



3.1 Financing emissions reductions in Oromia, Ethiopia

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Climate change policy and landscape-level interventions

As the global population continues to rise, increasing demands for food and fuel are depleting the world's natural capital: the stock of natural resources that provides the goods and services necessary for human survival. In developing countries, where food and energy security are already areas of concern, domestic policy-makers and the international community realize that there is a need for policy solutions that increase food production while preserving natural capital.

This challenge has drawn attention to an integrated landscape approach to sustainable development. Such an approach involves cross-sectoral management of natural capital to increase the effectiveness of sustainable sourcing and production. It seeks to simultaneously meet policy-maker's goals for food production, ecosystem health and human well-being.

There are several institutional, policy and financing challenges to achieving an integrated landscape approach; these make it a difficult option for policy makers to implement. This article uses a case study from Ethiopia to show how integrated landscape management can be achieved by linking with programmes that reduce emissions from deforestation and forest degradation (REDD+).



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Institutional, policy and financing challenges

Lack of institutional capacity at the national and sub-national level is one of the key barriers to landscape-level management. Most governments — not just those in the developing world — fail to coordinate their efforts in a coherent manner, due to a lack of incentives to work in a cross-sectoral way and to agencies' alignment to a specific sector or type of land use. International institutions also contribute to fragmentation; a multitude of conventions, organizations and initiatives relate to land management, but most have a single-issue mandate.

Financing related to land management is similarly fragmented. At the national and local levels, incentives are created through policies and fiscal measures (e.g., agricultural subsidies, concessional loans by development banks, etc.), which often are linked to specific sectors.

Recently, financing for climate mitigation (through donor funds and markets for carbon offsets or GHG emissions reductions) has come to be seen as a way to create incentives to change land management practices. Several developing countries such as Indonesia, Costa Rica and Ghana, expect that an international mechanism to incentivize REDD+ (reducing emissions from deforestation and forest degradation) would provide a significant source of finance by creating value from the carbon stored in forests.

Case study: Ethiopia

In Ethiopia, agriculture — and therefore, economic growth and food security — rely on sustainable land management (SLM). Land degradation is a major cause of the country's low and declining agricultural productivity, persistent food insecurity and rural poverty. Studies have shown that by the mid-1980s, some 27 million hectares (ha), or almost 50 percent of the Ethiopian highlands (which in turn makes up about 45% of the country's land area) were significantly eroded (Desta et al. 2000). Of this eroded area, 14 million ha were seriously eroded, and more than 2 million ha were beyond reclamation. It is estimated that some 30,000 ha are lost annually as a result of soil erosion; more than 1.5 billion tonnes of soil are removed annually by a range of land degradation processes (World Bank 2013).

Sector-specific interventions have failed to address land degradation. National and regional authorities in Ethiopia, along with their development and technical partners, are now promoting more integrated interventions to landscape management. The multi-year (2009–23) Ethiopia Strategic Investment Framework for Sustainable Land Management (ESIF) recognizes that past efforts by various agencies have failed due to their lack of coordination. The ESIF is a platform for multi-sectoral partnerships in which various stakeholders align their investments in a collaborative manner (see also article 3.6). This has led to promising results, such as the rehabilitation of degraded landscapes into productive ones in the northern region of Tigray.

The Oromia Forested Landscapes programme

As part of Ethiopia's ongoing national REDD+ readiness process, the goal of which is to allow the country to comply with international requirements to receive payments from international sources for verified reduced emissions from deforestation and forest degradation, the Government of Ethiopia (GoE) selected Oromia regional state as the site for testing a large-scale REDD+ programme. The plan is to reduce deforestation and forest degradation and increase forest cover. Oromia was identified as a priority since it harbors over 60% of the existing dense forests of Ethiopia (a total of around two million ha) and the majority of the country's woodlands. In addition, Oromia had created a dedicated semi-private institution, the Oromia Forest and Wildlife Enterprise (OFWE), to manage its forest estate.

Deforestation and forest degradation in Oromia is driven primarily by agriculture conversion (both large-scale commercial and small-scale subsistence farming), fuelwood extraction and charcoal making, and livestock. The most important commercial crop is coffee, and land is still being cleared for the expansion of full-sun coffee plantations. Clearing of land for subsistence agriculture is the result of the low productivity of existing agricultural practices and an increasing demand for food. Most of the region's energy is supplied by biomass, and unsustainable rates of fuelwood collection threaten local forests, particularly woodlands. Natural regeneration in degraded areas is hindered by their use as grazing lands.

The underlying causes of deforestation and forest degradation in the state are the same as those in the country in general. They include poor enforcement of land-use laws and regulations, unclear land tenure, lack of incentives and support for sustainable forest management at the local level, and demographic trends and economic policies that favour commercial crops and livestock (Government of Ethiopia 2010).

Programme structure

The programme will be led by the Oromia President's office, through a dedicated REDD+ Coordinating Unit that is responsible for the overall strategic vision and for ensuring coordination across the relevant sectors (particularly agriculture, forestry and energy). An Oromia REDD+ Steering Committee was established, with members from key regional-level institutions. They have responsibilities for land use in the region (from government and civil society), provide strategic guidance to the programme and oversee its activities.

The national REDD+ Secretariat at the federal Ministry of Environment and Forests (MEF) oversees the programme to ensure that it aligns with the emerging REDD+ framework at the national level. OFWE will implement activities in forest areas (both dense forests and woodlands); the Bureau of Agriculture (BoA) will be in charge of activities on croplands and grazing lands. At the local (*woreda*) level, activities will be coordinated by a Bureau of Agriculture. In order to provide technical assistance to local land users, the Coordinating Unit may call on executing agencies such as NGOs and private-sector entities.



The programme aims to promote cross-sectoral investments in the sectors of forests, agriculture, livestock and biomass energy to address deforestation and forest degradation. In agriculture, the programme will promote climate-smart agriculture practices to decrease the demand for cropland. In the forest sector, participatory forest management (PFM) will be scaled up and intensified in both dense forest areas and woodlands. PFM has been promoted in Ethiopia since the mid-1990s (Gobeze et al. 2009), as a strategy to sustainably manage forest resources by giving local communities rights and responsibilities for the management of forest tracts.

Energy needs would be addressed from the demand and supply side. On the demand side, the programme would promote more efficient cooking stoves and alternative energy sources, such as biogas and briquettes. On the supply side, the programme would establish timber plantations for a range of uses, including fuelwood and charcoal-making. The programme would also improve the existing regulatory framework, particularly for land tenure and land-use planning.

These interventions would be promoted across Oromia. The areas to be targeted for investments are being identified by the regional government through spatial analysis of historical deforestation and multi-stakeholder consultations.

The Oromia REDD+ Pilot programme

The Oromia REDD+ Pilot programme has three characteristics:

- it works within a jurisdiction (Oromia regional state);
- it takes a landscape approach to its interventions — the planning unit is the landscape (existing forest blocks), and investments cut across sectors (agriculture, forestry and energy); and
- it is financed through a results-based financing model.

These traits are expected to increase the effectiveness of the programme; that is, to enhance the likelihood of achieving emissions reductions from avoided deforestation.

Increasingly, a jurisdiction-wide approach to the implementation of REDD+ is preferred (VCS 2014), as it delivers the benefits of REDD+ on a greater scale, with uniform implementation arrangements over a large area. A jurisdiction can make the policy decisions needed to change the incentives that affect REDD+, such as the clarification of land tenure rights, the adoption of rules for sharing benefits from REDD, creating an enabling environment for the private sector, and the adoption and enforcement of participatory land-use planning. In addition, establishing the programme at the level of a jurisdiction enhances the likelihood that high-level decision-makers will be directly involved in its implementation, which fosters cross-sectoral coordination. This creates an enabling environment. In Ethiopia, for example, land certificates can be issued only by national and regional authorities. Only the government can enforce a master land-use plan.

The programme takes a landscape approach. The planning units are the existing forest blocks, since the main goal of the programme is to reduce the loss of existing forests. That means that the high-priority areas for investment are those at risk of deforestation, and that local interventions are planned to reduce the pressure on existing forests. Increasing agriculture productivity is a key goal; the programme seeks to ensure that the growing population has access to food and fuelwood without further encroaching on existing forest blocks. The connections between forests and energy are also highly relevant; the establishment of fast-growing timber plantations and more efficient energy technologies can reduce the pressure on existing forests (Graham 2011).

A key challenge of the landscape approach is ensuring cross-sectoral coordination. Various entities are responsible for the components of the landscape, including agriculture bureaus, forest agencies and energy bureaus. The Oromia REDD+ programme will address this issue through its Coordinating Unit, which can arbitrate among various land uses, such as commercial agriculture development and forest conservation. The agencies in charge of forest and agriculture lands are well represented in the unit and have clear implementation responsibilities. This is expected to reduce conflicts over responsibilities and institutional boundaries. The budget to be managed by each entity, and the funding, will also be clarified prior to the start of the interventions to prevent conflicts. At the local level, land-use decisions will be made by local watershed management committees (representing various types of land users), which have already been established as part of the national government's efforts to promote sustainable land management.

The programme will be financed through results-based funding from donors. In the implementation phase, disbursements will occur once benchmark results are achieved. Since the financing is earmarked for specific expenses, this gives the programme more flexibility in the use of the resources and places the focus on results rather than inputs. Results-based financing is a tool that donors can leverage to incentivize a wider range of results during implementation that would otherwise not be possible without the provision of a guaranteed financial reward. Results indicators will include area under SLM practices, number of communities managing forests according to an agreed management plan and number of land certificates distributed to land-holders. Results will be verified independently by an entity to be selected. The funds will be channelled to the actors who implement the activities, including government agencies, community associations and land-holders. After the programme has been set up and implemented according to donor requirements, payments from verified reductions in emissions from deforestation and forest degradation (or from increase in carbon stock in land and forests) would be used to ensure the sustainability of the new land-use practices adopted by local communities.

Conclusions

Landscape-level approaches can be an important tool to meet the dual objectives of natural resource management and sustainable economic development, particularly given the strong linkages between activities that drive land degradation, including forestry, agriculture and bioenergy. Such approaches require institutional arrangements to foster decision-making at multiple levels of governance (national, regional and local) and involving a large number of stakeholders (crop growers, herders, forest associations, etc.). National regulatory frameworks can provide incentives to a range of stakeholders. Landscape approaches require top-down policy reforms coordinated with bottom-up incentives to change behaviour. Policies should enable communities to benefit from sustained land-based ecosystem services, while creating conditions for the private sector to invest in sustainable activities, in energy, forestry and agriculture — the sectors that drive land use change.

Results-based climate financing such as REDD+ offers an innovative opportunity for landscape-level interventions. By focusing on one clear and quantifiable goal (i.e., emission reductions), programme managers can address the linkages between multiple activities that affect land use. Results-based financing is expected to create incentives at the national and regional level to support a regulatory framework that will help the programme to succeed. In the Oromia case, this will include policies that clarify land tenure and promotion of macro- and micro-level land-use planning (and enforcement of plans). At the local level, payments tied to changed land-use practices have the potential to promote sustainable land management.

There is no single model for landscape-level approaches. Jurisdictions such as Oromia should develop an approach that suits their particular circumstances. Emissions reductions are only one benefit of this type of programme. Local benefits, such as increased agriculture productivity, will determine whether new land-use technologies are adopted by local land-holders.

The programme is in the early stages, and implementation has not yet begun. A robust process of generating knowledge from this experience is needed, in order to inform Ethiopia's regulatory framework for land use and the international debate around landscape management.

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