

Climate change: Getting adaptation right

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‘Getting adaptation ‘right’ involves complex development policy management and implementation based on the best available climate and social science’

There is agreement that climate change is likely to result in a rise in sea levels, and more intense and frequent examples of extreme weather. Unless systems can adapt effectively, climate change may undermine development, including progress on the Millennium Development Goals.

In developing countries, coping with climate change means creating adaptation mechanisms to boost resilience and the ability to cope with anticipated impacts. A number of countries have prepared National Adaptation Programmes of Action (NAPAs) detailing the policies and programmes needed to build ‘adaptive capacity’, and reduce national vulnerability to climate change. Three guiding principles could help in ‘getting adaptation right’:

1. policies and activities should build resilience to climate change and vulnerability, and target those most at risk – a pro-poor approach;
2. poverty reduction policies and activities should avoid increasing vulnerability to climate change;
3. adaptation funds should respond to the Paris Agenda on Aid Effectiveness and reinforce national priorities.

This implies, first, that adaptation responses should be based on a thorough assessment and understanding of available knowledge on climate change and poverty, so that the most appropriate interventions are chosen; and second, that these should support existing government priorities on poverty reduction, rather than separate climate change programmes and projects.

Evidence-based adaptation

The evidence base used to construct adaptation strategies will determine the impact of identified responses. The starting point is knowing what climate changes are likely and how different systems – social and ecological – will respond. It is then possible to identify adaptation strategies to mitigate any negative impacts on poverty and ecological degradation. At the same time, the greater the knowledge base of the systems themselves, the greater the understanding of the complexities of adaptation and the

links between human and ecological systems.

A number of adaptation strategies take a vulnerability-based approach to mitigate the impact on poverty at the country level – sensibly, given the uncertainties inherent in climate science. This approach aims to ensure that critical thresholds of vulnerability in socio-ecological systems are not exceeded under climate change scenarios by addressing the underlying causes of vulnerability. And this is where development plays an important role.

In Ethiopia, for example, the Government has found it hard to identify and address specific climate-related risks because of the limitations of national climate change models. The prioritised adaptation options in the NAPA, therefore, aim to reduce vulnerability to climate change by prioritising options to reduce income poverty, thereby reducing the causes of vulnerability.

Crop insurance, for example, is seen as a priority adaptation activity in the Ethiopian NAPA, and may reduce short-term vulnerability among socio-economic systems by addressing the risk of serious rainfall fluctuation between years. What it does not do, however, is address wider climate change issues that will alter production systems over the long-term, such as cultivation that moves higher into the hills as temperatures rise, or changing rainfall patterns that will affect where and how pastoral groups can graze livestock. It will not build resilience to primary impacts of climate change.

Other policies aimed at primary risks involve small-scale irrigation and the building of dams. These are similarly risk-prone, given climate modelling uncertainties and, in the case of dams, the ‘lumpy’ investment and long lead time for implementation. This fixes adaptation responses to prevailing knowledge on rainfall patterns, but does not allow more flexible adaptation as knowledge changes and more finely-grained understanding of national-level impacts emerges. Irrigation and large-scale water storage can even induce negative impacts where implemented poorly, and disrupt other complex livelihoods systems that rely on river water, particularly in times of drought.

Given that experience in identifying adaptation options under NAPAs is limited, and rarely

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Box 1: Getting adaptation right – core issues

Experience in Bangladesh and Ethiopia suggest the following steps should be taken:

1. There is coordinated and systemised assessment of the best available climate change science at national, local and, where needed, regional levels;
2. This knowledge is adequately and demonstrably reflected in adaptation programmes and is ‘verified’ across a wide spectrum of development institutions;
3. The basis on which adaptation plans (like NAPAs) suggest adaptation strategies should be grounded in good development practice at all level;
4. There is a clear strategy for the implementation of adaptation strategies, including cross-sectoral dimensions and disbursement of funds;
5. There is parallel investment in the continued development of knowledge at national and regional level to improve the decision-making environment and the capacity of researchers and decision-makers to make the important connections between research, knowledge, policy and practice.

informed by rigorous impact and response assessments, it is important to invest in the development of knowledge at national and regional level. It is also important to improve the environment in which decisions are made, and the capacity of researchers and decision-makers to make the connections between research, policy, and actual practice. Two conclusions emerge:

1. adaptation strategies should be flexible enough to take on board new knowledge as it is generated and, in particular, more finely-grained climate impact modelling;
2. strategies should be inclined towards less ‘lumpy’ and more flexible social infrastructure investments, rather than large-scale hardware.

Mainstreaming adaptation strategies

Getting adaptation right means ensuring that strategies are implemented effectively. A number of country experiences point to the need to mainstream adaptation strategies into existing development policies and processes. There are two issues related to effective mainstreaming: vertical and horizontal coordination between implementing institutions, and determining how adaptation strategies are financed.

Getting coordination right means that NAPA processes should start with a wide-ranging consultation. The Ethiopian NAPA did so, but this needs follow-up to ensure coordination across sectors and institutions to prioritise investments and implementation.

On financing adaptation, existing experience with aid delivery highlights the need to ensure national ownership and alignment with government systems. A number of funds need to ensure that their finances are *in addition to* official development assistance,

so that finance is not diverted. Experience from Bangladesh and Ethiopia suggests best practices on national ownership of the adaptation agenda (Box 1).

In Ethiopia, where there is an increasing focus by donors on adaptation, the channelling and disbursement of adaptation funds should be seen within the context of an emerging aid effectiveness agenda in the country, including alignment with national systems. Although the means to finance identified options are still being developed, if the government takes a ‘project’ approach, the creation of vertical funds and projects may undermine aid effectiveness. At the same time, the added burden of extra funds on existing systems should also be recognised.

Project-based implementation is also likely to affect the sustainability of funding and hinder effective adaptation planning and implementation as a result of varying donor disbursement cycles and rules. If, however, finances are aligned to national systems, it is possible that adaptation funds will be off-set at a sub-national level in Ethiopia, thereby negating their additionality. There are many funding challenges that require major discussion before disbursement systems are established.

One option may be to follow the Bangladesh example. Here, the government is creating a Multi Donor Trust Fund to finance activities under the Climate Change strategy – an important example of efforts to ensure national ownership of the adaptation agenda. It reflects a ‘rights-based approach’, similar to the UN Framework Convention on Climate Change, under which developed countries have an ‘obligation’ to finance activities that will help developing countries respond to climate change. Donors can only give ‘grants’ to this Fund, rather than the resources provided by most of the new bilateral climate change funds, much of which will be loan-based. Above all, the Government of Bangladesh will be in the driving seat on strategy development and the identification of adaptation options.

Both financing and coordination of adaptation strategies pose major challenges for existing aid environments. Getting adaptation ‘right’ involves complex development policy management and implementation based on the best available climate and social science. It is important that substantial investments are also made in the knowledge environment surrounding adaptation to climate change at national level.

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