

# Assessing the effectiveness of climate adaptation

■ SIMON ANDERSON



***As governments and other agencies spend more money on adaptation to climate change they want to know that their investments are effective — that adaptation will keep development on track, that there is a fair distribution of costs and benefits, and that climate resilience is being built. But monitoring and evaluating adaptation policy and practice is not easy. Some approaches are unhelpful because they fail to integrate adaptation and development, use purely quantitative methods and do not include the perspectives of climate-vulnerable groups in their assessments. Enabling countries and organisations to effectively evaluate adaptation requires an inclusive approach built on sharing knowledge among all stakeholders — one that can capture behavioural and institutional changes and that answers to the needs of the climate-vulnerable poor.***



Across the world, policymakers and development practitioners have embraced the need to adapt to climate change. Climate change resilience and adaptive capacity have become the targets of significant spending — US\$100 billion was pledged at the 2009 UN negotiations in Copenhagen to support climate change responses, including adaptation. And there is a growing demand for frameworks and tools that can effectively track and assess the outcomes of these investments.

Governments, donor agencies and development organisations want reassurance that their investments deliver measurable results. Developing country governments need ways to assess the returns on their use of national funds, grants and loans.

There are three broad types of adaptation project: those that address existing ‘adaptation deficits’, those that manage incremental changes in climate-related risks and those that address longer-term climate change impacts by transforming existing systems and practices. Most adaptation policy and practice focuses on the first two, implementing projects to cope with current climate variability, improve climate risk management and ‘climate proof’ development — for example, providing social infrastructure against extreme weather events or promoting agricultural technologies to cope with less rainfall.

But the third type of adaptation project, which aims for transformative changes, are just as important, especially in the face of changing risk contexts, uncertain changes

in climate and unintended consequences of development interventions — which all demand flexible responses.<sup>1</sup>

## A difficult task

Across all three types of adaptation activity, good monitoring and evaluating (M&E) is critical to ensuring effective and accountable investments. But M&E of adaptation is not easy, not least because the domain of change that we are trying to measure — climate resilience or adaptive capacity — is not well defined, making it very difficult to know when significant change has happened.

M&E also tends to be seen as a highly technical and specialist area that focuses on quantifiable results. Advocates of econometric approaches to impact evaluation question the validity of qualitative approaches to evaluation, saying ‘if you can’t measure it you’re guessing’.

Capacity often poses a hurdle to M&E of adaptation because there are very few people who hold both M&E and climate change expertise.

And there are difficulties associated with measuring how fairly adaptation costs and benefits are distributed. Global economic development shapes adaptation needs for vulnerable groups — both by contributing to climate change through greenhouse gas emissions and by limiting adaptive capacity of socially excluded groups. So M&E needs to answer to both the agencies providing the resources for adaptation investments and to those people identified as the beneficiaries of adaptation.



Simon Anderson is head of IIED's Climate Change Group.

## Four tensions in practice

When it comes to implementing M&E of adaptation on the ground, these methodological, technical, capacity and ethical difficulties create four key tensions.

1. Investing time and financial resources to work out how adaptation is additional to development versus pragmatically using development indicators for climate-vulnerable populations as proxies. Here the emerging consensus is sensible: the best use of climate finance in the short term is developmental activities that increase adaptive capacity. Preoccupation with 'additionality' makes integrating the two harder.
2. Developing new M&E methods that account for the uncertainty and complexity of climate change effects<sup>2</sup> versus building on known and practised results-based approaches. Only once we have a sure grasp of the uncertainty and depth of climate change challenges to development will we realise the need for transformative change.
3. Using quantitative impact evaluation methods versus using quantitative and qualitative methods combined, to capture the behavioural and institutional changes that enable adaptation to succeed. The bottom line is that many adaptation gains will be achieved by improving governance; impact evaluations as yet cannot assess this type of change.
4. Using independent and impartial assessments versus doing participatory M&E that involves climate-vulnerable groups. Approaches that treat the climate vulnerable as objects of independent assessments may improve the impartiality of assessments, but they do little to support mutual accountability and learning.

These tensions have led to trade-offs in emerging M&E frameworks for climate adaptation. Unfortunately, a review of current M&E approaches reveals that seeing adaptation as additional to development, finding uncertainty difficult, using purely quantitative methods and treating the climate vulnerable as objects are commonplace.

But more recent M&E frameworks are tending towards pragmatism. They focus on the capacity of institutions, government and civil society to understand climate change and to integrate adaptation into decision making.<sup>3</sup> In doing so they ask if policy, institutional and other mechanisms are adequate to promote knowledge and action on climate change.

The developmental performance of adaptation — the extent to which adaptation to climate change keeps development 'on track' — is important. Combining the tracking of societal 'adaptive capacity' with measuring

developmental outcomes is evident to some degree in the results frameworks developed for the Pilot Programme on Climate Resilience<sup>4</sup> and the Adaptation Fund.<sup>5</sup>

## Moral hazard and challenges

Adaptation M&E frameworks are developed and deployed recognising the moral hazard and information asymmetry issues related to planning and implementing adaptation interventions.

The climate-vulnerable poor need to know what is being done to tackle the climate risks that affect their development. By examining how authorities manage climate risks, and by linking this to the vulnerability of marginalised groups and the development outcomes they experience, an adaptation M&E framework can assess whether and how the adaptation needs of the climate-vulnerable poor are addressed, and what safeguards are in place to avoid 'mal-adaptation' (actions that may deliver short-term gains or economic benefits but lead to exacerbated vulnerability in the medium to long term).

Key challenges remain. Adaptation deficits exist now and there is a real risk that the gap between those who can adapt to climate change and those who can't will widen. In many cases, becoming climate resilient requires development to be transformed rather just 'climate proofed'. This means that M&E of adaptation has to measure how well climate risk management for development is done, and how well development performs under increasing climate challenges.

## Next Steps

No one organisation will or should have a monopoly on adaptation evaluation knowledge. An 'open source' approach to monitoring and evaluating adaptation, based on dialogue and the sharing of knowledge and lessons, is far more likely to be effective. Such an approach should be inclusive, bringing together practitioners, donors, international bodies, and representatives of governments, non-governmental organisations and civil society of developing countries where adaptation interventions will be implemented.

A key goal of this process should be to build mechanisms through which developing countries can evaluate their own progress on adaptation and what outside agencies offer in terms of support to adaptation. This should lead to greater capacity within developing countries to independently formulate, implement and evaluate climate change policies and actions.



The International Institute for Environment and Development (IIED) is an independent, nonprofit research institute working in the field of sustainable development. IIED provides expertise and leadership in researching and achieving sustainable development at local, national, regional and global levels. The 'Lessons from adaptation in practice' series has been produced with generous support from the Japan International Cooperation Agency (JICA).

CONTACT: Simon Anderson  
simon.anderson@iied.org  
80–86 Gray's Inn Road,  
London WC1X 8NH, UK  
Tel: +44 (0)20 3463 7399  
Fax: +44 (0)20 3514 9055  
Website: www.iied.org

## Sources

- <sup>1</sup> Brooks, N. *et al.* 2011. *Tracking adaptation and measuring development*. IIED, London. ■ <sup>2</sup> See Villanueva, P. S. 2011. *Learning to ADAPT: monitoring and evaluation approaches in climate change adaptation and disaster risk reduction – challenges, gaps and ways forward*. SCR Discussion Paper 9. Strengthening Climate Resilience. ■ <sup>3</sup> See [www.wri.org/project/vulnerability-and-adaptation/nac-framework](http://www.wri.org/project/vulnerability-and-adaptation/nac-framework) ■ <sup>4</sup> See [www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Implementing%20the%20PPCR%20Results%20Framework\\_CIF\\_June%2023%202011.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Implementing%20the%20PPCR%20Results%20Framework_CIF_June%2023%202011.pdf) ■ <sup>5</sup> See [www.adaptation-fund.org](http://www.adaptation-fund.org) and Project Level Results Framework and Baseline Guidance Document, AFB/EFC.3/3, p30, Adaptation Fund.

