

Opportunities and Challenges for Harnessing Local Forest Management to Improve Rural Livelihoods in Africa

IUFRO WFSE Side Event at World Forestry Congress, Durban,
7 September 2015

IUFRO Special Project World Forests, Society and
Environment (IUFRO WFSE)

Rehabilitation of degraded forest and woodland ecosystems for livelihoods and ecosystem services in Ethiopia

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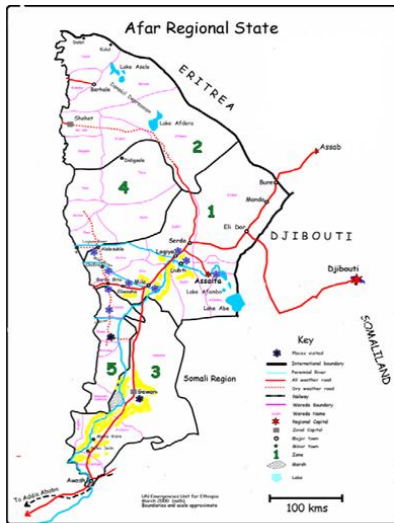
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IUFRO-WFSE side event
WFC, Durban



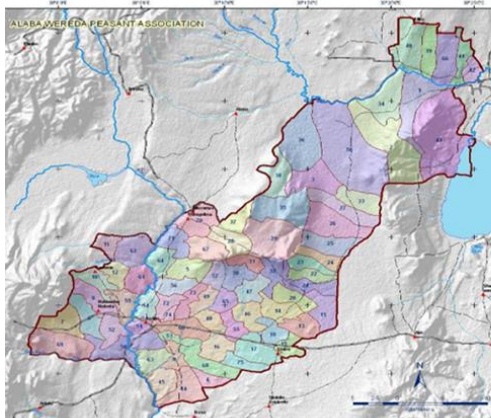
Introduction and aims of the study

- Deforestation has occurred for the past three millennia in northern Ethiopia.
- Rehabilitation - high priority and timely.
- The aims of the studies were:
 - Evaluate the processes and impacts of forest restoration on livelihoods and ecosystem services.
 - To study the impacts of policies and institutional arrangements on forest rehabilitation.
- Two case studies: Area enclosure at Alaba and rehabilitation of areas invaded by the alien species - *Prosopis* in Afar.

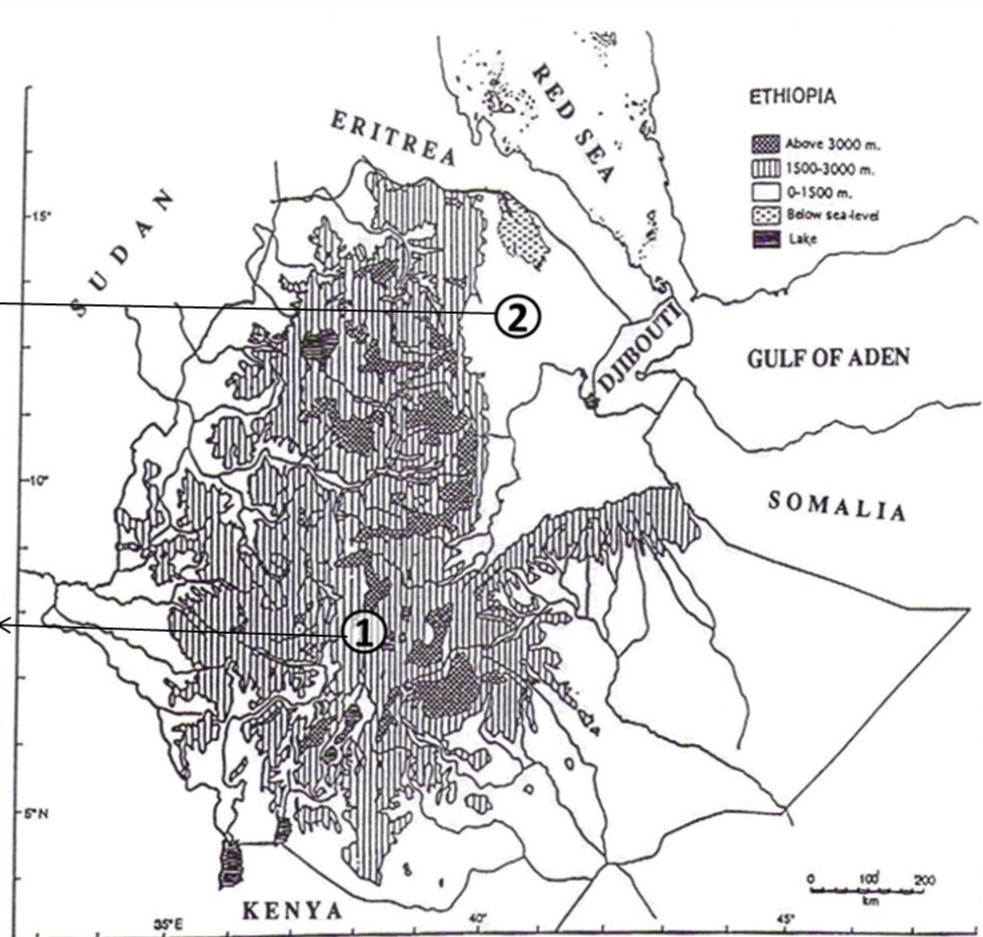
Study sites



Source: Tegegn 2008



Source: IPMS 2007



Area exclosure at Alaba

- ❑ Deforestation at Alaba has resulted in the reduction of the forest cover to ~7% and in severe land degradation.
- ❑ Area exclosure was established on communal land. 7600 ha of degraded area within 17 PAs were rehabilitated.
- ❑ Main actors: district administration, DOA, peasant associations (PA), local associations, other NGOs.
- ❑ Planting of trees and grasses, building of soil conservation structures and micro catchments, enrichment planting.
- ❑ The women's association and the PA were responsible for the day-to-day and overall management, respectively.

Post-rehabilitation biophysical changes

- ❑ Tree planting and natural regeneration has resulted in young secondary forest - increased biomass.
- ❑ Open ground is covered by herbaceous species.
- ❑ Some wild fauna and bird species were observed in the area enclosure.
- ❑ Soil erosion and water runoff has been reduced significantly.
- ❑ Floristic and faunistic diversity is lower and contains mainly early-successional and generalist species than natural forests.

Socio-economic effects of the rehabilitation intervention

- Local people generated considerable income from selling of grass and cattle fattening.
- Members were allowed to collect construction materials, thatching grass, and grass for livestock.
- Community benefited from harvesting of planted trees.
- The rehabilitation intervention brought a positive change in the perception of local people.



Challenges to sustainability of area exclosures

- ❑ Land and tree tenure of rehabilitation areas are still ambiguous.
- ❑ State policies do not offer provisions for the decision making power of communities (management, utilisation).
- ❑ Lack of mandated institution to enforce rules and regulations and implement by-laws.
- ❑ Lack of clear rehabilitation objectives and management plans.
- ❑ Inequity in benefit sharing.
- ❑ Emergence of wild animal pests - lack of management plan.

Spread and control of *Prosopis*

- ❑ *Prosopis* was introduced to Ethiopia in the late 1970s from India.
- ❑ Today, the total area invaded by *Prosopis* is estimated at 700,000 ha in Afar Region alone.
- ❑ *Prosopis* invasion has caused: decline in agricultural and livestock productivity, exacerbated biodiversity loss, blockage of water resources, etc.
- ❑ But, local communities are benefiting from the use of *Prosopis* for various purposes.
- ❑ Control through utilisation is practiced in Afar Region.

Management of areas invaded by *Prosopis*

- ❑ Establishment of cooperatives to clear invaded areas - conversion to crop and pasturelands.
- ❑ Processing of *Prosopis* pods and seeds for livestock feed.
- ❑ Charcoal and fuelwood were produced from *Prosopis*.
- ❑ Community mobilisation to uproot seedlings.
- ❑ Main actors: ANRS, local administration bodies, traditional community leaders, cooperatives, NGOs.
- ❑ ANRS controls all decision making power.

Socio-economic effects of the interventions

Rehabilitation interventions have brought considerable livelihoods benefits:

- A net profit of \$ 300,075 was obtained in one year from the sale of charcoal.
- One cooperative generated \$ 5850 from marketing crushed pods and seeds for animal feed.
- In one cropping season \$ 675-1270 was obtained from the sale of vegetables and sesame.
- It has created 233,509 man-days/year of work.
- Local markets have emerged for animal feed.

Challenges to sustainability of *Prosopis* invasion management

- ❑ Lack of clear and secure land and tree-tenure rights for rehabilitation sites.
- ❑ Top-down approach in management of rehabilitation sites (not decentralised).
- ❑ Lack of clear policies and institutional mandate.
- ❑ Lack of clear demarcation of the operational areas of different cooperatives.
- ❑ Absence of land-use plan and management of cleared lands.
- ❑ Lack of transparency and accountability.



Source: HDRA 2005

Source: Farm Africa 2008

Opportunities and Challenges for Small Forest-Based Enterprises in The Gambia

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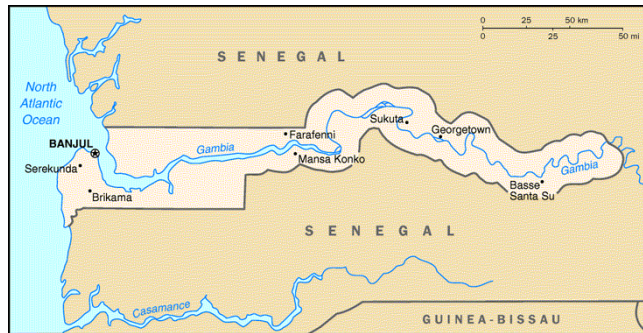
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**IUFRO Special Project World Forests, Society and
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Small forest-based enterprises



Scope and Objectives





















The Gambia



- Research goal: Identify opportunities and limiting factors facing small forest-based enterprises (SFEs)
- Qualitative multiple case study

Case study enterprises

- 16 small forest-based enterprises

Type of SFEs	Villages				Total SFEs	
	A	B	C	D		
Firewood					3	 Community-owned
Ecotourism					1	
Beekeeping				  	4	 Individually-owned
Handicrafts					1	
Branchwood	  		 	 	7	

- 14 financial institutions
 - 6 banks & 8 microfinance institutions
- Data collection in February and March, 2010

Contribution to livelihoods

- Community-owned enterprises
 - Community development
 - Forest management
- Individually-owned enterprises
 - Household needs
 - Additional source of income



*“...Everybody appreciates it because everybody has benefitted...
Everybody needs water, everybody needs to pay rates and taxes...”*

Enabling Environment

- Key role of government
 - Implementation of synergistic policies towards forest management decentralization
 - Land tenure reform
 - Establishment of community forests
 - Partial devolution of decision-making power
 - Recognize the role of SFEs in poverty reduction

Business support

- Capacity building has been central
- Training in enterprise development and forest management
- Economic and material support



“After the training, they gave us all the tools that we will need for the work [...]. They gave us everything except the Rhun Palm.”

- Continuous partnership with Forestry Department
- Complementary role of associations and NGOs

Access to Financial Services

- Good accessibility of savings (deposits) accounts
- Many have accessed credit
- Microfinance institutions have more flexible requirements
 - Group schemes
 - Collateral
- Role of credit unions

Main challenges

- Need of training on a continual basis
- Barriers to accessing credit:
 - Potential instability of policies
 - Informality
 - Unsustainable use of forests

Main challenges for wood-related enterprises

- Corruption at roadside checkpoints
- Illegal activities (e.g. illegal competition, intrusion in community forest areas)
- Impediments updating CF management plans
- Weak enforcement capacity by the government

A path forward

- SFEs are central to community forestry initiative
- Capacity building is key for decentralization and for advancing SFEs
- Need of ongoing support from government and other actors
- Key role of associations

Thank you!

Community Rights and Participation in the Face of New Global Interests in Forests and Lands: The case of Mozambique

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Eduardo Mondlane University, Maputo, Mozambique

1. Introduction and background



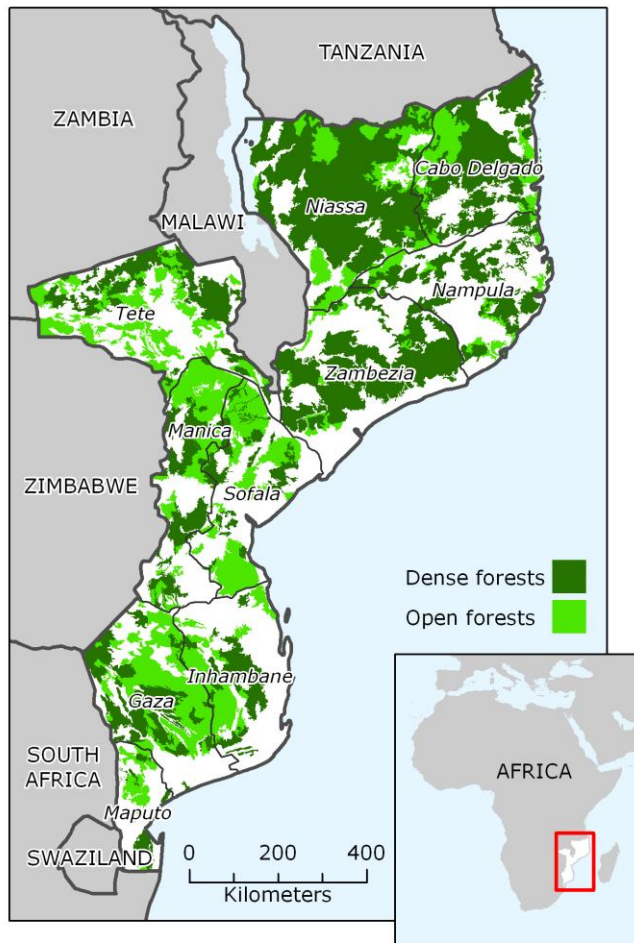
Short History

1975: Independence
 1992: end of Civil War
 1997: Land Law
 1999: Forest Law
 2003: Forest Regulation
 2009: REDD+ preparedness

General indicators

Surface: 800 million hectares
 Population: 24 million
 GDP(2012): 14.6 USD billion
 Economic Growth rate: 7.4%

Forest context



- Forest cover: 40 million ha (51% of the country surface)
- Mainly Miombo forests (dry forests)
- Annual deforestation rate: 0.58% (1990–2005)

Forests, Land Use Change and Deforestation



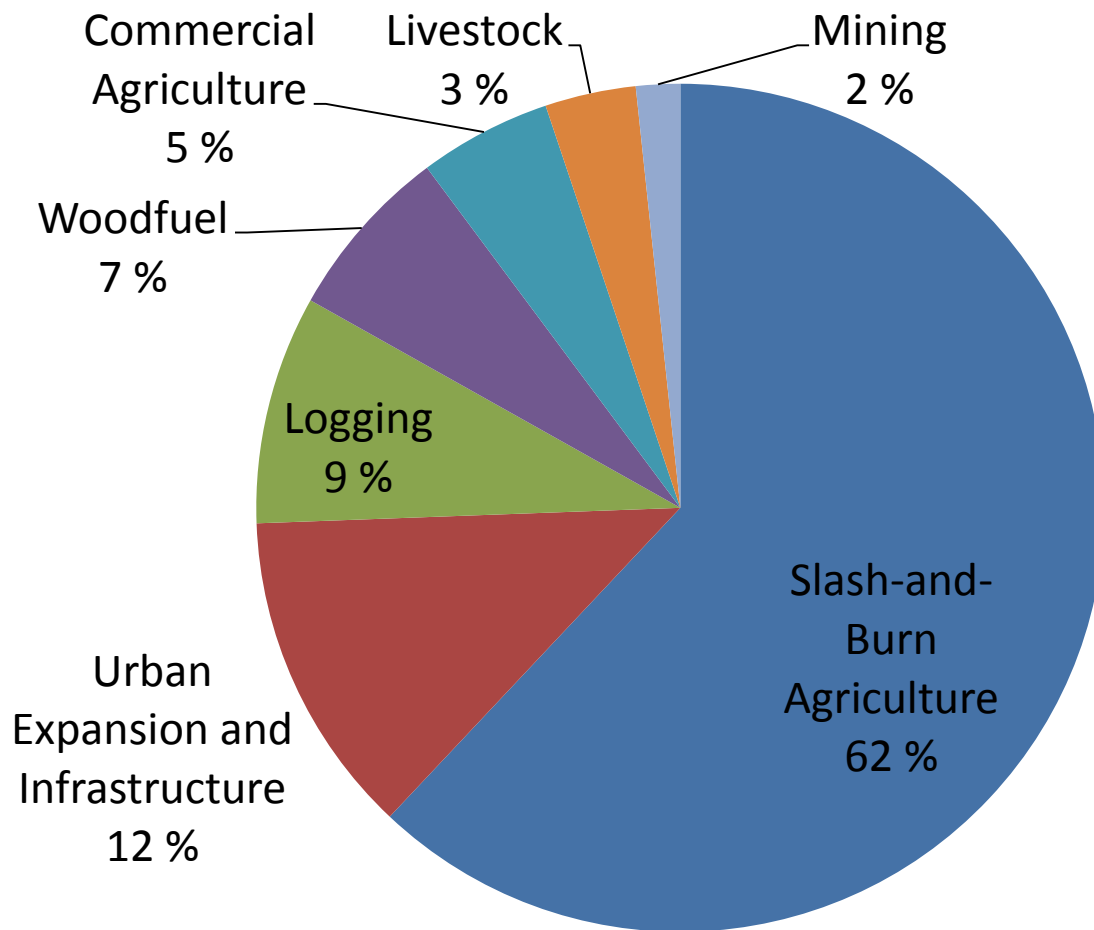
- **International markets**
 - Energy resources (coal, gas)
 - Wood (tropical hardwoods)



- **Domestic consumption**
 - Woodfuel
 - Food



Land Use Change and Deforestation



Forests, Livelihoods and Capacities



Political and Institutional Framework

- Community participation in national policies
- Coexistence of formal and traditional rights to land and forest–resource use
- Established benefit–sharing scheme
- Community forestry models and community participation
- Enforcement of laws and regulations

Distilling lessons for more community participation in forest management

- Mozambique experiences with community forestry
 - 70 Community forestry initiatives
 - 2 million ha
 - Community plantations
- Private sector investments in large-scale land projects
 - Mozambique = Plenty Land
 - Land as incentive for foreign investments
 - Non-compliance and local perceptions
 - Formalization of customary property right needed

Factors enabling SFM

- Transparent partnerships
- Capacity to execute rights and participate
- Commitment to SFM
- Manage the conflicts Statutory versus Traditional rules

Important Measures to Further SFM in Mozambique

- *capacity-building*, to enable effective community participation and SFM commitment
- *institutional*, including the formalization of property rights, carbon; appropriate implementation of laws and policies; commercially viable skill-transfer partnerships
- *informational*, i.e. use of and access to information on land-use occupancy, activity, and development plans

Thank you!





How domestic timber markets contribute to local livelihoods: Insights from Central Africa

Guillaume Lescuyer

Side event « *Opportunities and challenges for harnessing local forest management to improve rural livelihoods in Africa* »

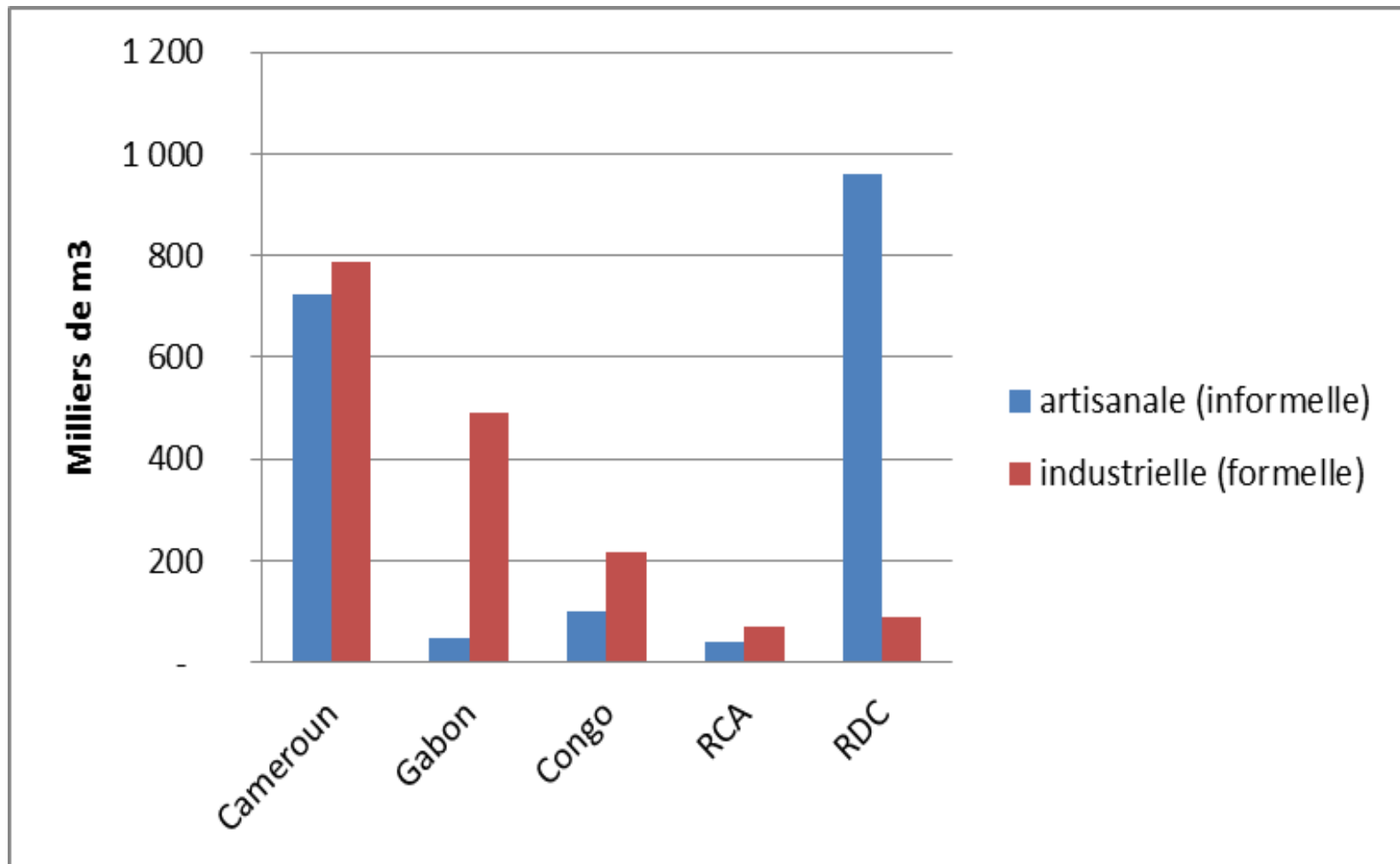


THINKING beyond the canopy



CIFOR

(Informal) domestic timber markets versus (formal) timber exports of sawn wood



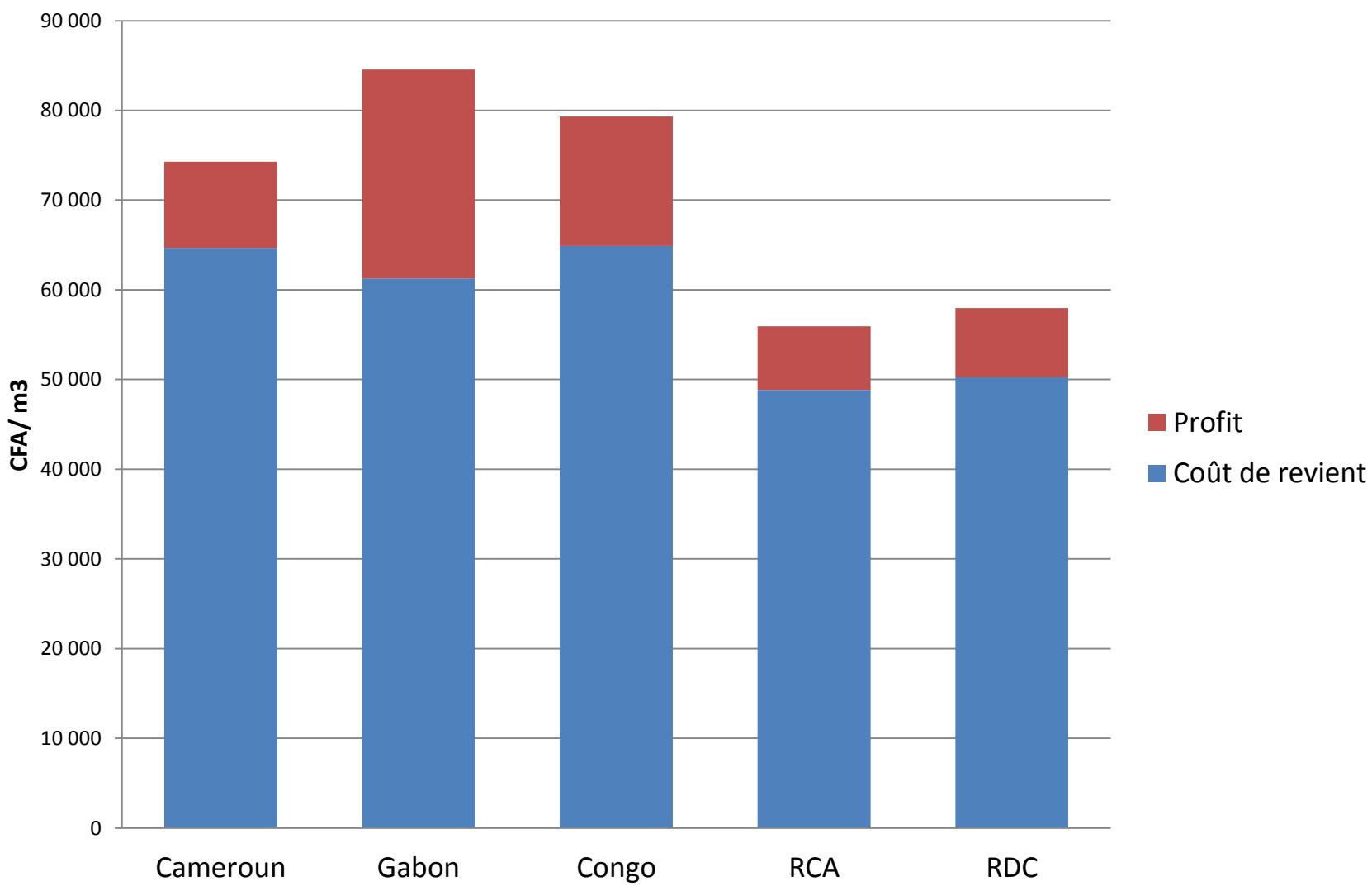
Chainsaw milling: jobs and contribution to rural economies

	CMR	GAB	DRC	Indonesia	Ecuador
Estimated informal jobs (000)	45	1	25	1,500	4
Estimated formal jobs (000)	15	14	15		
Contribution to local economies (million €/yr)					
	32	2	46	63	9
Annual forest taxes paid (formal sector, million €)					
	29	53	58	227	7

Principal financial contributions to livelihoods:

- Economic returns for chainsaw mill operators
- New sources of income for local workers and forest owners with traditional rights

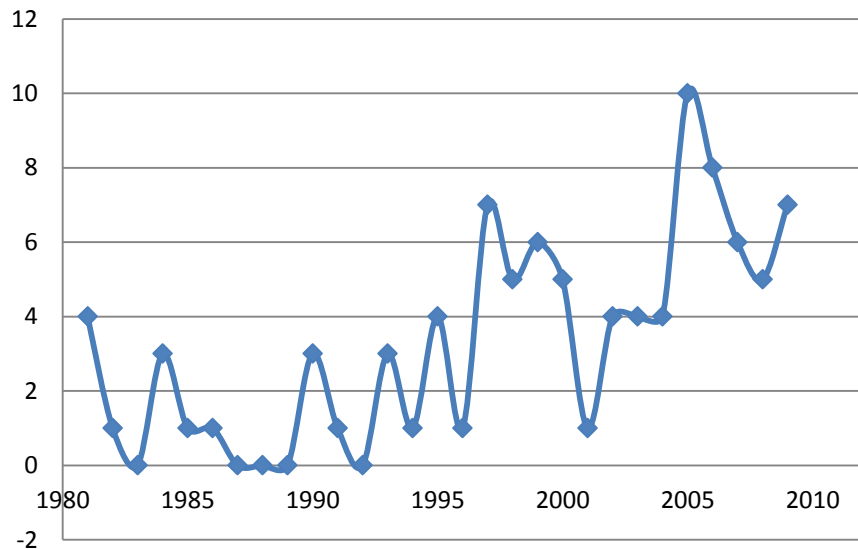
A lucrative activity for chainsaw millers



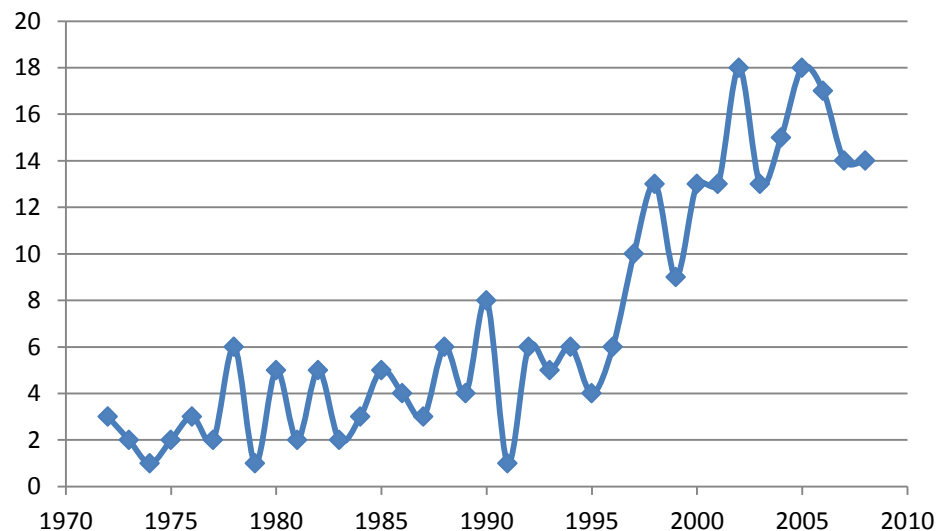
An attractive activity for rural people

Number of operators is growing in both countries

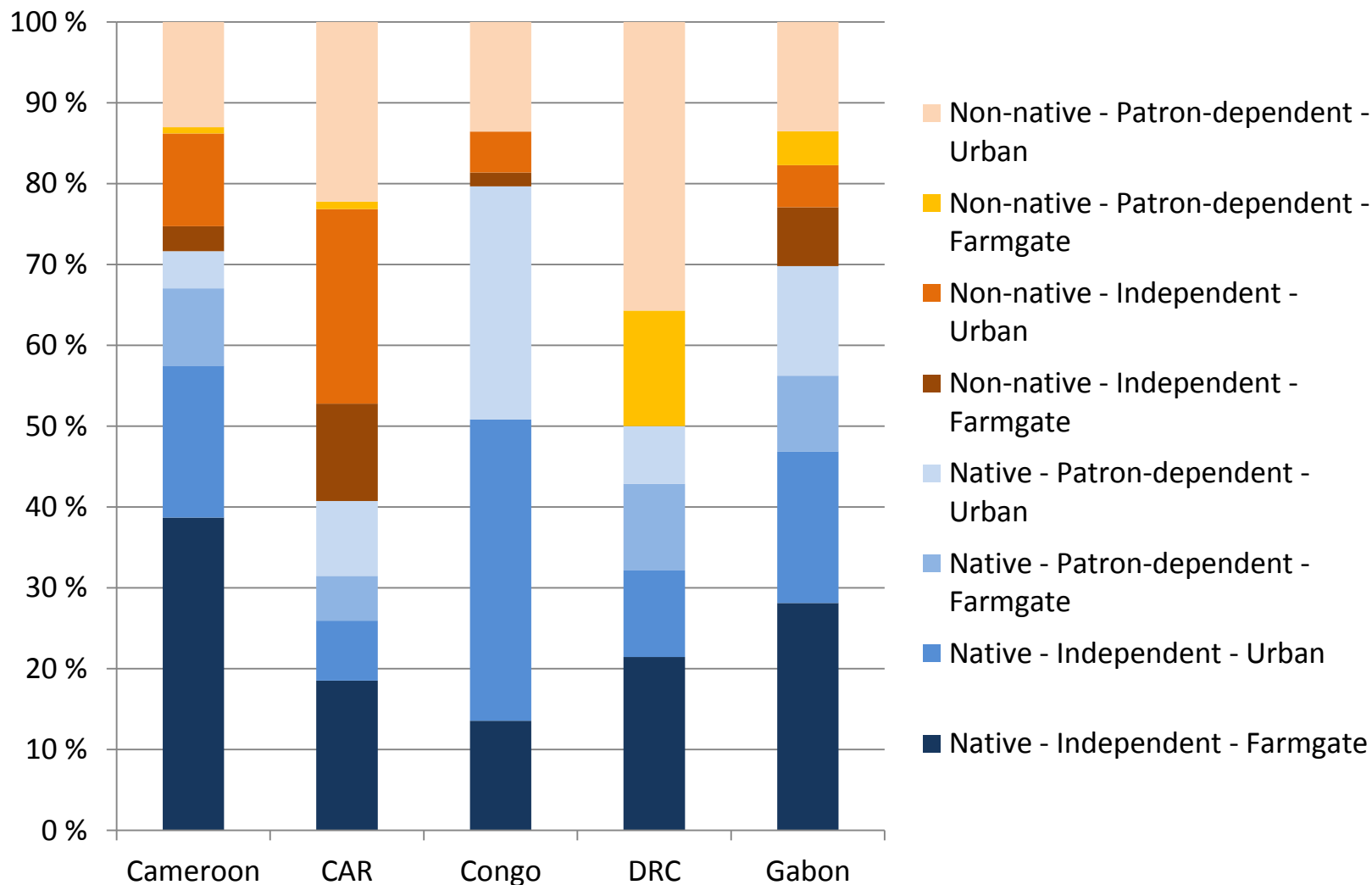
Chainsaw mill operators in Gabon



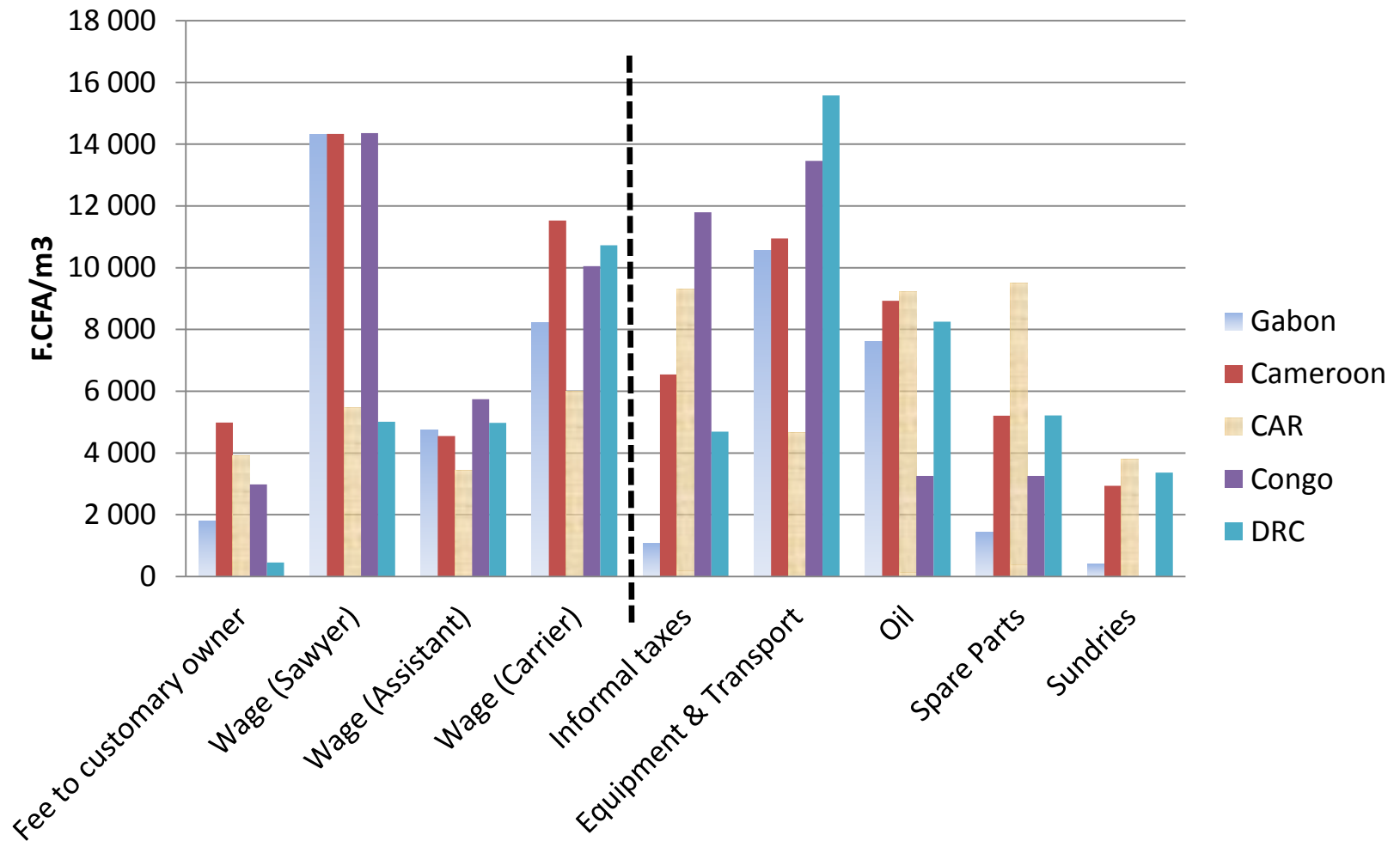
Chainsaw mill operators in Cameroon



Majority of rural (male) individuals

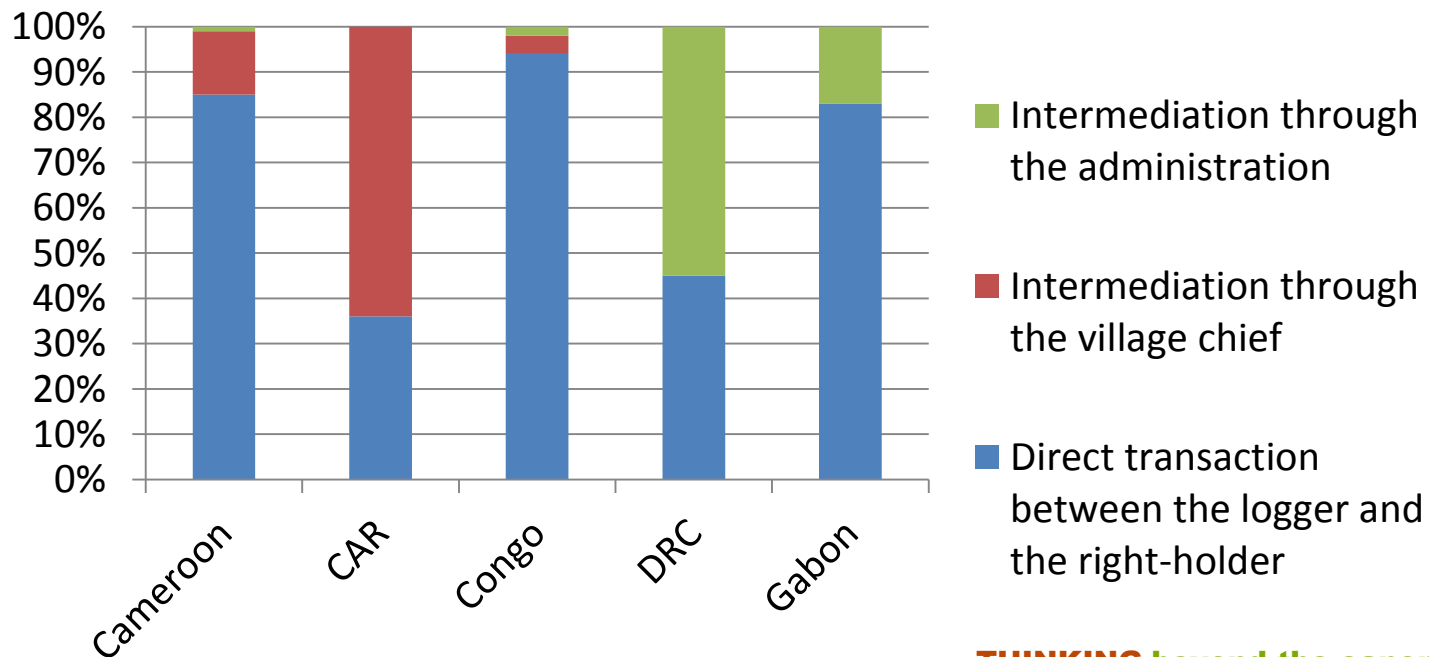


Distribution of the operational costs of chainsaw milling



Land and resources tenure

- In all countries, the state is the legal owner of forests and trees. Harvesting by rural people for commercial purposes is prohibited
- Customary rights are not fully recognized
- In contrast, chainsaw mill operators must gain approval from traditional owners to gain access to trees and forest areas



Chainsaw milling: a long term contribution to rural livelihoods?

- An informal activity generating little tax revenue
- Scant coordination with other land uses
- Limited ecological impact on forest resources:
 - Focused on large trees with less waste during processing
 - Few timber species with strong domestic markets
 - Located near roads or rivers
- Customary owners seldom pursue tree management initiatives
- Is increased formalization (legality and planning) the solution?
 - To increase tax revenues and promote forest management, but
 - without increasing operational costs and without reducing present contributions to rural livelihoods



Merci de votre
attention

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<http://www.cifor.cgiar.org/pro-formal>



The Center for International Forestry Research (CIFOR) is one of the 15 centres supported by the Consultative Group on International Agricultural Research (CGIAR)



THINKING beyond the canopy



A broad view of opportunities and challenges to enhance income from forests and trees in the African context

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IUFRO Special Project World Forests, Society and Environment (IUFRO WFSE)

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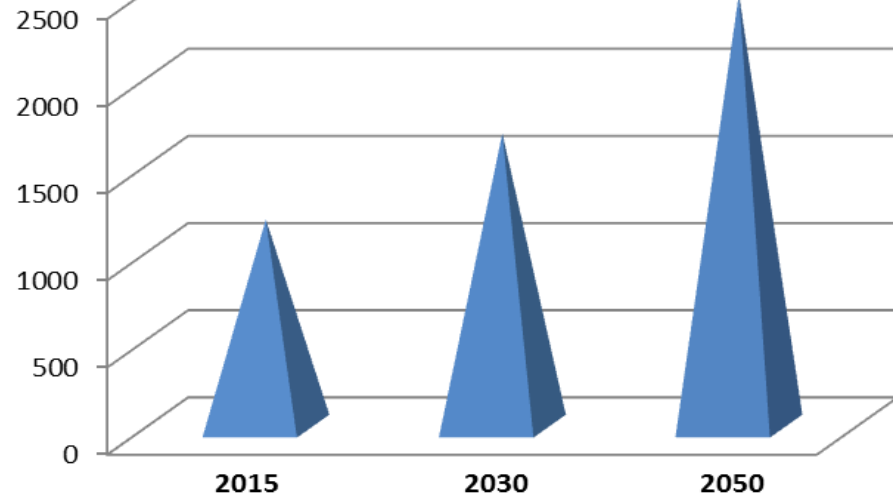
- Demographic changes
 - Population growth
 - Urbanization
- Land acquisitions
- Climate change
- The way forward: Transformation of rural landscapes

Population growth

- Africa is expected to be the only major area with substantial population growth
 - By 2050 increase of 1.3 billion to estimated 2.5 billion
 - 25% of global population

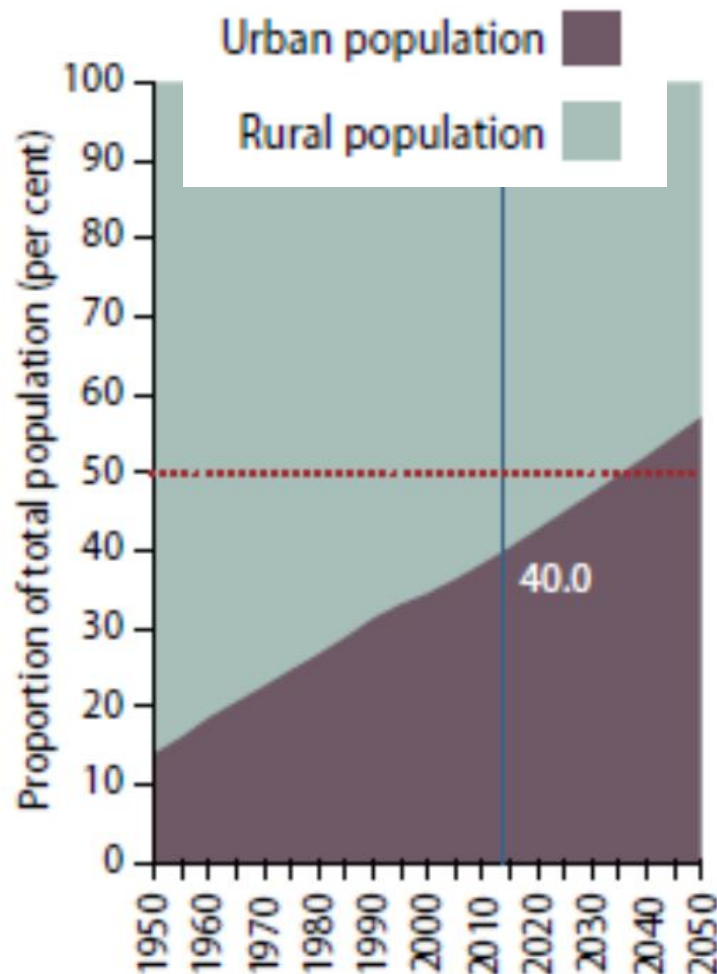


Millions



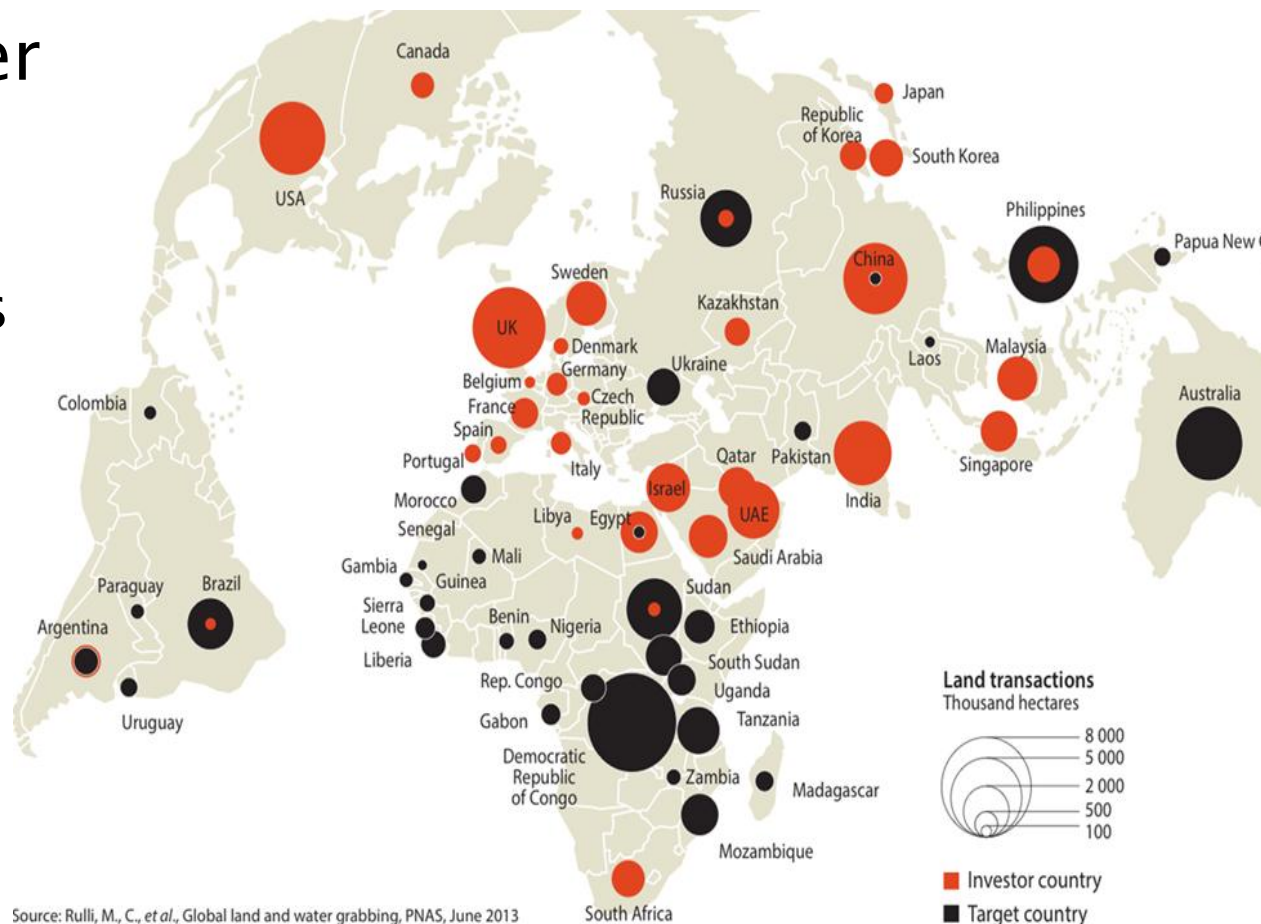
Rapid urbanization

- 56% of population in urban areas by 2050
 - Increasing functional integration between urban and rural areas
 - Increasing demand for food, feed, biomass energy and wood-based products
 - Competition between local land uses and the need to provide goods and services urban centers
 - Persistent poverty



Large scale land acquisitions

- Land deals cover 56.2 million ha in Africa
- ~ 4.8% of Africa's agricultural area
- Concentrate in Sudan, Ethiopia, Mozambique, Tanzania, Madagascar, Zambia and DR Congo



Large-scale land deals

- Target the poorest countries with weak land institutions
- Analysis of over 100 deals: three distinct socio-ecological patterns (Messerli et al. 2014)
 - Densely populated easily accessible croplands (35% of deals)
 - Remote forest lands with lower population densities (34%)
 - Moderately populated and moderately accessible shrub and grass lands (26%)
- Compete for water, land & forests with local communities

Large scale investments can create opportunities

- Job creation, share-cropping and outgrower or contract farming schemes, infrastructure development
- In practice benefits stemming from land acquisitions have generally not lived up to expectations (evictions, low or lack of compensations)



Ecosystems are already affected by climate change

- Future impacts are expected to be substantial:
 - amplify existing pressure on water availability
 - interact with non-climate drivers and stressors to exacerbate vulnerability of agricultural systems, particularly in semi-arid areas
 - is very likely to have an overall negative effect on yields of major cereal crops
 - estimated 1–18% loss of arable land in tropical and sub-tropical regions of Africa
 - impacts will occur in the context of rapidly rising crop demand

Opportunities

- Fast growing domestic markets and emerging middle class of urban consumers
 - In 2008 Africa's combined consumer spending was USD 680 billion, it is projected at USD 2.2 trillion in 2030
- Rich natural resources
 - a diversity of ecosystems and rich biodiversity
 - forests cover 23% of land
 - large scale and vast land areas: around 24% of the world's arable land
 - estimated 10% of the global oil reserves, 40% of gold and 80–90% of chromium/platinum group metals
- Challenge: balancing trade-offs at the local level

Transformation of rural landscapes⁽¹⁾

- New development paths that place climate resilience, sustainability, equity and justice at the center of development efforts
 - Implement international human rights law
 - Legal recognition of property rights to land and forests
 - Including rights to ecosystem services
 - Respect the rights of rural people in all large-scale land transactions
 - Make decision-making over land and forests inclusive, transparent and accountable

Transformation of rural landscapes⁽²⁾

- Put smallholder production at the center of strategies for agricultural development
 - agroforestry
 - rehabilitation of degraded lands, tree planting
 - resilient livelihoods
- Implement sustainable and adaptive management of forest and other natural resources
- Enhance investment: develop policy conditions, frameworks and capacities for equitable partnerships between investors and local people
 - Promote small and medium sized forest enterprises



THANK YOU!

All WFSE publications are available at:
<http://www.iufro.org/science/special/wfse>

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Synthesis: Implications for research and development efforts

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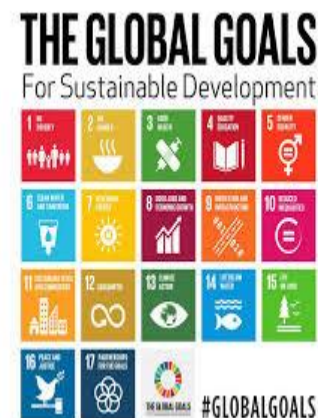
- Encouraging results conveyed by the cases
- Forest-based development and the SDGs
- Role of R&M, primary areas of concern identified by the cases
- Key issue of continuity
- Confluence of global, regional and local processes impact forest-based development
- Alignment and interaction among conditions for forest-based development
- Importance of clear objectives

Encouraging results in different contexts, generating an array of benefits

- From on-farm agroforestry for wood and non-timber products to natural forest management and control of invasive species
- Benefits include:
 - Enhanced livelihoods, income generation, employment opportunities
 - Funds for community development, for example, education & infrastructure
 - Biophysical: forest conservation, rehabilitation of deforested areas and degraded lands & enhancement of ecosystem services
- Results indicate viability of smallholder and community-based forestry and agroforestry in a diverse array of African contexts

Community-based and household forestry and agroforestry and the upcoming SDGs

- The cases illustrate that C-B forestry can make meaningful contributions to several SDGs (soon to be endorsed by governments worldwide)
- Examples
- Poverty alleviation, food security & employment: SDG 1, 2 & 8
- By generating income, improve health care and educational opportunities: SDG 3 & 4
- Foster social inclusion and gender equality: SDG 5 & 16
- Produce sustainable energy: SDG 7
- Mitigate climate change: SDG 13



Despite encouraging results, a number of challenges and conditions constrain progress

- Case studies, like the ones presented, contribute to a better understanding of the status of ongoing efforts, both:
 - Positive processes and outcomes
 - Constraints and limiting factors

The crucial role of research & monitoring

- R&M are crucial to track outcomes, to gain insights into conditions–factors that favor progress–positive outcomes and others limiting progress
- Although R&M into technical aspects of production and management would:
 - yield information to improve these systems
 - create opportunities to share lessons learned, best practices and innovations
- Cases stress other factors–conditions constraining progress

Primary areas of concern conveyed by the case studies (1 / 2)

1. Urgent need to improve conditions related to **governance, policies and institutions**, including:

- Clear rights to land and natural resources
- Transparency in dealings with government officials and other actors
- Reduction of bureaucratic bottlenecks and lack of alignment between policies and their application

*Taken together, indicate the need for creating an **enabling environment** and **empowering local actors***

Primary areas of concern conveyed by the case studies (2/2)

2. Challenges and needs associated with the **strengthening and consolidating of small forestry enterprises**

- Capacity building to enhance business skills
- Business Development Services: marketing, legal issues and planning
- Financial services

Throughout the world, forest-based development is grappling with both of these primary areas of concern

Key issue of continuity

- Another challenge alluded to relates to the **need for continuity in forest-based development**
- Need for research, capacity-building and services evolve over time
- Scaling up promising initiatives requires continuity in efforts to enhance governance and the enabling environment

Fostering of partnerships and collaboration among different stakeholders – an important strategy to favor continuity

Confluence of global, regional and local processes impact forest-based development

- Trends such as population growth, urbanization, expansion of agriculture, climate change and land acquisitions are ***exercising increasing pressure on forests and natural resources***
- Marginalization (lack of empowerment) of local actors make them particularly ***vulnerable to these pressures***
- Unless effective measures are taken to shore up problems associated with policies, institutions and governance, vulnerability will most likely increase over time

Result: *Opportunity to generate positive outcomes like those presented in the case studies would be undermined*

Alignment & interaction among conditions for forest-based development

- Although cases point out that initiatives have been promoted by key policies and governmental support, further progress will require effective measures to align policies and their application and to improve governance
- Governance involves both state and non-state actors
- Conditions for forest-based development interact in complex ways leading to observed outcomes

***Example:** Problems of corruption, illegality and bureaucratic inefficiencies undermine opportunities to bolster financial services required by SMFE in The Gambia*

Final observation

- Establishment of *clear objectives*: Key for effective R&M
 - crucial for targeting R&M efforts
 - help focus attention on outcomes and conditions that contribute to observed results and fosters accountability

The lack of clear objectives was a weakness identified in the cases that requires careful attention