

# An analysis of climate change adaptation reasoning in the Adaptation Fund

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#### Background

The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change. Initiatives are based on country needs, views and priorities. The Fund, whose mandate is to finance concrete adaptation activities, was established under the Kyoto Protocol of the UN Framework Convention on Climate Change. It has committed US\$ 331 million in 45 countries since 2010 to climate adaptation and resilience activities.

Through its financing of concrete adaptation projects and programmes, the Adaptation Fund has gained valuable experience and expertise in applying 'climate change adaptation reasoning' to projects (such as vulnerability criteria used to prioritize and fund projects) that may be useful to other international actors working to confront climate change. With approaches to adaptation constantly evolving in both study and practice, analyzing how the Adaptation Fund's approach to climate change aligns with current thinking and institutions involved in the climate adaptation space is beneficial.

As a result, the Adaptation Fund Board Secretariat undertook a study to share its experience with the climate change community and potentially identify any necessary changes to its climate change adaptation strategy.

### Climate Change Adaptation Reasoning – current thinking and the Fund's approach

As considered in the latest <u>Fifth Assessment Report of the Intergovernmental Panel on Climate Change</u> (IPCC), adaptation incorporates a definite sense of purpose to action and includes the notions of "incremental" and "transformational" adaptation. The report further recognizes that adaptation constitutes a complex, multidimensional issue where physical hazards and social and economic drivers interact to produce impacts.

The Fund's strategic priority is to finance concrete adaptation projects and programmes, with activities aimed at producing visible and tangible results on the ground. Achievement of this goal is materialized by a results framework that constitutes the backbone of the Fund's strategy, defining a 'climate change adaptation reasoning' that projects apply to support these aims.. The following analysis reveals that this framework includes not only social and economic aspects of climate vulnerability, but a prominent place for actions coping with physical hazards. It confirms that vulnerability, as a key component of adaptation, has acquired increasing complexity as a multidimensional issue.

#### What are the most common adaptation needs in Adaptation Fund projects?

To consider how Adaptation Fund projects have addressed climate change adaptation reasoning, it is useful to have a sense of the climate-related drivers of impacts in countries, key risks resulting from such drivers, and barriers faced in adapting to climate change.

As illustrated in the figure below (Figure 1), projects frequently identified increased intensity and frequency of extreme events, including floods, droughts and tropical storms, as well as warming trends and sea level rise, as climate-related drivers of impacts. The key risks and impacts arising from such climate-related drivers center around issues of food insecurity and livelihood disruption.



Adaptation Fund projects are commonly concerned with reducing vulnerability through the securing of assets, both human and natural, that underpin peoples' livelihoods. Institutional and social barriers, in addition to lack of information and technical capacity, are most frequently identified as preventing effective adaptation responses. These barriers represent adaptation needs for addressing the gap between predicted and desired outcomes.

Fishermen planting mangroves on the Mauritius coast. Project is implemented by the UNDP and funded by the Adaptation Fund.



Figure 1. Identification of climate related drivers in problem statements

#### What are the most common corresponding adaptation responses?

An examination of Adaptation Fund projects shows that social and institutional adaptation options are the most frequently pursued adaptation responses. However, in viewing the financial resources allocated to concrete project outputs, structural/physical outputs dominate project activities (accounting for nearly 70 percent of project spending). This confirms the Fund is fulfilling its mandate of funding concrete adaptation activities.

The figure below illustrates that the majority of Adaptation Fund funding is used towards adaptive structural/physical activities of various types (engineered and built environment, technological, ecosystem-based adaptation, and services) (Figure 2).



Figure 2. The usage of funding by activity in Adaptation Fund projects

## Project alignment with the Fund's objectives and current adaptation thinking

As demonstrated above, the core focus of projects in terms of outputs is on structural/physical adaptation measures, representing responses that clearly meet the Fund's mandate to finance concrete activities with visible and tangible impacts. However, this does not mean that strengthening the adaptive environment and addressing the social and economic drivers of climate vulnerability is being ignored. Indeed, the number of project outputs dedicated to this adaptation response type is high, as shown in the figure below (Figure 3).



Figure 3. Project outputs by adaptation response types in Adaptation Fund projects

While "transformational" adaptation is currently difficult to define, within Adaptation Fund projects there are outputs clearly established with a long-term impact perspective in mind. Such outputs focus on introducing new technologies or practices (e.g. early warning systems or hydrological information systems), and new systems or structures of governance (e.g. ecosystem-based assessments integrated within national legislation and planning frameworks, and integration of climate change adaptation needs and risk assessments into national policy.)Changing the location or nature of activities (e.g. vegetable/organic gardens established on stilts above flood levels and diversifying income through raising rabbits and ducks or bee keeping) is another example.

The Fund's approach of financing pilot/demonstration projects and including knowledge management in the results framework additionally exhibits potential to achieve mainstreamed adaptation through replication and scaling-up of activities.

#### Lessons learned by projects

Another noted lesson was the recognition that responding to climate change and variability impacts is a multi-year process dependent upon national timetables and processes, which cannot be achieved through a single project. The potential for replication relies upon activities reflected in national planning instruments, since having skills and frameworks in place will produce continual climate change risk assessment and response measures in the normal course of a country's activities.

The above points demonstrate the importance of an enabling environment for both the immediate and longterm success of a project. During the actual project period, adequate social and institutional capacity is necessary to design, implement, and manage the project components and outputs. However the project outputs themselves can work to strengthen this capacity, providing for the successful implementation of the project and establishing the 'seeds' of adaptive capacity that allow project results to be sustained, scaledup, and replicated.

It has been observed that the Fund's <u>Direct Access</u> modality is beneficial in developing the capacity of national organizations and agencies to design and implement adaptation activities. The ability of <u>National</u> <u>Implementing Entities</u> to directly access finance from the Fund has allowed them to build their capacity to design, implement, and monitor climate adaptation activities. This supports not only the activities financed by the Fund, but opens opportunities for these entities to demonstrate the capability to access additional sources of finance.

Further, the Direct Access modality and the capacity building it fosters allows entities to establish recognition from national authorities as credible actors in climate change efforts, setting up the potential for further adaptation efforts supported by the country and managed by the entities.

This has been shown in Senegal, for example, where the entity Centre de Suivi Ecologique implemented a successful coastal zone management project in highly vulnerable areas to prevent coastal surges from damaging local businesses, fisheries and agricultural land while developing its adaptive capacity and sound fiduciary, social and environmental risk policies that helped mobilize additional support to expand and duplicate project efforts.



Agricultural terraces help address extreme rainfall in Rwanda in Adaptation Fund project implemented by the NIE, MINIRENA.

Furthermore, Costa Rica's implementing entity Fundecooperación strengthened its institutional capacity and coordination with local stakeholders to reduce climate vulnerabilities in agriculture, water and coastal management that are already producing results in the first year of project implementation and mobilizing further resources to replicate efforts in other areas.

#### A few thoughts on the Adaptation Fund project review criteria

Based on the findings of this analysis, it does not seem necessary to add any elements to the Fund's project review criteria since AF projects demonstrate overall alignment with the strategic objectives of the Fund and its results framework. These objectives and existing review criteria are themselves largely in alignment with current thinking on adaptation.

There is nevertheless room for further guidance to be provided to parties when completing their project proposal documents, particularly in strengthening the sustainability of project outcomes and their contributions toward "transformational" adaptation. This can be achieved through knowledge management and sustainability elements of the current project eligibility review criteria.