

## Beyond borders: the need for strategic global adaptation

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***The 'adaptation is local' mantra is no longer valid. Climate impacts are pervasive, inevitably crossing geographic and political boundaries. And they will be severe. Some top scientists now say we should prepare for a rise in global mean surface temperature of 4 °C – even though most impact and adaptation research is based on 2 °C. What will this mean for adaptation? We need to move far beyond measures like National Adaptation Plans of Action. The ramifications of this new scenario are much more than physical and biological: there are significant socioeconomic and geopolitical implications on a par with those of mitigation. Adaptation must be understood, negotiated and financed in that light.***



### The strategic imperative

After taking a back seat to mitigation, adaptation to climate change has come of age. It is now one of the four more or less co-equal pillars of the 2007 UN climate talks' Bali Action Plan, together with mitigation, finance and technology. Funding for adaptation projects and programmes is currently a burning issue. But a paradigm shift in our overall approach to this challenge is now needed. Adaptation has to be understood as a strategic and security issue that transcends national boundaries.

In 1992, adaptation was a lower priority than mitigation because it was assumed that the impacts of climate change would arise slowly over time and could be dealt with piecemeal, as they emerged. It was also assumed that adaptation was largely local and could thus be managed at national level or lower, with some financial assistance for the most vulnerable countries.

Both these assumptions are now recognised as too limited. Climate change has been swifter than initially anticipated. Impacts are already being observed, while the projections imply a significantly more rapid emergence of enhanced climate risks.

Moreover, progress in reducing emissions of carbon dioxide and other greenhouse gases, and stabilising concentrations, has been minimal. The planet now faces the reality of substantial and no longer avoidable climate change. Most global impact and adaptation research is predicated on a global mean surface temperature increase of plus 2 degrees Celsius. But two top UK scientists are among those questioning

this. Bob Watson, chief science advisor to the UK Department for the Environment, Food and Rural Affairs, and former chief government science advisor Sir David King, suggest it would be more realistic to ask what adaptation will mean if the figure is over 4 °C.

The argument is that the 2 °C target is highly ambitious, and the action needed to reach it is relatively imprecise. Major economic, technical and political obstacles make the rapid reduction of emissions needed to reach that target unlikely, to say the least.

In this context, adaptation cannot be contained within national boundaries: the impacts of climate change will be serious and widespread, demanding adaptive measures to match. In essence, this strategic approach to adaptation will be a radical departure from short-term, project-oriented methods such as National Adaptation Programmes of Action (NAPAs). Two examples, from Bangladesh and Canada, show the need for the long view and a genuinely collaborative strategic approach.

### Before the deluge: Bangladeshi plans

The recently issued Bangladesh Climate Change Strategy and Action Plan 2008 (BCCSAP), covering 2009-2018, marks a substantial achievement in adaptation planning. It advances well beyond the country's NAPA, and covers both mitigation and adaptation.

The BCCSAP provides for the incorporation of climate risks into development activities, and proposes relevant programmes and projects. A range of ministries and agencies are to implement these, facilitated by a



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climate change secretariat and a steering committee on climate change reporting to the National Environment Committee, chaired by the prime minister.

Other countries, both developed and developing, would be wise to follow this lead. Yet for all its merits, the BCCSAP fails to account for some key realities.

For example, a major problem facing Bangladesh is the unsustainability of the economy and livelihoods of millions of people living very close to sea level in the outer *chars* or silt islands, and delta lands. Climate-related problems such as sea level rise, salinisation of groundwater and cyclones are all occurring, some at an accelerating rate and intensity. In the next few decades, 10 or 20 million Bangladeshis will be obliged to adapt by migration. Yet the BCCSAP assumes that all adaptation can be achieved *in situ*. The measures it proposes for the coastal areas amount to mere palliative adaptation.

A strategic approach would factor in the considerable relocation needed by providing for the creation of new towns built at higher elevations inland, and offering new economic activities and livelihoods. This would involve the private sector, stimulate creative planning and help to divert the flow of migrants away from Dhaka, the overcrowded capital. Strategic adaptation thus becomes synonymous with development planning and choices.

### Northern exposure: Canada's big thaw

The case of Bangladesh is stark. But the developed world faces its own adaptation issues. In Northern Canada, for instance, the permafrost is melting and undermining buildings, roads and other infrastructure. The season is shortening for winter ice roads – the main access routes to many smaller communities. Canada's northern ecosystems are rapidly changing, with new species moving in and established ones under threat. Traditional lifestyles and livelihoods are now at risk: many of the Inuit speak of cultural genocide.

Meanwhile, the entrepreneurial hopes of both the domestic and international private sector are buoyant over the prospect of the Northwest Passage – the sea route connecting Atlantic to Pacific – opening seasonally as its pack ice shrinks. Some Canadians, including a number of indigenous populations, welcome the prospect of a natural resources boom as the region warms and develops. Not least, there is now the prospect of much more oil being found and extracted from beneath the Beaufort Sea and the Arctic Ocean.

These rapid and unsettling shifts call for a strategic view of adaptation integrated with mitigation – which, as with Bangladesh, must be synonymous with development.

## Further reading & websites

Bangladesh Ministry of Environment and Forests. 2008. *Bangladesh Climate Change Strategy and Action Plan 2008*. MoEF, Dhaka, Bangladesh. ■ Lemmen, D.S., Warren, F.J., Lacroix, J., and Bush, E. (eds) 2008. *From Impacts to Adaptation: Canada in a changing climate 2007*. Government of Canada, Ottawa. ■ Randerson, J. 7 August 2008. Climate change: prepare for global temperature rise of 4C, warns top scientist. See [www.guardian.co.uk/environment/2008/aug/06/climatechange.scienceofclimatechange](http://www.guardian.co.uk/environment/2008/aug/06/climatechange.scienceofclimatechange). ■ Refugee Studies Centre. 31 October 2008. *Forced Migration Review* special issue: Climate Change and Displacement. University of Oxford. See [www.fmreview.org](http://www.fmreview.org).

## Towards the new vision

No country can solve the carbon emissions problem alone; nor can adaptation be addressed solely on a national basis. In Bangladesh, climate-triggered, large-scale migration is likely to spill across borders and oceans, causing a range of social and political implications and consequences including potential conflict and threats to security. In the Arctic, a lack of agreement on boundaries, the use and regulation of shipping lanes and of resources in international waters could spell trouble ahead as climate change unlocks the region's natural wealth.

There will be echoes of these emergent challenges round the world. International migration will increase, perhaps dramatically. International borders and boundaries will be closely scrutinised and in some cases disputed. National adaptation decisions will have impacts beyond borders. And new international agreements are needed.

A new vision of adaptation is emerging that includes strategic planning and cooperation at national, regional and global levels. It would be far better to provide for the development of collaborative adaptation mechanisms under the new post-Kyoto agreement – to be hammered out in 2009 at the Copenhagen climate talks – than to focus only on the project and national level.

## Next steps

- The international community must find new ways of tackling adaptation as a global strategic and security issue.
- Countries must focus on rethinking development goals and objectives in the face of realistic predictions of how ongoing climate change will affect their economies and population distribution.
- More financial flows are needed for adaptation at local and national levels, and a slice of these funds should support national strategic planning processes that involve civil society and the private sector.
- National plans should be developed in consultation with neighbouring and nearby countries.
- Developed countries need to prepare their own strategic plans.
- All countries should fully report their adaptation plans and programmes as part of their national communications to the UN Framework Convention on Climate Change.

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