

## Community forestry in the Amazon: The unsolved challenge of forests and the poor

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**I**n the Amazon region, efforts to put Community Forestry into practice have achieved only modest results. The international research project ForLive, analysing experiences in Peru, Bolivia, Ecuador and Brazil, revealed that considerable external resources are needed to overcome the technical, legal and financial barriers inherent in the current community forestry framework. As a consequence no spontaneous adoption takes place. To enable smallholders in effectively using their forests, there is an urgent need to revise this framework. Alternatives should start from existing locally developed practices with emphasis on education and extension. Larger areas of public forests should also be provided to communities, as, with appropriate investments in training, infrastructure and equipment, they have shown themselves able to effectively meet social, economic and environmental goals. Policy needs to distinguish more clearly between these goals. Improved social development skills are needed to support innovation and dissemination of locally appropriate practices and to strengthen local capacity for regulation and control.

### Policy conclusions

- The effective use of Amazonian forests can contribute to sustainable rural development, but the current community forestry-based framework is inappropriate.
- Under the framework, it is virtually impossible for communities to engage in legally recognised forest management activities without considerable external support to overcome technical, legal and financial barriers.
- Although in theory it is attractive to combine environmental, social and economic development objectives under community forestry, there is a need to clearly define separate policy objectives and to generate coherent policy instruments for these.
- The prevailing system of administration of forest resources by centralised state organisations using command and control is inappropriate for community forestry where the wide variations in socio-economic and environmental contexts make it impossible for the State to develop and apply appropriate regulations.
- A more appropriate legal and institutional framework would systematically explore existing possibilities for adapting to local realities and capacities of Amazonian communities. It is necessary to strengthen existing institutions with appropriate social development skills to enable innovation and dissemination of locally appropriate practices, as well as the local capacity for regulation and control.



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### Introduction

In the Amazon region, Community Forestry<sup>1</sup> (CF) has been seen as one of the most promising options to resolve the dilemma of how to combine forest conservation with rural development and poverty reduction objectives. Now, 15 years after Rio is an appropriate time for re-assessment. This paper draws on case studies from Bolivia, Brazil, Ecuador and Peru under the ForLive project (see Box 1). It argues that CF in the Amazon region has not met expectations and has been applied only by a limited number of externally supported pilot projects. The paper

recommends how more effective support can be provided to small farmers and communities in using forests to improve rural livelihoods.

### The Community forestry framework

The framework argues that in order to conserve forests it is necessary to provide financial incentives through the generation of income and that forest management is a means of achieving this. Since the Rio summit, in 1992, it became increasingly clear that reliance on commercial enterprises – considered to be the only actors with the financial and technical capacity for

**Box 1: The ForLive research project**

Forest management by small farmers in the Amazon – an opportunity to enhance forest ecosystem stability and rural livelihoods – *ForLive* is a research consortium of nine South American and European universities and NGOs in partnership with smallholders and communities from Bolivia, Brazil, Ecuador and Peru. *ForLive* identifies locally viable options for forest use contributing to local livelihoods and to define possibilities to promote these as a basis for sustainable development in rural areas of the Amazon. *ForLive* identified nearly 150 promising cases of CF management initiatives, from which a total of sixteen cases have been selected as a basis for more intensive research with the direct involvement of small farmers and the communities.

(see: <http://www.waldbau.uni-freiburg.de/forlive/Project.html>)

appropriate forest management – was not working. Wider social issues were seen as increasingly important, and around this time diverse social movements comprising indigenous people, rubber tappers and small farmers began to demand legal rights of access to traditional lands and forest resources. This paved the way for changes in policy and legislation.

Numerous development initiatives have invested in the promotion of what has become known generically as CF. This approach was strongly influenced by the model for Sustainable Forest Management (SFM) initially developed for commercial logging companies. This framework focuses on commercial logging of timber by the application of practices for Reduced Impact Logging (RIL), with the expectation of accessing the financially attractive international markets including via Forestry Stewardship Council (FSC) accredited certification and are subject to a rigid set of regulations and norms established as a basis for effective control (Kaimowitz 2003).

**Implementing Community Forestry**

CF has been implemented through two principal lines of action: (1) the establishment of a legal and institutional framework, including the revision of legal norms and regulations for forest management, the development of National Forest Plans, the strengthening of governmental environment agencies, and decentralisation processes to sub-national levels of government, and (2) pilot projects to demonstrate the feasibility of the CF framework.

The pilot projects, supported by donors and NGOs, initially concentrated on the training of local people in SFM practices and investments in equipment and transport. Foresters were generally contracted to draw up the management plan and obtain legal authorisation. Due to the complex tenure situation, many CF projects spend time obtaining the formal land tenure documents required by law. Attempts to add value by processing raw material have rarely achieved the intended effects. In some cases, professionals have also taken over the marketing of forest products for the communities, with FSC certification intended to achieve better prices on international markets. However, since the general requirements of certification largely follow those of national forestry legislation, communities have generally had problems firstly establishing and then maintaining certification status.

Generally, external support has proven necessary to enable communities to comply with CF technical and legal requirements established under the revised legal conditions. Considerable effort has been invested in the development of management capacity and community organisation. But to simplify management, many communities have started to contract out the technically more complex and costly activities such as skidding, installation of infrastructure, loading and transport. When external support has come to an end, in extreme cases, communities have simply

contracted and supervised commercial enterprises to log their forests. Paradoxically, this is very similar to communities' traditional way of dealing with forest enterprises that CF was intended to replace. Nevertheless, today these kinds of community-enterprise partnerships are promoted by many development organisations and governments as well as conservation NGOs.

**Costs and Benefits of Community Forestry**

Generally, as CF has to comply with the logic developed for commercial logging operations, its financial attractiveness depends on economies of scale. To achieve these communities would need to adopt the same management systems and organisational structures as commercial operations (see Box 3). However, there are also significant costs for training and equipment, generally at least US\$10,000 for each initiative. Especially for smaller initiatives, the costs of technical assistance for management plans, support for administration and marketing are also relatively high. Low productivity means that such operations then often require continuous financial subsidy as the anticipated profit does not materialise.

If CF is considered as a complementary activity integrated into an overall production system then there are much better prospects of making it financially attractive. Unfortunately, such systems are generally illegal under the current framework for CF, as are many of the practices employed by small farmers in managing forest resources such as the use of forest resource without authorized plans, and farming within areas of natural forest.

However, there have been a number of other indirect benefits from CF initiatives, which, from the smallholders' point of view, have generally been more important than the income or employment opportunities generated. These include formal regularisation of land tenure, improvements to infrastructure (especially road access), improved marketing opportunities for agricultural products, and better access to credit and information. Support for CF has also enabled some community leaders, often in alliances with environmental NGOs, to become more engaged in dialogue enabling the views of formerly ignored Amazonian populations to be incorporated into policy and to be taken into consideration in decision making processes (Schmink and Wood 1992).

A number of negative effects have also been observed. Within the pilot initiatives, the various training events and forest operations have meant additional work for the communities. As not all members of a community were able or interested in investing the required time, in many cases only part of a community participated, resulting in tensions, especially over questions of how to distribute responsibilities, costs and income. In a more general sense, the

**Box 2: The Bolivian forest law**

The much acclaimed Bolivian Forestry Law (No. 1700) passed in July 1996, was the first national legislation in the region which permitted a diverse range of social actors to participate legally in forest management activities (Pavez and Bojanic 1998). The law, made specific provisions for indigenous people, colonists and other small farmers and local social organisations to participate in the forest sector. However, the management instruments for such groups to engage in forest management activities were essentially the same as those for commercial logging operations. For example, management plans based on forest inventory or census data have to be signed off by a professional forester, implying additional expenses both to carry out the inventory and pay the professional, which are unaffordable for most communities. As a result most communities are obliged either to enter into commercial agreements with logging companies or act outside the provisions of the law.

amended legal frameworks and improved enforcement mechanisms have pushed the communities, previously acting in the vast grey area of informality, into officially defined illegality, leaving little space for traditional ways of using their forests to improve their livelihoods. This increases the pressure on local people, weakening their negotiation position with potential buyers of their products, with negative effects on prices and incomes.

Most critical, with regard to the expectations linked to the pilot project approach, was that in all study areas virtually no examples of spontaneous adoption of the CF approach have been found. In fact, only very few of the pilot initiatives established, with significant inputs of financial and human resources, have become financially independent. Instead, they remain dependent on continued external support in order to comply with legal requirements and marketing procedures. This has resulted, in some cases, in a kind of institutionalisation of externally financed partnerships, initially thought to be only temporary. Consequently, the overwhelming majority of Amazonian communities continue to be unaffected by such approaches and continue to use and manage their forests in traditional ways, including the sharing of harvesting rights with commercial enterprises.

### So what is going wrong?

CF as currently promoted follows an outmoded approach to rural development, where an ‘expert’ technical package is transferred to the clients (Pokorny and Johnson, forthcoming). In expectation of attractive financial returns, the framework widely ignores the traditional focus of rural producers on agricultural production, and the extraction of Non Timber Forest Products (NTFPs). Instead of acknowledging the cultural preference for horizontal organisational structures and economic activities with immediate returns, development organisations have tried to establish vertical management structures and business strategies with a focus on long-term investments in compliance with the ‘enterprise’ concept. As a consequence, the technical, managerial and financial requirements of this package have proven to be largely incompatible with local realities and interests, resulting in a lack of local ownership and strong dependency on external support.

The current approach depends for its success largely on two features: the provision of significant advantages in comparison with traditional management schemes and the establishment of effective extension mechanisms. But, as shown above, the financial attractiveness for smallholders is limited as profit margins have been lower than expected and economic risks principally from markets and the uncertainty of approval of plans by the governmental agencies are significant. Without subsidies, few initiatives can cover operational costs. Also the attempts to enhance profit margins by the use of “appropriate technologies” which comply with legal requirements, such as small scale saw mills, have implied high costs and so not financially successful. Only those community logging areas equivalent to commercial scale operations were able to earn a moderate surplus from timber harvesting. But even under favourable conditions, families will generally not receive more than 1-5 US\$/ha/year. To ensure access to the required technologies and capital, implementing agencies have invested relatively large amounts of money over short periods. This has created an enclave of virtual reality within the surrounding social and institutional environment. A rigid and inflexible system of command and control has been set in place, which has impeded smallholders from experimenting with the approach and limited possibilities for local adaptation, both of which are decisive requisites for adoption. There has also been a considerable communication gap between potential adopters and professional foresters who are rarely trained or experienced in community development work and who are contracted as extension

agents. Current promotion strategies largely ignore the fact that diffusion of innovation is a social process (Rogers 2003). They are oriented to predetermined forest management models rather than to the management of forests by people.

### Is community forest management viable?

Although there are some important achievements at a political level and specific success stories of pilot initiatives, the current framework for CF does not represent a suitable model for pro-poor, pro-forest development in the Amazon. Yet, to work with and through local small-scale forest managers offers a number of comparative advantages over commercial enterprises. These include:

- **Effective protection:** Experience shows that local people, in contrast to commercial enterprises, are interested in maintaining their forest resources in the long run, because they depend directly on the resource, and have limited access to more attractive alternatives. They often do so in combination with agriculture (see Box 3). Communities also have a continuous presence in the area. More broadly, it is necessary to rethink the vision of the Amazon forest, rejecting the romantic view of the Amazon as a vast tract of pristine primary forest, and instead orienting policies to the maintenance of a landscape mosaic in which secondary forests of different ages also play an important role.
- **Effective use of resources:** In contrast to logging companies which base their harvesting strategies on standardized technologies and silvicultural prescriptions, mostly concentrating on timber, communities consider an array of forest products and services. In fact, for many communities the harvesting of non-timber forest products is often more important than timber and can be adapted spontaneously to local needs and capacities.
- **Greater compatibility with the biological potential:** Local multiple-use management schemes tend to be adapted to the low densities of valuable species and low timber growth rates typical of tropical forests. Also the lower opportunity costs for local people in comparison to rates of return anticipated by enterprises matches the long-term economic potential of the forests and leaves space for more flexibility and lower harvesting rates.
- **More effective contribution to local development:** Forest management by logging companies implies a certain concentration of resources. Benefits for local population are more indirect, for example through the generation of employment, and depend on local people adapting their way of life to entrepreneurial logic and routines. In contrast, forest management by local communities can permit a more equitable distribution of benefits. Income generated is directly re-invested in the local economy, and forest workers have more possibilities to maintain their community lifestyle.

### Opportunities for moving forward

The general conclusion of ForLive is that, in spite of the considerable efforts made to promote CF, uptake of the approach within present legal frameworks has been extremely limited. “Successful” examples of community forest management are generally subsidised by international donors, or the communities are obliged to enter into agreements with commercial timber companies in order to comply with the prevailing legal requirements. Financial benefits tend not to meet expectations.

It is not then the principle of forest management by communities that is in question, but the current framework. If CF is to have a future in the Amazon region it is essential to allow communities to make use of their comparative advantages. But, how can the

**Box 3: Endogenous practices for the management of Brazil nut in the Cajari Extractive Reserve, Brazil**

The Cajari Extractive Reserve in Amapá State is home to traditional communities whose income is derived from the harvesting of Brazil nuts. At the same time their subsistence requirements are obtained predominantly from slash and burn agriculture and hunting and fishing. Small farmers of the region have developed a range of agro-forestry and forest management systems which promote the integrated use of forest resources. In the attempt to maintain or improve Brazil nut yields one of the principal forest management practices is the choice of location for agricultural plots. Selection criteria favour cropping in secondary forest; or selection of sites in primary forest where no valuable timber or productive Brazil nut trees are located; also in expanded forest gaps and areas where lianas dominate gaps in the primary forest as a means of giving a kick-start to natural regeneration in areas considered to be unproductive. In addition, a number of other practices are applied in cropped areas which promote the regeneration, growth and development of Brazil nut trees and other valuable species, including selective thinning to liberate Brazil nut trees in secondary forest, cutting of lianas and the establishment of highly diverse agro-forestry systems in which natural regeneration of Brazil nut trees is encouraged. These endogenous systems of intensified forest management are considered sustainable although in most countries of the region, cropping within areas of primary forest is illegal.

framework be adjusted to explore the existing potential of forests for smallholders? The answer to this question will depend on the ownership context – in one scenario, the use of reduced areas of forests on individually owned land, and, in another, the management of large forest areas under common or public ownership.

For the former scenario, it is necessary to re-orient CF so as to build on current practices and to establish regulatory systems based on simpler, more locally applicable practices. How far the legal and institutional framework can be adapted to facilitate smallholder use of their resources in accordance with their own capacities and interests is a crucial question. A strategic shift is necessary from what has become a policing activity, to a role, which promotes successive marginal improvements to existing practices with emphasis on education and extension (Pokorny et al. 2005). This implies the provision of space and opportunities for the development of locally defined and managed working agenda, management systems and governance mechanisms, and to invest and trust in local capacity to manage natural resources. This approach is also pragmatic, in view of the impossibility of effectively controlling smallholder management practices by centralised government agencies. To guarantee the space and time required for such a process, a coherent and transparent policy framework is needed, which carefully distinguishes between environmental, social and economic goals.

With regards to the second scenario, the current CF framework makes more sense. Smallholders have already been shown to have the capacity to meet the legal, institutional and technical requirements, and, although production costs are higher in comparison to enterprises, the relatively low profit margin still generates an acceptable level of income. The assignment of larger areas of public forests to communities is then a rational option which is both socially and environmentally efficient with income generated often being reinvested in the area.

However, this option requires not only the waiving taxes and royalties, but also significant investment in training, infrastructure and equipment.

The current political will of various governments to promote CF in the Amazon provides a window for the present framework to be profoundly reviewed. A clearer vision of the aspirations of indigenous communities in the region is needed. This will help to define more coherent and realistic policies which promote the effective use of forests by smallholders as an important input for the sustainable development of the region and as a means of reducing rural poverty.

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**Endnotes**

<sup>1</sup> By CF we refer to the involvement of a wide range of social actors, either individually or collectively, in decision-making that affects the forest resource.



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