A PLATFORM FOR STAKEHOLDERS IN AFRICAN FORESTRY

FACTSHEET

FORESTS AND TREES IN ADAPTATION AND MITIGATION INITIATIVES

Internationally supported initiatives to mitigate climate change began in the early 1980s. Local people across Africa are also adapting to the changes they are experiencing directly. The vital role of forests and trees in regulating the world's climate system and contributing to sustainable adaptation solutions makes their inclusion in these activities essential.

Key messages

- Sustainable forest management can contribute to both climate change mitigation and adaptation.
- Sustainable agricultural and agroforestry practices can contribute to reducing emissions by storing carbon in the soil or in standing biomass.
- To realize these potential contributions, much more needs to be learned from local people's autonomous innovations in adapting to climate change.
- Advocates of sustainable forestry and agriculture in Africa must work to ensure that forestry and trees have a far more visible position on international climate change agendas.

Adaptation and mitigation initiatives

Three major adaptation and mitigation initiatives have been established under the UN Framework Convention on Climate Change (UNFCCC):

- ***National Adaptation Programmes of Action (NAPA)*** provide a process for Less Developed Countries (LDCs) to identify priority activities for climate change adaptation. Once a NAPA is approved, the country can apply for implementation funding.
- ***Nationally Appropriate Mitigation Actions (NAMA)*** are an instrument through which LDCs can seek finance, capacity building and technology transfer to support their mitigation efforts. NAMAs include statements of intent, strategies, policies and projects.
- ***UN Reducing Emissions from Deforestation and forest Degradation (REDD+)*** is a collaborative initiative which assists developing countries in the preparation and implementation of national strategies and mechanisms for reducing emissions. It aims to create an incentive for the sustainable use of forest resources and to create financial value for the carbon stored in them.

All three of these initiatives intend, at least in theory, to take into account the views of multiple stakeholders. NAPAs in particular are supposed to learn from autonomous experiences of adaptation, a range of which are illustrated in Table 1.

What are adaptation and mitigation?

Mitigation activities involve reducing emissions or enhancing sinks of greenhouse gases, with the aim of slowing or stopping climate change.

Adaptation activities involve adjusting natural or human systems in response to actual or expected climate change.

Planned adaptation and mitigation initiatives are the result of deliberate policy decisions, often originating from international agreements.

Autonomous adaptation describes local activities that respond to climate change, often including traditional knowledge and practices.

Table 1. Examples of adaptation to local climate conditions and variability

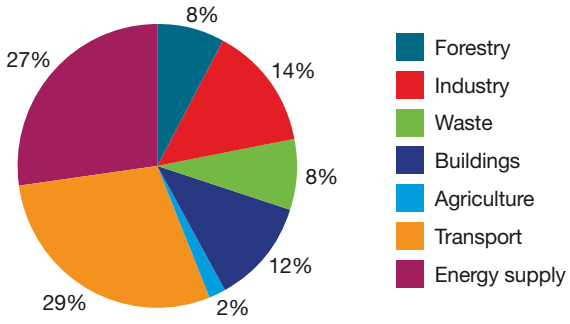
Country	Adaptive strategy
Botswana	Planting drought-resistant trees around villages. The fruit are vitamin-rich and provide additional income when crops fail due to poor weather.
Burkina Faso	Afforesting areas with acacia to protect against drought and aridity, and provide firewood, fodder, tannin, pulpwood, shelterbelts and soil improvement.
Mali	Farmers grow jatropha for fuel and protection from damage from wind and water
Senegal	Cultivation of moringa trees that are drought-resistant and tolerate a wide variety of soil types. They can be used to combat malnutrition by providing enriched food and ground seeds can also be used to purify drinking water.
Tanzania	Promoting vegetation regeneration and tree planting, traditionally known as 'ngitili', has helped protect against drought and aridity and improved livelihoods in Shinyanga region.
Zimbabwe	Practicing agroforestry with deep-rooted trees to tap moisture from lower depths during the dry season and return nutrients to the soil, as well as to provide shelter against wind erosion.

Source: Adapted from Roberts et al. (2009)

Forests in adaptation and mitigation: facts and figures

- In May 2012, a total of 52 NAMAs were under development worldwide, 8 per cent of which were in the forestry sector.

Figure 1. Sectoral distribution of all NAMAs (as percentage of total)



Source: Tilburg et al. 2012

- In November 2012, six NAMAs were in sub-Saharan Africa. Of these, however, only one had any direct relationship to forests or trees.
- In March 2012, 69 per cent of 45 NAPAs worldwide were from sub-Saharan Africa. These African NAPAs contain 333 priority projects, but only 22 of them, less than 1 per cent, were directly related to forests.
- By October 2012, none of the forestry-related African NAPA projects had received funding.
- The REDD+ initiative works with 44 partner countries, 16 of which receive support to prepare full National REDD+ Programmes. Five of these are in sub-Saharan Africa. They have received between USD 4 and 5.5 million for activities including drafting strategies, strengthening forest monitoring systems, assessing capacity gaps for implementation and facilitating stakeholder participation.
- There is considerable evidence of farmers autonomously using improved crop, soil, land, water and livestock management systems to cope with climate variability (Kristjansen et al. 2012).

Challenges

The potential contribution of forests and trees to climate change adaptation is not always reflected in official national documents. This knowledge gap distorts policy and programme design and hinders the development of cross-sectoral institutional alliances.

Significant knowledge gaps also exist as to what adaptations options are available, what their likely benefits or costs would be, and where and when they should be deployed. NAPAs are unlikely to adequately emphasize community-based adaptation because they do not attempt to scale up existing adaptation technologies.

A major challenge is to enable adaptation initiatives to accelerate at a faster rate than climate-related change.

Priorities for adaptation and mitigation

- Forest planners must increase general awareness about the role of forests and trees in adaptation to climate change.
- Processes for accessing support available through NAPAs and NAMAs should become less bureaucratic so that momentum is not lost.
- Further examination is needed of the barriers which currently prevent learning from and scaling up of existing adaptation technologies.

Sources

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