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Linking forests and food production in the REDD+ context

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Key messages

- ▶ Governments implementing REDD+¹ programmes must address agriculture, which is the primary driver of global forest clearing, to reach REDD+ carbon emission mitigation targets. Current REDD+ readiness activities illustrate there are serious obstacles to creating meaningful cross-sector links able to alter strong economic forces and existing government targets and mandates.
- ▶ Brazil and Acre State (within Brazil) are highlighted as a case study, as both have overcome the considerable hurdles faced by other governments, as shown in the country investigation of REDD Readiness Preparation Proposals (R-PPs).
- ▶ Based on the analysis of country R-PPs, this brief offers a roadmap to tighten REDD+ and agriculture strategies. This includes: identifying clear strategies to address demand-side and market pressures; sorting out tenure and land access rights; strengthening cross-sector policies; linking mitigation to adaptation; boosting efficiency and production of agricultural systems; and incorporating agricultural carbon measurement in national MRV systems.



Agricultural drivers of deforestation and degradation range from smallholder impacts to large-scale commercial and industrial agriculture production such as this soybean plantation in Santa Cruz, Bolivia. Photo: N. Palmer (CIAT).

1. REDD+ is a set of policy approaches and incentives to reduce emissions from deforestation and forest degradation, and promote conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

Introduction

This policy brief summarizes key findings from the report, "Linking forests and food production in the REDD+ context."² The report evaluated the extent to which countries participating in the World Bank Forest Carbon Partnership Facility (FCPF) readiness activities are actively linking REDD+ to agriculture policies and programmes and institutional and governance arrangements. The analysis is based on 20 current country REDD Readiness Preparation Proposals (R-PPs)³ submitted to the FCPF.

The Food and Agriculture Organization predicts a 34% increase in the world's population by 2050 with a corresponding growth in consumption patterns, resulting in a 70% boost in food demand by 2050. While yield increases can satisfy some of this demand, the expansion of agriculture into forest areas is inevitable. This large, future disconnect between REDD+ and agriculture must be reconciled. REDD+ readiness funding should promote activities that respond to the role of agriculture in forest clearing, stretch beyond the forest sector and align the long-term objectives of safeguarding terrestrial carbon stocks while providing food for a growing population.

Agriculture is the primary driver of forestland clearing

- ▶ Sixteen of the 20 national R-PPs reviewed report agriculture as the primary driver of deforestation and degradation. Those countries citing mining or logging as primary drivers still indicate that agriculture is in the top three.
- ▶ Underlying drivers for land conversion and unsustainable use of resources include: **governance and institutional failures** such as inadequate enforcement (cited by Costa Rica, DR Congo, Ethiopia, Ghana, Kenya, Lao PDR, Liberia, Nepal, Madagascar and Tanzania); **low financial returns on forest use** compared to other uses; and the 'tragedy of the commons' whereby **lack of local user rights and inadequate land tenure arrangements** are disincentives to sustainable forest resource use.
- ▶ Commercial and industrial scale agriculture is increasing in 15 of the 20 countries reviewed (the need to supply export and urban markets and biofuel production is cited). Argentina and Vietnam offer the boldest examples of industrial-scale food production: industrial soybean cultivation accounts for 70% of Argentina's deforestation while Vietnam's export commodities of coffee, cashew, pepper, shrimp (the latter affecting coastal mangroves), rice and rubber, drive forest conversion. Other countries with significant commercial and industrial impacts on forests include: Lao PDR (plantations fueled by foreign direct investment), Costa Rica (meat exports to the US promoted by government lending policies), Mexico (82% of deforestation due to agriculture or grazing), and Tanzania (increasing biofuel production).

2. Kissinger G. 2011. Linking forests and food production in the REDD+ context. CCAFS Working Paper no. 1. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. Available online at: www.ccafs.cgiar.org

3. The 20 R-PPs reviewed were: Argentina, Cambodia, Costa Rica, DR Congo, Ethiopia, Ghana, Guyana, Indonesia (R-Plan), Kenya, Lao PDR, Liberia, Madagascar, Mexico, Nepal, Panama, Republic of Congo, Suriname, Tanzania, Uganda, Vietnam.



An aerial view of a soybean field in a deforested area of Mato Grosso State, Brazil. Although Brazil's soybean production increased 196% between 1990 and 2008, the 2006 government ban on purchases of soy grown in newly cleared areas of the Amazon forest has been critical in slowing deforestation. Photo: LeoFreitas/flickr.com

Case study: How can national REDD+ readiness activities influence agricultural drivers of deforestation and degradation?

Brazil and Acre State (within Brazil) are highlighted as a case study, as the two jurisdictions have overcome considerable hurdles identified in the country investigation of FCPF R-PPs:

- ▶ While a recent drop in soybean commodity prices may have affected agricultural expansion in the Amazon, there is clear evidence of a link between a national deforestation target and the national agricultural policy. Recent deforestation rates have decreased, while agricultural production has increased. It should be noted that this activity commenced before formal REDD+ arrangements were developed.
- ▶ The goal is to link national, state and local scales to Brazil's emergent REDD+ strategy, with state targets and strategies being nested in national economy-wide targets.
- ▶ Acre State's REDD+ programme encompasses all land and use types, including the full range of agricultural uses that affect Acre's forests. It offers a mix of incentives and payments, bundled under an umbrella REDD+ programme linked directly to the Acre Sustainable Development Plan. Its emission reduction targets are nested within federal targets; it is based on multisector land use plans; and governance of the programme, including enforcement abilities, appears strong.

Tightening REDD+ and agriculture strategies – a roadmap

1. Identify clear strategies to address demand-side and market pressures, and how government can influence them.

For countries facing commercial and industrial-scale agriculture pressures, this is of great urgency. They should start by addressing the appropriate location of small- and large-scale agricultural expansion in relation to their REDD+ strategies and use mechanisms that can affect market demand, such as certification and influencing lending policies.

Action

Countries can encourage the use of agricultural product certification systems that will steer investment to agricultural producers and promote demand for products that meet certification standards. For example, endorsement and promotion of the Roundtable for Sustainable Palm Oil, principles and certification standards of the Roundtable on Sustainable Biofuels, and the Sustainable Agriculture Network (operating in Central and South America). The Acre State, Brazil model promotes best practices and property certification (including payments) for small and large agricultural producers via their Programme for Valuing Environmental Assets, an integral part of their state-wide REDD+ strategy.

There is a growing trend towards applying procurement policies and supply chain transparency, particularly for controversial products. In recent years, scrutiny of illegally harvested timber has improved, with France, Germany and the UK adopting green public procurement policies affecting illegally harvested wood; more and more, they are considering similar commitments related to agricultural products. The World Bank Group recently adopted a framework and

International Finance Corporation strategy to guide future engagement in the global palm oil sector. Countries will progressively need to consider those external commitments, but can also shape domestic lending guidelines for loans and investment decisions by banks. For example, the Bank of Brazil announced in December 2010 that it will veto agricultural credit for soy farmers who want to plant in newly cleared areas of the Amazon forest.

2. Strengthen cross-sector policy and align implementation.

While countries are following FCPF's recommendations for cross-sector working groups and steering committees, R-PPs are generally unclear how agreement and accommodation will be made on conflicting programme strategies and when and how tough decisions will be handled. Very few R-PPs mention legislative decisions, often critical for changing national priorities and ministry targets and mandates. Consultation does not infer a change in ministry mandates.

Action

Countries with clear conflicts between REDD+ and national and regional agriculture (or related) policies must prioritize these for multi-ministerial decisions and identify ways to solve them (legislative decisions, further stakeholder input, and so on).

Further, they should emphasize the development of tools and mechanisms, linked to policy formation, that help to reconcile sector conflicts, such as Argentina's deforestation risk index and Kenya's spatially-explicit future trajectories of emissions/removals under different economic and development scenarios. Effective land use planning is also critical for aligning sectoral interests, and demarcating how to overcome jurisdictional differences between national, regional and district levels of government.

Countries should link REDD+ to low carbon development plans and other higher level policy platforms to create strong enabling legal frameworks. Brazil will implement 12 sectoral emission reduction plans by the end of 2011, all of which tie into its economy-wide emission reduction target.

Countries will need to assess how national REDD+ policies will affect sub-regional and district government decisions, and conversely how key multisector decisions at those levels can reinforce REDD+ programme goals. This is particularly important for countries such as Indonesia, Kenya and Tanzania, in which local authorities have far more control over land use decisions than national governments.

3. Sort out tenure and land access rights.

This crosscutting issue was cited by many countries as a prerequisite to addressing smallholder agricultural impacts, and holds the potential to address the poverty and disenfranchisement of forest-dependent people. Focusing on this issue will lay the vital groundwork for designing benefit-sharing mechanisms, essential to leaving forests standing. Twelve countries cite this as critical: Argentina, DR Congo, Ethiopia, Ghana, Liberia, Nepal, Madagascar, Republic of Congo, Suriname, Tanzania, Uganda, and Vietnam.

Action

Governments should focus on increasing the access of forest-dependent and indigenous people to forests, and institutionalize their rights to tenure and benefit sharing.

4. Link mitigation to adaptation.

Argentina, Ghana, Liberia, Nepal and Panama already have, or will create Adaptation Working Groups under National Climate Change Committees and hope to link their REDD+ strategies to those. More countries should follow suit.

Action

Countries must link forest and agriculture strategies, using both mitigation and adaptation approaches, to identify how to meet future domestic food supply (given population growth, increasing urbanization, regional changes in precipitation and other climate change impacts), while safeguarding carbon stocks.

5. Boost efficiency and production of agricultural systems.

All countries that cite agricultural inefficiency as directly affecting deforestation do not offer clear causal pathways on how policies and institutions will address this in their REDD+ readiness strategy development and activities. Furthermore, R-PP budgets reviewed do not indicate funds to be allocated for this purpose, beyond commissioning studies and gathering more information.

Action

REDD+ strategies can promote land use efficiency by steering agricultural expansion to already degraded lands that have low potential for regeneration of carbon-rich forests. They can also help to steer agricultural extension services to priority landscapes and to those with greatest potential conflicts within the REDD+ strategy.

In countries where shifting agriculture (smallholder impacts) is problematic, a mix of clarifying access and tenure rights, combined with extension programmes (such as Liberia's conservation agriculture), may be critical (depending on the circumstances).

Emphasis should also be on promoting agricultural intensification activities that increase carbon storage (such as agroforestry), combine animal husbandry and food production (Mexico's PROGAN Ecológico) and are geared towards boosting soil fertility (Brazil's success with techniques for fixing nitrogen that decreased the use of fertilizers). Countries should apply REDD+ readiness funding to further this goal.

6. Incorporate agricultural carbon measurement into national MRV systems

While the financing and capacity may not currently exist in many countries to achieve this, building data inventories and tracking agricultural uses and carbon emissions into the design of MRV systems for REDD+, will address an information shortcoming in many R-PPs. Such information is critical in fine-tuning national and regional REDD+ and agriculture policy development.

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