

Mainstreaming Adaptation into Development Plans: Lessons from the Regional Climate Change Adaptation Knowledge Platform for Asia

Key Findings

- Mainstreaming adaptation into development – integrating it into existing policies, practices and plans – can raise the profile of adaptation, ensure a more efficient use of scarce resources, help policy-makers find synergies between development and adaptation, and reduce conflicts among policies.
- Mainstreaming is an iterative process that takes at least a couple of years. It requires: raising awareness of climate issues; gathering information about climate concerns specific to the development processes being addressed; and interacting with planners and policy-makers to build their capacity. New strategies and policy approaches need to be tested, and the lessons learned will then inform the next stage of planning and discussions. With time, adaptation becomes part of “business as usual”.
- Mainstreaming should occur at multiple levels: national, sectoral, sub-national (from provinces, down to individual villages), and potentially, also at the level of international regions when dealing with trans-boundary resources or impacts.
- Promising entry points for integrating adaptation at the national level include countries’ five- and ten-year development plans, poverty reduction strategy papers, disaster risk reduction strategies, water resource strategies, and conservation strategies.
- Adaptation also needs to be tailored to local needs and conditions. This means mainstreaming adaptation into local government planning and policies. In the initial stages capacity building will often be required, which may have side-benefits for development planning more broadly.
- Inclusive and meaningful participation will often be needed to successfully mainstream adaptation, as otherwise perspectives and support of influential as well as highly vulnerable stakeholders may be missed, and this is likely to constrain design and implementation. Adaptation measures should incorporate the insights of development planners and practitioners, while helping to build their capacities for adaptation. Engaging vulnerable groups may require pushing the boundaries of existing planning systems, but will bolster the perceived legitimacy of adaptation measures.

Adaptation is inextricably linked with development. To the extent that they focus on the poorest and most vulnerable populations, they share many of the same goals. Failing to adapt to climate change can also derail development – but without coordination, development and adaptation can undermine one another.



Mainstreaming adaptation requires extensive engagement with stakeholders. Above, a focus group discussion in Lombok, Nusa Tenggara Barat, Indonesia.

A growing understanding of these dynamics has led many to call for “mainstreaming” adaptation into development planning, aiming to avoid policy conflicts, reduce risks and vulnerability, increase efficiency, and leverage larger financial flows, especially in sectors that are particularly climate-sensitive.

This policy brief draws on several studies sponsored by the Regional Climate Change Adaptation Knowledge Platform for Asia (AKP), which enlisted researchers in 13 Asian countries to evaluate adaptation needs, engage with policy-makers, planners and practitioners at the national, sub-national and local levels, and interact directly with communities through case studies and pilot projects. Our primary source is a report based on a regional forum hosted by AKP and its partners in Bangkok in 2010. In addition, we draw on case studies in Thailand, Vietnam and Bhutan.

What is mainstreaming?

“Mainstreaming” means integrating adaptation into existing policies, practices and plans, rather than addressing it sepa-

rately. Thus, mainstreaming can use scarce resources more efficiently, raise the profile of adaptation, find synergies between development and adaptation, and avoid conflicts.

The concept is not new – it has also been applied to gender equality and poverty reduction, for example. It is not easy, as it requires cutting through sectoral and institutional barriers, but in our analysis, it is the most effective way to scale-up adaptation across the Asia and Pacific region.

Development planning is multi-level, and mainstreaming must be as well. It will need to consider at least national, sectoral and sub-national levels (from provinces, down to individual villages). In some cases, as with trans-boundary rivers, planning at the regional and international levels may also be crucial. Mainstreaming adaptation within individual sectors can be particularly useful; applying a “climate lens” to plans and policies can help “climate-proof” investments and identify key adaptation needs.

Mainstreaming does not happen overnight; it is an iterative process that can take many years (see Figure 1). It begins by raising general awareness of climate issues, and then requires gathering information about climate concerns specific to the sector or administrative level being engaged. A great deal of capacity-building and interaction with planners and policy-makers is required, and then new strategies and policy approaches need to be tested. Lessons learned through those experiences then inform the next stage of planning and discussions, and over time, adaptation becomes part of “business as usual”.

Finding the entry points

In developing countries, adaptation, poverty reduction and rural development are all strongly linked, as agriculture is highly climate-sensitive, and the poor are the most vulnerable to climate impacts. As a result, poverty reduction strategy papers, which guide official development assistance (ODA) and other financial flows, are seen as useful entry points for mainstreaming. In Nepal, an estimated 50% to 65% of ODA funding goes to activities that could be affected by climate change. However, most countries’ poverty strategies do not address the environment, natural resources or disaster management.

The potential benefits of mainstreaming adaptation in poverty reduction are significant. Take the state of Maharashtra,

India, where a recent prolonged drought severely affected around 15 million small-scale farmers. Historically, such droughts have occurred every 25 years, but are now projected to occur every eight years. Adaptive measures such as water-conserving irrigation could reduce the devastating losses. In Andhra Pradesh, meanwhile, government price supports have hindered adaptation by encouraging farmers to grow paddy rice in drylands, instead of switching to drought-tolerant crops such as millet.

National development strategies and plans are also prime candidates for mainstreaming adaptation. These documents typically set investment priorities for five or ten years, as well as long-term goals. Attention to climate risks can help governments make more robust choices – and not build a hydro-power dam on a river that’s running dry, e.g., or build coastal infrastructure that won’t survive sea-level rise. A climate lens can also help planners understand cross-sectoral trade-offs and interactions, such as the water-supply implications of energy choices, or the flood-risk impacts of clearing mangroves to build shrimp farms.

Planning within individual sectors is another promising entry point. Just like national strategies, sectoral plans can guide major investments, and screening proposals to ensure they address climate risks will help avoid adverse, unintended outcomes or maladaptations. Sectoral planning is also important for adaptation because vulnerability and potential responses are often highly sector-specific. Adaptation measures regarding water supplies, for example, might be best addressed in the context of water planning.

Key sectors for mainstreaming

One obvious entry point for adaptation policies is disaster risk reduction. Disaster agencies are increasingly looking for ways to reduce disaster risk, not just respond to disasters, and adaptation efforts share that risk-reduction goal. However, this does require a shift in focus, from early-warning systems and emergency relief and recovery, to addressing the drivers of vulnerability, including poverty, weak institutions, and misguided development choices. It may also require coordination between different ministries: in Thailand, for example, the Ministry of Interior handles disaster risk management, whereas climate policies are mainly overseen by the Ministry of Natural Resources and Environment.

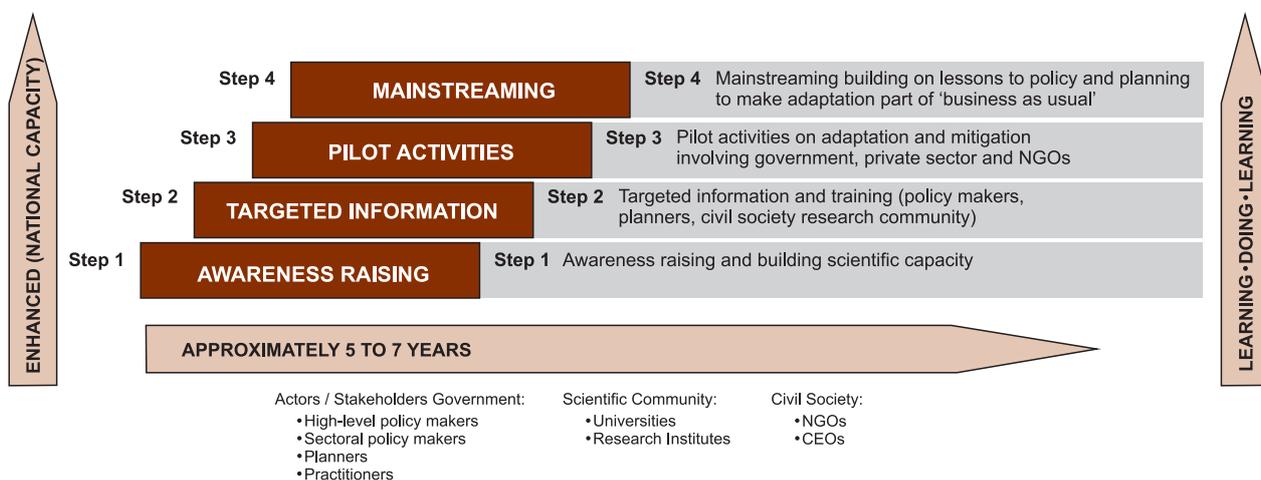


Figure 1: A simple step framework for mainstreaming

Source: Huq, S., and Ayers, J. (2008). Taking steps: mainstreaming national adaptation. IIED Briefing. International Institute for Environment and Development. <http://pubs.iied.org/17040IIED.html>.



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Concentrated growth in high-risk areas, such as the Bangkok mega-delta, means increased exposure to disasters. Above, flooding in November 2011.

Given the extent to which climate change is expected to affect water resources in many countries, the water sector should also be prioritized for mainstreaming adaptation. Water resource planners often have substantial experience in dealing with climate-related variability in water flows. Many countries have also adopted integrated water resources management (IWRM), which could facilitate adaptation planning through participatory processes at the river basin level.

Conservation planning is another good entry point for adaptation – both in the context of protecting vital ecosystem services (e.g., coastal buffers, regulation of water flows, prevention of erosion and landslides), and in protecting livelihoods. Yet in a study in Bhutan, an internationally recognized leader in forest conservation, we found several barriers to mainstreaming adaptation. There was no clear strategy to address climate change, or adequate financing or institutional capacity. And in practice, conservation was valued less than economic development – even though many people depended on climate-sensitive activities such as agriculture and livestock, and were already seeing climate-change impacts.

Mainstreaming at the local level

Adaptation can be driven by national-level policies and strategies, but it also needs to be tailored to local needs and conditions, and that means mainstreaming adaptation in local government planning and policies. The benefits are clear: local officials have the best view of conditions on the ground, and local-level processes can more easily engage vulnerable populations. But in the countries we have studied, there are also major obstacles to addressing climate needs at the local level.

For starters, many countries have highly centralized, hierarchical government structures, with policies and resources handed down from national, to provincial, to district and local-level authorities, so the latter have limited power, funding, or ability to influence higher-level processes. Knowledge (or awareness) of climate issues is limited even at the national level, and minimal at the lower levels; lack of capacity even at the provincial level was a significant issue in a case study we conducted in Binh Dinh province, Vietnam. The situation is better in more-developed countries and larger cities; for instance, the Bangkok Metropolitan Administration has explicitly addressed climate change in flood risk management.

A key challenge for individual cities or districts is the lack of scaled-down climate change information. Planners across Southeast Asia, for example, tend to think about adaptation primarily in terms of minimizing the impact of future climate change, but they often don't have projections specific to their area, and they don't know how to deal with uncertainties.

In a case study of the Lao-oi district in Thailand, we attempted a paradigm shift: to mainstream adaptation in the community development plan not by trying to address specific future climate risks, but by ensuring that development strategies and responses to current climate threats would still be sustainable in a changing climate. For example, faced with heightened flood risks, the district was considering switching from rain-fed wet-season rice farming to irrigated dry-season rice farming.

Only one regional climate change scenario was available at the time of the study, which indicated a trend of higher precipitation in northeastern Thailand, suggesting the switch was appropriate. However, the scenario also indicated that summers could become longer and warmer, reducing river flows and increasing demand for water for irrigation and other purposes. Thus, expanding irrigation through pumping water directly from the river, as was being considered, might not be sustainable.

Engaging stakeholders

Mainstreaming adaptation at any level requires a considerable amount of awareness-raising and interaction with stakeholders. Experts can't simply dispense their wisdom and prescribe solutions; they need to embrace a participatory approach, working together with planners, practitioners and decision-makers, exchanging ideas and building mutual trust. This will bolster the perceived legitimacy of adaptation measures, and it is also an effective way to build local adaptation capacity.

Broader public involvement is also needed – and in many places, that will require pushing the boundaries of existing planning systems, which will be challenging. However, it will also improve transparency and accountability in adaptation planning, is an issue that has not been sufficiently addressed so far. Another key benefit may be improved understanding of the perspectives of vulnerable populations, and increased buy-in when measures are implemented.



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Development choices can help fishing communities adapt to climate change, or exacerbate their vulnerability. Above, a fisherman in Kampong Thum, Cambodia.

Policy recommendations

- Effective mainstreaming of adaptation requires strengthening capacity to use climate information. This may require new tools and models for climate risk assessment, and new techniques to help planners and decision-makers grapple with uncertainties. Climate information also needs to be made more useful and relevant to practitioners. This will require scientists to pay closer attention to the questions, concerns and practical experience of planners and policy-makers, and more tailoring of materials.
- Factors that influence vulnerability and adaptive capacity are highly context-specific, and may often be best addressed at the local level. This means national plans and policies need to enable local responses, provide adequate resources, and support local capacity-building. Stakeholder engagement at the local level is also crucial, and should include a wide range of perspectives, from the private sector, to the most vulnerable, poor and marginalized communities.
- Screening mechanisms can be very useful in mainstreaming adaptation. If governments have tools that they can use to systematically screen and review plans, policies, programmes and projects, they will be better equipped to recognize climate risks, identify adaptation needs, and avoid misguided investments. Similar approaches have been applied successfully to official development assistance (ODA) portfolios.
- Mainstreaming should start with existing policies, plans and institutions, as these often embody important experiences and may already address key development issues. Thus, a first step in mainstreaming might be to identify development measures that are already under discussion and highlight their benefits for adaptation. Low-cost, low-risk “no-regrets” strategies can be particularly valuable.
- For mainstreaming to be effective, it needs to go beyond environmental agencies and show adaptation is a development issue. When adaptation responsibilities are shifted to ministries and agencies more directly concerned with development, adaptation is likelier to be recognized as important by decision-makers, given an adequate budget, and really integrated into development planning.
- Conflicts with other priorities are a key obstacle to mainstreaming adaptation. Governments prioritize poverty reduction and other development objectives, making it hard to divert resources and funding to actions that do not show clear and immediate benefits. Stakeholders may also prioritize short-term economic development gains over long-term adaptation benefits. Thus, it is crucial to stress the value of adaptation in ensuring that investments are robust to climate change and don't exacerbate vulnerability.
- Pilot projects can demonstrate the benefits of mainstreaming adaptation, but pilot projects also have limitations. Most notably, they often have a limited duration, and thus their effectiveness in reducing climate risks may not be clear until well after they've ended.
- Mainstreaming adaptation is an iterative process, and will work best if the resulting policies and projects are carefully monitored and evaluated, so lessons can be drawn to inform future efforts. Ideally, they should include ways to obtain continuous feedback that enables implementation to be adjusted as it proceeds. The system should also be open to identifying previously unknown risks and impacts.

This policy brief was written by Marion Davis, based on the report *Mainstreaming Climate Change Adaptation* (Lebel et al., 2012), and other studies published through the Regional Climate Change Adaptation Knowledge Platform for Asia (AKP), all available at www.asiapacificadapt.net or weADAPT.org.

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