

Improving information for community-based adaptation

■ SALEEMUL HUQ



Community-based adaptation aims to empower local people to cope with and plan for the impacts of climate change. In a world where knowledge equals power, you could be forgiven for thinking that enabling this type of adaptation boils down to providing local people with information. Conventional approaches to planning adaptation rely on ‘expert’ advice and credible ‘science’ from authoritative information providers such as the Intergovernmental Panel on Climate Change. But to truly support the needs of local communities, this information needs to be more site-specific, more user-friendly and more inclusive of traditional knowledge and existing coping practices.



Over the past five years, the world has woken up to the issue of adaptation to climate change. Scientists are clear that climate change is happening and will significantly impact people and the environment. Rising temperatures will change crop growing seasons. Changing rainfall patterns will cause water shortages or flooding in some areas. And rising sea levels means a greater risk of storm surges, flooding and wave damage for coastal regions across the world. Extreme weather events — such as droughts and cyclones — are also likely to become more frequent and more intense in the face of climate change.

With growing recognition of these inescapable impacts has come an increasing acceptance, by policymakers across the world, that countries and communities will need to plan and take action to cope with the changes ahead.

The Cancun Adaptation Framework adopted at the 2010 UN climate negotiations in Mexico demands that all countries must now work up a National Adaptation Plan that identifies medium- and long-term adaptation needs and priorities, and outlines strategies and programmes of action to address these.

Effectively planning and implementing adaptation requires information. But the type of information needed varies depending on whether plans are for developed or developing countries and whether they are being established at country, sector or community level. There

is a tendency for decision makers to turn to ‘experts’ for their information — to be guided in their planning by credible science.

But when it comes to supporting adaptation at the community level — which is where, for many developing countries in particular, there is the greatest need to adapt because the poorest communities are also the most vulnerable to climate change impacts — traditional sources of scientific information fall short of what is required.

Shortcomings of science

For the past decade, the bedrock of scientific information on impacts, vulnerability and adaptation to climate change has been the Working Group II of the Intergovernmental Panel on Climate Change (IPCC), of which I have been a lead author since the third assessment report, published in 2001. Conventional approaches to planning adaptation, which rely on ‘expert’ advice and credible science to guide them, have had few alternatives to turn to in their search for information.

Initially, the working group’s assessment reports were limited to outlining possible future impacts based on global climate models. This provided good information at large scales, but was less useful for local planning. Global climate models cannot, for example, accurately predict what will happen in specific locations.

And they do not factor in underlying socioeconomic



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vulnerability in their predictions. So, for example, model-based physical impacts in the Netherlands look similar to those in Bangladesh — in part, because the two countries share a similar topography, both being low-lying deltas. But in reality the impacts on people — and the options for adapting to these — are likely to differ widely: the Netherlands is technologically and financially rich and can adapt to rising sea levels by raising dykes; Bangladesh, on the other hand, cannot afford to build dykes around its entire coast, even if that was the best adaptation solution.

These shortcomings led to a greater emphasis in later IPCC assessment reports on examining the underlying societal vulnerabilities alongside potential physical impacts. This approach provided a more rounded picture of which countries and regions are at highest risk from climate change and made it clear that the most vulnerable parts of the world were the poorest countries in Asia, Africa and Latin America.

Most recently, IPCC assessments have moved even further to also look at actual adaptation options. Its latest contribution — the fifth assessment report, which is due to be published in 2014 — will include four chapters on adaptation, compared with just one in its last report in 2007.

Learning by doing

Even though the IPCC assessment reports have become more sophisticated in examining adaptation, they still rely to a large extent on theoretical and model-based assessments. And providing valid scientific information on adaptation cannot be made from this type of learning alone.

Adaptation is a relatively recent, and rapidly evolving, field. In most cases — particularly at the community level — knowledge about adaptation grows out of practice, which means that planning or implementing effective strategies requires a learning-by-doing approach.

The least developed countries — a group of forty-eight of the poorest developing countries located in Africa and Asia — have already begun such learning. Starting in 2002, this group was the first in the world to begin building national adaptation programmes of action that identify adaptation actions and prioritise them according to urgent and immediate needs. Many of these countries have also identified the most vulnerable communities and focused on priority actions at the community level.

Such community-based adaptation, which aims to empower people to cope with and plan for the impacts of climate change by addressing local priorities with local knowledge and capacities is beginning to

gain traction among researchers, policymakers and development practitioners alike.

Several community-based adaptation projects are up and running in vulnerable communities in both developing and developed countries. Large-scale initiatives — such as the Global Partnership on Community-Based Adaptation — are also being designed to try and answer some of the questions arising through ‘action research’. And four international conferences, led by IIED, have already been held to share knowledge and experience of community-based adaptation.

Fulfilling four needs

Through these various initiatives, we are gaining greater understanding of the type of information required for community-based adaptation, and of what established scientific bodies such as the IPCC can do to provide that.

First, information on potential impacts of climate change must be location-specific. Communities need information on what will happen where they are, not just at the global level. Climate modellers’ ability to provide location-specific data is improving with the development of better down-scaled models. But to be most effective, these should be located in the most vulnerable regions and countries so that their outputs can more easily be passed on to the local communities.

Second, information must be provided to communities in an appropriate format. Many members of vulnerable communities cannot read and understand the highly technical IPCC reports. Even translating them into local languages — which often do not have words for their English equivalents — is not much use for illiterate communities. Information must be made accessible to a general audience, and preferably delivered in an audiovisual, rather than written form.

Third, information on adaptation options must incorporate and build upon existing coping strategies of communities, both traditional practices as well as more modern ones. Often the best adaptation practices are traditional ones learnt over many generations of dealing with climatic hazards.

Finally, information providers — mainly researchers and academics — must be ready to learn from local communities and work with them to come up with proposed adaptation actions that are both truly useful and have a real chance of being adopted and owned by people on the ground. This requires humility on the part of the ‘experts’ and a spirit of partnership in the learning and adoption of best adaptation practices at community level.



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