

## Financing adaptation: matching form with function

By Jessica Brown and Nanki Kaur

**F**inancing adaptation to climate change is one of the most challenging aspects of the Copenhagen agenda. Current negotiations are focused primarily on the overarching financial architecture and how to raise international finance, but this runs the risk of losing track of the core aspects of adaptation. This Background Note offers a critique of the ways in which the financial architecture to support adaptation is taking shape in international negotiations, and identifies important issues that need to be taken into account when designing this new architecture.

First, we define ‘adaptation’, paying particular attention to the concept of ‘additional’ and ‘incremental’ costs’. We then examine the three main components of climate change finance:

- Funding sources, and their operational implications, in relation to both public and private sectors;
- Institutional arrangements – the financial mechanism to generate and manage climate change funds;
- Delivery mechanisms on the ground, through programmes and projects.

Finally, we assess the likely effectiveness of the options that are currently on the table for the activities in question.

### Defining adaptation

Broadly speaking, adaptation activities aim to reduce vulnerability and/or increase resilience to the impacts of climate change. However, there is still no formal definition of adaptation by the United Nations Framework Convention on Climate Change (UNFCCC). This is despite considerable debate about the extent to which countries need to adapt, which core

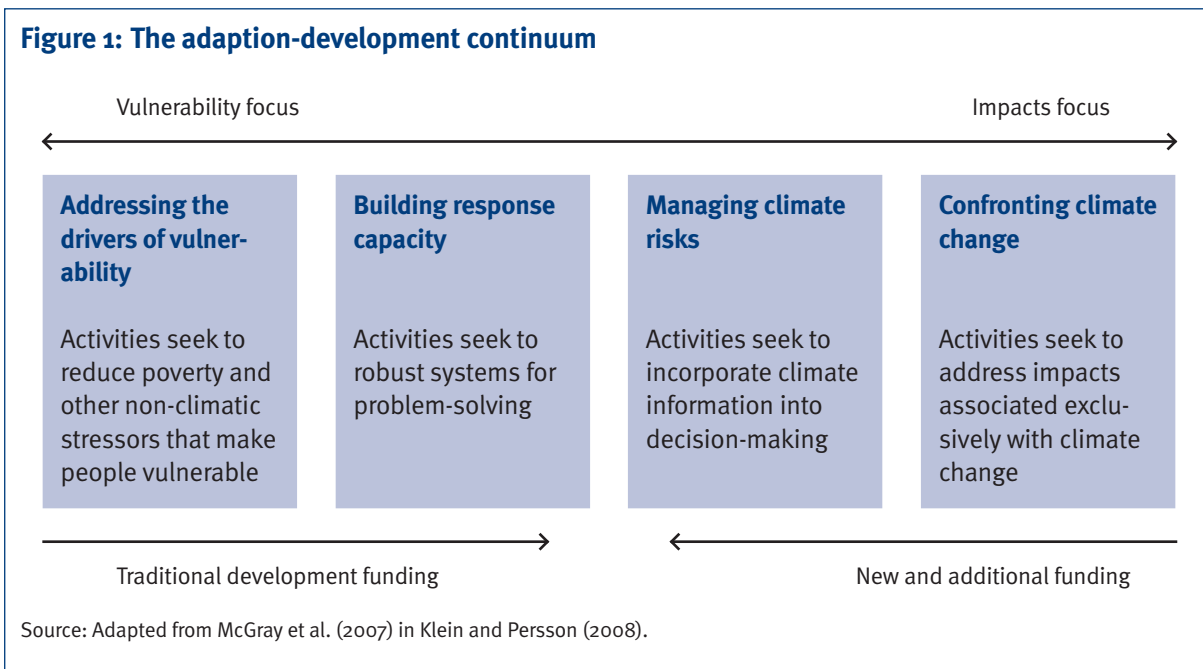
functions need to be prioritised, and the level and type of finance necessary to fund them (Persson, 2009).

For the purposes of this paper, we will use the definition of the UNFCCC Contact Group on Enhanced Action on Adaptation which views adaptation as ‘action to reduce the vulnerability and build the resilience of ecological and social systems and economic sectors to present and future adverse effects of climate change in order to minimise the threats to life, human health, livelihoods, food security, assets, amenities, ecosystems and sustainable development’ (October, 2009).

A particular area of difficulty is the notion of ‘incremental’ and ‘additional’ costs. The UNFCCC states that developed country parties shall provide financial resources to meet the ‘agreed full incremental costs’ of implementing measures that deal with costs of cooperation in preparing for adaptation. Other relevant language is used by the Least Developed Country Fund (LDCF), created to support least developed countries’ national adaptation programmes of action (NAPAs). LDCF guidance states that the fund shall provide ‘full cost funding to meet the additional costs of adaptation activities identified in the NAPAs’. But it is far from clear how countries are to assess ‘full incremental’ and/or ‘additional’ costs, both conceptually and operationally.

On a conceptual level, the close relationship between adaptation and development has been emphasised by the expert and academic community (Burton et al., 2002; Adger et al., 2003; O’Brien et al., 2004; Persson et al., 2009). Adaptation interventions often mirror ongoing efforts towards sustainable development, making it particularly hard to identify their incremental and/or additional cost over and above development as usual.

**Figure 1: The adaption-development continuum**



Adaptation activities can thus be viewed on a continuum – from activities that are needed both for adaptation and development (such as providing technical assistance to farmers to increase agricultural yields) to explicit adaptation measures, where the incremental cost is more clearly identifiable and quantifiable (such as the construction of a seawall to prevent flooding). As Bapna and McGray (2008) explain: ‘At one end of the continuum, the most vulnerability-oriented adaptation efforts overlap almost completely with traditional development practice, where activities take little or no account of specific impacts associated with climate change. At the opposite end, activities are designed to target distinct climate change impacts, and fall outside the realm of development as traditionally defined’. In the context of UNFCCC negotiations, the focus tends inevitably to be on activities clearly incurring additional and incremental costs, rather than activities which bridge the conceptual adaptation/development divide. The other end of the continuum, which includes issues not *exclusively* caused by climate change, tends to be overlooked.

However, in the real world of climate vulnerability, failure to address the ‘development’ end of the adaption continuum will significantly impair a community’s ability to respond to climate change. The problem is that the ‘incremental cost’ principle is ill-equipped to measure the benefits supplied by adaptation funding initiatives. Unlike mitigation efforts where incremental benefits can easily be measured (by tonne of carbon abated), adaptation does not necessarily achieve an additional environmental benefit. Instead it protects communities and

resources against potential risks and disasters. It lowers risks directly and increases capacity of communities to cope with further risk.

At the operational level, governments responsible for costing projects prioritised under NAPAs have found it difficult to measure adaptation additionality (LDCF Project Workshop, 2009). For example, the Maldives (on behalf of the Least Developed Countries) formally requested the Global Environmental Facility (GEF) to ‘reduce the requirements for showing adaptation-additionality of proposed projects’ (Decision 5/CP.14). This, in turn, has led the COP to request the GEF to make the concept of incremental costs (Decision 5/CP.8) ‘more understandable’. An independent Incremental Cost Assessment (GEF, 2006) pointed out the ‘great variation in understanding of concepts and principles underlying incremental costs exists among the various stakeholders in GEF projects, along with widely differing interpretations of the role of incremental cost assessment’. The evaluation concluded that ‘incremental cost assessment and reporting should be dropped as requirements for GEF projects’ (GEF, op.cit.).

There is thus a strong case for the concept of ‘additionality’ and ‘incremental costs’ to be redefined – arguably even abandoned – so as to include financing for adaptation activities that are similar, if not identical, to those needed to finance development expenditure.

### Financing adaptation

Adaptation finance has three main components, namely:

1. Sources of revenue: how money is mobilised;

2. Institutional arrangements: how money is managed, and
3. Delivery: how money is channelled to adaptation activities.

**Sources of revenue: public and private finance.**

The balance between public and private sources of investment for climate change adaptation is a particularly contentious issue. A number of proposals have been put forward on how to mobilise the necessary resources (Brown, 2008; Bapna and McGray, 2008). However, despite substantial movement on the debate around ways to mobilise international public funds, there is a strong emphasis on the role of the private sector to meet funding needs within UNFCCC submissions and other statements by developed country governments.

The Bali Action Plan encourages consideration of how both the public and private sector can contribute to adaptation in developing countries. Key areas for investment are:

- Capacity-building;
- Policy reform and planning processes to incorporate climate change adaptation considerations into local and national development plans;
- Knowledge management and dissemination of climate-related information (these may be similar to capacity-building but tend to be ongoing investments);
- Research, development and demonstration;
- Technology diffusion, defined here as the provision and support of innovative solutions (systems or processes), as well as technical assistance needed to use/implement these technologies; and
- Infrastructure.

According to Persson et al. (2009), the private sector offers specific strengths which could align well with adaptation finance needs. For example, as a source of new finance; provider of risk management mechanisms (e.g. insurance); designer or distributor of goods and services; and an insurer that new investments in developing countries are climate-proofed. However, private sector finance is generally motivated by commercial incentives, with profit-seeking being the main driver of private sector investment. Many of the above key areas for investment are unattractive to profit-oriented organisations, and are unlikely to offer sufficient financial rates of return to spur the interest of private finance. These include capacity-building, policy reform processes and non-commercial infrastructure creation.

There are two main issues here: the nature of the benefits provided, and the attractiveness of vulnerable countries to private sector finance. Given that the

societal benefits which derive from adaptation infrastructure are expected to be greater than the possible private benefits, direct public investment is critical. Over-reliance on the private sector to support climate change adaptation would thus seem inappropriate. Further, countries with poor credit ratings, high levels of debt, limited institutional financial capacity and significant barriers to capital are unlikely to be able to attract private sector investment on a significant scale.

This is not to completely discount the importance of private capital, however. The private sector can and should play a critical role in financing adaptation interventions, provided that the necessary structural investments are already in place. This is only likely to be realised if government interventions have already occurred in key areas. Governments can play an important role in reducing private sector financial risks, and in some ways reduce overall costs. For example, the use of debt and equity guarantees sends a signal to private investors that governments are committed to underwrite climate-friendly investments. Guarantees by the government provide sound ways to mobilise upfront capital and reduce risks around debt repayment.

In the right circumstances, a mix of public and private financing will play a role in financing technology diffusion or market-based instruments like insurance and water pricing. For instance, in India, weather-based risk insurance is provided by the private sector. This has been made possible by public guarantees and investments in implementing a regulatory framework and data systems.

**Institutional arrangements.** The UNFCCC (Article 11) requires parties to set up a ‘financial mechanism’ to generate and manage climate change funds, including adaptation funds. There are several proposals for this (e.g. G77, UK Compact Model, Mexico’s Green Fund). The main options are:

1. *The fully decentralised option, using existing and possibly reformed, funding channels:* contributing countries would use established channels, such as the World Bank Group, bilateral and regional development banks, and the GEF to disseminate adaptation funds. These would then work with existing intermediary organisations to carry out funding activities. This option tends to be supported by donor countries wishing to maintain control over delivery of finances and avoid creating new (and potentially expensive) institutions (Reed, 2009).
2. *The centralised option, with national/regional funding hubs:* this is supported by many developing countries, and would involve a central funding channel managed by an executive body accountable to the COP, with a related mechanism and bodies to address all aspects of implementation for developing countries. Different funding win-

dows would support existing national institutional arrangements to coordinate financial resources and authorise national entities of developing countries to approve funding. This translates into a structure in which recipient countries are in charge of managing public-based financial resources.

3. *The registry option:* through pooling information, this expedites the matching of country governments' needs with availability of finances/products offered by bilateral and multilateral donors and international financial institutions. The registry approach creates an 'international bulletin board' which posts statements of national objectives, needs and financing requests (including Nationally Appropriate Mitigation Actions (NAMAs), low carbon action plans, adaptation programmes and sector transformation plans). Both public institutions and private investors thus align their financial and technical products with the needs of individual countries. National plans are certified by an operating body (or its boards, including an international adaptation board) and entered into a public registry domain where interested parties (public or private) can negotiate with the host country regarding financing terms.

The institutional arrangements that are finally adopted will have an important impact on national ownership and how adaptation funding is coordinated within national policies, procedures and budgets. Effective adaptation strategies require coordination between all levels of management and policymaking (Orindi and Eriksen, 2005). There is a strong argument to the effect that such coordination can only be achieved where decision-making is passed from the donor to the national level. Advocates for aid effectiveness also point to the need for 'direct access' to funds to support national ownership, where Parties can nominate a qualified in-country institution (or 'executing agency') to develop and implement projects.

Arrangements that rely on (1) above – existing funding channels and structures – may be exacerbated by a lack of international donor coordination, which often reflects a lack of coordination and policy coherence at the national level. Most existing funding arrangements rely on retained (donor-led) decision-making, and avoid direct access for recipient countries. However, there has been increasing attention on country ownership to ensure that adaptation activities are mainstreamed into national development plans. There is also significant support for direct access, as seen in the Kyoto Protocol Adaptation Fund. If continuing to rely on the existing structure, a patchwork approach to financial assistance is likely to continue.

A centralised model (2 above) may become institution-heavy and lead to issues about the efficiency of output. The design allows for high levels of coordination and harmonisation, between and among funders, and direct access to funds for recipients. National climate change funding and decision-making hubs can deliver national coordination and foster synergies, enabling cross-thematic funding. Some of the centralised proposals suggest that funding should be retained by the COP mechanism; others support direct decision-making by national governments. While it is unclear which approach will win out, decision-making passed along to recipient governments is more likely to be aligned with national planning processes.

The registry approach (3 above) offers flexibility and a range of funding options and forms, but it is unclear how well this approach will function in practice and how considerations for national ownership and coordination will pan out. Given that it is up to public and private sector entities to align themselves, one could imagine a scenario where a developing country develops a national adaptation strategy but cannot find the appropriate mix of financial resources on the registry. It would therefore need to adapt its plan to meet a donor's wishes. This may compromise national level ownership and decision-making.

In summary, it remains unclear how the various proposed institutional arrangements will respond to adaptation needs. A more complete assessment of how the international structure will affect adaptation strategies on the ground should be conducted before reaching a decision on structure.

**Delivery mechanisms: project or programme?** Programme-based approaches (PBAs) are being proposed to facilitate disbursement and replace project-based approaches, which are increasingly seen as inefficient, costly and lacking scalability. Programmatic support allows for longer-term coordinated planning that is integrated into the budget of the recipient country. However, there is as yet little clarity on what is meant by PBAs within the context of the UNFCCC and what this implies for international project-based funding. Despite legitimate concerns, there is still an important role for project-based support to play over the short term. If such support is appropriately integrated into national strategies, this financing modality may provide much needed flexibility.

The shift away from stand-alone project grants towards programme-based delivery mechanisms will present challenges. First, PBAs require a well-functioning national financial management system with sound rules and procedures and transparent accounting. Moreover, the attribution of adaptation efforts arising from international support provided through programmatic delivery channels will be far more dif-

difficult than with directly targeted project interventions. Second, early evidence suggests that PBAs have resulted in the recentralisation of power and decision-making within national administrations to the detriment of local decision-making (Evans et al., 2006). The movement towards a programmatic approach therefore needs to be balanced with the capacity to implement arrangements effectively. These complexities will have to be accounted for if all Parties are to continue supporting the move towards PBAs.

## Conclusion

Understanding how adaptation should be financed is not an easy or straightforward task. Often what is proposed does not translate well onto the complexities of adaptation interventions on the ground. Nor does it fit with the motivations behind public and private finance. These realities need to be understood in order to ensure that adaptation needs are properly met. The following four issues require heightened attention if adaptation funding is to achieve its goal:

- *Definitions*: The current use of adaptation finance has been placed within a definitional framework that is ill-equipped to measure adaptation costs. The concept of ‘additionality’ and ‘incremental cost’ does not adequately respond to the full spectrum of adaptation needs – given similarities to sustainable development – and should, therefore, be restructured.
- *Funding sources*: The emphasis on the role of private sector finance is not responding to the reality of adaptation finance needs; namely, that public finance is more appropriate for an important set

of actions that are commercially unattractive. Incentives for private sector investment, though challenging, can be encouraged through public sector interventions.

- *Institutional arrangements*: International institutional arrangements will have an important impact on national ownership and how funding is coordinated within national policies and procedures. While it is unclear how the various arrangements that are proposed will respond to adaptation needs, a more complete assessment of the impact of the international structure on the ground should be conducted before reaching a decision on structure.
- *Delivery mechanisms*: The dichotomy between project-based and programmatic funding is misplaced, as both interventions are necessary for adaptation for the immediate future. As long as decision-making and ownership has been devolved to the national level (or lower levels of the administrative hierarchy), recipient countries should make their own decisions about how funding is managed and delivered internally. However, strengthening of national ownership needs to be balanced with the capacity to implement arrangements effectively.

Any future international financial system that is to meet the needs of developing countries in their attempt to adapt to climate change will need to consider these points. Otherwise, the system runs the risk of the tail wagging the dog.

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