

Critical list: the 100 nations most vulnerable to climate change

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Well over a billion people in 100 countries face a bleak future. In these, the nations most vulnerable to climate change, resilience has already been eroded by entrenched poverty, degraded or threatened environments and other problems. The harsher, more frequent natural disasters that are predicted could tip them over the edge into chronic famine or forced migration. Yet these are also the countries that have contributed least to climate change. It is vital that their voices and views be heard in the negotiations to determine the post-Kyoto climate regime. Equally importantly, the countries emitting the most greenhouse gases must redress the balance by establishing robust mitigation programmes and by supporting adaptation.

Pinpointing the vulnerable

The Fourth Assessment of the Intergovernmental Panel on Climate Change (IPCC) states that the impacts of human-induced climate change are likely to be felt in poor countries and poor communities first. The IPCC highlights the following as being particularly vulnerable:

- Small Island Developing States (SIDS)
- Africa
- Mega-deltas (particularly in Asia)
- The polar regions.

The UN Framework Convention on Climate Change (UNFCCC) also recognises SIDS and Africa as being particularly vulnerable, and adds to this the Least Developed Countries (LDCs). The countries making up these three groups are shown in the diagram.

As this shows, there is considerable overlap between the groups. For example, a number of SIDS — which are physically vulnerable because of their location on small low-lying islands or coasts — are also

socioeconomically vulnerable LDCs. Many African countries are also LDCs, and as noted by the IPCC, 'Africa is one of the most vulnerable continents to climate variability and change because of multiple stresses and low adaptive capacity' (our emphasis). These conditions are mutually reinforcing: a low level of development constrains adaptive capacity.

Taken together, these countries form one group of 100 nations, collectively housing well over a billion people. However, their CO₂ emissions (excluding South Africa's) account for only 3.2 per cent of the global total, compared to 23.3 per cent for the US, 24.7 per cent for the EU, 15.3 per cent for China and 4.5 per cent for India (see table below).

It is abundantly clear from this data that this group of 'Most Vulnerable Countries' (MVCs):

- Makes up a significant number of Parties to the UNFCCC and the Kyoto Protocol (and a more significant proportion of the 131 'G77' countries)
- Emits a tiny proportion of the total amount of greenhouse gases from human sources and a negligible amount relative to the emissions from the major emitting countries.

KEY MESSAGES:

- Human-induced climate change is likely to have the heaviest impact on small low-lying island and coastal states, African nations, Asian mega-deltas and the polar regions.
- The 100 most vulnerable countries have contributed the least to total global carbon emissions.
- If the highest-emitting nations fail to introduce strong mitigation measures, the most vulnerable countries will suffer catastrophic impacts over the longer term.

Highest and lowest: CO ₂ emissions, 2002			
Country/Region	Total emissions (1000 tonnes)	Total of global emissions (%)	Per capita emissions (tonnes)
LDC, SIDS and Africa*	791,456	3.2	2.2
LDC, SIDS and Africa	1,155,363	4.67	2.3
India	1,105,595	4.5	1.1
China	3,783,231	15.3	2.9
US	5,773,401	23.3	19.9
EU	6,117,989.5	24.7	8.4
Global	24,756,694	100	4

*Excluding South Africa

So while these countries and their people (particularly the poorest communities within them) will suffer severely over the next decade or two from the impacts of climate change, they bear minimal responsibility for creating the problem.

The need for strong mitigation and adaptation support

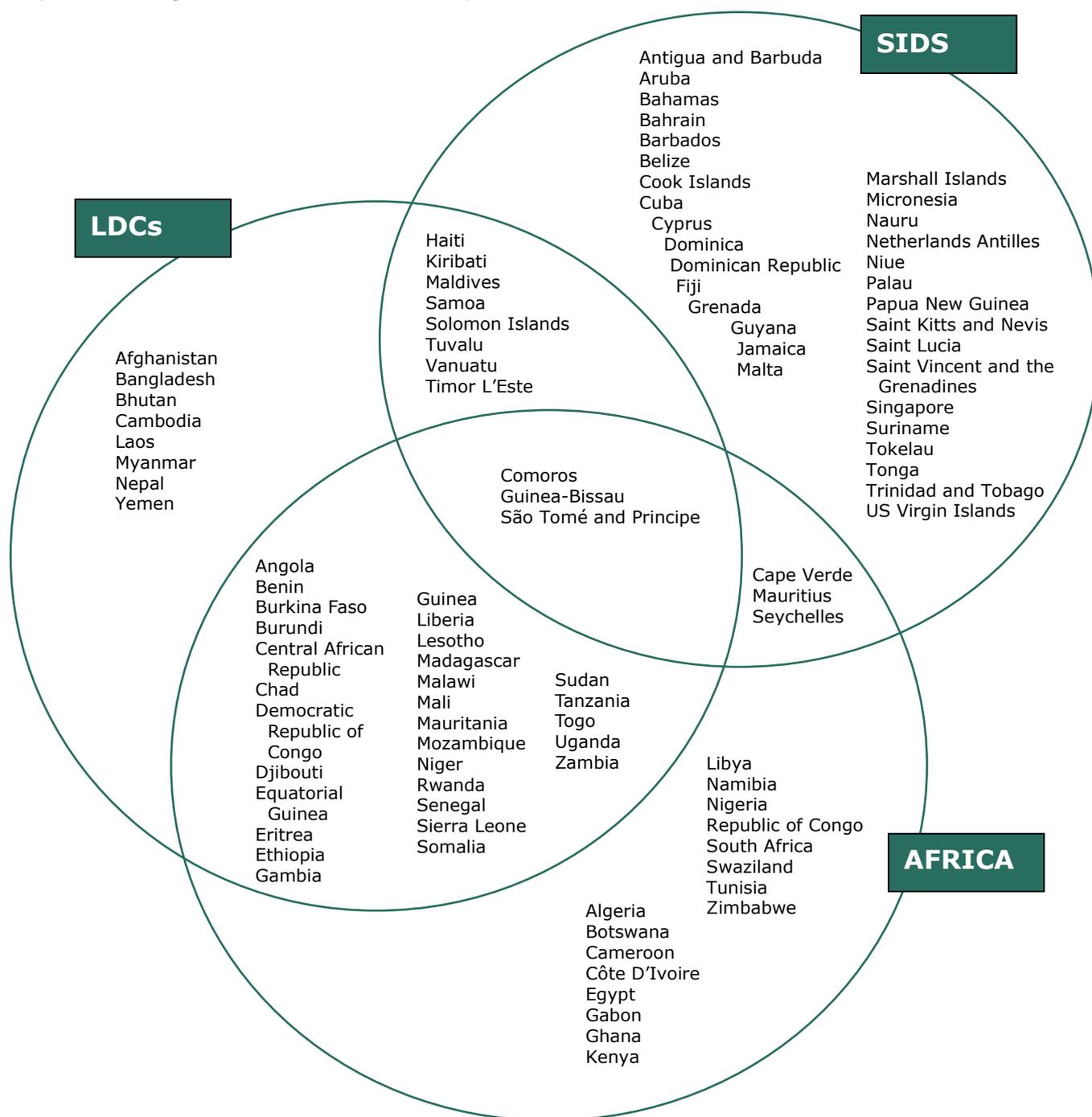
If during that time the countries and regions emitting the most — primarily the US, EU, China and India, as shown in the table — fail to introduce strong mitigation measures, the impacts on the MVCs over the longer term could be catastrophic. In the case of SIDS, some may be completely inundated and disappear altogether. In other cases, the lack of capacity to cope with the impacts of climate change may result in the forced migration of tens of millions of people, for example from the low-lying and densely populated delta and coastal regions of Asia and Africa. In the near term, these countries will need substantial funding for adaptation, running into tens of billions of dollars a year.

The December 2007 negotiations under the UNFCCC in Bali, Indonesia, are meant to lead towards a new, global climate regime. The Bali talks are of critical importance to this very large and significant group of most vulnerable countries.

It is therefore essential that their voices, views and perspectives be heard — and incorporated — in the post-2012 climate change regime negotiations.

Sources

IPCC (2007) *Climate Change 2007: Impacts, adaptation and vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva. See www.ipcc-wg2.org.



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