Options for sustainable community forestry business incubation in the Democratic Republic of Congo (DRC)

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Acronyms

ADIKIS Kisangani Integrated Development Association (Association pour le Développement

Intégré de Kisangani)

ALPs Artisanal logging permits

ANAPI National Agency for the Promotion of Investments (Agence National pour la Promotion

des Investissements)

BDS Business development services

CARG Rural Agricultural Council for Management and Development (Conseil Agricole Rurale

de Gestion et Développement)

CoNGOs NGOs collaborating for equitable and sustainable community livelihoods in Congo

Basin forests project

DRC Democratic Republic of Congo

FAO Food and Agriculture Organization of the United Nations

FFPO Forest and farm producer organisation

FMU Forest management unit

FPI Industrial Promotion Fund (Fonds pour la Promotion de l'Industrie)

IIED International Institute for Environment and Development

IITA International Institute of Tropical Agriculture

NGO Non-governmental organisation

NTFPs Non-timber forest products

OCEAN Organisation of Ecologists and Friends of Nature (Organisation Concertée des

Ecologistes et Amis de la Nature)

CTB- Belgian Development Corporation Supporting the Rehabilitation and Recovery of the

PARRSA Agricultural Sector Project (Coopération Technique Belge Projet d'Appui à la

Réhabilitation et à la Relance du Secteur Agricole)

REDD+ Reducing emissions from deforestation and forest degradation (REDD) and the role of

conservation, sustainable management of forests and enhancement of forest carbon

stocks in developing countries (+)

SDGs Sustainable Development Goals

SMEs Small and medium-size enterprises

SMFEs Small and medium forest enterprises

UNIKIS University of Kisangani

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CoNGOs is an IIED-led UK consortium (involving also Client Earth, Fern, Forest Peoples Programme (FPP), Rainforest Foundation UK (RFUK) and Well Grounded) that aims to achieve improved governance and practice in equitable and sustainable community forestry livelihoods in the Congo Basin. This document, however, is the sole responsibility of its authors and does not necessarily reflect the views of all consortium members belonging to the CoNGOs project.

The report was commissioned by IIED as part of CoNGOS work and conducted under the supervision of their subcontracted partner Tropenbos DRC. The authors are grateful to the organisations who accepted the invitation to be interviewed that contributed producing the present report. Thanks also to the sub-contracting assistants for their enthusiastic help in collecting data. We are indebted to Tropenbos DRC for its assistance and opportunity offered to conduct this evaluation option.

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Partner organisations

Université de Kisangani (University of Kisangani) was established in 1963 as a non-profit public higher education institution located in the medium-sized city of Kisangani, Tshopo in the centre of the Democratic Republic of Congo (DRC). Officially accredited and/or recognized by the Ministère de l'Enseignement Supérieur et Universitaire, République Démocratique du Congo (Ministry of Higher Education, Democratic Republic of the Congo), Université de Kisangani (UNIKIS) annually enrols 6-7,000 students as a coeducational higher education institution offering courses and programs leading to a range of officially recognized higher education degrees.

Tropenbos Democratic Republic of Congo has been operational since 2010, implementing activities in the former Province Orientale. In 2017, Tropenbos DRC became a legal national entity and a member of the Tropenbos International Network. Tropenbos DRC currently works towards sustainable managed landscapes were natural resources are sustainably exploited, local communities and indigenous people have improved livelihoods and the landscape is pacified in the provinces of Ituri, Mongala and Tshopo. Together with local CSOs Tropenbos DRC has supported the development and implementation of community forestry, lobbied for the revision of national nature conservation legislation regarding the exploitation of natural resources in protected areas, supported the regulation of both artisanal logging and mining by the provincial governments and private sector and supported artisanal loggers and miners to become formal SMFEs with awareness building on gender related topics.

Summary

This report aims to assesses options for installing better business incubation directed towards sustainable community forest business in the Democratic Republic of Congo (DRC). It gathers evidence from literature and through interviews with 26 business groups in Tshopo, Mongala and Ituri provinces. It addresses the gap in support for sustainable forest and farm business among DRC's many smallholder forest and farm producers. The activities of these producers directly impact forest cover and rural livelihoods and so finding means to better support them is imperative.

Forest-business incubation is defined as a support process that accelerates the successful development of sustainable businesses in forest landscapes. The challenges of financing incubation in remote forest landscapes are laid out. Where projects are limited and fee-based incubation services unrealistic, the best option to finance forest-business incubation may lie with forest and farm producer organisations (FFPOs) themselves. FFPOs can aggregate and add value to products and reinvest profits from that work into developing the business capacity of their members.

Forests in DRC cover 155 million hectares (67 per cent of the national territory and the second-largest forest area after the Amazon basin). It is subdivided into protected forests and permanent production forests. The latter forests have historically been subject to industrial logging through concessions and artisanal logging permits (ALPs). Despite a moratorium on the granting of new concessions in 2002 and a new Forest Code, illegal logging has continued apace. But in 2016, a new legal framework for community forests was set out in Article 22 of the Forest Code. This grants commercial forest rights to local communities and indigenous people over large areas – with provisions for sub-contracted harvesting to artisanal logging groups.

At present, artisanal logging – and community forestry – are mostly organised as informal businesses, and the net benefits to different actors are opaque, diverse and highly variable. They face a range of business constraints to do with:

- Resource access (eg lack of clarity on how to arrange supply guarantees between registered local community forest concessions and artisanal logging groups)
- · Access to finance (eg perceptions of high risk exacerbated by informality)
- Markets/engaging buyers (eg low-margin domestic markets)
- Bureaucracy (eg multiple taxes variably applied)
- Worker skills (eg limited education systems and absence of business training), and
- · Business reputation (eg informality and illegality).

Despite the (rather scattered) institutional efforts of several largely non-governmental organisation (NGO) and project-based incubation efforts, very few formalised community forest businesses exist to date. Establishing more formalised collective organisations between forest and farm producers might be one way of increasing market scale, sharing costs and improving negotiating power with buyers, government authorities and finance providers. Most businesses interviewed operate still as sole traders. Only a very few are working toward formalisation as associations (for example, the Rinec-Bois group under Tropenbos DRC incubation, funded through the CoNGOs programme).¹

This report endorses the view of other recent analyses in suggesting a strong rationale for developing more sustainable business incubation services to cater for a variety of forest and farm-based enterprises. Improved forest-business incubation is needed to respond to prioritised assistance requests for market and value-chain analysis, investment design and proposal development, accounting (bookkeeping) and financial reporting, business planning and market strategy, negotiation more generally, and business monitoring and evaluation. There are also gender dimensions (eg timber = men; non-timber forest products or NTFPs = women) that need to be accommodated or in many cases challenged.

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¹ NGOs collaborating for equitable and sustainable community livelihoods in Congo Basin forests (CoNGOs).

At this point in time, the most realistic possibility for enhancing forest-business incubation appears to rest in project-based efforts to bring in outside expertise to meet such demand in a training-of-trainers approach that works with key local business clusters. In the longer term the idea would be for those same business clusters or associations to finance business incubation for their members from their own profits. The emphasis should be fourfold:

- Using community forest legislation to design a roadmap towards legal forest-business partnerships that involve communities and artisanal logging groups,
- Focusing on strengthening the business organisations of the above with the ultimate aim of them
 providing forest-business incubation services,
- Drawing in investment from other private-sector buyers in return for more secure supply, and
- Promoting a market for legal domestic timber in which formality becomes advantageous (rather than weighing formal businesses down with multiple discretionary taxes).

The report concludes with a series of recommendations to three main groups of actors:

Government and financial institutions:

- Ensure government cross-sector institutions start granting and enforcing legal access to forest and finance resources.
- Improve forest governance and enhance clarity about the supply guarantees with which community groups can engage artisanal logging partners.
- Simplify bureaucratic procedures related to business registration and operations. This can reduce costs and enhance value-adding opportunities.
- Develop a smallholder forestry and agroforestry programme targeted at poor forest users without legal tenure, and a forest industry-market linking strategy to promote the financial and business development of small and medium enterprises.
- Improve the accessibility and reach of financial services, specific credit lines and public-private partnerships, according to the needs and nature of small and medium forest enterprises (SMFEs).
- Put in place financial incentives, including tax breaks for start-up SMFEs.

Civil society, NGOs and development agencies:

- Inaugurate training-of-trainers in business incubation. Start with key local forest and farm business
 associations to educate a clustered critical mass (young and dynamic population) in both rural and
 urban environments as the basis for the future of the business development services (BDS) for
 SMFEs. This will require greater coverage of technology and product delivered quality.
- Facilitate access to finance, market and technical information as a priority. SMFE communication
 networks can be funded to improve information flows, stimulate community-company partnerships,
 and facilitate access to trade fairs and better articulation among technical, business development
 and financial services.
- Facilitate multi-stakeholder negotiations for better policies, improved business environments, and conflict management. This can help to address context-specific challenges.
- Provide detailed technical support for specific value chains and niche markets (eg for certified timber or fairtrade farm production and NTFPs) and to improve marketing and negotiation skills.
- Align delivery mechanisms between NGOs, development agencies and commercial BDS providers to support SMFEs.

Forest and farm producer organisations (FFPOs)

- Strengthen partnerships with other local community organisations for the implementation of projects on the ground and involve them in actively participating in these initiatives. Monitor and disseminate achievements in terms of capacity building and increased ownership by local civil society.
- Improve competitiveness in local, national and international markets for their business's forest-based products.
- Work to develop capabilities associated with the internal management of SMFEs, organisational capacities, entrepreneurship and long-term vision.
- Upgrade technical, business and financial capacities. Creating internal institutional arrangements for business management that are directed towards adding value to timber and NTFPs, farm production and timber processing. This would help increase profitability and reduce administration costs, facilitate new business partnerships, and provide a basis for negotiating more favourable terms of trade.
- Adopt clear performance indicators concerning (both direct and indirect) recipient organisations' compliance with the relevant laws, norms and standards, and establish an independent mechanism to monitor compliance.

The report concludes by calling for a national dialogue to debate how best to provide forest-business incubation in the future, how to assess and learn from existing forest-business incubation effectiveness, produce specific roadmaps to improve incubation and make it more sustainable, and to adopt binding commitments in each case.

1 Introduction

1.1 The purpose of this report on forest-business incubation

The purpose of this report is to gather evidence and assess options for installing better business incubation directed towards sustainable community forest business within the Democratic Republic of Congo (DRC). The report was commissioned as part of a project entitled NGOs collaborating for equitable and sustainable community livelihoods in Congo Basin forests (CoNGOs).

CoNGOs was an International Institute for Environment and Development (IIED)-led UK consortium aiming to support the development of sustainable and secure community livelihoods in the Congo Basin – covering Cameroon, Central African Republic (CAR), DRC, Gabon and the Republic of Congo (RoC). The consortium included 17 international and national NGOs, including Tropenbos DR Congo, who oversaw the production of this report. The report itself was led by the University of Kisangani (UNIKIS).

Countries in the Congo Basin are at a crossroads in managing their lands and forests. Governments in the region have the ambition to transform their countries to 'emerging economy' status within the next two decades. National strategies aiming for economic growth focus on the exploitation of natural resources including forests, and the rapid development of agribusiness and energy infrastructures, often at large scale. There is little evidence that this industrial approach to forestry delivers poverty reduction or protects forests (Mayers 2006).

A more promising option lies in the fact that DRCs forests are inhabited by a huge number of smallholder producers, working on farms and in the forest, whose economic aspirations might unleash much more equitable and sustainable growth. But those smallholder producers are not adequately supported. As a result, forest exploitation is extremely inefficient, forest degradation is widespread, and local people receive only a fraction of the value that might be possible if their businesses were more professionally run. Improving forest-business incubation support to those smallholder producers and forest communities is now a priority – especially since the DRC has passed highly progressive legislation in favour of local community forest concessions (Yaoundé Declaration, 2019).

This report contributes to the three overarching outputs of the CoNGOs project that include:

- Improved evidence on viable options for community forestry,
- Stronger capacity of community organisations to pursue rights, commercial options and policy changes, and
- More effective policy engagement for sustainable and profitable policy engagement.

It also draws on the direct experiences of Tropenbos DRC, who with IIED have been facilitating a process of training in market analysis and development (MA&D) for community groups in the DRC– and by 2019 had completed three phases of training for 43 enterprise development plans, including 25 participants from groups representing both timber production (primarily in DRC) and non-timber forest products (NTFPs) production (primarily in Cameroon).

The present study aims to investigate how to empower rural producers and their wider communities, including relevant community forestry groups, artisanal logging associations, other forest and farm producer organisations (FFPOs), NGOs, universities and private-sector entities which have (or might have in the future) expertise in community forestry business, to influence public decisions and private-sector conduct in favour of bottom-up, locally beneficial and more sustainable investments in small and medium forest enterprises (SMFEs) and farm producer organisations by providing sustainable incubation support for developing their business.

Empowering SMFEs and farm producers through business incubation responds to this challenge. The idea is that forest-business incubators will support rural producers, their organisations and their wider communities to make informed choices, seize opportunities, address risks and shape their own future.

This study addresses the following questions:

- How can we establish better forest-business incubation in DRC (with specific focus on Tshopo, Mongala and Ituri provinces)?
- What existing attempts to develop commercial community forestry in the context of artisanal logging in DRC?
- Are there relevant community forestry groups, artisanal logging associations, other FFPOs, NGOs, universities and private-sector entities who have (or might have in the future) expertise in community forestry business incubation?
- How might it be possible to develop capacity for sustainable business incubation and a network of experts (including in the university sector), and
- What would be the ideal and sustainable long-term institutional home for business incubation capacity? (With an assessment of the realistic possibility of sourcing financing from client fees, value addition to client products, grants and other income-generation options.)

With those guiding questions above, our study looks at the roles that incubators of SMFEs and farm producers play in the sustainable community forestry business in these provinces (with potential for extension across the whole of DRC). Different types of incubator organisations, including private-sector actors, government agencies and NGOs can play complementary roles in bringing strong benefits to local people and rural communities. Acknowledging this, we also look at what positive impacts or practices might be taking place as a result of sustainable production and consider positive future alternatives.

1.2 What forest-business incubation is and why it is challenging

Forest-business incubation is defined as a support process that accelerates the successful development of sustainable businesses in forest landscapes (Macqueen and Bolin 2018). A 'business incubator' is any organisation that provides such a support process. Those organisations may be government institutions (eg extension agencies), private-sector institutions (eg commercial incubators), civil society organisations (eg environmental or social NGOs), or FFPOs.

Forest-business incubation is called many things. For the sake of this report we view it as synonymous with terms such as industrial, research or science parks, hubs, spokes, hatcheries, hives, seedbeds, germinators, graduators, grow-on spaces, enterprise centres, technopoles, knowledge centres, ideas labs, innovation centres, business accelerators, networked incubators and so on (Theodorakopoulos *et al.* 2014). While the names differ, the concepts are much the same.

Since the first documented business incubator in 1959 (Adkins 2001), numbers have grown globally to more than 7,000 documented examples (Mian 2016). Additionally, the business incubator concept has evolved from that of shared space for entrepreneurs to learn from one another (first generation) to shared space and mentoring (second generation) to shared space, mentoring and networking (third generation) (Bruneel *et al.* 2012).

Forest-business incubators typically serve the needs of promising early-stage businesses which might lack premises, facilities, market information, technological knowledge, business-management experience, procedures, finance and legitimacy. This support process is very important, because there is clear evidence globally that most growth in value generation and employment comes from existing businesses rather than start-ups (Shane 2009). Moreover, there is a strong correlation between firm age and survival (Haltiwanger *et al.* 1999). In other words, with age comes critical know-how and experience that helps a business adapt and flourish. Business incubators can accelerate the transfer of that critical know-how and experience.

Delivering business incubation in remote forest landscapes such as the tropical forests of DRC, however, is challenging. In such forest landscapes there are generally low densities of educated entrepreneurs, high logistical costs, scarce infrastructure, and few capable business mentors (see Bolin *et al.* 2018). Moreover, the links that are vital for a business to grow and flourish are hard to come by, for example links to legal authorities, finance or insurance, research and development etc (see Figure 1.)

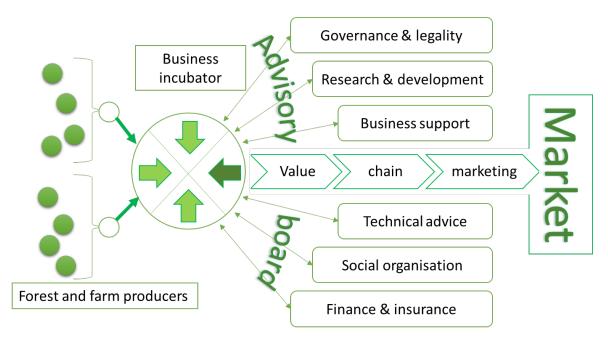


Figure 1. Important areas in which a business incubator provides training and linking services. Source: Macqueen (2019)

In a global review of different business-incubator models operating in forest landscapes it was found that financial sustainability for such incubators was perhaps the major constraint (Macqueen and Bolin 2018). In other words, the more remote the operating environment, the higher the costs of providing business incubation services.

In the review of forest-business incubators cited above, the most common pattern of incubator financing was through a mix of public grants (eg projects) and some client payment for services (eg fees). But too often such models collapse once project funding ends. A more sustainable model was seen in incubators that could rely on their own business revenues (eg profits from value addition in umbrella cooperatives that process products from their members).

So, in thinking through how to develop more financially sustainable forest-business incubation, three priorities were laid out (Macqueen and Bolin 2018):

- Greater channelling of development aid and/or climate finance into professional forest-business incubation (eg through reducing emissions from deforestation and forest degradation or REDD+ implementation finance),
- Stronger efforts to establish forest-business incubation in second-tier FFPOs (aggregation businesses) or other lead firms that use their profits to finance forest-business incubation of their forest suppliers, and
- More concerted and sustainable support through government services for such forest-business incubators.

1.3 Methodology

To carry out this research, the authors were commissioned to prepare a workplan to undertake a study on installing better forest-business incubation in DRC with a specific focus on Tshopo, Mongala and Ituri provinces. This was to involve two main elements: firstly, a literature review relating to existing attempts to develop commercial community forestry in the context of artisanal logging in DRC; and secondly, a survey of key informants including relevant community forestry groups, artisanal logging associations, other FFPOs, NGOs, universities and private-sector entities which have (or might have in the future) expertise in community forestry business.

The assessment on options for sustainable business incubation based around community forestry (effects and effectiveness) is based on a sample of 26 interviews with those running businesses in forest landscapes. These include individuals, associations, platforms and networks in forest business and their potential incubators situated across the three regions.

The businesses individuals and networks were chosen on the basis of their survival – indicating strategies that had proved effective and able to withstand the varying demands of the market and top-down economic crisis. For most of the interviewees, business incubation was a novel idea (or at least the term was novel). This sense of novelty or innovation was seen as part of a global transition towards economic growth, part of a process of socioeconomic development to empower small and medium business entrepreneurs to sustainability. The novelty or innovation was also understood to be an approach based on the deliberate scrutiny of existing business models and working to achieve conscious changes towards new business models with improved functions that satisfy customer needs better than the existing business models.

For many of the interviewees, organisational and marketing innovations were felt to be central to the implementation of new or significantly changed business models and practices, workplace organisation or external relations of the institutional unit. The interviewees understood the importance of forest-business incubation in developing business plans that explored innovative opportunities.

2 Context within Democratic Republic of Congo (DRC)

2.1 Forest cover and deforestation in DRC

DRC contains high levels of biodiversity due to its geological history and geographic location. The total area of DRC is roughly 234.5 million hectares, of which 155.5 million hectares is forest (the second-largest area after the Amazon basin forest). In other words, 67 per cent of the national territory is subdivided into classified, protected and permanent production forests. The hydrographic network in DRC is composed of three basins: the Congo River, Shiloango River and the River Nile containing one of world's richest centres of mega-biodiversity. DRC is also rich in ores of all kinds, as well as hydrocarbons and gas. In terms of agriculture, it possesses arable soils covering an estimated area of 80 million hectares. DRC is one of Africa's most extraordinarily rich natural resource countries – and set to become a global environmental and economic powerhouse.

Despite this potential, however, forests continue to be degraded by unsustainable land-use practices, and artisanal and industrial logging. The estimated rate of deforestation in 2000–2010 was 0.44 per cent per year, representing approximately 612,000 hectares. Agricultural expansion continues to be a primary driver of deforestation in DRC (de Wasseige *et al.* 2012, FAO 2018). The direct causes of forest deforestation in order of importance are shifting agriculture (driving deforestation), small-scale logging, charcoal production and fuelwood harvesting (driving forest degradation), mining, and industrial logging (MEDD 2009).

Although the main cause of deforestation is agricultural expansion, the primary government response to deforestation is to insist on sustainable forest management in forest concessions. Both logging companies and forest communities are required to develop a forest management plan. The response to slash-and-burn agriculture and charcoal production is less clear.

Forest management is covered by legislation, in particular Law No 11/2002 of 29 August 2002 on the Forest Code. Forest management is an activity consisting of evaluating the state of forest resources (inventory), and then planning measures and work required for sustainable extraction. A set of government regulations defines the technical, economic, social, legal and administrative management of forests necessary to sustain them and make the most benefit of them.

2.2 An overview of forest land use in the DRC

From DRC's total of 155 million hectares of forest, our study area included the Ituri region (6.57 million hectares of forest and 4,241,236 inhabitants), Mongala (approximately 5.0 million hectares of forest and 1,793,564 inhabitants) and Tshopo (19.96 million hectares of forest and 2,614,630 inhabitants). In all these provinces, forests cover more than 80 per cent of the land area. In terms of protected areas, the Okapi Wildlife Reserve in Mambasa (Ituri) and the Yangambi Biosphere Reserve (Tshopo) are the two best known examples in the study regions.

The major ethnic groups to be found in the Ituri forest include the Bandaka, Babila-Babombi, Babila-Bakwanza, Walese Dese and Karo, alongside the Bangwana and indigenous semi-nomadic huntergatherer pygmy peoples (Efe and Mbuti) and Budu (from Haut Uele) and Nande (North Kivu) migrants. In the Tshopo forests there are Babali, Bakumu, Balombi, Bangelema, Babowa, Bamanga, Turumbu, Topoke, Lokele, Bambole, Walengola, Wagenya and Basoko alongside the semi-nomadic Basoa pygmies. Mongala forests are inhabited by the Mbuza, Ngombe, Mongo and also in small numbers by sedentary and semi-nomadic indigenous peoples, the Batwa pygmies in Bongandanga. While Bunia (for Ituri), Kisangani (Tshopo), Bumba and Lisala (Mongala) are the main cities, about 70 per cent of the inhabitants are found in rural communities.

According to the land-use data, women focus more on agriculture, collecting NTFPs, and farm product and timber commercialisation. By way of contrast, men typically become more involved in farm preparation and tree felling, artisanal logging, timber extraction and mining. Estimates suggest that

women are more frequently represented in the informal sector than men, although men's contributions to gross value added are higher, in line with their typically higher earnings (Aggarwal *et al.* 2015).

Land is acquired through the tradition of clan descent, or by purchase or lease from a landowning community or individual. Slash-and-burn agriculture is the common mode of land use by the population, even in primary forests. Farmers belonging to a community are assigned land through clan descent and then fell the trees and burn the fields. Access to forest land for such practices is free to indigenous peoples. Ancestral lands do not have legal title documents, and most artisanal loggers or NTFP users do not have legal documents. Artisanal loggers tend to buy trees from the communities. Failure to comply with legal requirements for the use of community forest lands and inappropriate allocation of agricultural land or logging by traditional leaders sometimes leads to inter-tribal conflict. Artisanal logging for local furniture making and construction, which is poorly monitored, consumes three times more timber than industrial logging for export. Most artisanal loggers operate at the edge of forests and therefore do not increase access to forests. However, farmers often clear these areas once artisanal loggers have removed the largest trees. Traces of forest degradation are noticeable in these three provinces where artisanal logging has occurred. Non-indigenous people, however, must buy land through cash payments from the landowner (someone who belongs to the landowning family or from the clan) before accessing it for a seasonal or annual period.

For larger industrial purposes, lands use can be arranged through industrial concessions. In the DRC, industrial logging started in colonial times with timber extraction from concessions. This involved very low-density selective logging of specific timber species. About 80 species of trees of commercial value are found in the forests of the DRC, but a handful of them dominate the trade. These include afrormosia (*Pericopsis elata*), listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), but still intensively exploited in Equateur province, doussie (*Afzelia bipedesis*), iroko (*Milicia excelsa*), sipo/sapelli (*Entandrophragma spp.*) and militia ivory. The country has very little timber processing capacity.

Counsell (2006) pointed out that, after the economic chaos of Mobutu's decades and the failure of infrastructure investments, the forest has been relatively little exploited industrially. Additionally, Congo's vast river system cannot be used to reach the Atlantic's main export port, Matadi, due to the presence of Boyoma Falls (formerly Stanley Falls) downstream of Kinshasa. For example, logging began in the Kongo Central region (formerly Bas Congo), between the port of Matadi and Kinshasa in the 1890s, after a strong acceleration in the 1950s (ARD 2003). Many of these areas are now depleted by timber stocks.

Counsell (2006) describes how the timber industry began to move inland in the 1970s including parts of Orientale, Equateur and Bandundu provinces, usually near the Congo River and its main tributaries. Transport to the sea from the interior of the country requires the transfer of logs transported by river on a rail or road link to avoid Boyoma Falls, which fell into ruins during the Mobutu era. Some companies have also begun exporting timber (legally and illegally) by road through the Central African Republic and Cameroon in the west and Uganda in the east.

Another obstacle to industrial logging has been the costly, complex and corrupt nature of the forest tax system and timber trade (Counsell, 2006). As with all other economic sectors under Mobutu and until now, the role of government and forest managers was largely to appropriate private wealth, often through arbitrary taxes and taxes on the exploitation, transport and processing of resources. This was particularly the case with the former National Transport Office (ONATRA), now Société Congolaise des Ports et Transport (SCPT), which had a quasi-monopoly on transport on the Congo River and in 2006 collected \$16 per cubic metre on timber delivered to the port of Matadi, representing 35% of the total tax burden in this sector (Counsell, 2006).

Counsell (2006) cites an anonymous analysis of more than 155 fees and taxes payable in the forest sector. These systems have been easily adapted for revenue collection by armed factions during the various conflicts and, in some regions (including the forest-rich provinces of Orientale Province and Kivu), are still operational. Although the World Bank has been working actively to restructure tax systems in the forestry sector, it is important to understand that this will threaten the lucrative revenue collection systems that have been in place for many years and that politicians, civil servants and the extensive patronage networks that depend on them are likely to fiercely oppose it.

Maintaining such a complex and opaque (para)legal system will pose interesting challenges in determining the legal compliance of forest sector operators. It is also worth noting that in August 2002, a new Forest Code was adopted by the unelected interim government. The code provides a basic skeleton legal framework for the management of DRC's forests, including broad definitions of different forest-management objectives, such as for industrial timber production, nature conservation and community use. According to the World Bank (2002), the new Forest Code introduced innovations such as the legal protection of traditional users' right in all forests; the right for local people to manage community forests, mandatory sustainable management plans for production forests, revenue sharing with local governing bodies, and social responsibility clauses attached to concession contracts (cahiers de charges), expanding the protected areas network, and promoting environmental services. However, the code does have gaps and shortcomings. It provides no specific framework for the small-scale timber sector2, thus failing to promote sustainability within the sector, and It maintains the discretionary allocation of concessions.

In our study provinces, industrial logging concessions are mainly operated by western and Asian companies. There are also large-scale palm oil plantations managed by the Canadian-based agribusiness company Feronia Inc in Tshopo and Mongala.

Poor marginalised communities often face land threats, not only from industrial logging, but also from mining, infrastructure, renewable energy and investments in natural resource exploitation that ignore rights. This has caused significant and costly conflicts. Mining, infrastructure and renewable energy projects – which are likely to increase in coming years – are also significant drivers of land conflicts and deforestation (Rights and Resources Initiative 2017). Therefore, secure tenure rights for forest communities are urgently needed.

To reduce carbon emissions, the DRC government is committed to the agenda for REDD+. It has established inter-ministerial REDD+ administrative processes, although these have proved quite complex to put into practice. Priority measures include reducing agriculture-based deforestation, enhanced efficiency in charcoal and fuelwood utilisation, participatory land management with secure tenure rights for local communities and other forest dependent people, forest governance and protection of forest resources, and sustainable agriculture and forest management.

2.3 Emerging legal status of community forest business

In line with its new REDD+ agenda, the legal framework for community forests as set out in Article 22 of the 2002 Forest Code was completed in February 2016. The signature of Ministerial Order 025 on the management of community forests followed the 2014 Presidential Decree 14/018 laying out the process through which these community forests could be applied for by local communities and indigenous people. The legislation is widely considered to be one of the most innovative of its kind in that it enables communities to manage their forests according to their own custom and in perpetuity – features that are increasingly recognised as being integral to good forest governance.

Within the DRC Forest Code, a community forest is defined as a forest that communities hold by ancestral tradition. It ascribes to them the rights of landowners. In Article 36, the forest use rights of people living in or near the forest estate are those resulting from local customs and traditions as long as they do not contravene the law or public order.

Within community forests, harvesting of forest resources is allowed by those populations, to meet their domestic, individual or community needs. Even so, exercising user rights is always subordinated to the state. Nevertheless, Article 41 stipulates that all Congolese communities may exercise user rights over the entire protected forest estate, provided that they comply with the provisions of this law and its implementing measures.

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² Although in 2016 a series of ministerial orders (84, 85, 86 and 322) were approved providing complimentary guidance to the Forest Code on the allocation and governance of forest land for artisanal logging purposes that are semi-industrial and commercial in nature (i.e a move away from a focus on subsistence and annual permits).

The DRC Forest Code aims at promoting forest management by communities within the context of an overall development vision and provides for cross-sectoral linkages with the environment, agriculture, energy, health, lands, minerals, water, wildlife and gender. This presents an important opportunity to develop community forest business and also to enhance gender-equitable access to forests and related lands across forest regions.

With the finalisation of community forest legislation so recently completed, official country statistics showed that in 2019 64 Local Community Forestry Concessions (LCFCs) have been registered for a total area of 1,157,327 hectares in 7 provinces (Tshuapa, Mai-Ndombe, Équateur, Maniema, Kwilu, Tshopo et Nord-Kivu). Another 21 LCFC's, covering 444,082 ha, are in process being established (MEDD, 2019). It is not known to what extent women are involved in the management of these areas. No community forest areas have yet been allocated in Ituri and Mongala, where the processes were only initiated in 2018, but in Tshopo two LCFC's were registered in 2019 with a third one in process of being established.

In Table 1, we summarise the basic legal texts that will allow one to better understand the principles of forest-sector management in the DRC.

Table 1. Legal status of DRC forest laws related to potential development of community forest business

Forest Code and related community forestry law	Principles of management		
Ministerial Order No CAB/MIN/AF.F-ET/194/MAS/02 of 14 May 2002 suspending the granting of forest allocations	This decree establishes the suspension of the granting of forest allocations (Supply Guarantee and Letter of Intent) while setting the criterion before it is lifted.		
Law No 11/2002 of 29 August 2002 of the Forest Code	The Forest Code organises the modes of access to the space and the forest resource, both for industrial exploitation of timber and for artisanal exploitation and, at the same time, paves the way for alternative uses of forests, including the use of forests for cultural purposes, bio-prospecting, conservation, recreation and carbon sequestration.		
	Especially in Article 22, the Forest Code of 2002 makes local communities co-managers of forests. Indeed, Articles 22, 111 to 113 speak of the forests of local communities, in which these communities are holders and exercise exclusive forest rights including over land. In addition, according to Article 112, local communities have the commercial right to exploit their forest. This exploitation can be done either by themselves or by sub-contracting private artisanal operators, under a written agreement. Private artisanal operators can only operate in the forests of local communities by holding an approval issued by the provincial governor, on the proposal of the local forestry administration. In Article 113, it is stipulated that for the purposes of the exploitation of their forests, local communities may request the assistance of the forest administration and obtain assistance from it. The proceeds of the operation accrue to the local community after deduction of the expenses due to the forest administration for its services.		
Decree No 05/116 of 24 October 2005 setting the terms for conversion of old forest titles into forest concession contracts and extending the moratorium on the granting of logging titles	The purpose of this decree is to set the procedure for converting old forest titles (Supply Guarantee and Letter of Intent) as well as the additional criteria for lifting the moratorium on the granting of forest allocations.		
Article 14 paragraph 3 Decree 05/116 of 24 October 2005: The recommendations of the Interministerial Commission for the Conversion of Old Forest Titles published in December 2008 on	This legislation covers recommendations about whether former exploitation titles could be converted into forest concession contracts. It was published in October 2008 without prejudging the final decision of the Inter-ministerial Commission on cases of appeal.		

each of the titles that were the

subject of appeals for second review	
Ministerial Order No 103/CAB/MIN/ECN-T/15/JEB/O9 of 16 June 2009 on the organisation and functioning of forest disputes	In the framework of this ministerial order covering the forest dispute commission, elements of interest to communities are also included. Article 3 stipulates that forest disputes also include those between a forest concessionaire or a management institution of a classified forest and a local community.
Decree No 011/26 of 20 May 2011 imposing the obligation to publish any contract relating to natural resources	This decree establishes the obligation incumbent on the state to publish any contract concluded between it, a portfolio company and one or more private national or foreign partners, private or public law, and whose object is the research, exploration or the exploitation of a natural resource.
Law No 11/009 of 09 July 2011 on the fundamental principles relating to the environment	This law lays down the fundamental principles relating to the protection of the environment, in accordance with Article 123 point 15 of the constitution. It aims to promote the sustainable management of natural resources, to prevent risks, to fight against all forms of pollution and nuisances, and to improve the quality of life of populations while respecting the ecological balance.
Law No 11/022 of 24 December 2011, laying down fundamental principles relating to agriculture	This law recognises, in Article 18, that customary tenure rights can be exercised collectively or individually on lands that are customarily owned by a local community. The totality of land recognised by each local community is its land tenure and includes reserves of cultivated land, fallow land, pastures and rangelands as well as the woodlots used regularly by the local community. Article 9 states that everyone has the right to participate in the decision-making process concerning the environment and the management of natural resources.
Law No 14/003 of 11 February 2014 on the conservation of nature	This law lays down, in accordance with Article 202 (36) (d) of the constitution, the rules on the conservation of biological diversity, the sustainable use of its constituent elements and on access and fair and equitable sharing of benefits from the exploitation of biological and genetic resources.
Decree No 14/018 of 02 August 2014 laying down the terms and conditions for allocating forest concessions to local communities	The purpose of this decree is to set the terms and conditions for granting forest concession status to forests on lands occupied by local communities. As such, it determines the prerequisites for the acquisition of a forest concession by a local community and the procedure for awarding the concession.
Ministerial Order No. 034/CAB/MIN/EDD/03/03/BLN/2015 of 3 July 2015 laying down the procedure for drawing up, verifying, approving, implementing and following up the development plan of a forest concession for timber production	This order establishes the procedure for developing, verifying, approving, implementing and monitoring the development plan for a timber concession.
Ministerial Order No 025/CAB/MIN/ECN- DD/CJ/00/RBM/2016 of 9 February 2016 laying down specific provisions for the management and operation of the local communities' forest concession	This decree lays down specific provisions for the sustainable management and operation of the local community forest concession.
Ministerial Order No 84/CAB/MIN/ECN- DD/CJ/00/RBM/2016 of 29 October	This decree establishes the timber production conditions and the rules according to which the forests concerned are exploited. For this purpose, it provides for the timber harvesting regime, the conditions for access to

2016 on the conditions and rules for	the timber resource, the operating licence, the terms and conditions for		
the exploitation of timber	sub-contracting activities related to the exploitation, the rules and		
	measures to ensure the traceability of timber.		
Ministerial Order No	This ministerial order outlines the rules and conditions for the creation		
85/CAB/MIN/ECN-	and management of Artisanal Forest Units (Unite Artisanale Forestiere),		
DD/CJ/00/RBM/2016	the procedure for allocating harvesting rights, operational requirements of		
2 of 29th of October 2016	SMFE in terms of equipment, and for meeting socio-economic obligations		
	towards local communities.		

Participatory forest management (PFM) by local communities is now integrated with local administration planning processes, local government and land tenure legislation. Local community representatives and the DRC Forest Services Agency manage forests together with local governments and communities, via jointly prepared management plans and with by-laws that define permitted and banned forest activities.

2.4 Community forest business opportunities

In rural areas, people's livelihoods mainly depend on forests, trees and agriculture. These communities rely on artisanal logging (for timber, charcoal and fuelwood), and NTFP production (Gond *et al.* 2016), subsistence farming (poultry, pork and goats), artisanal mining (Ituri and Tshopo) and hunting and fishing. Farm associations and individual producers in the region serve substantial local markets for cassava, bananas, maize, paddy (rice), peanuts, beans, palm oil, cocoa and vegetables.

Many the activities listed above are carried out in natural forests – or in slash-and-burn clearings, but when integrated into agricultural landscapes, forests and trees can increase agricultural productivity and help provide food security for hundreds of thousands of people. In addition to fruit and other sources of income, trees are an important source of energy for most livelihoods. Wood-based energy comprises an important percentage of wood removals and 90 per cent of household energy consumption is based on it. Electricity and other energy sources are expensive, scarce and usually available only in urban areas. Fuelwood harvests amount to as much as 30 times that of industrial timber production. Despite huge potential wood supplies, many households in urban areas do not have access to, or cannot afford, adequate supplies of charcoal and fuelwood. Integration of trees on farm can reduce pressure to collect fuelwood from natural forests.

According to Wolfire et al. (1998), there is also considerable pressure from hunting. Commercial poaching has become a thriving business throughout the Congo Basin, because wildlife provides an astonishing 80 per cent of the protein consumed in DRC.

For the artisanal exploitation of timber, the DRC forest authorities issue individuals with ALPs. The intention is that these should be registered Congolese individuals (not companies) with the correct equipment, who aim to develop their own SMFEs. But in practice, few such registries of individuals actually exist and ALPs are frequently given to large companies, some foreign owned, in order to allow them to carry out industrial logging while the industrial concession moratorium is in place (Global Witness 2012).

Nevertheless, DRC's forest law and its regulatory texts were originally designed to ensure that artisanal logging is undertaken by local communities for their own benefit. The 2002 Forest Code (Article 112) and Ministerial Order 035 (Article 24) specify that a community has the right to exploit its forests – either on its own or through an intermediary private artisanal logger following the conclusion of an agreement between the community and the logger. With the approval of the new community forestry legislation, this is now a realistic possibility. Formerly, artisanal loggers were widely granted ALPs without any relationship with communities (in part because the lack of implementation of local community forest concessions) (see Global Witness 2012). But now communities could indeed secure a local community forest concession and work with artisanal loggers to extract timber in a planned and sustainable manner.

Despite vast demand (including from local consumption), artisanal logging still falls far short of supplying it. Artisanal timber supplies the local market in the major centres, including Kisangani, Bafwasende for Tshopo, Mambasa, Bunia, Ariwara, Mahagi, Ngote, Nderi (Ituri province) and the Mongala producers cover Bumba, Lisala, Yakono, Yakata, Bobangala, Ngozi and Lingoy. Timber from Ituri and Tshopo are also sold in the cross-border markets of Ariwara and Nderi, Kasindi, even the cities of Beni, Butembo and Goma. Significant shipments are sold in neighbouring eastern countries (Uganda, Kenya and Rwanda) and Sudan and exported to the Asian market. The province of Mongala also maintains a large river traffic supplying the cities of Mbandaka and the capital Kinshasa.

As a way of managing forests, the legislation on community forestry has considerable potential as it allows local democratic control over forest harvesting, allows communities to contract and oversee artisanal logging (that is otherwise almost completely unregulated) and generates community revenues through the sale of standing timber that can benefit social equity. Artisanal logging has opportunities that suit both men (eg mobilised in heavy labour tasks such as felling, extraction, loading timber in the forest, and transporting it to market and for final processing) and women (eg engaged in financial management, retail or wholesale marketing). There is limited availability of employment data in DRC, and although the provincial governments pretend to hold forest statistics, there are no real records as such. One approach to estimate informal forest employment is to use production statistics that relate to own account workers.

At present, artisanal logging – and community forestry – are mostly organised as informal businesses, and the net benefits to different actors are opaque, diverse and highly variable. At individual level, economic benefit also varies, depending to the rate of the initial investment, labour and government taxes paid for exploitation and marketing. In the three investigated provinces, comparisons of data suggest there is a positive relationship between the prevalence of self-employment and informality, and there are many bureaucratic obstacles that formality brings with little corresponding benefit.

2.5 Support needed by community forest businesses

Establishing some form of collective organisation between forest and farm producers is one way of increasing market scale, sharing costs and improving negotiating power with buyers, government authorities and finance providers (Macqueen *et al.* 2006). Scale is an important advantage. Key informant interviews with relevant community forestry groups, artisanal logging associations, NGOs, universities and private-sector entities noted that a particular challenge for many SMFEs is isolation: they lack access to information and data and they also lack physical access to markets and financial support. Associations or networks can help overcome this isolation, enabling members to exchange expertise and knowledge. In addition, they give SMFEs a stronger negotiating voice, whether in political arenas or in the marketplace (Adkins 2001, Aerts *et al.* 2007).

In general, interviewees mentioned that a successful community forest business faces multiple risks and challenges that are serious barriers to the development of their business. Internally, there are exaggerated expectations of the ease with which forest-owning communities can acquire local community forest concessions and ALPs. Communities and artisanal loggers lack equipment for artisanal logging. They lack of means of transport for harvesting and marketing. There is also a general lack of business capacity and non-appropriate training to run activities in the community forest sector. Few community groups can put up a credible loan proposal to access finance and most lack the means of getting their products to the more promising markets. Almost none have the technology for effective transformation of products into high-quality processed end products with commercial value.

From our interviews, the following specific challenges were apparent in a number of key business areas.

2.5.1 Resource access

The reforms under the Forest Code have integrated the concepts of artisanal logging as well as the community forest reserve for timber exploitation within the FMU within which it is also possible to develop small-scale farming production. While SMFEs organised for artisanal logging operate through arrangements with local communities for timber exploitation, the arrangements are only valid for one

year – with a supply guarantee by a registered FMU for their activities. Unfortunately, there is often a lack of transparency in who should be involved in the allocation of supply guarantees and overlapping responsibilities of several services can confuse and discourage artisanal loggers. Providers of forest-business incubation services need to assist local SMFEs in clarifying such issues.

2.5.2 Access to finance

DRC capital markets are poorly developed. The commercial bank system is highly constrained for SMFEs and farm producer groups. Although there are various formal credit lines (banks, registered credit institutions, credit cooperatives etc) interviewees asserted that access to them, particularly by local artisanal loggers and farm producers, is still limited. In DRC, financial risks drive banks and microfinance institutions away from SMFEs because of payment uncertainty. During our interviews most entrepreneurs indicated that they do not even try to approach commercial banks to apply for credit, because they know they will be unable to pay the exaggerate interest rates and end up filing for bankruptcy. The few SMFEs that use commercial banks do so only to deposit their savings. Very few interviewees had exploited opportunities such as microfinance institutions like the Credit Cooperative (Coopérative de Crédit or COOPEC) to support their business as they were not aware of any other financial or commercial opportunities offering services. Forest-business incubation providers need to improve the track record and confidence of SMFEs in financial management and help negotiate better terms from financial service providers.

Instead, most SMFEs and farm producers usually start their business with personal capital and make any further investments exclusively using their own capital. Some had approached relatives and friends and/or received funds from donors. Despite this general self-sufficiency, several interviewees drew attention to informal sources of credit, where foreign timber dealers give money to an individual to apply for a small logging activity on their behalf. This simplest way of extracting timber in the short term is most profitable as there is strong demand and it helps to build starting business capital. Some have been able to tap into international development finance sources in the country that support a wide range of actors struggling to develop their business. Within DRC, most credit lines are based on projects (including government institutions, bilateral and multilateral agencies) that support SMFEs, local associations, NGOs and consulting firms on behalf of community development initiatives. There is scope for forest-business incubation to explore pilot programmes with such donors.

2.5.3 Markets/engaging buyers

Interviewees noted that commercial connections were mostly discovered through the personal efforts of SMFEs and farm producer organisations. These businesses most frequently supply domestic markets in which there is significant price instability. Because of the limited assistance available, many smallholders have relied on themselves to commercialise their production. To be successful, they have often had to get around exploitative government agents or adopt illegal practices. In wishing to promote a market for legal timber, the government must focus on local markets, since this is where most SMFEs will tend to supply the bulk of their products as these are the easiest to access – both physically and in terms of meeting market requirements. But establishing a legal supply of timber must be done in parallel with efforts to create demand for legal timber. One approach is to bring together different stakeholders – government, civil society and industry (both large and small scale) – to find ways to work together to promote a legal market. This was suggested by most of the entrepreneurs involved in artisanal logging operations. Forest-business incubators could help broker these types of meetings.

2.5.4 Bureaucracy

Considered as a source of government income, there is a multiplicity of taxes variably applied by different officials. Most pressingly, there is a lack of transparency in the allocation of supply guarantees and overlapping responsibilities of several services. This situation has a severe impact on smallholder producers as they lose revenue, cannot navigate the system or comply with requirements.

2.5.5 Worker skills

As noted above, SMFE staff typically have limited technical and management capabilities, which can be a major limitation to their participation in more competitive forestry activities. The types of assistance that they need include technical support in order to understand basic business economics, financial and business management (including the basics of agreeing contracts) and marketing. Technical support is also needed to increase the quality of timber production, provision of information (on market prices and regulations, for instance) and access to funding and low-cost credit. Additionally, interviewees stressed the fact that there was an urgent need to improve the capacity of SMFEs workers in simple production operations such as felling, extracting and grading timber.

2.5.6 Business reputation

From interviews with SMFEs and farm producers, most flourish through informality, forced into this by the unhelpful environment for doing business as a small and medium entrepreneur. Almost all SMFEs and artisanal logging individuals are not recognised or registered as a viable business. The resultant reputation for informality reduces the capacity of SMFEs to compete with formal firms and undermines their lack of access to credit to run a sustainable business. Progress towards improving legality among SMFEs has been slow. Although successful initiatives have been taken, such as the reform and adoption of the Organisation for the Harmonisation of Corporate Law in Africa (OHADA) Uniform Law on the Structural Organisation of Security, national SME policy has not brought about the transformational change necessary to create a private sector of small and medium-sized forest and agricultural producers that is essentially legal and well governed. One reason for this failure is the lack of political support for the sector or, rather, for its formalisation.

The current system of informal production and trade are deeply entrenched in the country, providing a major source of income for stakeholders along the entire length of the supply chain – not just for the loggers, processors and traders, but also for enforcement agents and forest officials, who profit from bribes and other informal payments. Corruption is foreseen here as a major factor in maintaining the status quo. In order to bring about a change in the official approach to rural development, SMFEs will need to make a convincing case for the role that they can play in enabling sustainable rural development and helping governments to meet the growing challenges of climate change, environmental degradation, poverty reduction and socioeconomic change through the Sustainable Development Goals (SDGs).

3 Existing support for community forest-business incubation

3.1 Institutional actors supporting smallholder forest and farm businesses

Within DRC there is very little in the way of formal forest-business incubation. Despite the poorly developed incubation system, a wide range of actors are trying to develop both national and local programmes to support SMFEs. These include government institutions, bilateral and multilateral agencies, local associations, NGOs and consulting firms through community development initiatives. Table 2 lists a number of well-established initiatives that support SMFEs and farm producers in limited sectors that include:

- Forests: Developing sustainable forestry businesses (artisanal and small-scale logging).
- **Energy:** Building associations/cooperatives to pilot and then sustainably upscale (including perhaps even modern biomass energy).
- Agriculture: Developing sustainable commercial and subsistence farming and agro-processing.
- Other sectors: Diversifying business opportunities.

Our interviews uncovered 26 different community forest business groups that had received project support from a range of different support actors. Table 2 presents a selected number of relevant community forestry groups, artisanal logging associations, other FFPOs, NGOs, universities and private-sector entities who have (or might in the future) provide expertise towards developing forest-business incubation services.

The incubator services listed in Table 2 include both technical support services and business support services. Technical support services include technology sourcing and installation, seed, and agricultural inputs for food safety and compliance. Business support services include business mentorship, market linking, developing investor networks, helping to ensure regulatory compliance and business plan development. All of these contribute to capacity building.

In our interviews, several potential incubators were mentioned and then also interviewed. These possible incubators include Tropenbos DRC, Organisation of Ecologists and Friends of Nature (OCEAN), Kisangani Integrated Development Association (ADIKIS), Caritas DRC, Agricultural and Rural Management Council (CARG), International Institute of Tropical Agriculture (IITA), Food and Agriculture Organization of the United Nations (FAO), Belgian Development Corporation Supporting the Rehabilitation and Recovery of the Agricultural Sector Project (CTB-PARRSA).

Many of these organisations provide multidisciplinary assistance in project development, sustainable agriculture and community development activities. During the pilot REDD project, for example, a number of NGOs supported local associations with financial support from the United States Agency for International Development's Central Africa Regional Program for the Environment (USAID-CARPE). Currently, the Central African Forest Initiative (CAFI) and the United Nations Development Programme (UNDP) are assuming a similar role with financial support from the Norwegian government to support sustainable forest management and to reduce deforestation. The University of Kisangani provides scientific expertise and offers opportunities for strengthen theoretical experience.

Notwithstanding these institutional efforts and projects, very few organised SMFEs exist to date. Most businesses interviewed have structures that operate still as sole traders. Some have received mentoring from NGOs about grouping themselves into associations, platforms or network to increase their effectiveness and productivity. But very few have achieved an operational level of cooperation between individual traders. Only a very few are working toward formalisation as SMFEs (for example, the Rinec-Bois group under Tropenbos DRC incubation funded through the CoNGOs programme).

Table 2. Examples of community forest businesses that have received 'incubator' support in Tshopo, Mongala and Ituri provinces of DRC

Potential incubator	Incubator services provided	Sector	Business organisation		Value-chain stage
			#	Activities	_
Tropenbos DR Congo, OCEAN	Feasibility analysis, business capacity building, financial accounting and loan preparation, market and value- chain	Forestry: SMFEs	4	Logging	Logging and transport, retail through wholesale marketing, timber processing, export
development Forestry: artisanal logging associations	development	Forestry: artisanal logging	8	Artisanal logging	Different production
	associations	2	Logging and agribusiness	operations, retailer,	
			2	Logging and NTFPs	wholesale
IITA, FAO, Caritas DRC, CTB- PARRSA, CRONGD, Hope	Seeds and agricultural inputs, technical assistance	Farm producers and NTFP organisations (individuals and	2	Agribusiness	
Lunon/CESM, Technical ADIKIS, CARG assistance	associations)	8	Agribusiness (livestock and beekeeping)		

Notes:

CRONGD (Regional Coordination of Non-Governmental Development Organisations Coordination or Régionale des Organisations Non Gouvernementales de Développement); Hope Lunon (Humanitarian Organisation Promoting Equity); CESM (Center for Environmental Studies and Management).

The various supporting institutions might not refer to themselves as forest-business incubators. Nevertheless, they provide some services that have the same function. For example, various NGOs have provided the initial funds in the development of the stakeholders' productive activities, along the entire length of the supply chain – not just for the loggers, processors and traders but including several sustainable community forest and farm producing businesses. Some businesses have even benefitted from investments secured through collaborative work with financial service providers to improve their business growth. Support has covered both financing of registered cooperatives and individuals within the region. Support has tended to be in the form of project support over three to twelve months, as the incubator budget is often allocated on an annual basis.

A number of types of support have proved particularly useful in helping to develop SMFE associations made up of several forest and farm producers. Some have offered training to build capacity and market and value-chain analysis prior to the implementation of the business. Others have given legal advice and/or financial resources.

One example of forest-business incubation that encourages collective enterprises was the DRC government itself launching, through a REDD+ project, an initiative to create community forest businesses and farm producer associations. The aim was to diversify livelihoods alternatives to reinforce rural communities' development. FAO and IITA launched agriculture initiatives to support rural community agricultural development, while other community development and conservation NGOs encouraged participatory natural resource management at the national and provincial levels. They hosted training for a series of associations interested in topics such as artisanal and small-scale

logging, carpentry, cash crops agriculture, and production transformation and charcoal production groups, etc. The initiative included several results:

- A number of artisanal logging associations received support to prepare their enterprise development plans.
- A group charcoal enterprise developed its enterprise development plans.
- Market surveys and analysis were completed at provincial, transboundary and exporting levels for some other selected products.

To date, considering the area covered by this study, only artisanal logging associations are well managing their businesses. A number of SMFEs have started to emerge but are still a long way from becoming formalised.

As for access to finance, the Congolese government and most of the formal banks are known to have little regard for private-sector investment. In part, this stems from a fear of being unable to recoup investments through reimbursement by informal, poorly organised activities and their derived business. Little capital is available for private-sector financing, even from international incubator NGOs. Traditional banks state that they do not have the technical capabilities to work with private SMFEs or farm producers operating as sole traders and without any business plan – making it difficult to appreciate the risk. As a result, the availability and terms of credit files for SMFEs remains poor or non-existent.

Compounding this problem, there is a lack of reliable information or official statistics about smallholder forest and farm businesses, especially the number of artisanal loggers and other community forest businesses active to date. This is a major gap as these informal forest and farm businesses provide tens of millions of jobs at the national level when one combines the figures for small-scale logging and timber processing, cash crop production and processing as farm producers, charcoal production and processing, and the collection and processing of NTFPs. Although the importance of NTFPs for poverty alleviation has been demonstrated by many studies, there is a lack of comparable data about their overall contribution, including in terms of economic value and their role as an important income generator for rural communities and therefore, these activities lack incubation support.

Business incubators – if properly constituted and financed – could play a critical role in improving information about these important smallholder forest and farm businesses, assessing their capacity gaps and helping overcome these challenges. They could improve trust between financial institutions and these businesses and champion innovation to build sustainable private-sector business.

Analysing the different types of incubator support demanded by our interviewees, and the past and ongoing supply, we recognise the validity of the framework developed by Dalberg Analysis (2017) for the development of forest-business incubation in DRC. It is presented here in Figure 2 as a framework of support for incubator vision, goal, outcomes and outputs that seems applicable to the needs of smallholder forest and farm businesses in DRC.

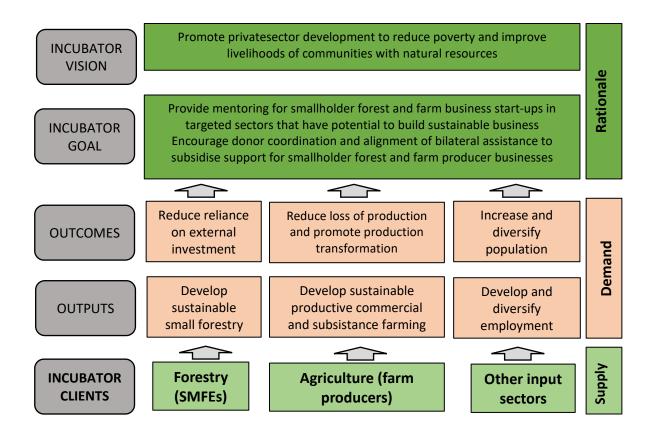


Figure 2. Framework for developing business incubation in DRC. Source: Adapted from Dalberg Analysis (2017)

Although to date there are very few organised and formalised community forest businesses active, the newly created local community-forest concessions under the Forest Code create a huge opportunity. Of the total 64 such concessions already allocated (albeit most outside our study area), the majority are in Équateur (26), Mai-Ndombe (19) and Tshuapa (7) (MEDD, 2019). There is a growing realisation that communities will have a stronger incentive to manage these concessions sustainably if they are making a good income from them. And this raises the question of how to provide forest-business incubation as an issue of national importance.

3.2 Nature of existing support needs

In our interviews with smallholder forest and farm businesses themselves, the following priorities for support emerged:

- · Assistance in market and value-chain analysis
- Investment in project design and development
- · Accounting (bookkeeping) and financial reporting
- Developing the SMFEs business plan and a SMFE market linking strategy to promote the financial and business development of small and medium enterprises
- · Lobbying and negotiation more generally, and
- Business monitoring and evaluation.

Interviewees also noted the need to improve management-information systems, and the capacity to formulate their demands for technical, business and financial services, through a process of improved information and awareness. Some cited the need for support with critical self-assessment, and in learning how best to negotiate and build mutual trust to sustainably run business associations which serve the needs of several member businesses.

Several of the enterprises interviewed consider sustainability, natural resource management and social and corporate responsibility as integral elements of SMFE business development strategies. It was expressed that smallholder forest and farm business development should not take place in isolation (just for reasons of economic development), but rather as part of a broad-based strategy for reducing social poverty and maintaining the ecological integrity of DRC's forests. There should be an integrated plan for developing rural and urban-based small and medium enterprises and their successful integration in national and international supply chains for agricultural and forest products.

Interviewed entrepreneurs considered increased cooperation among individual producers a vital next step in developing their business opportunities and impacts. Increasing the scale of business improves prospects for investment and market access. This could be achieved through tools such as:

- Multistakeholder platforms for facilitating business links
- Promoting communication platforms and networking opportunities among SMFEs
- Linking SMFEs with providers of technical, business development and financial services, and other actors along the supply chain, and
- Support for peer-to-peer exchanges around successful cases and sound practices of SMFE development, their underlying critical success factors, and the potential for scaling up.

Women interviewees who were involved in forest business who received any training or technical support claimed to have a strong and positive view of women's participation in value chains and gender integration within SMFEs. Gender aspects can be fully integrated within SMFEs, so the challenge is to ensure that gender aspects are taken into account at all programmatic and SMFE development stages in practice.

3.3 Financial sustainability of that support

As mentioned previously, there is no effective mechanism of financial support from the Congolese government for forest-business incubation. Both the Industrial Promotion Fund (FPI) and the Small and Medium Enterprises Programme target larger-scale industrial enterprise development. Additionally, banks have little engagement with the smaller end of the private sector.

The interviewees had exploited few if any commercial service providers, often simply because they were not aware of the institutions and opportunities, such as microfinance institutions. Although there are various formal credit lines (banks, registered credit institutions, credit cooperatives, etc) and international finance sources in the country, access to them, particularly by local communities, is still limited. The government has some programmes like FPI, but they do not reach SMFEs.

Projects fund some incubator support services (for example of the Tropenbos DRC team involved in this report) but they are limited in duration. So, associations of SMFEs who market SMFE products might be the best place for financing forest-business incubation more sustainably. There is much to do to develop associations strong and well-financed enough to enable that to happen, but it is a useful trajectory towards which to work.

3.4 Challenges for support institutions

In general, our interviewees mentioned that a successful community forest business faces multiple risks and challenges that are serious barriers to development of their business. Perhaps the biggest single

constraint is bureaucracy and corruption. When money is in short supply, forest and farm businesses are considered by government officials as a source of government (or personal) income. There is a multiplicity of taxes that are collected – and which drive businesses into informal tax evasion. There is also a lack of transparency in the allocation of supply guarantees (eg for artisanal loggers supplying from community forests) and overlapping responsibilities of several services that prevent these small operators from progressing their business.

In addition, there is also the lack of technical aptitude of the managers and workers. As private-sector players, smallholder forest and farm businesses engaged in the forestry and agriculture sectors have proven effective in running informal businesses but must adapt in light of the DRC's emerging challenges.

A final challenge is that of price instability in the timber markets. It is very difficult to plan operations with such variability in demand and continuity in business partners. The most prevailing challenges are synthesised in Table 3.

Table 3. Challenges faced by interviewees from community forest business

Sector	Internal challenges	External challenges
Forest	Limited demand for all but a few species	Insecure land rights, difficulties in
sector (eg	Lack of effective transformation of products into those	accessing and poor control over
artisanal	of high commercial value	concession areas
loggers)	Limited logging equipment for artisanal logging	Exaggerated expectations for
	Lack of transport for marketing	local forest-dependent
	Unsustainable forest management	communities in terms of aptitude
	Lack of expertise in agroforestry	for business
	Limited export market for products	Lack of provision of appropriate
	Lack of transparency and formality reduces ability to	finance to community businesses
	track progress	Difficulties in reaching more
Agriculture	Land rights insecure	lucrative markets
sector (eg	Poor ability to reach larger urban markets and	Poor infrastructure development
crop	exporters	Lack of education and vocational
producers)	Lack of skill in agribusiness development	training
	Lack of agri-processing facilities and technologies	Lack of policy focus on improving
	Limited crop types and over supply	forest and farm sectors
	Lack of association and cooperation between	
	producers	

To address some of these challenges, it would be important for forest-business incubation services to find practical ways forward in the following main areas:

3.4.1 Resource tenure

The new legal framework for community forestry should be implemented so as to provide certainty over community land tenure and rights to use land and forest resources – and the conditions and process through which artisanal loggers' associations could be contracted by communities to undertake sustainable logging.

3.4.2 Financing and numbers of potential clients

By rolling out the community forest legislation across the country, a large scale of potential production can be created with similar production dynamics. This offers opportunities to develop common

production practices and to encourage association between different community forest groups and artisanal loggers' associations. By building the scale of these associations, it will be possible, through the generation of profits, to move towards self-sufficiency in financial resources which will pave the way for further investments in added-value processing and diversification of products into the market.

3.4.3 Logistics and communication

Access to basic infrastructure such as electricity and the internet is limited, making it difficult for many smallholder forest and farm businesses to stay in touch with potential buyers and service providers. Similarly, the poor state of roads accentuates the situation, posing problems for the transportation and commercialisation of goods. These are challenges that inhibit domestic trade and require business solutions worked out with those emerging community forest associations and their support agencies.

3.4.4 Political stability and security of operating environment

Forest-business incubators need to work with government authorities to promote peaceful and inclusive societies for sustainable development as the key for DRC's transition towards a developed economy. Longstanding political instability continues and has worsened for years, hindering foreign investment growth and trust in the business environment. Despite the DRC being rich in natural resources, the economy has not maintained stable growth, in part due to political instability. This contributes to the numerous barriers that small and medium enterprises face and significant constraints to their growth which can lead to failure.

- Unclear SME policy: Specific support targeting SMEs can be unclear and complicated to apply for
 as there are a range of public agencies defining the business landscape for SMEs (National Agency
 for the Promotion of Investments or ANAPI, Ministry of Small and Medium-size Enterprises, FPI).
- **Taxation:** The tax system is generally viewed as onerous, with tax demands coming from multiple agencies. SMEs can be charged large penalties for mistakes in tax returns or delays.
- **Protection:** Strong networks are required to protect business interests, needing local-leadership backing in challenging market conditions this complicates starting new initiatives/businesses.
- **Political risk and investor confidence:** Investor confidence is worsened by the political environment: legal protections are in place on paper but seldom tested in court, while unforeseen financial risk (currency, inflation) increase costs of capital.

3.4.5 Available staff and skillsets

In common with the rest of the DRC, human capital is built from a young and dynamic population, unfortunately without much capital. A poorly focused and weak higher education system is disconnected between the needs of entrepreneurs and the skills of workers. There is a need for capacity building to develop their skills in agribusiness that would have impact on rural and self-employment, economic diversification and small and medium business growth.

3.4.6 Corruption

The unreliability and mismanagement of public institutions creates risks in conducting business in the DRC. According to the Doing Business report (World Bank, 2019), the DRC ranks 184th out of 190 countries in public institutions efficiency and some payments are required for successful business operation but can be difficult to justify to international donors and investors. These constraints translate into the large and growing informal sector with firms avoiding troublesome oversight and taxes.

3.5 Issues of gender

Within DRC, many women act as rural entrepreneurs in the informal forest and farm sectors and play an important role in value-added activities. Making up half of the pool of potential entrepreneurs, it is important that any expanded forest-business incubation approach is gender sensitive. The gender and development (GAD) approach provides tools to help organisations look at the sexual division of labour and responsibility. While many are aware of the broad approaches – some of the dynamism may have gone out of efforts to achieve real change (Jaquette, 2017). All interviewed organisations considered themselves gender sensitive in the design and implementation of projects. However, an approach is needed that mainstreams gender equality, giving women equal access to land ownership and tenure and other forest resources.

Strengthening tenure presents an opportunity to enhance gender-equitable access to forests and trees, as well as encouraging a long-term, sustainable approach to community forestry business management. While there are some signs of change (albeit with very little gender-disaggregated data) it is clear that men still dominate the formal forest sector as well as decision-making at all levels. On the other hand, many rural women spend much of their lives collecting fuelwood, food for family consumption, medicinal plants, resin and other NTFPs.

Studies have highlighted the entrepreneurial role that women play in value-added activities, especially in the informal sector, as well as their leadership role in community and participatory forest management. However, more work is needed to investigate issues such as women's access to forest rights and the impact on gender equity, as well as their empowerment in transitioning from the informal to the formal sector.

Problematic is the fact that, while all respondents acknowledged the existing sexual division of labour in the social context within which their programmes and projects are implemented, rather than challenge it, they tend to design their activities around it. For example, in many cases during our interviews, men are more involved in logging, production, transport and transformation activities while women are integrated in selling and marketing, which is in line with the prevalent tradition of men doing heavy labour rather than women. As a result, project approaches tend to insist that women are trained in marketing while men focus on sustainable forestry and farm production. But this does not overcome the gender bias – it merely reinforces it.

Despite such problems, respondents stated that gender integration has a positive impact on the long-term sustainability of the projects. First, it ensures a better approach in understanding the various ways in which the resource is exploited, and secondly, it ensures the collective acceptance of projects by communities through women who ensure the sustainability of the knowledge acquired in terms of natural resource management and men whose acceptance is essential for its social sustainability.

4 Options for enhancing forest-business incubation support

4.1 Some current institutional possibilities

Despite the current institutional challenges of providing forest-business incubation support, there are a range of public agencies defining the business landscape for SMEs (eg ANAPI, Ministry of SMEs, FPI). These public agencies could do more to support forest-business incubators.

A strong forest-business incubation institution should take into account all challenges from the production to the commercialisation phase of smallholder forest and farm businesses. It should also focus on developing comprehensive technical support. Incubators should reinforce community forest and farm producer's groups to assess market demand, identify major opportunities and risks, and develop a plan to take opportunities and mitigate risks. This should include longer-term efforts to track market conditions and the broader policy context of keeping a sustainable forest enterprises business. Good guides now exist on how to build forest-business incubation capacity into existing institutional frameworks (Bolin *et al.* 2018) Therefore, the incubator should work to:

- · Review market conditions and the broader context
- · Identify sectors in each country that align with the incubator's objectives
- Establish the demand and need for incubator/accelerator services
- Identify the support requirements of enterprises
- Assess its own capability and the possibility of filling experience gaps from the landscape of current incubators and other SME support providers
- Assess the landscape of funders in the region and other fundraising possibilities (eg charging fees for training, project funding, use of own profits etc), and
- Develop a structured design of incubator/accelerator functions.

4.2 Future business capacity-development options

The weak higher education system in the DRC leads to a mismatch between the needs of companies and the skills of workers, resulting in a high unemployment rate and limiting the country's ability to tap into the potential of its growing youth population. In the region covered by this study, only the forestry high school of Bengamisa trains agro-foresters with technical skills in forestry and general agriculture – but with little business input. There is no food-processing school to supplement farm product processing elements. Few carpentry schools offer specialisation in timber processing and transformation. And there is little prospect of decent business training.

It is not surprising that most students coming out of school have had no business/financial training — and little entrepreneurial aptitude. Developing human capital by reforming the education curricula could have a significant effect on rural employment, economic diversification and growth rates. As for the entire DRC, a considerable effort has to target youth directly out of university across different subjects to develop their skills in agri-business.

Another option is to work with a lead association of smallholder forest or farm producers and try to build business incubation capacity into that entity. There are limited opportunities to build such competencies, however, as few such associations yet exist and of those that do, any peer-to-peer training is not yet equipped for capacity building around professional business and technical skills, including entrepreneurial leadership.

At the outset therefore, one possibility would be to bring in outside expertise in a training-of-trainers approach that works with key local business clusters to develop strong and sustainable businesses based on business-incubation programmes. Of particular importance are modules focusing on effective,

accountable and transparent association governance; how to build inclusive, participatory membership of such business organisations; how to help community forest businesses improve their access to finance and resources; and research, science, and technology options.

These initial 'clients' of a training-of-trainers approach could help to develop clusters of business (eg community farmer groups or cooperatives, artisanal logging associations etc) with the knowledge and ability to influence their business in ways that contribute to empowering entrepreneurial leadership.

The Tropenbos DRC experience points to the benefits of continued capacity-building support (eg mentorship) that provides for continued business development and support for SMFEs by incubators. Such ongoing training, while initially from some NGOs like Tropenbos DRC, might eventually become embedded in the smallholder forest and farm business associations themselves. This could improve organising technical and financial assistance, providing market information, production value-chain analysis and establishing SMFEs relationships (including the oversight of contracts between SMFEs and large companies, and monitoring and evaluating activities).

4.3 Possible funding sources

All the interviewees complained about the cash flow problems of running a business start-up self-sufficiently. The same problem would face a forest business incubator as a business. Running a financially sustainable incubation programme would require careful thought. Perhaps the best solution ultimately lies in embedding the incubation services in some second-tier forest or farm producer association that makes profits by marketing forest and farm produce and can then use some of those profits to help train its members in the various necessary elements of business.

Of course, any forest-business incubator would also have to help its client SMFEs with access to finance through a combination of credit, loans from banks, bilateral donors and microfinance. However, getting credit is considered as one of the main constraints to doing business in the DRC, and in particular, for SMEs. This lack of financial access contributes to the low domestic savings and deposit volumes in domestic banks. So it may take time for a second-tier forest and farm producer organisation (e.g. an umbrella association) to generate sufficient funds so as to be able to offer business incubation services to its members.

Since 2012, the government of the DRC adopted the country's national REDD+ strategy which presents the country's roadmap to building a green economy. Subsequently, an investment plan and specific REDD+ measures have been agreed between donors and government authorities. The DRC's strategy document for growth and poverty reduction (Ministry of Planning, 2011) also proposes strategies for the protection of the environment and to fight against climate change. Within this scheme, giving priority to forests is key to poverty alleviation and, looking ahead, there is scope for broadening the benefits of community forest management by operationalising financial incentives under REDD+ mechanisms, green funds or payments for environmental services mechanisms, as well as potentially drawing in private-sector investors to support SMFEs. It is important to promote SMFEs in national REDD+ strategies by adapting each country's REDD+ implementation to include funding for sustainable smallholder forest and farm businesses. Subsequently, REDD+ strategies should integrate SMFE support into their planning.

Additionally, Forest Law Enforcement, Governance and Trade (FLEGT) programmes can invest in improving legality among small-scale forest enterprises. The small-scale forest sector is thriving in the Congo Basin and plays a crucial role in its rural economies. However, much of the activity in this sector is informal, owing to poorly designed policy frameworks and the lack of political support for small-scale operators. The development of a framework of indicators could provide an effective way of galvanising political support and of driving progress towards establishing a legal and sustainable small-scale forest sector.

An integrated approach between the Ministry of SMEs and Ministry of Economy, along with related institutions, to support emerging SMFEs is critical for sustainable business incubation and for making progress towards the SDG targets. Nevertheless, cross-sectoral coordination can be difficult because of sector-based ministries and agencies with their own resource allocations and accountability

arrangements. Effective cross-sector coordination requires dialogue and coordinated action, with a focus on achieving the SDGs and benefitting from interlinkages rather than promoting individual sectors.

The DRC Growth and Poverty Reduction Strategy Paper (Ministry of Planning, 2011) which aims to meet the SDGs should challenge sectoral ministries to change the way they work. They must coordinate their policies and development strategies across government and civil society to act as SMEs incubators. To achieve this, DRC may consider establishing SMFE-SDG implementation platforms composed of key sectors that are related to natural resource use and management. The SMFE-SDG platforms would bring together different ministries and government agencies with other key stakeholders and SMFEs to target sustainable support for small business development. In addition to developing sustainable development policies, they would also focus on implementation – identifying and addressing barriers to change and monitoring progress, in order to demonstrate to banks the financial viability of SMFE businesses.

5 Conclusions

5.1 Options for better community forest-business incubation

Use community forest legislation to design a roadmap towards legal forest business for communities: The new community forest legislation secures rights for communities, who are free to enter into sub-contractual arrangements with artisanal loggers to harvest timber against an agreed territorial management plan. Partnerships could be developed on a stable basis to allow for the perpetual extraction of timber within the bounds of sustainable natural regeneration.

Focus on strengthening the business organisations of smallholder operators: With their expertise in conducting business in challenging environments, gaining access to resources, and capacity for innovation, smallholder forest and farm businesses are critical for delivering many of the DRC government's goals and targets for REDD+ and SDGs. These smallholder businesses may actually be the DRC's largest private sector. But at present, their isolation robs them of scale, access to markets and support. Facilitating the formation of strong local and regional associations would improve scale and negotiating power, increase knowledge sharing and peer-to-peer learning, and allow for a more efficient transfer of business incubation know-how.

Work with the private sector, within and beyond the forest sector: Despite the advantages of smallholder associations, it is also important to engage larger private-sector buyers of particular products. Promoting private-sector engagement can help to unlock the challenges in the region that cannot be solved without the participation of all stakeholders. Therefore, encouraging donor coordination and alignment of bilateral assistance to partner countries based on SMFE needs is one realistic option. Larger companies who may need access to products available from smallholder groups might even be willing to invest in the latter if it helps to secure their supply.

Promote a market for legal timber: SMFEs tend to supply the bulk of their products to local markets. These are the easiest to access both physically and in terms of meeting market requirements. However, there is often little demand for legal timber on such markets, primarily because it tends to be more expensive. In many countries this situation prevails: there is a lack of legal timber to supply the domestic market. Because of the limited assistance available, many smallholders have relied on companies to help them obtain licences and sell timber, but often under exploitative or illegal terms. Thus, there is a particular need for advice on concluding and overseeing contracts with logging companies. Moreover, there is an overarching need for a positive enabling environment for private-sector activity, for example in connecting value chains, capacity innovation and vertical integration that adds value through timber and food processing and improved cooperation between businesses of all sizes. Taking advantage of private-sector capacities can increase productivity and local incomes.

Make formality advantageous: Overall, several challenges limit the ability of SMFEs and farm producers to flourish. These are mostly rooted in a non-enabling business environment (and infrastructure deficiencies). Almost all SMFEs and farm producer groups are not recognised or registered as formal businesses. This reputation of informality is reducing their capacity to compete with formal firms leading to a lack of access to credit to run a sustainable business. But the costs of formality and the visibility and exposure it brings to a hugely burdensome tax system are a powerful disincentive to change. The government urgently needs to revisit its tax systems to make formality advantageous.

5.2 Recommendations on next steps

The DRC forest and farm sectors are greatly in need of innovation against a background of informality and resource degradation. Chesbrough (2010) has defined open innovation as a paradigm, which assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as firms look to advance their business or technology. More recently, he defined it as 'a distributed innovation process based on purposively managed knowledge flows across organisational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organisation's business model' (Chesbrough 2010, Chesbrough and di Minin 2014).

Within the framework of this assessment, it is clear that smallholder forest and farm businesses are recognised as key to sustainable urban and rural development and to economic and environmental stability if their businesses are supported and managed to grow. The following recommendations for better and effective actions coordination are directed at potential supporters of SMFEs, especially the government, government agencies, civil society and NGOs, and at SMFEs themselves.

Government and financial institutions:

- Ensure government cross-sector institutions start granting and enforcing legal access to forest and finance resources.
- Improve forest governance and enhance clarity about the supply guarantees with which community groups can engage artisanal logging partners.
- Simplify bureaucratic procedures related to business registration and operations. This can reduce costs and enhance value-adding opportunities.
- Develop a smallholder forestry and agroforestry programme targeted at poor forest users without legal tenure, and a forest industry-market linking strategy to promote the financial and business development of small and medium enterprises.
- Improve the accessibility and reach of financial services, specific credit lines and public-private partnerships, according to the needs and nature of small and medium forest enterprises (SMFEs).
- Put in place financial incentives, including tax breaks for start-up SMFEs.

Civil society, NGOs and development agencies:

- Inaugurate training-of-trainers in business incubation. Start with key local forest and farm business associations or business clusters and educate a critical mass (young and dynamic population) in both rural and urban environments as the basis for the future of the business development services (BDS) for SMFEs. This will require greater coverage of technology and product delivered quality.
- Facilitate access to finance, market and technical information as a priority. SMFE communication
 networks can be funded to improve information flows, stimulate community-company partnerships,
 and facilitate access to trade fairs and better articulation among technical, business development
 and financial services.
- Facilitate multistakeholder negotiations for better policies, improved business environments, and conflict management. This can help to address context-specific challenges.
- Provide detailed technical support for specific value chains and niche markets (eg for certified timber or fairtrade farm production and NTFPs) and to improve marketing and negotiation skills.
- Align delivery mechanisms between NGOs, development agencies and commercial BDS providers to support SMFEs.

Forest and farm producer organisations (FFPOs):

- Strengthen partnerships with other local community organisations for the implementation of projects on the ground and involve them in actively participating in these initiatives. Monitor and disseminate achievements in terms of capacity building and increased ownership by local civil society.
- Improve competitiveness in local, national and international markets for their business's forest-based products.
- Work to develop capabilities associated with the internal management of SMFEs, organisational capacities, entrepreneurship and long-term vision.
- Upgrade technical, business and financial capacities. Creating internal institutional arrangements for business management that are directed towards adding value to timber and NTFPs, farm production

and timber processing. This would help increase profitability and reduce administration costs, facilitate new business partnerships, and provide a basis for negotiating more favourable terms of trade.

 Adopt clear performance indicators concerning (both direct and indirect) recipient organisations' compliance with the relevant laws, norms and standards, and establish an independent mechanism to monitor compliance.

In the mid and longer terms, education and training capacities for sustainable forest businesses should target the development of a wide range of skillsets, including:

- Forest-management skills and capabilities linked to technical knowledge related to community forestry agribusiness.
- Sound business practices: accountancy and financial management, entrepreneurship and long-term vision, infrastructure and technological advancement and innovation.
- Legal capabilities, human resources, commercial/marketing capacities, auditing, self-assessment, and knowledge management.
- Communication and administration.
- · Manufacturing and production capabilities, diversification and certification.

The small-scale forest sector plays a crucial role in the rural economies of DRC. If given the right support, it could play an even bigger role and make a significant contribution towards the achievement of the country's targets for sustainable development as well as the global SDGs.

Through the elaboration of national-level indicators focused on the small-scale forest sector, the SDGs could help to stimulate support within the SMFEs sector. Not only would this provide an opportunity to access funding from the international community to develop the sector, it could also allow for exchanges of information to take place between SMEs and linked organisations, and for lessons to be learnt.

Finally, we encourage a national dialogue to debate how best to provide forest-business incubation in the future, how to assess and learn from the effectiveness of existing forest-business incubation, and to produce specific roadmaps and adopt binding commitments to tackle each situation. The community forestry roundtables - implemented by a coalition of Congolese civil society and international NGO's between 2016 and 2019 – successfully brought a range of stakeholders together to agree on a common national strategy for implementing community forestry. Such a dialogue should be the foundation for a new emphasis on forest business incubation for community and smallholder forestry businesses. Since there is very little information available on the smallholder forest and farm business sectors, considerable investment will be needed in the agencies and institutions that can help to evaluate and monitor the state of the sector. At the same time, the DRC might be able to access additional support under the SDG framework to help establish or strengthen statistical and monitoring functions.

References

Adkins, D (2001) A report for the Japanese Association of New Business Incubation Organisations (JANBO): summary of the US incubator industry. National Business Incubation Association, Athens, USA.

Aerts, K, Matthyssens, P and Vandenbempt, K (2007) Critical role and screening practices of European business incubators. *Technovation* 27(5): 254–267. https://core.ac.uk/download/pdf/6304626.pdf

Aggarwal, SC, Erumbun, AA and Das, DK (2015) Structural changes in employment in India, 1980 to 2011. Paper prepared for presentation at the India KLEMS Conference, December 2015, Delhi School of Economics, New Delhi, India.

ARD (2003) Conflict timber: dimensions of the problem. Vol III, Africa Case Studies, ARD/USAID, Vermont, USA.

Bolin, A (2019) Yaoundé declaration: statement concerning community forestry in the Congo Basin region. IIED, London. https://pubs.iied.org/G04413

Bolin, A, Macqueen, D, Greijmans, M, Grouwels, S, Camara, K and Ndethiu, L (eds) (2018) ForBlnc. Forest-business incubation toolkit by and for forest and farm producer organisations. IIED, London. https://pubs.iied.org/13596IIED

Brahic, C (2007) 'Protected' Congo forest is logged regardless. http://bit.ly/2nPhrcd

Bruneel, J, Ratinho, T, Clarysee, B and Groen, A (2012) The evolution of business incubators: comparing demand and supply of business incubation services across different incubator generations. *Technovation* 32(2): 110–121.

Chesbrough, H (2010) Business model innovation: opportunities and barriers. *Long Range Planning* 43(2–3): 354–363.

Chesbrough, H and di Minin, A (2014) Open social innovation. In: H Chesbrough, Vanhaverbeke, W and West, J (eds). *New frontiers in open innovation*. Oxford University Press.

Counsell, S (2006) Forest governance in the Democratic Republic of Congo - An NGO perspective. FERN

Dalberg Analysis (2017) Feasibility study – Central African forest initiative incubator/accelerator – first validation workshop. Central African Forest Initiative (CAFI), Bonn.

de Wasseige, C, de Marcken, P, Bayol, N, Hiol-Hiol, F, Mayaux, PH, Desclée, B, Nasi, R, Billand, A, Defourny, P and Eba'a Atyi, R (2012) The forests of the Congo Basin – state of the forest 2010. Publications Office of the European Union, Luxembourg, www.cifor.org/library/3754

FAO (2018) The state of the world's forests 2018: forest pathways to sustainable development. www.fao.org/state-of-forests/en

FERN (2006) Forest governance in the Democratic Republic of Congo: an NGO perspective. FERN, Moreton-in-Marsh, UK. http://bit.ly/2mo1k56

Global Witness (2012) The art of logging industrially in the Congo: how loggers are abusing artisanal permits to exploit the Democratic Republic of Congo's forests. Global Witness, London. http://bit.ly/2n7zWbU

Gond, V, Dubiez, E, Boulogne, M, Gigaud, M, Péroches, A, Pennec, A, Fauvet, N and Peltier, R (2016) Forest cover and carbon stock change dynamics in the Democratic Republic of Congo: case of the wood-fuel supply basin of Kinshasa. *Bois et Forêts des Tropiques* 327 (1): 19–28.

Haltiwanger, J, Lane, J and Speltzer, J (1999) Productivity differences across employers: the roles of employer size, age, and human capital. *American Economic Review Papers and Proceedings* 89 (2): 94–98.

Jaquette, J. (2017) Women / gender and gevelopment: the growing gap between theory and practice. Studies in Comparative International Development 52:242–260

Macqueen, D (2019) Forest-business incubation : the heartbeat of healthy landscape livelihoods. IIED, London. https://pubs.iied.org/17645IIED

Macqueen, D and Bolin, A (eds) (2018) Forest-business incubation: towards sustainable forest and farm producer organisation (FFPO) businesses that ensure climate resilient landscapes. FAO and IIED. https://pubs.iied.org/13595IIED

Macqueen, D, Bose, S, Bukula, S, Kazoora, C, Ousman, S, Porro, N and Weyerhaeuser, H (2006) Working together: forest-linked small and medium enterprise associations and collective action. IIED, London. https://pubs.iied.org/14521IIED

Mayers, J (2006) Poverty reduction through commercial forestry: What evidence? What prospects? The Forest Dialogue, New Haven. https://pubs.iied.org/G02227

MEDD (2009) Rapport national synthese sur le developpement durable en Republique Democratique du Congo. http://bit.ly/2mYeJBg

MEDD (2019) Community Forest Database. https://rdc.geocfcl.org/applications/

Mian, SA (2016) Business incubation and incubator mechanisms. In: Phan, PH, Mian, SA and Lamine, W (eds). *Technology entrepreneurship and business incubation – theory, practice, lessons learned.* Imperial College Press, London.

Ministry of Planning (2011) Growth and poverty reduction strategy paper – second generation GPRSP 2. Government of DRC, Kinshasa, DRC.

Rights and Resources Initiative (15 February 2017) Poor, marginalised communities face land threats from mining, infrastructure, renewable energy – secure tenure rights urgently needed. *Business & Human Rights Resource Centre*. http://bit.ly/2o7LjRp

Shane, S (2009) Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics* 33 (2): 141–149. http://bit.ly/2IQ5CS3

Theodorakopoulos, NK, Kakabadse, N and McGowan, C (2014) What matters in business incubation? A literature review and a suggestion for situated theorising. *Journal of Small Business and Enterprise Development* 21(4): 602–622.

Wolfire, DM, Brunner, J, Sizer, N, Karr, CJ and Nielsen, D (1998) Forests and the Democratic Republic of Congo: opportunity in a time of crisis. WRI-FFI Report. http://bit.ly/2nWQnYM

World Bank (2002) Democratic Republic of Congo, Mission de Suivi Sectoriel, 17-27 April 2002. World Bank, Washington, USA.

World Bank (2019) Doing business 2019 - Training for Reform. A world Bank Flagship Report 16th Edition. World Bank, Washington, USA.

WRI (2018) Forging ahead: WRI 2017–2018 annual report. Oxford University Press, New York. http://bit.ly/2nWTvnu

Governments in the Congo Basin want to transform their economies by exploiting natural resources (including forests) and developing agribusiness and energy infrastructure at scale. But there is little evidence that this will deliver poverty reduction or protect forests. A more promising option for equitable and sustainable growth lies in the huge number of smallholder producers working on farms and in forests. Finding better ways to support them is imperative. This report assesses options for better business incubation for sustainable community forest businesses in the Democratic Republic of Congo (DRC) from improving access to forest resources, finance and markets to reducing bureaucracy and enhancing business skills and reputation.



Forests

Keywords:

Forests; community forests; Democratic Republic of Congo (DRC); natural resource management; forest-business incubation



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