REVITALIZING REGIONAL PARTNERSHIPS AND INNOVATION FOR AGROFORESTRY COMMODITY VALUE CHAINS IN AFRICA:

LESSONS FROM LATIN AMERICA AND EAST ASIA

DISCUSSION FORUM
GLF, NAIROBI
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Global Landscapes Forum

FINDINGS AND NEXT STEPS:

WORLD BANK FUNDED STUDY, LEVERAGING AGRICULTURAL VALUE CHAINS TO ENHANCE TROPICAL TREE COVER AND SLOW DEFORESTATION (LEAVES)

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Why LEAVES?

Natural climate solutions—forests, trees and soils—could provide up to 1/3 of the GHG emission reductions needed by 2030; most of this potential mitigation is in the tropics

However. . .

Demand for food and feed will increase to supply a growing, more affluent population

Most of that demand will be met in the tropical and subtropical latitudes, potentially displacing forests and woodlands

- LEAVES is a response to this challenge—to produce more food, feed and fuel while keeping more trees and forests on the landscape

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The Case Studies

- Agroforestry Shea Parklands of sub-Saharan Africa
- Coffee and Cocoa Agroforestry Systems
- Silvopastoral systems in Latin America
- Cattle in the Brazilian Amazon
- Soybeans in the Brazilian Amazon
- Palm Oil in Indonesia

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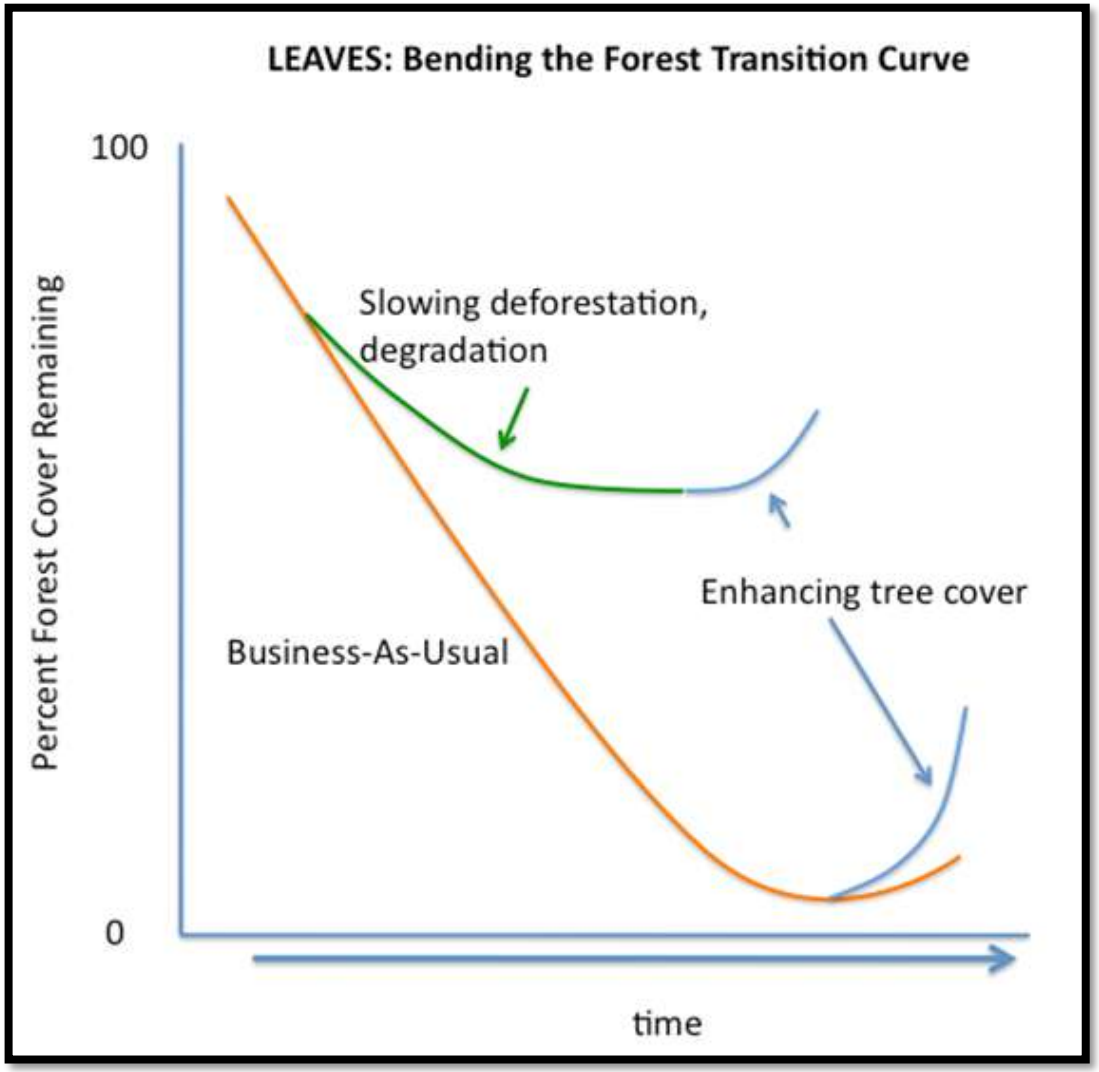
Bending the Forest Transition Curve



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Recommendations:

Markets:

- **Corporate Zero Deforestation Pledges**: Move beyond unilateral announcements to more collaborative approaches
- **Certification**: Build on global standards and international commercial regulations to achieve regionalized, bottom-up definitions of “sustainable”
- **Public-Private**: Seek harmonization between private sector initiatives and public policies/programs
- **Ecosystem Services**: Take carbon and ecosystem service valuation to scale; “pay-for-performance” ready for replication
- **Finance**: Urgent need to increase sustainable access to finance

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Recommendations:

Farmers and Industrial Producers:

Competitiveness: For LEAVES to take hold, farmers and industrial producers engaged in sustainable production systems must become more competitive than those who are not; governments and buyers can help tilt the playing field to favor sustainable producers

Find & support innovators: Urgent need to recognize, reward and enable innovative producers through appropriate finance, resolution of land tenure uncertainty, and technical assistance

Responding to markets: Producers need support to respond to consumer demand for sustainability

Backlash: to succeed, corporate “zero deforestation” pledges and NGO deforestation campaigns need to engage farmers

Recommendations:

Governments:

- **“Sticks” must be balanced with “carrots”**; command-and-control, regulatory measures to control deforestation can work up to a point
- **Beyond silos**: Foster collaboration and build capacity across agencies
- **Build the governmental case for forests/trees**: Translate and communicate the benefits of forest-friendly development into regional visions supported by public policies and programs

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A new paradigm?

The LEAVES studies highlight some elements of an emerging paradigm shift:

- The major international “tools”—certification, REDD+, corporate deforestation pledges—are making positive contributions but, alone, are insufficient
- A critical shift in focus is needed to approach deforestation and tree enhancement from the perspective of farmers and local governments
- The shift means moving from binary, “black and white” approaches to sustainability, to **nuanced, regionalized approaches** that recognize and inspire long-term progress towards sustainability
- Punitive measures, restrictive regulations and market exclusion must be complemented by mechanisms for tapping into human pride: recognizing, celebrating and rewarding innovation on the ground
- This points to **a new era of partnerships**: corporations with farmers and communities, corporations with governments, governments with farmers

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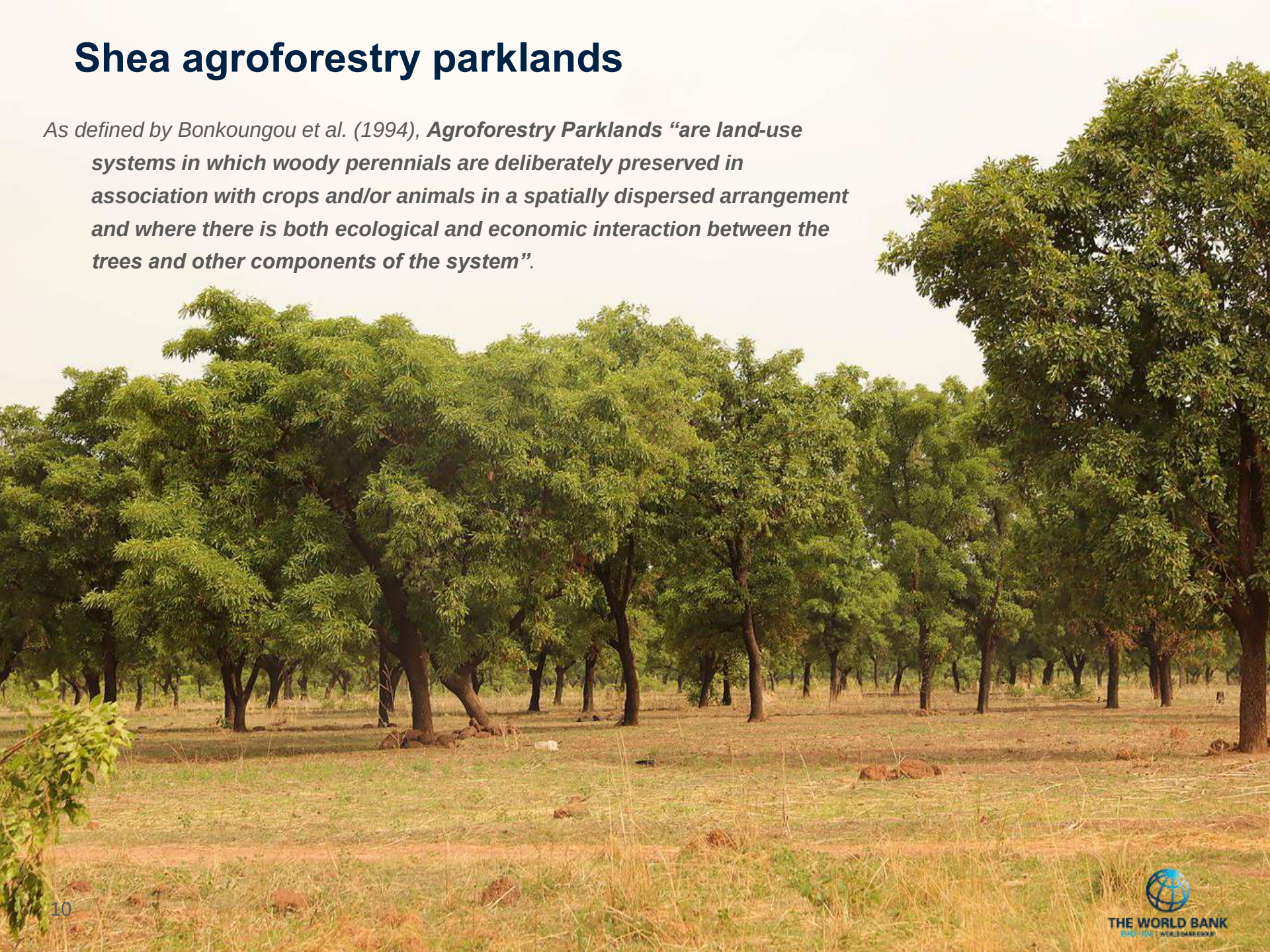
Agroforestry shea parklands of Sub-Saharan Africa

Peter Lovett and L. Denzil Phillips

Shea agroforestry parklands

As defined by Bonkoungou et al. (1994), ***Agroforestry Parklands "are land-use systems in which woody perennials are deliberately preserved in association with crops and/or animals in a spatially dispersed arrangement and where there is both ecological and economic interaction between the trees and other components of the system".***



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Main shea study findings

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Why shea?

Major food and fuel security importance sub-Saharan Africa, 200-300 million people, 2000+ years of trade & management

- Sustainable production system for wood fuel, annual crops & tree crops
- Deciduous, fire-resistant, native, insect-pollinated, pioneer tree species
- 21 countries, 300-350 million hectares of Sahelian-Sudanian-Savannah
- 16+ Million women collect
- Local African edible use c. 2 million tons sheanuts

Growing International Market Demand

- Personal care products, just 10% of export crop
- Invisible 90% export crop edible use: **Cocoa Butter Alternatives** *ingredient*
- 8 West Africa nations export 300-500,000 tons shea kernel p.a.

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Main shea study findings

- Shea parkland is a vast *invisible* management system, not a wild minor forest product
- Its women collectors remain among poorest people in the world
- Wrongly viewed as primarily for personal care, when 90% of exports are for cocoa butter substitution; most shea consumed locally
- Shea parkland managements systems—rotating fallows—are being lost to monoculture, herbicide and pesticide, urbanization

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Main shea study recommendations

- **Rebranding needed** – not a minor “wild harvested” NTFP but nutritional, ecological-climate stabilizing commodity from a regional managed parkland
- **Address the threats** – tree removal for crop cultivation, agricultural chemicals
- **Land reform** needed to provide secure tenure
- **Female-oriented technologies** and access to finance are needed
- **Regional shea landscape event** urgently required with key stakeholders

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Dual role of coffee & cocoa in deforestation and reforestation

Eduardo Somarriba and Arlene López-Sampson

Why coffee and cocoa?

Coffee

11 million hectares; 60% under shade i.e. agroforestry systems

10 million farmers

9 million tons of green coffee

125 million people's livelihoods.

Cocoa

10 million hectares; 70% under shade i.e. agroforestry systems

10 million cocoa farmers

4.5 million tons annually

40-50 million people's livelihoods.

The problem and (part) of the solution

- Coffee and cocoa are drivers of both deforestation and reforestation

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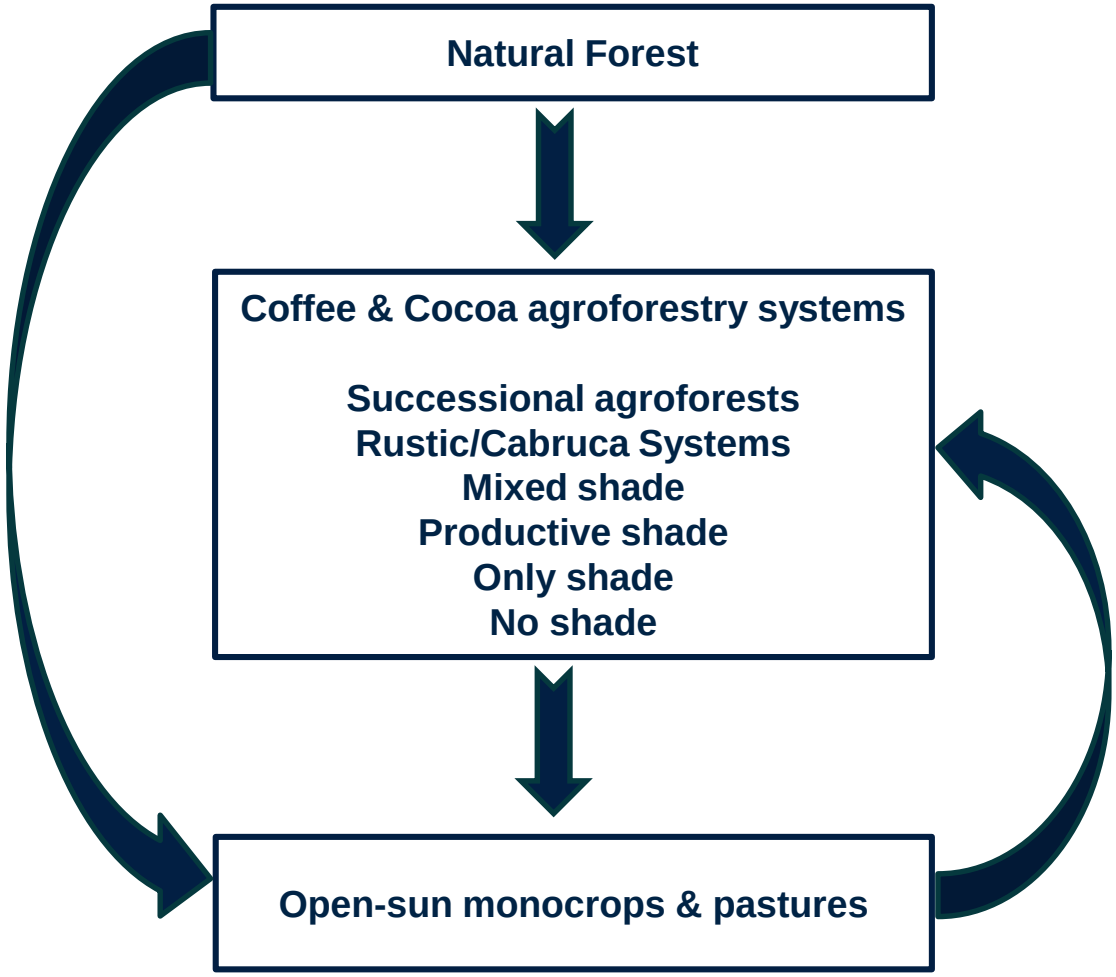

Transition pathways between natural forests, coffee and cocoa agroforestry systems and other land uses

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Main findings

- Deforestation in West and Central Africa's forest frontiers continues at fast rates due to the expansion of cocoa
- Major **threat** is crop husbandry **intensification--**low shade or no-shade systems are winning the battle
- Must increase **profitability and resilience** of coffee & cocoa farming (diversification, not only cocoa or coffee)
- Long way to go in improving **legal, institutional, policy and financial frameworks** for trees on farms (especially timber)
- **Concerted actions** between governments (national, jurisdictional), industry, value chain actors, farmers, financial institutions, and donors are essential

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Recommendations to reduce deforestation

- Improve the **legal, institutional, policy and financial frameworks** to increase the value of forest in private land and to enforce protection measures on conservation areas
- Invest in the use of **modern technologies to monitor deforestation** in real time.
- Support "**zero deforestation" and transparency in supply chain** pledges by industry and other stakeholders (e.g. Mars' Deforestation Policy)
- Support **multi-stakeholder platforms** aimed at reducing deforestation and securing a sustainable coffee and cocoa economy (e.g. Cocoa Forest Initiative)

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Recommendations to increase reforestation

- Increase the **profitability and financial resilience** (e.g. diversification with timber and fruits) of coffee and cocoa farming
- **Optimize the trades-offs** between ‘‘crop husbandry intensification to increase cocoa yield’’ and the ‘‘reduction in shade level (tree cover) and species richness’’
- **Improve the legal, institutional, policy and financial frameworks** to make trees in the shade canopy “visible” and accessible to farmers
- Support **certification standards** promoting tree planting in coffee and cocoa
- Promote, among farmers, **the vision of “timber trees as crops”**

Silvopastoral (SP) options for enhancing tree cover and productivity in livestock systems in Latin America

Danilo Pezo, Muhammad Ibrahim and Ney Rios

Silvopastoral Systems in Latin America

The Problem

- Significant increase in demand for livestock products domestic and for exports in last 50 yrs
- Projections to 2050 suggest continued growth in demand
- 50-70% of pasture under traditional cattle ranching are degraded; new pastures are established at expense of forests

The Solution

- Rehabilitate degraded pasture lands in areas with potential for more intensive use, leaving others for secondary forest regeneration or reforestation
- In rehabilitated pasture lands, livestock systems must shift to more intensive SP options

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Main Findings

- **SP are "win-win" options**: improve animal welfare and productivity, increase income, products diversification, enhance climate resilience, fewer GHG emissions and greater C-sequestration, increase ecosystem services

- Different SP options for **tailoring systems** to the constraints and opportunities in different sites, as well as diverse farmer expectations and goals

- Greater diversity of SP options in LAC found in tropical than in temperate boreal zone

- Despite substantial evidence on the economic, ecological and social benefits of SP systems, adoption rates low

Enabling factors to accelerate adoption of SP options

- The livestock sector is part of the Nationally Determined Contributions (NDCs) for Climate Action in different LAC countries
- Changes of production paradigms and coordinated R4D efforts on SP systems involving livestock, forestry and environment institutions
- Large-scale projects aimed at mainstreaming lessons learnt should be built on successful pilot projects that have demonstrated the potential of SP interventions
- Access to PES schemes, price premiums, and green credits under different climate change initiatives (i.e., REDD+, Green Climate Fund, 20x20 Initiative) for promoting SP innovations
- Development of the legal framework, as well as adjustments in the wood processing sector, to support the conservation and sustainable use of timber and forest products coming from SP systems

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Case study: The Brazilian Soy Moratorium

Daniel Nepstad & João Shimada

Why Soybeans?

Global demand rising driven largely by economic growth and greater meat consumption in China and other emerging economies

Demand fueling tropical deforestation in South America - the Amazon, Cerrado of Brazil; the Chaco of Paraguay and Argentina

The **Brazilian Soy Moratorium (BSM)**: key experiment in removing deforestation from soy value chain in the Brazilian Amazon region

BSM: an agreement among trading companies, NGOs, retailers and banks to not purchase or finance soybeans grown in fields converted from forest after July 2006 (later changed to July 2008); effective monitoring program

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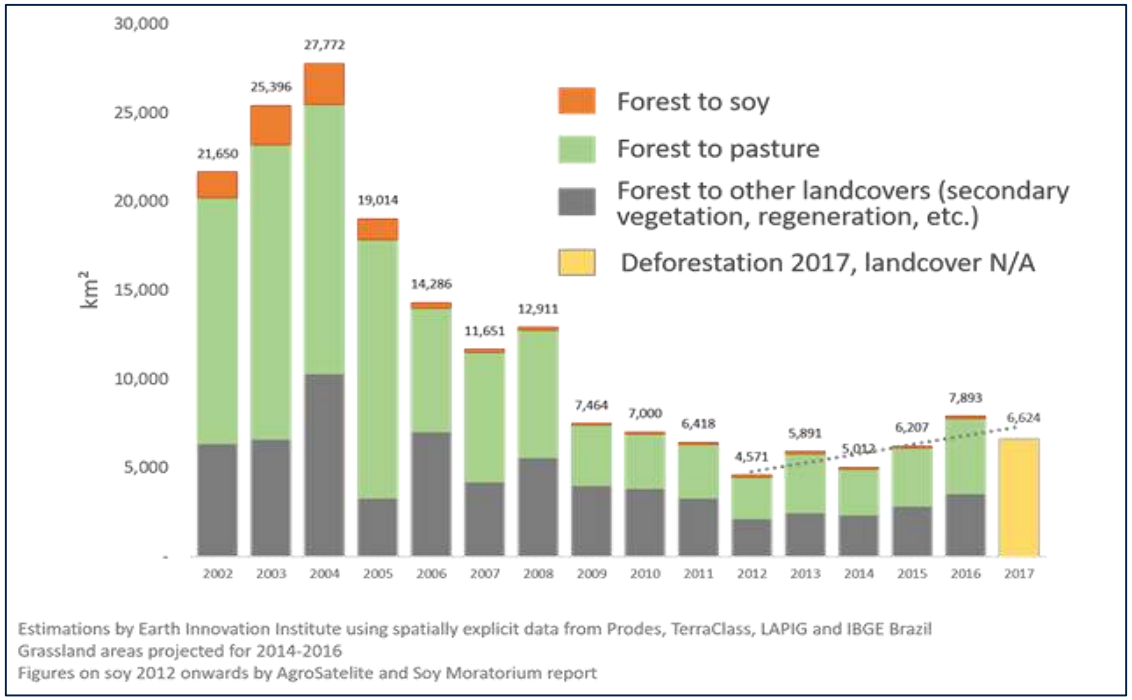
Main findings: has the BSM worked?

Yes: From the perspective of corporate risk management, **99% of soy cultivation area** in the Amazon forest biome was cleared prior to July 2008

No: The contribution of the BSM to the **70% regional decline** (graph) in Amazon deforestation is quite modest. The Brazilian Government's law enforcement efforts, expansion of protected area system, and the decline in demand for new deforestation were more important



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Main recommendations: linking value chain interventions with public policies through a jurisdictional approach

The BSM was never supported by the powerful farm sector: that is a problem

- BSM imposed restrictions on responsible, law-abiding soy farmers without compensation for lost value of their farms.
- Losses fairly minor in the Amazon, but more substantial in the Cerrado and Chaco
- Possible farm sector backlash could erode environmental gains—a major challenge of value chain approaches in isolation

Jurisdictional approach defines shared goals for production, conservation and social inclusion at the scale of entire states and provinces through multi-stakeholder processes. Example: Mato Grosso Produce, Conserve, Include Strategy (PCI):

- Zero net deforestation and 6 billion tons CO2eq avoided emissions by 2030

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Case Study: Beef in the Brazilian Amazon

João Shimada and Daniel Nepstad

Why Brazilian Beef?

Cattle pasture formation is key driver of deforestation in Latin America. In the Amazon region of Brazil, **70% of cleared land under cattle pasture**

Unlike soybeans, little “market pull” for sustainably-produced beef. 80% of Brazilian production is for domestic market

Study analyzed the **Brazilian Cattle Agreement (BCA):** experiment in removing deforestation from the beef value chain, Brazilian Amazon

Triggered by Public Prosecutor’s actions against illegal cattle sourcing by meat-processors

BCA, agreement among largest meat processing companies (JBS, Minerva, Marfrig, Bertin) and NGOs to **end the purchase of cattle from farms deforested after October 2009**, indigenous territories or reserves encroachment, labor infractions

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Main findings: has the BCA worked?

Mild Yes: From the perspective of **corporate risk management**, reduced deforestation on farms and ranches selling directly to meat processors

No: Indirect suppliers, laundering, self-monitoring (~80% of target)

- Transparency/verification of self-monitoring by processors; JBS & “Carne Fria”

Challenge: **Limits of “negative” approaches to deforestation**

- Missing carrots for responsible, law-abiding producers
- Cattle intensification is reducing demand for new deforestation
- Financial gap

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Main recommendations

Improve BCA: Better monitoring of indirect suppliers with public instruments (CAR, GTA), e.g. “VISIPEC”

Beef Institute of Mato Grosso: transform cattle sector by addressing quality, sanitation, sustainability demands of key markets

- Standardization, technical support, clear benefits to producer

Attract necessary investment to Mato Grosso PCI Strategy

- Goal of increasing cattle productivity on smaller area of pasture, soybean expansion without deforestation, reforestation; industrial tree farms

Beef substitution with low-carbon protein

Dialogue with cattle sector urgent: growing wave of populist backlash

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Oil palm in Indonesia

John Watts and Silvia Irawan

Why oil palm?

- Oil palm (*Elaeis guineensis*) is one of the more visible, and profitable, agricultural commodities driving the expansion of industrial and small-scale plantations into forest areas, especially in Southeast Asia

- Between 2000 and 2010, around 4.5 to 7 million hectares of Indonesia deforestation, around 20 per cent of which occurred in oil palm plantations

- Sustainably produced palm oil, free from deforestation and social conflicts, has become the aspired goal for many consumers, buyers and governments, reinforced through zero-deforestation commodity supply chain pledges

- The most effective path for achieving this goal remains elusive

Main findings

- **RSPO certification** has both the instruments for reducing deforestation and global legitimacy but effectiveness constrained by scale, market demand, and costs
- **The Indonesia Sustainable Palm Oil (ISPO)** system is based on existing laws and regulations and is mandatory, however, perceived as a weaker system by NGOs
- **Corporate zero deforestation commitments** met with resistance by the government-- disproportionate impact on smallholders
- The Indonesian government issued **laws and regulations** for reducing deforestation and environmental degradation, focusing on peatland degradation and fires using strict regulatory approaches, not positive incentives
- Addressing **yield gap** between small-scale and industrial oil palm growers could reduce agricultural expansion into forests and peatland-- more systematic efforts are required
- **Jurisdictional approaches**, in particular jurisdictional certification initiatives represent a hybrid approach with potential to overcome challenges faced by other initiatives

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Recommendations

- **Small-scale production models**: Find incentives and financially viable models of small-scale, sustainable palm oil production; identify obstacles to broad-scale adoption
- **Land and supply chain taxation**: Investigate appropriate mechanisms for taxing plantation, other estate land and palm oil supply chain that adequately reflects its value and environmental and social effects
- **Environmental and social safeguards**: Find acceptable compromise among government methodologies and HCV/HCS and FPIC
- **Legal framework of jurisdictional certification and sourcing**: Investigate the legal barriers to jurisdictional certification and source both in terms of national laws and bi-lateral and multi-lateral trade agreements
- **Preferential jurisdictional sourcing**: Find cost-effective ways for companies to source from sustainable jurisdictions
- **Mechanisms for financing low emission development**: How to best channel financial resources to local governments to enable jurisdictional sustainability

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Thank you!

LEAVES Team