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Article

Promoting Community Forestry Enterprises in National REDD+ Strategies: A Business Approach

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Abstract: Community forestry and related small and medium forest enterprises (SMFEs) can contribute towards the achievement of REDD+ goals, since they can promote sustainable use and conservation of forests and, therefore, a reduction in forest-related carbon emissions. Additionally, they can improve the quality of life of forest-dependant people by generating alternative sources of income and employment. However, SMFEs often face a number of challenges, including non-conducive policy environments, inadequate business skills, and moreover, limited access to financial services. In this paper, we propose to direct a portion of REDD+ readiness efforts towards promoting the generation of an enabling environment for SMFEs that includes: the construction of an adequate Business Environment (BE), the provision of Business Development Services (BDS) and better access to Financial Services (FS). With the application of this framework, SMFEs will be more likely to proliferate and succeed, leading to enhanced community resilience and empowerment, in addition to increasing the likelihood of forest carbon stock permanence and the long term achievement of REDD+ goals. Opportunities and challenges of applying this approach in Latin America are discussed.

Keywords: small and medium forest enterprises; enabling environment; business environment; business development services; financial services; REDD+

1. Introduction

REDD+, a proposed payment mechanism for reducing emissions from deforestation and forest degradation in developing countries, aims to provide value to standing forests as a financial incentive to reduce deforestation and forest degradation, and thus reduce greenhouse gas emissions. REDD+ can also deliver co-benefits, such as biodiversity conservation and poverty alleviation.

While the details of a REDD+ mechanism are still being negotiated under the auspices of the U.N. Framework Convention on Climate Change, some expectations concerning the general architecture of such a mechanism have been elaborated. The policy option receiving the most attention is a direct transfer payment to individual forest users to foster changes in their behavior [1], such as a payment to keep forests standing. It is expected that international payments will be channeled either through an international fund, bilateral funds, or a carbon market, or possibly a combination of these. At the national level, options for funding disbursement include: project-to-project, either a separate REDD+ fund or one administered by the state, or through specific budget support [2]. It is also expected that national governments will play a central role in the success of REDD+, and as such several governments are elaborating national strategies to prepare for implementation of such a mechanism. The national-level approach is seen as necessary to carry out overall coordination [2], help avoid leakage, ensure permanence, provide reliable monitoring, reporting and verification (MRV) of emissions reductions [3], and ultimately ensure a reduction in carbon emissions in an equitable, efficient and effective way [4].

Several countries have begun engaging in "REDD+ readiness" activities, to prepare for the implementation of a national REDD+ strategy. Readiness activities planned or currently being undertaken in Asia, Africa and Latin America (reviewed in [5]) include, *inter alia*: reforming land tenure systems; stakeholder participation in planning processes; governance development, such as revising polices, strengthening regulatory frameworks, and enhancing monitoring and enforcement; designing MRV systems; enhancing institutional transparency; and promoting production forests through sustainable forest management, certification, and community forestry.

It has been noted that engagement and meaningful participation of local communities and indigenous peoples will be a central activity of REDD+ readiness programs [2,6,7]. Communities and other local stakeholders are expected to be part of national level consultations on creating a national REDD+ strategy and are also contemplated to be one group of beneficiaries of REDD+ payments [8]. Incorporating communities in a REDD+ strategy can also reduce costs for enforcement and monitoring [6]. But for REDD+ to succeed, local communities and smallholders will likely need to be involved in more than just consultations or a monitoring and enforcement capacity. As stated by Boscolo *et al*. ([9], p. 3): "Forests will be maintained and respected only if the proposed forest-based solutions enhance people's livelihoods."

Some Latin American countries participating in the UN-REDD Program and FCPF have, as part of their strategies, the intention of promoting community and smallholder forestry. Argentina plans to design a framework to provide incentives for sustainable productive activities of small and medium farmers and indigenous people and local community associations. Costa Rica plans to start a program to promote commercial reforestation and sustainable management of natural forests, mainly targeting small owners and community-managed forests in indigenous territories. Both Costa Rica and Mexico aim to develop added value forestry-related projects at the community level. Panama has begun to

develop micro-enterprises and cooperatives managed by small farmers and indigenous communities based on environmental services in and around protected areas, and plans on using REDD+ funding for investing in participatory mechanisms for the transfer and distribution of resources and relevant information to community businesses (see national Readiness Preparation Proposals—http://www.forestcarbonpartnership.org—and National Programs—http://www.un-redd.org—for more details).

However, several issues with proposed REDD+ mechanisms have been pointed out as potentially constraining to communities. The necessity of such a principal role for national governments has brought criticism of the possibility of recentralizing forest governance, reversing a promising trend of decentralization in several countries and shifting authority from the local forest user [3], which in many cases in Latin America is already tenuous [10]. Gregersen *et al.* [11] point out the difficulties involved in calculating fair payments under uncertain tenure regimes. If the mechanism were to rely on a carbon market, volatility in carbon prices can cause fluctuations and uncertainty in cash flow to communities [6], while sustaining long-term multilateral funding is still an issue to be addressed [12]; this leaves permanence of carbon stocks in question. Benneker and McCall [13] question locking communities in Mexico into long-term contracts, which can threaten property or user rights and decision-making power. They also note that international carbon markets could lead to uneven power relations between local sellers and external buyers.

One way to more fairly engage local communities while achieving REDD+ goals can be to invest in systems that aim for sustainable livelihoods of forest-dependent people. Community forestry, which we use here to broadly mean locally controlled forestry, such as smallholder forest management and community owned/managed forests, can be one such system. In Latin America and beyond, community forestry and related forest-based enterprises have shown to reduce deforestation, increase carbon stock, enhance sustainable management of forested landscapes, and reduce rural poverty while delivering sustainable livelihoods [14-18], indicating that community forestry can also fulfill the objectives of REDD+. It is estimated that 33% of Latin American forests are currently owned or managed by local communities and indigenous peoples [19], including 25% of the Amazon under indigenous control [20], making community forestry an important component of any REDD+ strategy in the region.

However, community and small-scale forestry still face a number of challenges and constraints. These include limited access to markets [16], insecure tenure and unrecognized traditional rights [15,21,22], adverse policy and regulatory environments [18], low productivity of community forest enterprises and their financial viability [23,24], inadequate organizational capacity [25], and limited access to technical know-how [18,26]. Communities struggle with both initiating community forest enterprises and maintaining them [27], with many initiatives failing once funding and/or support from the outside interventionist are discontinued [24].

Cronkleton *et al*. [28] advocate that as part of REDD+ policy, existing community forestry should be reinforced, and expanded into areas where it does not yet exist. They highlight the need for securing property rights and strengthening local governance and institutions as essential for promoting community forest management. Here, we complement that view by proposing that sustainable forest-based enterprises run by communities and smallholders should be promoted as an integral component of national REDD+ readiness strategies, to ensure long-term achievement of REDD+ goals.

2. Proposed Mechanism for Promoting Small and Medium Forest Enterprises within National REDD+ Strategies Using a Business Approach

Small and medium forest enterprises (SMFEs), including community and individually owned forest enterprises, are business operations aimed at making profit from forest-linked activities. They can produce a great variety of products based on timber and non-timber forest products, and they can even trade in ecosystem services like tourism and carbon [29-31]. SMFEs can contribute towards the achievement of REDD+ goals through the conservation and sustainable use of forests, while improving the livelihoods of local populations. Thus we propose to use a portion of REDD+ readiness efforts to promote the generation of an enabling environment that can increase the likelihood of these enterprises to develop, grow and succeed. The new framework we propose here applies a business approach to promoting such enterprises.

A proper enabling environment for SMFEs usually requires a combination of three main factors: the construction of an adequate Business Environment (BE), the provision of Business Development Services (BDS) and access to Financial Services (FS) [30,32]. These factors and the processes that could facilitate their integration into national REDD+ readiness strategies are briefly explained in the following paragraphs.

2.1. Factor 1: Building an Enabling Business Environment

The BE of a country is shaped by the attitudes and beliefs of citizens towards the role of the state, markets, entrepreneurship, among others [30,33]. It is mainly comprised of the legal and regulatory framework, the set of macroeconomic policies, the governance level and the institutional structure, all of which influence the performance of a business. A number of international development and donor agencies use this term to describe the broad range of external elements that influence businesses [33]. Beck and Demirgüc-Kunt [34] highlight contract enforcement, clear property rights and low entry as well as exit costs for companies, as very important aspects of the BE. Boscolo *et al*. [9] note that it is crucial to have an enabling environment for the provision of financing at the national, regional and local levels.

Macqueen [30] states that the BE in many countries is often "stacked against SMFEs." SMFEs commonly take place in non-favorable policy environments [18] with excessive state bureaucracy and regulations [30]. In some circumstances, they have to deal with great uncertainty over their access to raw materials, since they lack clear and secure ownership over forest resources [35,36]. A great number of SMFEs carry out their operations within the informal sector [29,37] and in some contexts, forest regulations even prioritize large scale operators [31,32,38].

Many of the aspects mentioned above, especially issues of governance in the forest sector, land tenure reform and commercial rights over forest resources, are already being incorporated in current REDD+ readiness discussions [5,39,40]. However, building an enabling BE for SMFEs will require an additional effort to the one that will already be invested for the implementation of REDD+. Macqueen [30] states that BE reform includes aspects such as: equitable taxes among actors; transparent and accountable systems based on rules instead of favors; enhancement of judicial systems; enforcement of regulations; promotion of trade and exports; and development of appropriate policies by first evaluating their potential impacts. Macqueen further highlights the role of different actors in

promoting and leading change, and stresses the importance of inter-agency cooperation [30]. Additionally, it is essential that overly burdensome regulations that constrain and even criminalize SMFEs and community forest operations [27,38] be revised [1,18].

While an appropriate BE is being put in place, support for SMFEs to carry out their operations will also be needed. This can be aided with the delivery of Business Development Services.

2.2. Factor 2: Provision of Business Development Services

BDS are all the range of non-financial services that support enterprises in various areas like marketing, skills development, product design, technology access, planning, accountancy, legal services and effective management, among others [30,41]. They are intended to improve operations and reinforce business competitiveness [42]. There are many aspects of BDS that are common to most businesses like accountancy, management and planning; however, there are other aspects that can be specific to each type of SMFE. For example, the technical skills required to run a furniture enterprise are different than the ones required to manage a beekeeping business, or to the ones required for carbon trading. BDS can be targeted differently depending on the technicalities of each type of enterprise; but also, communities may receive an extensive training in different technical skills since they could be operating various SMFEs within the same locality.

Forest-based enterprises frequently face constraints related to their business performance. They often have managerial weaknesses, suffer from a lack of internal organization and do not have adequate entrepreneurial abilities [29,43]. In addition, they regularly have poor market information, low negotiating power, deficient business expertise and low technological skills [44]. BDS may support SMFEs to access appropriate technologies, design better products and to increase their efficiency, among other benefits.

The provision of BDS can be incorporated into REDD+ readiness strategies through national capacity building schemes. Depending on the institutional framework and current capacities of each country, BDS can be provided by governmental or non-governmental institutions, or through a BDS market. A government-driven approach involves government institutions offering BDS directly, through the creation of new capacity-building organizations or strengthening the ones already existing. Another approach would be to establish partnerships between government and other institutions such as non-governmental organizations (NGOs), universities, technical institutes, field schools, research organizations, training centers, advisory institutions and the private sector in general, who may have the expertise required to act as effective intermediaries in the delivery of services to forest-based communities. Finally, a last approach for improving the offer of BDS to SMFEs is through the generation of a well-functioning BDS market, driven by supply and demand. According to Macqueen [30], the development of a BDS market can be promoted by improving the availability and flow of information between customers and suppliers, and through the generation of clusters of SMFEs that could justify the development of a specific service for them. Each of the approaches mentioned above does not necessarily have to operate independently and a combination of these may be possible.

One example of how capacity building activities can be implemented is the Market Analysis and Development (MA&D) methodology, a tool designed by the Food and Agriculture Organization of the United Nations (FAO) to assist communities in planning tree and forest product enterprises. The main strength of this framework is the methodical consideration of environmental and social concerns, while

still taking into account issues related to the financial, commercial and technological aspects of forest products [45]. The MA&D is put into practice in three consecutive stages: (1) Assessing the existing situation, where forest resources are assessed as well as their commercial potential; (2) Identifying products, markets and means of marketing; and (3) Planning enterprises for sustainable development. This methodology takes into account four aspects of sustainability which are: social/institutional, environmental, market and technological. The MA&D has been implemented in many countries. In Colombia, the MA&D approach helped communities in three pilot areas to prepare business plans, develop enterprises based on local biodiversity products and establish strategic financial and technical alliances [46]. In the Gambia, a four-year pilot phase of this process resulted in 26 communities using this methodology and developing 72 community-based enterprises that effectively marketed 11 different products [45,47,48]. The success of the process is evidenced in that the MA&D has been incorporated into the Community Forestry Implementing Guidelines of the Gambia, since it is considered by the Forestry Department an essential step in the community forestry process. It is important to mention, that a key actor in the implementation of this methodology has been a local NGO, the National Consultancy on Forestry Extension Services of the Gambia, which supports the Forestry Department in training and capacity building activities with communities.

The provision of BDS for forest-based enterprises can improve their performance and competitiveness, thus increasing their likelihood of success. However, this may not be a sufficient condition for ensuring their continued existence and upgrading, since SMFEs usually require financial services as well.

2.3. Factor 3: Access to Financial Services

FS not only include the provision of credit, they also involve insurance, savings and money transfers, among others. FS can be offered by formal and informal institutions. Private and public banks are typically the most formal, but less formal organizations usually include financial cooperatives, NGOs, and non-bank financial institutions [49]. Enterprises usually require FS for starting-up and running their operations [29,32], but are equally or even more essential for their growth and upgrade [30].

A deficient access to credit and the shortage of finance is commonly cited as the principal obstacle facing SMFEs [29,43,44]. It can be challenging and costly for FS providers to reach out to SMFEs, since these are frequently isolated in rural areas and they are perceived to be involved in high risk activities [43]. In addition, some of these enterprises have difficulties in providing collateral, which is often a requirement for accessing credit [50]. Spantigati and Springfors [43] suggest that the constraints SMFEs face for accessing FS may be a symptom of other difficulties, such as lack of internal organization or business skills, rather than a problem of access.

With the aim of promoting both the creation of new SMFEs and the maintenance of existing ones, national REDD+ readiness strategies can include the promotion of a more effective delivery of FS to forest-based communities. Governments, through the national budget or supported by international organizations, can develop microfinance projects with credit lines targeted for financing SMFEs. These credit lines can be channeled through public financial institutions, microfinance organizations, financial cooperatives or rural banks that have expertise with rural communities and have support systems already in place. Governments can also offer non-financial support through the generation of

an adequate environment that allows microfinance institutions to develop and extend their outreach to forest-based communities. According to Spantigati and Springfors [43], this can be done through the establishment of a policy framework conducive for microfinance; supporting the development of effective microfinance institutions; offering an adequate market infrastructure; providing SMFEs with the necessary skills for sound financial and business management and by securing clear land tenure rights for rural communities. An effective provision of FS to rurally-based communities may also be strategic for the implementation of REDD+ projects, since it could allow governments, international donors and carbon traders to use these already established networks for delivering payments, thus reducing transaction costs.

Community forest enterprises in El Petén, Guatemala, were successful in accessing FS from commercial banks, mainly due to the presence of a clear legal framework and the support structure that was in place. Junkin [51] explains that commercial banks were encouraged to offer their services due to the fact that communities had clear and secure commercial rights over forest concessions and also because they had been provided with technical and business training for their enterprises. Banks were effective at reducing transaction costs by lending to associations of producers instead of individual enterprises and they diversified their risk by expanding their loan portfolio to other regions of the country. With an adequate provision of FS, these enterprises were able to increase their cash flow and invest more in growing opportunities, and they additionally acquired greater bargaining power [51].

2.4. Different Approaches for Provision of BDS and FS

Delivery of BDS and FS can be done through direct provision by governments or donors, or through a market-based approach. Altenburg and Stamm [42] discuss the possibilities of a paradigm for BDS that moves away from a donor-based, highly subsidized traditional system to one that is guided by market forces and is privately-run. In general, the traditional, donor-driven approach has been criticized due to its lack of financial sustainability, limited outreach, low quality and poor business orientation. It has been argued that a market-based system can improve the quality and outreach of BDS [32]. However, some limitations of this paradigm have been identified, namely, that its development can be slow and difficult, the transition may not always be politically viable and it may be more effective to reform existing public service providers than replace them with private ones [42].

Regarding FS, Macqueen [30] also emphasizes the shift from a direct provision of services to the generation of a well-functioning market. Highly subsidized government programs distort the microfinance market and alter client expectations [52] usually impacting the more sound and sustainable private providers [30]. Governments, through the provision of an adequate regulatory framework, can play an important role in the promotion of viable microfinance models and the downscaling of banks, therefore increasing the delivery of services and reducing costs [53]. Spantigati and Springfors [43] also highlight the importance of not imposing ceilings to interest rates and not offering highly-subsidized, unsustainable credit programs. They state that globally, subsidized rural credit programs often have default rates of over 50%. In many countries, market-based approaches that work with independent and sustainable providers are on the rise. For example, during the last two decades, a number of microfinance institutions in Latin America have become fully sustainable [54].

Ultimately, the choice to apply one model over the other and the transition into a different paradigm depends on the capacities, political situation and economic context of each country.

3. Discussion

Countries will be considered ready to receive payments once they have successfully completed readiness activities, at which point it is assumed that forest and land tenure have been clarified, necessary policies have been revised, and an MRV system has been implemented, among other requirements. At such a point, REDD+ payments can begin to be made for forest conservation and management. In order to illustrate the benefits of our proposed model, we present two possible REDD+ implementation scenarios related to forest-based communities, once countries are ready to receive payments. The first scenario consists of a conventional model of readiness activities that has not included promoting an enabling environment for SMFEs and is instead mainly focused on carbon payments as a means for forest conservation. This scenario has been modeled after current REDD+ pilot activities already being undertaken in Latin America [for a review of existing and planned pilot initiatives in Latin America, see [55]. In contrast, the second demonstrates the potential benefits of incorporating the promotion of an enabling environment for SMFEs into national REDD+ strategies, as proposed in this paper. The two models can contribute toward REDD+ objectives; however, the second model may have a higher degree of certainty over the permanent achievement of these objectives.

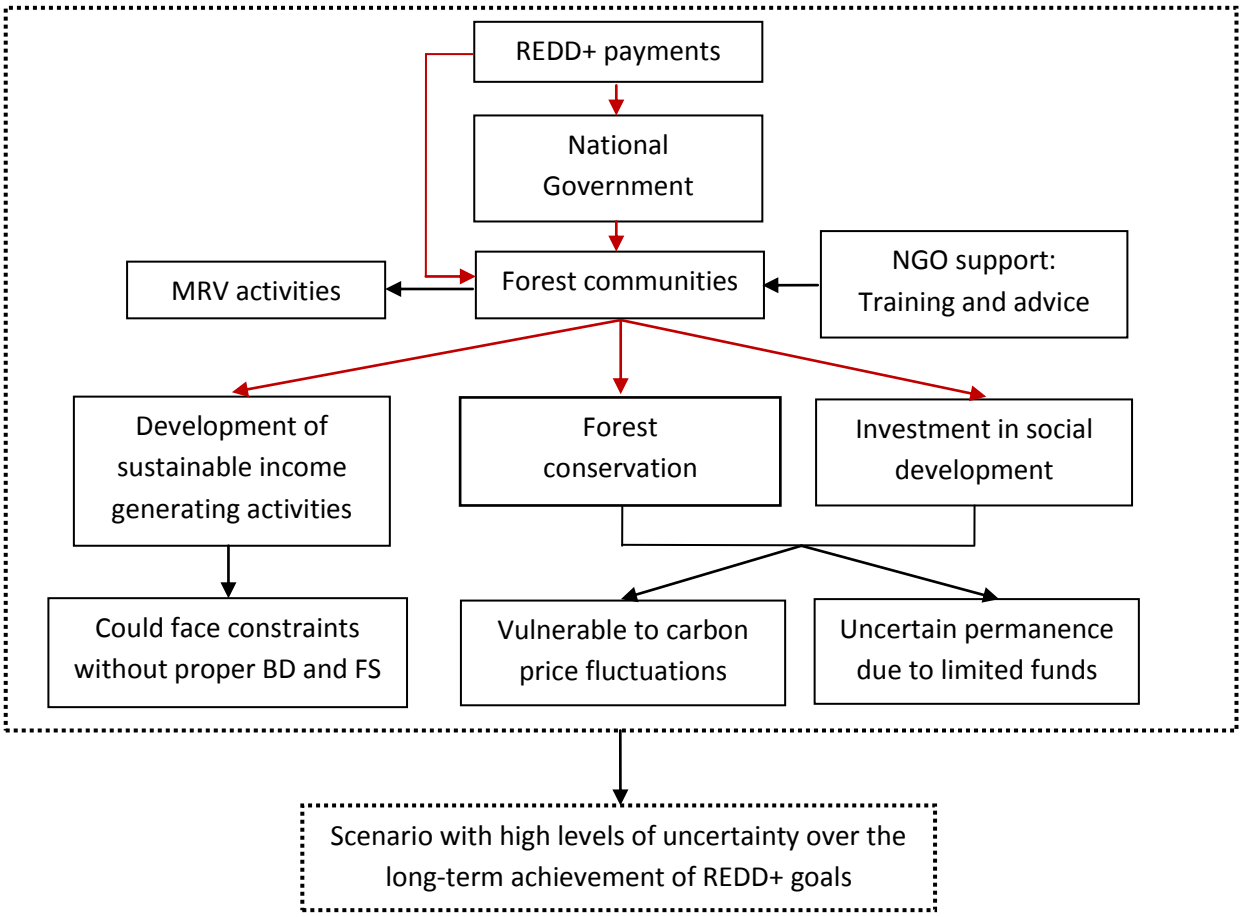
3.1. Possible Scenario 1: Conventional REDD+ Implementation

In Scenario 1 (Figure 1), payments will likely be delivered through national or local governments, or in a direct/semi-direct transaction between donors/users and forest-based communities. For example, in Ecuador's Socio Bosque Program, an incentive-based policy implemented by the national government in 2008 to provide economic incentives to land owners who voluntarily decide to protect their forest, the national government pays individual landowners or indigenous communities per hectare of forest protected voluntarily [55]. In other cases, local governments have teamed up with NGOs and/or private investors for delivery of payments for forest conservation or, in some cases, sale of carbon credits to the private sector [55]. In many cases, communities are assisted by an NGO, such as the Amazonas Sustainable Foundation in the Juma Sustainable Development Reserve, Brazil, who advises and trains them in the skills they will need to participate in carbon trading, such as: monitoring, accountancy, legislation, financial management, among others. In the Brazilian pilot studies in Juma and Surui, once communities receive the financial incentives from REDD+ they are distributed for: the conservation of the forest, developing alternative, sustainable income-generating activities and executing social programs for the community [56].

In this scenario, the conservation of the forest and therefore the reduction in emissions are mainly dependent on the continuous flow of REDD+ payments that communities receive for avoiding deforestation. Consequently, communities as well as forests are vulnerable to carbon price fluctuations or to the availability of funds for REDD+ projects, both aspects that could generate high levels of uncertainty over the long-term achievement of REDD+ goals. It is important to point out that sustainable income-generating activities may act as a safeguard in a low-carbon price or in a

no-payment situation; however, these activities may not endure if appropriate business development and financial services are not provided to them.

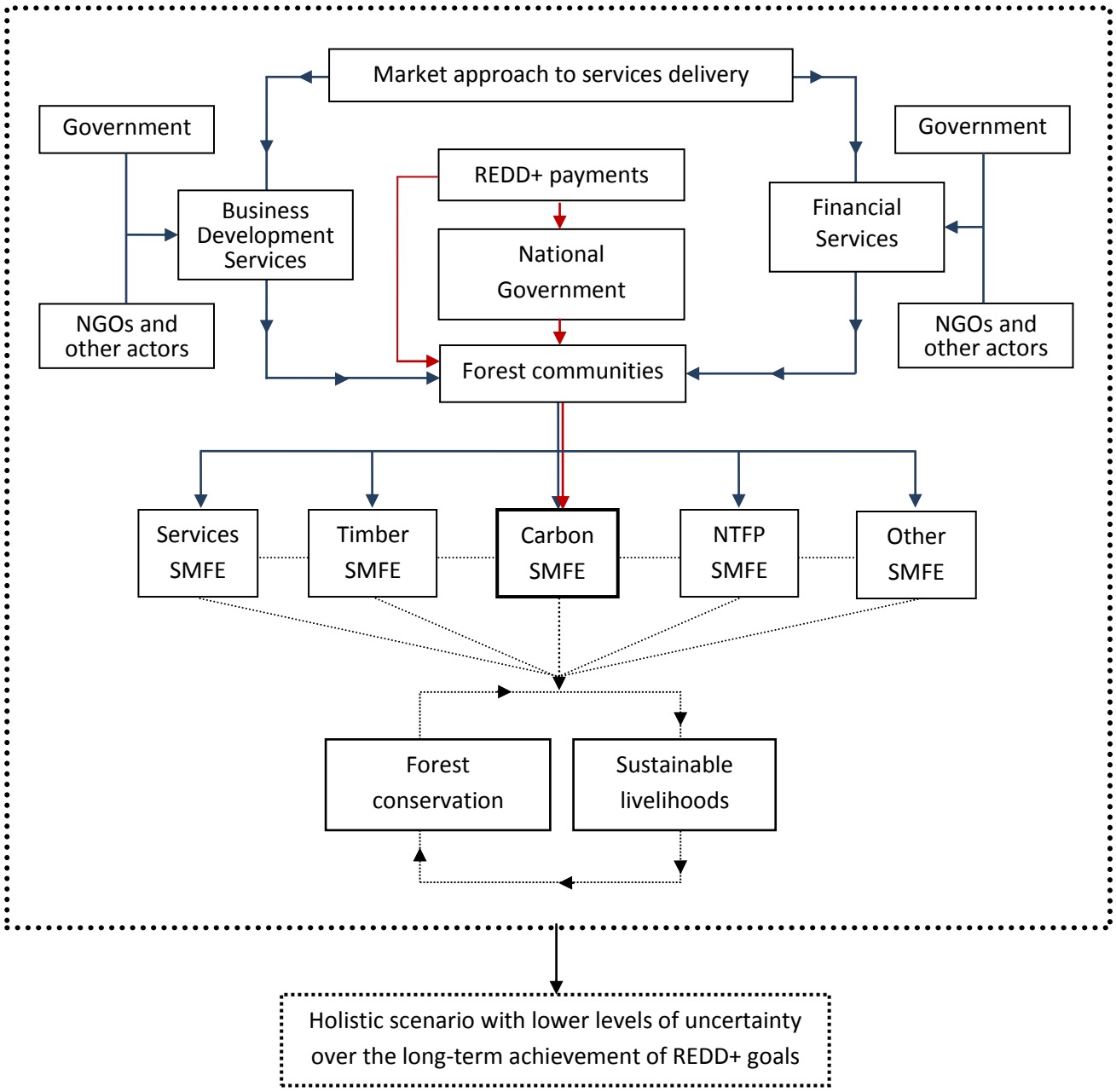
Figure 1. Possible Scenario 1—the conventional model.



3.2. Possible Scenario 2: New Proposal for REDD+ Implementation Incorporating Enhancement of an Enabling Environment for SMFEs

In Scenario 2 (Figure 2), before delivering REDD+ payments and as part of REDD+ readiness activities, we assume that communities have been provided with BDS that promote the generation of sustainable enterprises based on the forest; and they have also been supplied with financial services that allow them to start-up, run and possibly upgrade their businesses. The generation of these income-generating activities can be very diverse depending on the resources, capacities and motivations of each community (*i.e.*, furniture, mushrooms, ecotourism, *etc.*). In the case of attaining the generation of a well-functioning market for services delivery, the provision of these services could be continuous and self-sustained.

Figure 2. Possible Scenario 2—the proposed new model, with a business approach to promoting SMFEs.



Similar to Scenario 1, payments can be delivered through national governments or in direct/semi-direct transactions. Once communities receive REDD+ funds, they will have the capacity to generate a carbon SMFE, whose main task will be to carry out negotiations, assure the long-term maintenance of the forest, execute monitoring activities to measure the stored carbon and manage administrative/financial issues, among others. This carbon SMFE will be one enterprise among others that could be operating within a community, since an enabling environment for SMFEs has already been developed. REDD+ payments can also be used as seed capital for other SMFEs, in addition to the new access that communities have to financial services. All of these income-generating activities can act as interconnected units that mainly depend on ecosystem well-being for their long-term profitability and subsistence. Consequently, they are likely to promote the conservation and sustainable use of the forest, while generating revenues for the development of the community and its inhabitants.

Scenario 2 could reduce the uncertainty and impact of low-carbon prices and/or potential termination of payments, since the interconnected units of SMFEs may act as a buffer that can absorb the shock of income fluctuations. This means that if the carbon SMFE is not viable due to any of the above reasons, communities and therefore the forest, its biodiversity and stored carbon, will still be ensured, and REDD+ goals achieved.

3.3. Opportunities and Challenges of Implementing the Proposed Business Approach in Latin America

Depending on the country or on the specific regions within a country, the proposed business approach will face different opportunities and difficulties in its implementation. However, the Business Environment and the provision of Business Development and Financial Services required for enterprise development are already in place to some extent in Latin America.

The environment for doing business in the great majority of Latin American countries has improved since 2005. According to a study, measuring the ease of doing business in 183 countries around the world [57], considering aspects such as ease of starting and exiting a business, taxes, construction permits, credit access and enforcing contracts, Mexico, Peru and Colombia rank at the top in Latin America and 35th, 36th and 39th globally. However, some of the most difficult economies in which to do business are Suriname and Venezuela, ranking 161st and 172nd, respectively. Mexico and Peru have increased their scores related to the ease with which a business can be started; yet, Mexico still faces challenges regarding taxes and the administrative burdens involved with these, and Peru faces difficulties associated with the enforcement of contracts. A study like this that evaluates the region's business environment may help to forecast which countries could be better prepared to implement the model proposed here (Scenario 2) and identify which areas still require improvement. However, for SMFEs and REDD+ implementation to succeed, other factors should also be considered, such as: transparency, security, governance, land tenure and clear commercial rights, among others (governance in Latin America in relation to REDD+ implementation is discussed further in [39]]. While the region has been a global leader in decentralization of forest governance with the creation of many indigenous territories and reserves for local communities, much remains to be done in terms of clarifying land tenure in areas such as the Brazilian Amazon, and in transferring effective powers for forest resource commercialization to local communities [10,58]. A country's BE is continuously being constructed, so investing effort in improving the overall environment for SMFE development will likely be constant yet variable depending on the country's situation.

The provision of Business Development Services (BDS) in Latin America has been traditionally dominated by donor-driven, highly-subsidised approaches, which have discouraged private investment as well as distorted potential markets for the delivery of these services [59]. However, in the last decade there has been a slight transition away from a direct provision towards the generation of a more demand-driven market approach where governments and donors act more as facilitators rather than as direct players [41]. Today, public, private and non-profit BDS providers are found in many countries throughout Latin America, such as INA and CEGESTI in Costa Rica, SENA and Fundación Carvajal in Colombia, IDEPRO in Bolivia, FINCA in Peru, INSOTEC in Ecuador and SBA in Mexico. For instance in Peru, the government encouraged the generation of private business development centres that offer specific services according to the markets they serve [59]. De Ruijter de Wildt [60] reports that the BDS market in Bolivia is mainly dominated by NGOs and foundations. For the most part,

BDS institutions in Latin America offer business and technical training to improve competitiveness, and some of them offer credit as well. While BDS are present in Latin America, these services do not always reach forest-based communities and related enterprises. Pacheco and Paudel [61] describe the case of two SMFEs in Nicaragua and Bolivia that enhanced their capacities to compete in markets possibly due to the intervention of international NGOs; however, the authors question the real competitiveness of these businesses without this external support. Various SMFEs in the region face a similar challenge of being overly reliant on projects and external aid [24]. A sustainable provision of high-quality BDS is imperative to reduce this over-dependence. Governments could promote the generation of business development centres that specifically target SMFEs, or they could use already established BDS providers to develop specialized divisions directed to forest-based enterprises.

The enabling environment for microfinance in Latin America is quite well developed. In a study of 54 nations globally, which looked at regulatory framework, investment climate and institutional development, the region scored very highly, with five countries in the top ten spots [52]: Bolivia, El Salvador, Ecuador, Colombia and Peru, with the latter being the global leader in microfinance. Venezuela, however, is ranked last. Eight countries in the region occupied a spot in the top-ten ranking for level of institutional development, which is measured by the range of services offered, competition and credit agencies. However, few countries scored well in the regulatory framework index, with only three from the region scoring in the top ten. Christen and Miller [54] describe the challenges still facing microfinance in Latin America, such as: extending and deepening its outreach to rural and poorer areas; increasing its services besides the offer of credit; and achieving these tasks while remaining competitive. Despite the progress achieved in the region, demand still exceeds supply, leaving many people unattended [62]. For instance, Spantigati and Springfors [43] explain that isolation was one of the main factors that impeded Brazil nut harvesters from accessing microfinance in Madre de Dios Department in Peru. Countries with a well-developed environment for microfinance may still have remote and low density areas unable to access these services. One way of achieving a more effective delivery of BDS and FS can be through the generation of clusters of producers, which can be strategic for attracting more providers and reducing transaction costs at the same time. Governments and external agencies could play a central role in promoting FS providers in Latin America to keep expanding their outreach to more rural and isolated communities, through the generation of specific credit lines for SMFEs. These could be delivered through existing public banks or through the network of microfinance institutions that already exist in the region.

Many of the factors required for enterprise development are already in place to some extent in Latin America. However, for successful implementation of the proposed business approach (Scenario 2), further investment will be needed to support and promote SMFEs specifically. Countries in Latin America are at different stages in developing the necessary Business Environment, Business Development Services and Financial Services for enterprise development, and thus national implementation strategies will need to vary accordingly.

4. Conclusions

Both the conventional (Scenario 1) and proposed (Scenario 2) approaches aim to support community participation and ensure that the local forest owner benefits from a REDD+ financial mechanism, as advocated by many as an essential component for successful forest

conservation [6,9,28]. Both will require improvements in the enabling environment, including tenure security, law enforcement, and appropriate forest regulations. However, by providing an appropriate environment for SMFEs to develop, which includes training in business skills and the creation of a nurturing environment for the proliferation of financial services, which can better target rural smallholders and communities, the second approach has many additional advantages.

Empowerment: Developing local forest-related enterprises has the added advantage of empowering communities to be actively involved in forest management. Providing them with business skills can help in managing enterprises based on direct payments for carbon, should future carbon payments follow that model, and enhance their negotiating power and bargaining position when making carbon contracts, thus reducing their reliance on outside interventionists and providing for more balanced power relations. This approach of nurturing forest-related enterprises can help to quell the possibility that REDD+ will recentralize forest management [3]: using REDD+ funds to enable community forestry, and providing communities with management options, puts the decision-making power back into the hands of the community and involves them in more than just a monitoring and enforcement capacity—they become active participants and decision-makers. This is key to ensuring legitimacy, effectiveness, efficiency and equity of REDD+ [6,63].

Diversification: This business approach to promoting community involvement in REDD+ avoids the pitfall of leaving communities overly reliant on one commodity: carbon. In Figure 1, if the arrow depicting REDD+ payments is discontinued for any reason or at any time, the system will stop and the communities will no longer have an income source that incentivizes forest conservation. However, in Figure 2, if REDD+ payments are discontinued, communities will still have access to other financing services, and will have other, non-carbon SMFEs to rely on. Communities can be especially vulnerable to carbon price volatility [6], and having a diversity of SMFEs within a community can increase resilience to this volatility by diversifying the community's forest-based income source. Communities such as Ixtlán de Juarez and Santa Catarina de Ixtepeji in Oaxaca, Mexico, run several forest-related enterprises (timber, eco-tourism, furniture making and water bottling plants, among others [18]), allowing them to not only have more flexibility in the use of different forest areas, but they are also able to float profits from one enterprise to support other less profitable enterprises or develop new ones [64]. This keeps more community members employed locally in forest-related enterprises, and provides a greater incentive to remain in the community and conserve the forest.

Permanence: Having a diversity of enterprises also increases the possibility of permanence of carbon stocks. With other benefits coming from the standing forest, there is less incentive to clear the forest should carbon prices drop, or should carbon payments eventually stop.

Moving away from a project-by-project approach: Community forestry projects often fail when project funding ends, often due to the inability of projects to holistically address challenges to initiating and maintaining SMFEs. Whether these challenges are regulatory barriers that unevenly discriminate against communities and smallholders, or lack of business acumen and entrepreneurship, this is an opportune time for making necessary reforms in forest-related and financial institutions that will make it easier for smallholders and communities to enter and exit forest markets. The reforms suggested here do just this by providing the necessary environment, skills and services, making communities less reliant on project funds. This is more likely to become a self-sustained system, especially if a market-based approach for services delivery is attained.

Incorporation of other forest values: Forests generate a variety of benefits for the communities inhabiting these ecosystems as well as for the populations living at farther distances. They are valuable in different ways to different people; forests are not only timber and certainly not only carbon. The approach promoted here incorporates different forest values besides carbon, since it looks more holistically at the multiple benefits communities can obtain from the forest.

Even though this new proposal may present several apparent benefits, building the necessary environment to nurture SMFEs may not be a quick and easy task and it will highly depend on the circumstances of each country. For example, Macqueen [30] mentions that achieving a well functioning market for BDS and FS may be challenging, especially in nations with weaker economies. In some cases, it can take years to implement such an approach successfully, and years to develop the appropriate BDS and FS markets. Furthermore, for this model to work, collaboration and combined action among different levels of government and different stakeholders will probably be required [32], just as it would for other REDD+ mechanisms [65]. It is unclear if donors would be willing to invest in readiness activities where the effects would perhaps not be noticeable or directly measurable for many years to come. Given the amount of international attention given to REDD+, donors may also be reluctant to invest in a system that can be interpreted as a "back-up plan" in case a carbon payment system malfunctions or fails altogether. However, this business approach can be seen as a long-term strategy to sustaining livelihoods based on standing forests: it can empower and engage communities more meaningfully in a carbon market, but without the perpetual need for subsidization of conservation. With this approach, permanence of carbon stocks on community lands, beyond a 10 or 20 year payment schedule, is more likely.

An important caveat to keep in mind is that a business approach cannot be indiscriminately applied; it will not work in all situations, and there is not a one-size-fits-all formula to enabling community forestry [6], since forest-dependant people and communities vary greatly according to each context [9]. Business approaches at the national level will have to be tailored to national circumstances, and similarly so at the sub-national or local level. But by providing the right environment, communities have various options in deciding which SMFEs are best for them and their circumstances.

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