in Washington, DC, believes "it is already too late to avert dangerous consequences, so we must learn to adapt."

Second, evidence is growing that climate change hits two specific groups of people disproportionately and unfairly. They are the poorest of the poor and those living in island states: 1 billion people in 100 countries. Tony Nyong, a climate-change scientist in Nairobi, argues that people in poor countries used to see global warming as a Western matter: the rich had caused it and would with luck solve it. But the first impact of global warming has been on the very things the poorest depend on most: dry-land agriculture; tropical forests; subsistence fishing. In a recent paper* for the Brookings Institution, a think-tank in Washington DC, Robert Mendelsohn of Yale University estimates that African farmers on rain-fed land will lose \$28 per hectare per year for each 1°C rise in global temperatures. Global warming erodes coastlines, spreads pests and water-borne diseases and produces more erratic weather patterns.

The victims share two characteristics. They are too poor to defend themselves by expensive flood controls or sophisticated public-health programmes. And (unlike China or Brazil) their own carbon footprints are tiny. Kirk Smith, a professor at the University of California, Berkeley, calls climate change the world's biggest regressive tax: the poorest pay for the behaviour of the rich (see map).



The new focus on adaptation shows itself in a slew of private- and public-sector projects. A private Australian company called New Forests cleans up degraded land in South-East Asia, creates "biodiversity conservation certificates" and sells them to big firms which want to be greener. Swiss Re is designing new kinds of subsidised insurance to help poor farmers in a dozen African countries guard against some of the impacts of climate change, creating innovative climate-risk indices and weather derivative contracts. Dozens of small firms advise big ones on cutting their carbon footprints; although most aim at reducing emissions, a few invest in reforestation, soil protection and the like.

On the public-sector side, rich-country governments are levying new taxes and using the revenues for global poverty-reduction and adaptation. France, for example, imposes a tax on international flights of between €1 and €40 per seat, using the money for HIV/AIDS in Africa. Some environmentalists want a similar tax on all international flights to help adaptation. Countries are creating adaptation funds by auctioning rights to pollute under cap-and-trade arrangements. A fifth of the money raised by the European Union's emissions-trading scheme—forecast at over \$2 billion a year by 2020—is supposed to go on climate-change efforts including, as the scheme says, "developing countries' adaptation". A bill proposed this year in America's Senate would have generated \$10

billion-20 billion a year after 2025. The bill failed but similar steps have the backing of both Barack Obama and John McCain.

Most important, a United Nations conference in Bali last December set up what is essentially a global tax on carbon, with the money to be spent by an international body. Under the Kyoto protocol, companies in rich countries that have signed the climate accords can finance reductions in emissions by private firms in developing nations. In return, rich-country companies can offset a portion of their own (capped) emissions. These company-to-company deals produce "carbon credits" which have a value and can be traded. In June, it was agreed that 2% of that value (forecast at up to \$950m by 2012) will go into an adaptation fund controlled by donors and recipients. About \$100m-worth of these credits are already in the bank.

So adaptation is becoming a proper business. As it does so, however, it encounters a host of problems.

To begin with, the money involved is just a puff of smoke. Back-of-the-envelope calculations suggest the cost of coping with climate change is in the tens of billions a year for poor countries (see table). The total pledged to date (cumulatively, not per year) is \$300m, of which just 10% has actually been spent. China says rich countries should allocate 0.5% of their national incomes in official aid to help developing countries adapt. But most rich countries are failing to fulfil earlier

\$50 billion, or thereabouts Estimated costs of adapting to climate change		
Assessment by	Annual cost \$bn	In
UNDP (2007)	86	2015
UNFCCC (2007)	28-67	2030
World Bank (2006)	9-41	2008
0xfam (2007)	>50	2008
Stern Review (2006)	4-37	2008
Source: World Resources I	institute	

promises to increase aid for other reasons, so that looks like a non-starter.

The discrepancy means poor countries will end up bearing most of the burden themselves. China has a national climate-change programme with an elaborate series of targets and exhortations to cope. Bangladesh this year put \$50m into a national adaptation fund and invited rich countries to add of their plenty. But this sort of thing is much easier for giants like China or large countries like Bangladesh, than it is for poorer Mali or tiny Maldives.

With more problems than money, there will—as always—be a fight over the spoils. Rich countries may concede the poor are harder hit and need help, but once there is a pot of money, they too will want a share. For an American administration, rebuilding the levees of New Orleans (an adaptation programme) will take precedence over projects in Africa or the Caribbean.

Even if poor countries do get help, there are bound to be fights over how to use it. In general, says Saleemul Huq of the International Institute for Environment and Development in London, most adaptation spending should go on what countries are doing anyway—irrigation, drought-resistant seeds and so forth. But that leaves plenty of room for disputes.

If sea levels go up, do you build sea walls or rehouse people? If infectious diseases are rising, do you spend money trying to eradicate the worst ones, like malaria, or on health and nutrition in general? The latter makes sense but most donors concentrate on single-disease efforts. George Soros, a financier who runs a chain of philanthropic organisations, says that in their experience, few people in poor countries have a clear idea about climate change and how to cope with it.

Lastly, the international arrangements that might help sort out some of these disputes are a shambles. Among developing countries, most negotiations on climate change (as on everything else) are led by the big three: China, India and Brazil. But they are large polluters themselves and their interests differ from very poor states and islands. Angus Friday, Grenada's ambassador to the UN who speaks for island states there, says the states most vulnerable to climate change are least able to participate effectively in climate-change talks.

The poorest lose out in another way. When industrial polluters in emerging markets cut emissions, they are rewarded through Kyoto. But the poorest are not rewarded for the big contribution they could make towards reducing emissions, which is the better management of tropical forests. That is because forests were excluded from Kyoto, to the chagrin of the poor.

Mary Robinson, a former president of Ireland and UN high commissioner for human rights, says that there should be a "rights-based" approach to climate change, meaning poor countries should have some redress under international law for the environmental costs they suffer. This seems like a recipe for alienating rich countries. But it reflects a growing impatience. As the costs of climate change bear down on the poor, so their demands grow that rich countries, which caused most of the problems, should help them cope.

* www.brookings.edu/events/2008/0801_development.aspx

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