



Associations for business partnerships

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Summary

“Associations for Business Partnerships” is a tool for migrant or other marginalised forest dependent communities. It helps such marginalised natural resource smallholders to engage with, compete in, and benefit from market economies. This paper describes the approach in the context of the Brazilian Amazon frontier and presents evidence for its efficacy in overcoming marginalisation.

What is ‘collective market engagement’?

Collective market engagement is a proactive process of association by which migrant communities can solidify their control over and sustainable management of forests and the benefits derived from them. It is an approach that has developed out of the joint action of many private smallholders – in other words it involves collective action without collective ownership, although it may also be applicable to collective ownership situations. It involves steps that overcome marginalisation: deficits of information, political influence, market power, and administrative experience – all of which are associated with immigrant communities in unfamiliar forested environments. It does so by sharing information, generating bargaining power, increasing scale economies and creating the administrative experience to foster self-sufficiency. It culminates in the development of a formal contractual arrangement with established forest industries. Its impacts include greater social and economic benefits in marginalised communities and more sustainable management of forest resources.

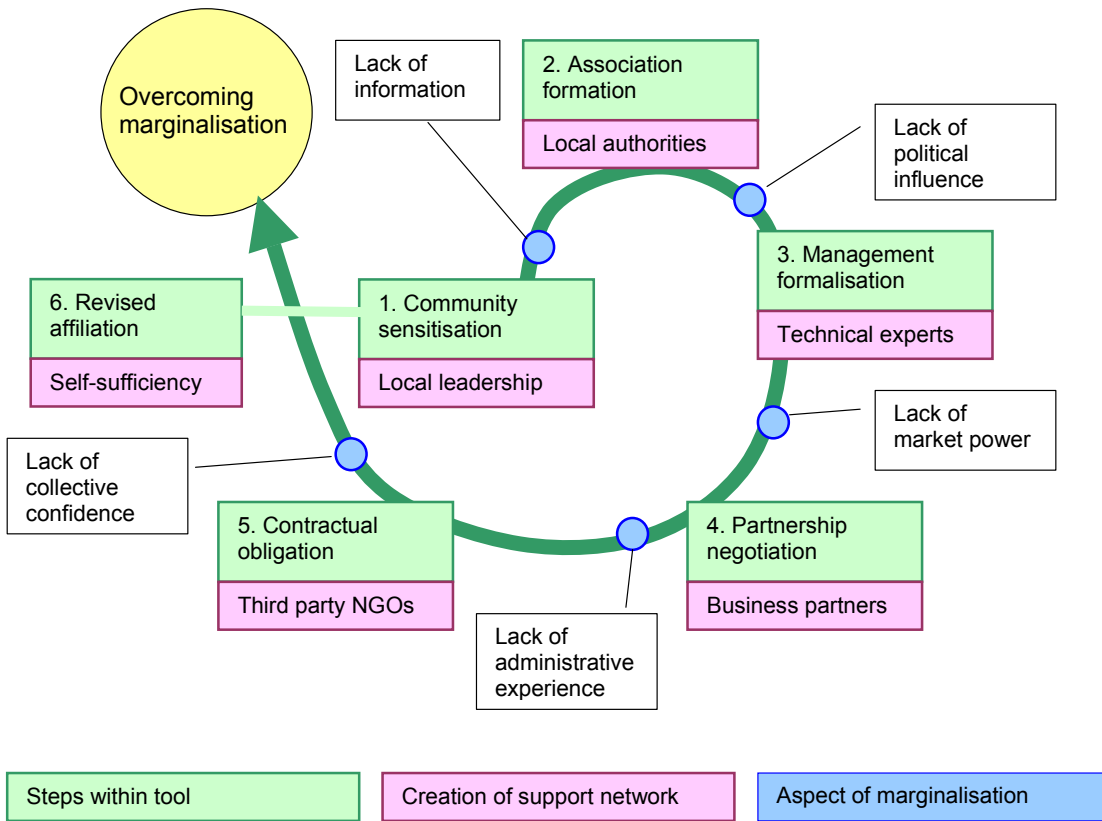
Collective market engagement is made up of six overlapping and iterative steps displayed in Figure 1:

- Community sensitisation
- Association formation
- Management formalisation
- Partnership negotiation
- Contractual obligation
- Revised affiliation

Part One: Tool Guidance

The idea is that this tool acts as a catalyst for proactive groupings within the community to join together, capture benefits for participants over a short period and attract wider support in a spiral of increasing involvement and self-sufficiency.

Figure 1. Collective market engagement – a tool to overcome marginalisation in migrant forest-dependent communities



Why is collective market engagement necessary in migrant or other marginalised communities?

Migrant communities at the forest frontier are often heterogeneous with few support networks other than recently established alliances of convenience between neighbours. In such an environment, communities are at a disadvantage, lacking both the capacity to exploit the resources within their control, and open to exploitation by those who do have that capacity. There is an urgent need for migrant communities to consolidate their hold on their resources and develop a robust support network with which to engage with outsiders. In particular migrant communities need to overcome five main constraints:

- Lack of information (uninformed about local natural resources and the legitimate and efficient use of them)
- Lack of political influence (little credibility with local authorities and support services such as finance agencies, legal services etc.)
- Lack of market power (ignorance over potential markets and small scale of resources with which to negotiate effectively)
- Lack of administrative experience (without a history of the bureaucracy and functioning of their new environment)
- Lack of collective confidence (few joint experiences on which to establish mutual trust and from which to take calculated risks)

Each of these aspects of marginalisation can be addressed through the twofold process of (i) practical collective action towards a defined economic objective and (ii) gradual creation of a support network to fill gaps in community capacity. The tool 'collective market engagement' has been developed to achieve this twofold process and reduce marginalisation as a result. We have depicted it as a spiral of increasing influence (above)

Any tool requires certain preconditions and this tool is no exception – the tool described in this paper requires the following preconditions:

- Individual smallholders with tenure over separate lots
- Available forest resources
- Willing business partner (e.g. logging company)
- Positive forest rents from extractive activities

What steps does ‘collective market engagement’ involve?

The ‘tool’ in question culminates in a formal contractual agreement about sustainable forest management between a smallholder association on the frontier and an established business (e.g. a logging company). But the tool described here is much more than that – it is a process that develops community capacity, builds a support network and fosters self-sufficiency. We have summarised the ‘tool’ as a series of six steps – each targetted at a particular aspect of marginalisation. Each step is spelled out in more detail below, based on our initial experience at the Amazon frontier.

Step 1 Community sensitisation

Fragmented migrant communities at the forest frontier are unlikely to have a detailed knowledge of forest management and its potential benefits to the smallholder. The first step therefore begins with community sensitisation – its aim being to reduce the lack of information on natural resource management options that contributes to marginalisation.

Sensitisation initially requires some outside catalytic agency (e.g. an NGO or government extension service) – although as the tool is more widely adopted community-community replication may occur spontaneously. The initial partnership between the community and this catalytic agency is the first of many new linkages that will eventually provide the community with a broad support network.

Upon entry into the community, the catalytic agency talks with the president of the community association (if there is one already formed) or a leader identified by community members. That leader calls a meeting with invitations to smallholder lot owners (often the communities are not yet fully formed). Any and all individuals are invited to attend. The first presentation focuses on forest management and aims to demystify the process. It introduces the idea of collective market engagement and spells out the benefits in terms of increased economic returns, political influence, greater market power and administrative experience that collective action will bring. The agency acting to introduce this tool needs to be conversant with the specific forest ecosystem, prices of forest products, harvesting costs, etc, so as to be able to provide accurate information comparing sustainable forest management with alternative legal land uses.

Lack of information: Demystification of forest management is an important first step – in the Amazon, at two communities in the State of Para, many smallholder settlers immediately begin to clear their legal allocation of 20% of their land despite the fact that wise use of forest resources might generate considerable revenues to help during their early establishment. Moreover management of the remaining ‘legal reserve’ may generate considerable additional revenues for smallholders if these benefits can be captured.

The subsequent meetings trace the terms of the contract and the role of the communities in the forest management process. The details required by the community and individuals are listed. For example, for individuals to be part of the agreement between the association and the logger, they must have their documents prepared. These documents include identity cards, signature registration (or thumb print in the case of illiteracy), land registration with INCRA (the National Institute of Colonisation and Agrarian Reform), and so forth. These requirements are identified and it is often the case that individuals will require substantial assistance with this process. An

additional benefit to registering is that the individuals now become eligible for government benefits and services, regardless of the outcome of the logging contract.

If an association has not yet been formed in the community, the meetings must also encompass the creation and regulations of the association. If there is a community association already in service, its bylaws may not be appropriate, or may be insufficient, for a logging contract. The meetings are a setting in which the community and the logger can identify the requirements of the association and develop the appropriate infrastructure for the market experience.

For marginalised individuals the changes brought about by the introduction of collective action and integration into the market place can be confusing. Research has shown that the initial discussion of new opportunity may generate mistrust in association by settlers. It is therefore important that individuals have a forum in which they can raise questions, receive responses, and dispel doubts. Neighbouring practical examples are also useful.

It is fully expected that without prior examples in adjacent communities, however, at least 10 to 15 meetings will be held before the community is in a position to conclude the formation of an association and sign any contract over natural resource use. The community meetings provide a forum to answer questions and build collective understanding of the overlap or diversity in agendas within the group. As the meetings progress it may prove useful to introduce the idea of an association for sustainable forest management to have a specific set of practical issues about which to base discussions (step described below). An association of some form is not only of benefit to the community by strengthening its interaction with outside authorities, but will also be required for the logging contract.

Step 2 Association formation

Formation of a formal association within the community goes beyond any initial coalescence of the community itself. An association is a subset of the community who agree to joint action to achieve a specific end (in this case collective market engagement concerning forestry sources). It is important that any association draws on the motivations associated with voluntary membership. For example, in Brazil, smallholder lot owners are allocated lots by INCRA without choice, but it is their right to decline to participate in the association. Starting with motivated individuals increased the success of the venture.

Organised communities generally have a President or Coordinator who has decision-making powers and who informally or semi-informally represents the interests of the community. This model may be adapted such that associations also have formal leaders. Once the idea of an association has been accepted the next step is to choose an able and willing leader by some form of acceptable voting in a public assembly of association members.

The next important decision is to choose the right form of association for the collective management of smallholder natural resources. It is normal for formal associations to be registered with local government officials of one type or another – early discussions between the community and such government officials adds a second element to the support network which will stand the community in good stead for the long term.

Lack of political influence: In Brazil, for communities to become recognized formally they must be constituted (listed) as a Pessoa Jurídica (Legal Entity). For the communities to create, or become, a legal entity – which could be for example an “owner association”, they must first discuss what type of organization will best serve their needs. Common forms of legal entities are:

Community association (Associação comunitária): an association that meets to resolve internal community problems, for example environmental sustainability.

Sindicate (Associação Sindical): a civil organization that defends the interests of a professional class. For example, a Syndicate of Rural Workers.

Cooperative (Associação Cooperativista): these are associations based on common goals of production and economic development.

With a capable leader and an understanding of the type of association – it is then possible to develop registered statutes (which are the rules and norm by which the members of the association abides). Statutes describe the structure and working of the institution. It is a legal document that binds the administration and organisation of the association. The statutes are made formal through the process of voting in assembly, and once formal cannot be changed without the majority vote of the assembly. In Brazil, associations are registered formally in the government registry called “Titles and Documents” and this: (1) makes the contents incontestable; (2) keeps an original, certified, copy on file; (3) guarantees the authenticity; and (4) makes the document valid against third parties according to Federal Law of Public Registry nº 6.015, 1973.

Since the act of constituting an association is such an important step in the process of collective market engagement it is worth detailing some of the major issues that should be discussed at any meeting to form an association (see list below):

List of what should be discussed in the meetings to form an association?

Constitution

- Name
- Purpose
- Duration
- Headquarters
- Objectives of the association
- How to achieve objectives

Members

- Who can be a member?
- What are the rights of the members?
- What are the duties of the members?
- What are the penalties that may be applied?

Goods and revenue of the association

- How will the association generate funds?
- What will be the contribution of the members?
- How will this be paid?
- Where and with whom can funds be sought?

Administration:

- How will the administration function?
- What shall each group (if pertinent) do within the association?
- How are decisions to be made?
- How are elections to be run?
- How long shall officers serve?
- What is the role and responsibility for each officer?
- How will internal monitoring of the association work?

Dissolving the association

- How can it be decided to dissolve the association?
- How many votes will be necessary to dissolve the association?
- How will the goods of the association be distributed?

General points:

- Who will represent the association in selected issues?
- How can the statutes be changed?
- Will the directors be paid?
- What will be the fiscal year?

Step 3 Management formalisation

Although natural resource / forest management is possible on individual smallholder lots and does in fact occur in many instances, an important prerequisite for the community to be able to strengthen its negotiating position is collective action. The new association improves the bargaining power of individual smallholders by increasing the scale of resources with which they can collectively attract outside interest.

Lack of market power. In The Brazilian settlement programmes, one smallholder lot has on average 900 m³ of logs (approximately 180 trees), which is not very much. On the other hand, it would take only a community of 16 to provide a years worth of timber to an average sawmill with a consumption 15,000 m³ of logs and production of 5,000 m³ of sawnwood. By association the community bargains more effectively for higher prices and the inclusion of lesser-known species in the harvest.

Once an association has formed, members can begin to address the specifics of what sort of natural resource management it is to oversee: how many smallholder lots are to be involved? What time period is envisaged? What are the principal concerns over the use of natural resources in different lots? What are the concerns over the distribution of benefits?

At this stage, it is important that the community association take advantage of any technical expertise to hand in discussion about forest management – this may best be arranged by the catalytic agency responsible for sensitisation of the community in the first place. Linkages of this sort can be a considerable asset to developing the community support network.

Sustainable forest management (SFM) in smallholder community lots is no less complicated than in larger contiguous areas. It is a broad concept, and not reserved exclusively for timber harvesting. It includes an array of forest-related activities such as wildlife management, extractive reserves, and recreation. In many forested areas however (including the Amazon) the principles management objective is the sustainable production of wood products. The most comprehensive expression of SFM is to be found in the principals of what has come to be known as “reduced impact logging”. These are the best management practices available today, but are under constant revision and improvement. Although any harvest will alter the forest to some extent, reducing the impact is an important first step in the goal of sustainable production. Reduced-impact logging (RIL) provides standards for silvicultural activity and as such, is considered a necessary step toward achieving sustainable forest management. Guidelines are available from:

- Suriname Agricultural Training Center (CELOS),
- International Tropical Timber Organization (ITTO),
- Food and Agricultural Organization (FAO),
- Institute of Humans and the Environment of the Amazon (IMAZON),
- Tropical Forest Foundation / Fundação Floresta Tropical (FFT).

It is not necessary for a community association to have a detailed knowledge of HOW to carry out all the technical prescriptions defined for reduced impact logging in Table 1 below. It is however useful for the community association to be aware of WHAT each prescription is and why it is necessary. Knowledge of this sort is an important precautionary measure – so that smallholder members can evaluate what is going on their land and report irregularities to the association leader.

Table 1. Comprehensive list of activities involved in Reduced Impact Logging (RIL)

Activity	Description
PRE-HARVEST ACTIVITIES	
Area definition and layout	Identifying future harvest area
Opening of inventory lines	Cutting lines 50 meters apart in future harvest block
Permanent plots	Setting aside areas for research in forest dynamics
100 % inventory	Locating, identifying, grading, and measuring commercial trees above standard diameter
Vine cutting	Cutting vines around crop trees to reduce felling damage
Planning harvest activities	
Data processing and tree selection	Selecting crop trees and processing harvest data
Mapping (pre and post harvest)	Using inventory data to show tree location (done both before and after harvest)
Selection and marking of crop trees	Identifying crop trees in forest and producing a felling map
INFRASTRUCTURE	
Planning secondary roads	Planning roads into harvest site
Construction of secondary roads	Making roads to access harvest site
Planning of log decks	Locating log deck sites
Construction of log decks	Making log decks
HARVEST ACTIVITIES	
Directional felling	Judging tree quality, testing for hollow, felling and identifying fall direction on felling map
Skid trail layout	Use felling map to design shortest skid trail, mark skid trail for Skidder
Skidding	Follow marked skid trail to log, skid log to log deck
Log deck operations	Measure logs, stack logs according to use

Step 4 Partnership negotiation

Armed with substantial collective natural resources, official recognition and management information, associations are now in a position to negotiate with established forest business partners regarding harvesting activities on multiple smallholder areas. Partnerships of this sort are necessary, because it is unlikely that communities will have the technical capacity, financial capital or equipment to carry out the administration and management of a commercial forest operation.

The use of this tool has as a prerequisite the presence of an interested forest business partner. At this stage the community association is ready to invite that partner to make an initial inventory of the community area and prepare a management plan for sustainable forest management in line with national legislation. The likely nature of any future agreement and the area and timeframe of any contract should be carefully discussed with the forest business partner at this stage – inventory and management planning are costly exercises and bring with them some expectation of economic return on the part of the forest business partner.

Lack of administrative experience: There are few better options for gaining administrative experience in contractual arrangements than through embarking on a contractual arrangement. In Brazil it has proved useful to bind parties to the first years harvest only – thus allowing renegotiation in the event of mismanagement and also the introduction of additional small holders in the event of demonstrable success.

The activities to be undertaken jointly by the community and forest business can extend for a long period, and in addition the planning and execution of forest management is an involved process. Because of this it is most important that the community be able to accurately monitor the on-going activities. To this end, it is important that the community either train a member or retain an outsider to monitor the harvest. Lot owners are encouraged to follow the harvest closely, and are given access to the results of the 100 percent inventory of their lot.

Step 5 Contractual obligations

An example of the contract and contractual obligations drawn up between the community association and an external forest business is presented in Annex 1 in English. It establishes the legal obligations of both parties and is a fundamental part of the process. In our experience it has proved best to bind the smallholder and logger to the first harvest only leaving future harvests available for competition.

An integral part of any contract between the community association and the forest business is the completed plan for sustainable forest management drawn up by the forest business. This specifies exactly what is to be extracted over what time period in line with government regulations.

Lack of collective confidence: In Brazil it was found useful to involve the forester in legal deforestation of 20% of settlement plots. Because legal deforestation is done on many lots with little volume per lot it is quite likely that the logger will not gain a substantial profit from this activity. The machines must be moved around more than in RIL. The legal deforestation does, however, present an important first step in the development of collective confidence between the loggers and smallholder, and as such should be kept in the contract.

In Brazil, contracts between community associations and forest businesses have required two elements. The first covers the legal deforestation of up to 20 percent of each smallholder lot (20 hectares in the Brazilian case study). The rate of deforestation is at 3 ha per year or up to 60 cubic meters. The subcontracted logger is immediately able to harvest this timber.

A second component of the contractual obligation relates to the much more substantial extraction of forest products from the remaining 80% of each smallholder lot – the “legal reserve”. For

extraction from this reserve a management plan is required, covering each lot and presented to IBAMA for approval. This is part of the work of the sub-contracted logger. It is much better for the sub-contractor to do this because it requires knowledge of management plans and the workings of IBAMA, which would be difficult for the smallholder to overcome. In addition, economies of scale can be captured in the investment in infrastructure (computers, office space, forest engineers etc) for a large number of plans rather than each individual smallholder producing a plan. Forest management with full approval by IBAMA is the only legal way in which the smallholder can use this land. Therefore the joint management with a logger is both necessary and mutually beneficial.

Step 6. Revised affiliation

As the process is completed during the first year of contractual partnership between the community association and the established forest business partner the success of the venture can be readily assessed by other community members. Since the initial contractual timeframe has been kept short, there is a window of opportunity after the first harvest to invite more community members to participate. In addition it is possible to open up the extraction area to competitive bidding by rival forest companies should there be wider interest in this particular forest resource.

Success in one particular community may also trigger neighbouring communities to engage in similar cooperative actions. Case study work from Brazil has shown that the model of collective market engagement is equally applicable to the management of community fish stocks.

In addition to the spontaneous demand by surrounding communities, this model has been visited by people from over 40 countries and members of the National Forestry Program (PNF). It is the foundation for the emerging political debate about forest-based settlements (Assentamentos Florestais). In addition, this model is being replicated along the Transamazon Highway in projects administered by the Instituto de Pesquisa Ambiental da Amazonia, the Fundacao Viver, Produzir e Proteger, and the Instituto de Floresta Tropical. These NGOs are actively disseminating this project to the settlers and industry in five Municipalities of the TransAmazon. Their objective is to provide the information and training required for both parties – forest business and communities – to recreate this market-based collaboration.

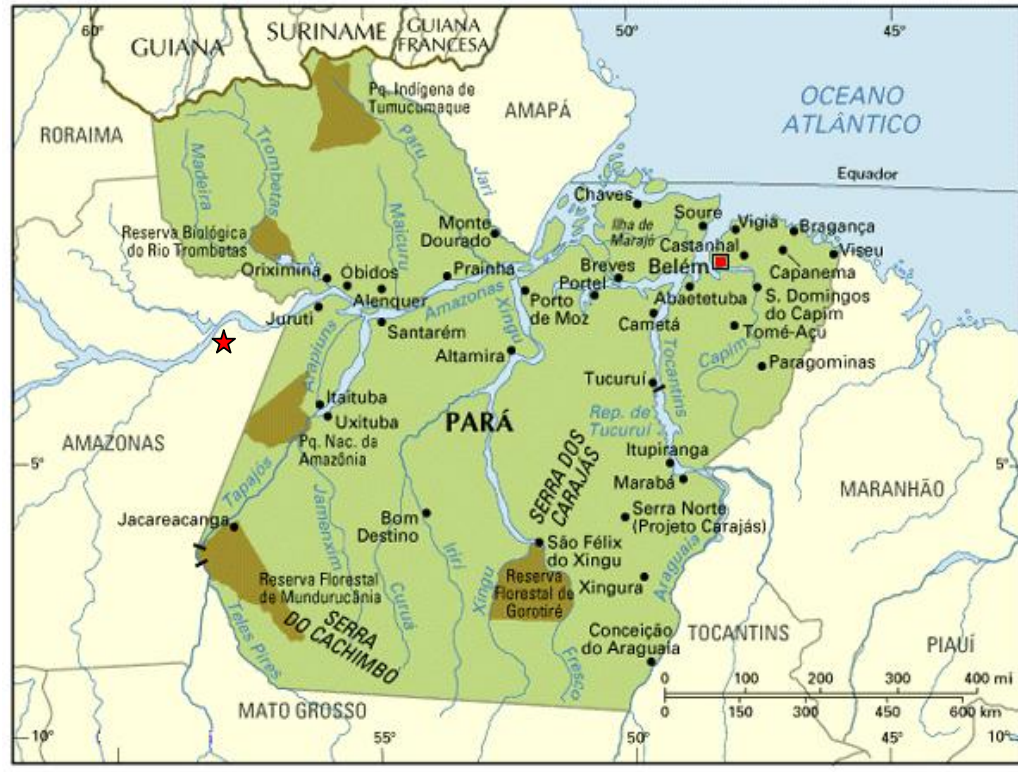
Part Two: What is the evidence from Brazil that the collective market engagement works?"

The 'collective market engagement' tool ' has been developed with one logging company and successfully implemented in two communities in the vicinity of Moju in Para; including total of approximately sixty families based in two settlements shown in Figure 2.

Figure 2. Location of the INCRA settlements of Moju I and Moju II.

The success of this program has generated spontaneous interest from another 600 families who are in various stages of contract negotiation.

The new reality in the Brazilian Amazon is of new



communities that are heterogeneous, spontaneous, and marginalised. Individual communities can range from a couple of families to more than 100, their only immediate connection being a mutual dependence for survival. The tool presented in this report has acted as a catalyst to create and foment local level institutions, providing access to markets through better infrastructure, and speeding the process of de-marginalisation.

Needless to say the tool is not without its problems. It has been in operation for less than four years and depends heavily on the actions of one individual logging company. Replication of this tool will require modifications to both company and community roles. The future logging companies will need to be supervised carefully, and the communities must acquire a better understanding of operational requirements of forest management. In addition, there may be options for some value-added activity, or different contract options.

Despite these potential problems a detailed survey of new migrant communities provides qualitative and quantitative data which support the success of a 'collective market engagement' approach (Merry et al. 2004). For example, in communities where collective market engagement had led to a contractual arrangement with a forest business, individuals were 46% more likely to join the community association. By way of contrast, if individuals had heard of forest management but had not been involved in it they were 22% less likely to participate in a community association. In communities where logging had actually taken place communities were 37% less likely to rate their association as inactive, 61% more likely to rank it as reasonable and 74% more likely to rank it as good compared with communities in which logging had not taken place.

An important point is that it is only after the harvest has occurred that the majority of community members will begin to believe in the project. Therefore it will be key to have a demonstration available, where community members can go and talk with other members and actually see forest management in action, and to quickly get past the first stages where uncertainty about the process and results generates confusion and distrust in the smallholders.

How could collective market action be applied to common-property resources?

The redesign of this tool to accommodate the varied land tenure conditions of the frontier is eminently possible. A considerable source of timber supply on the frontiers is from government land “Terra devoluta” which equates with common property resources in other contexts.

In Brazil, this “Terra devoluta” land could provide an important source of common property based income for surrounding communities. The allocation of land to communities would give financial income to the migrants and would provide the industry with a legal source of raw material. Because this land is common property, the conditions of income distribution within the communities would have to be carefully designed.

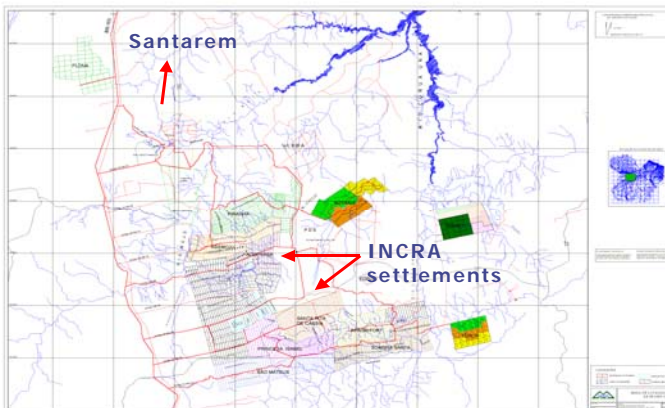
Even though errant leadership is a major problem on the frontiers, it is somewhat mitigated in the collective market engagement where individuals control their own resources and part is allocated jointly. In a common property management system, the opportunity and incentives for mismanagement by community leaders is more apparent and needs to be carefully considered. In the case of common property management, it may be the case that independent oversight is required.

The nature of migration in the Amazon

Migration to the Amazon frontier, both formal and informal, is incessant; families move deep into the forest with little support because land ownership is a powerful incentive. This is not the Sem Terra (Without Land) social movement; these are poor, individual, families searching for opportunity and willing to find it in what many would consider unbearable conditions.

The standard lot is 100 hectares (≈250 acres) and presents a chance for an otherwise destitute family. Poles and a tarpaulin are the first signs of residence; poor shelter in a foreboding forest. Axes and fire are the clearing instruments of choice - chainsaws are too expensive – and the battle for survival begins. Figure 3 shows a map of a typical settlement area.

Figure 3. Settlement map showing thin contiguous settlement plots adjacent to feeder roads at the forest frontier.



In the absence of government support (or perhaps in the face of intermittent support) and with little education and poor knowledge of the new environment, the families are marginalised from resource use decisions. They find themselves on a lot that is basically all forest, but know nothing of forest management and little of the potential for non-timber forest products. They understand clearing and planting manioc, corn, beans, and rice; they understand clearly the message given by illegal loggers 'R\$ 100 for your tree' but beyond that, their horizon is limited. The full economic potential of the natural resources at hand is under-utilised – even with better knowledge, access to formal credit is limited, creating a formidable barrier to investment in mechanisation and increasing productivity.

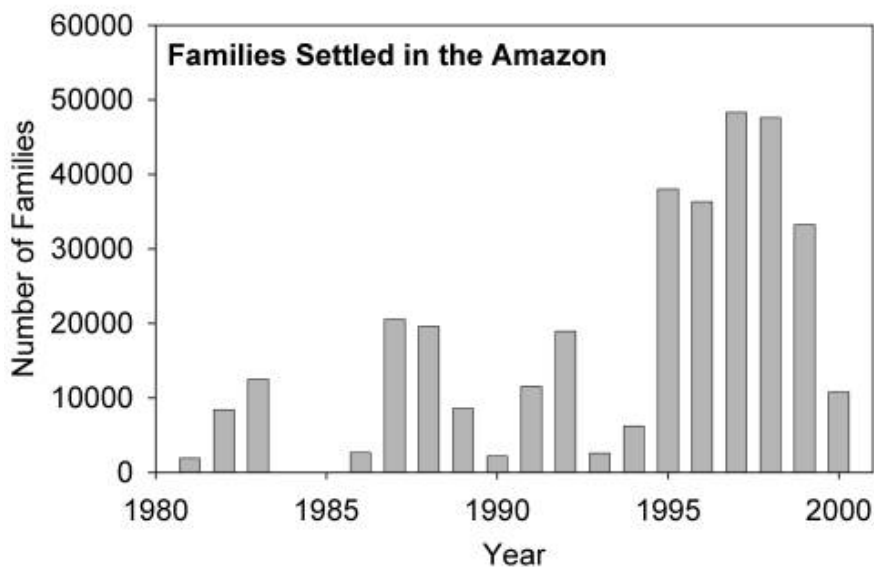
INCRA is largely responsible for the homesteading of migrants on the burgeoning Amazon frontier. Figure 4 shows an estimate for the number of families settled by INCRA from 1980 to 2000. There are many informal settlements above the number listed by INCRA, and often informal settlements, in which the lots are delineated by the individuals or communities, begin and are then formalised by INCRA.

In a formal settlement contract, INCRA has a set of obligations to the smallholder – it provides R\$ 1,400 as start-up cash, a road, and a house. The cash is available quickly, but the road and house are often delayed. The house is estimated at R\$ 3,100 and this money goes directly to a construction company who must then build a house on the lot.

INCRA gives the smallholder a temporary title (called a Protocolo), which confirms the process of land titling is underway. The temporary title is sufficient for other government authorities to permit land use (ie, legal deforestation and forest management). It is unfortunately not sufficient for commercial banks to hold as collateral.

Communities in the Amazon are therefore often spontaneous and heterogeneous groupings of migrant settlers – with limited resources over which tenure is fragile and where management, business and administrative capacities are embryonic.

Figure 4. INCRA estimates of families settled in the Amazon



Source: Lima et al. 2003

4.2. The Amazon frontier (frontier settlement papers)

The Amazon frontier holds untold promise, and, much like the western United States, the search for economic opportunity and a better life drives people to stretch its limits.

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Alston Libecap and Mueller about conflicts, property rights and frontiers.

Whether following or creating new roads, logging is amongst the first economic activities to spring forth on emerging frontiers in the Amazon. This is followed closely, or is in conjunction with, the arrival of small farm settlers

The process of frontier development in the Amazon has been widely described (Alston, Schmink and Wood, Moran, etc) – frontier settlement papers

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Evolving notions of community forestry

Community forestry in the Amazon (and elsewhere) has traditionally been seen from one perspective: the management of common resources by a small homogeneous group whose livelihood is intricately, and in some cases uniquely, tied to the forest resource. The thread is familiarity in the use of common property and the collective dominion and management of forested areas.

This concept of knowledgeable collective dominion over common property is attractive because in theory it captures the essence of development—building on local knowledge, autonomous decisions in resource use and harmonious collective action. The reality, however, is quite different – while many long-established communities or peoples exist, community forestry is also a vibrant and varied concept often involving multiple private small-holdings of migrant settlers and the future lies in acknowledging and embracing this change (Kant 2000). There are examples of community groups managing common property resources sustainably but there is no doubt that this is a time consuming and complex process (Edmonds 2002).

Although the image of an integrated community is attractive, it is the exception rather than the rule in the Brazilian Amazon. Community members are normally heterogeneous and familial ties largely not apparent in the first generation. That is not to say that communities rarely exist. Migrant smallholders control vast areas of forest and invariably form communities for mutual benefit. During settlement programmes, each family lot is approximately 100 hectares, 20 percent of which can be deforested legally, and, if the colonist has a forest management plan, he/she is able to harvest timber from the remaining 80 hectares of “legal reserve”. Many individuals practice forestry of some form - certainly all participate in the legal deforestation of up to three hectares or up to 60 m³ of timber per year. But what of the 80 percent of the lot that must be left in legal reserve, available only with an approved forest management plan.

Currently, this ‘legal reserve’ area is the domain of established local logging businesses who exploit their information and market advantages – they know the price of timber and are often a single buyer in the market. In many cases their offers can seem attractive to the smallholder. For example, they may offer R\$100 per tree to the smallholder, which is an attractive price. But the logger will harvest only highest-grade species (ie, Ipê *Tabebuia* spp., Maçaranduba *Manilkara* spp.) which bring a log price of anywhere between 150 to 300 Reias per cubic meter – which, using a conservative estimate of 5 m³ per tree (Holmes et al. 1999), would bring anywhere from 600 to 1,500 R\$ per tree. Even accounting for harvest costs, which do not include any costs of registration, road building, or planning, this will bring attractive profit to the logger!

If this is to change and communities at the frontier are to control their forest resource, the perception of community forestry and of sustainable forest management itself must change. At the moment, community forestry is still seen exclusively as collective domain over common property resources. Additionally, sustainable forest management is generally assumed to require large contiguous areas of forest and be the preserve exclusively of established forest business. Despite not being 'well-established' communities with familiarity of use over common-property resources, migrant families do form communities and can agree on the collective use of their multiple smallholdings. Nor is the small scale of each individual smallholding an insuperable barrier. As far as forest management is concerned, it can be done on any area, regardless of scale (d'Oliveira et al. 1998, Pinedo-Vaquez et al. 2001). Conservation benefits also come regardless of scale (Jantzi et al. 1999).

That is not to say that smallholders should be the only managers of forest, nor that this model is the only model of community forestry. The point is that community forest management should not be constrained by scale or the 'type' of community that exists; both large and small systems should compete to supply the market demand. In the Amazon, we build on common practice, although to date mostly illegal and at different scales. For example, many small and medium scale milling enterprises rent or buy land to supply their mills. In many cases they are able to secure land for not more than two or three years supply (approximately 1,000 to 4,000 hectares are common).

Demand for tools based on collective action

Communities at the forest margin (whether in the Amazon or in many other parts of the world) are often of a fragmented migratory nature. The community is often not trained to face a diverse and competitive market and if the community is less efficient at processing than new entrants, their marginal costs will be higher than the competitors, and they will be forced out of the market. Although the support of NGOs to these projects can be successful (Rosyadi et al. in press) it may provide a subsidy to production that is often overlooked when assessing a community's competitiveness. Indeed, Gerbremedhin et al. (2003) suggest that collective action is more effective or sustainable when managed at a local level and when it is demand driven rather than imposed from outside sources.

There is clearly demand for tools based on groups spontaneously forming from within the community - these are thought to be more effective than those mandated by outside influence (Chakraborty 2001). It is important to note, however, that as collective market engagement between the community and industry must be carefully monitored because there is potential for the social and environmental considerations to be neglected (Gauld 2000), and in some cases, community forestry remains subject to the incentives for illegal logging (Klooster 2001)

We are gradually acknowledging the latent potential of self-governance and development in community and local institutions (Donnelly-Roark 2001, Heltberg 2001, Becker 2003). In a competitive market - global or local - a producer surplus attracts entrants - in other words, if the community becomes successful, there will be others who copy, improve, and compete.

Since the model of land ownership in the Amazon is largely that of private smallholdings there is demand for a tool that is based around the concept of cooperatives. In cooperative management individuals set aside individual revenues in favour of a collective agreement that gathers income from individuals and distributes it according to an agreed plan - providing an income-smoothing effect in situations when the benefits come to individuals in large, random, amounts. The uneven nature of individual income is a function of forest harvesting (ie, it is more cost effective to harvest resources that are contiguous rather than equal amounts from separate individual smallholding).

Avoiding the risks associated with collective action

Many failures of collective action can be attributed to the incentives for free rider action. The question of free-riders—those who benefit from but do not participate in collective action—is also relevant to the smallholder communities of the Amazon; individuals may choose to not participate in the association and thus forest management agreements, but stand to benefit greatly from roads built within the community. Illegal loggers are also beneficiaries, although not strictly free riders to community forestry programs, as their access to timber stands—either government land beyond the communities (Terra Devoluta), or individual smallholder lots is made easier.

There is the suggestion that collective action and common resource management in rural areas of developing countries can overcome the difficulties of free rider or common property management (Nugent 1993). The reasons being that rural groups are often more homogeneous and have less difficulty in communication due to family ties. In the case of heterogeneous community development on a migratory frontier, it may then be expected that cooperation is delayed or difficult. Research has shown, however, that under the right conditions the change from noncooperation to cooperation can occur quickly (Varughese and Ostrom 2001) and that heterogeneity does not uniformly depress community organisation and self-organisation. However, the general complex nature of community governance, coupled with differing, and sometimes obstructive ideologies from outside or within the group, can hinder the effective local management of resources (Tomich et al. 1998, Dhesi 2000, Kull 2002). That said, it is also apparent that mutually beneficial activity can be successful and overcome conflicting goals from outside sources (Ligon and Narain 1999, Uphoff and Wijayaratna 2000)

There is general agreement on the conditions under which self-organisation and effective local institutions are likely. The list is divided between attribute of the resource and attribute of the users (Sekher 2001) and follows here from Ostrom (1999 pg. 3). The relevant attributes of the resource are: (1) it is not damaged beyond recovery; (2) there is information available about the resource; (3) the resource availability is predictable; and (4) the determination, establishment, and maintenance of boundaries are possible. The relevant attributes of the users are: (1) the level of dependence on the resource; (2) The level of shared understanding of the resource among the user group; (3) the users have a low discount rate and so are willing to value future income; (4) the elite are also affected by the use of the resource; (5) there is an established level of trust among users; (6) there is autonomy in user decisions ie, there is no contradiction by the State; and (7) there is some degree of prior organisational skills.

It is important also to acknowledge that the participation of women in local institutions has shown to be beneficial to the care maintenance of local resources (Zwarteveen and Meizen-Dick 2001, Quisumbing et al. 2001). Yet it remains clear that concern over equitable access to resource use by female users is valid; women's access to resources is usually poorer than men's (Locke 1999, Agarwal 2000, Agarwal 2001).

Annex 1 Example contract between community association and established forest business

This contract is established between NAME OF COMMUNITY ASSOCIATION and the forest enterprise NAME OF THE ESTABLISHED FOREST BUSINESS for the harvesting of NAME OF PRODUCT in the area of NAME OF COMMUNITY as described below:

The contract enters into force on the DATE OF START OF AGREEMENT and terminates on the DATE OF END OF AGREEMENT. The contracted party, NAME OF ESTABLISHED FOREST BUSINESS represented in this contract by NAME OF REPRESENTATIVE OF FIRM, hereafter referred to as the consultant and the NAME OF COMMUNITY ASSOCIATION represented by NAME OF PRESIDENT OF ASSOCIATION hereafter referred to as the contractor, based in ADDRESS OF ASSOCIATION agree to abide by the terms of the current contract established under relevant laws LIST OF RELEVANT LAWS IF AVAILABLE as set out in the following paragraphs and conditions.

1 -FIRST CLAUSE – OBJECTIVE OF THE CONTRACT

1.1 The objective of this contract is the extraction of NAME OF FOREST PRODUCT identified in the collective area of smallholder lots pertaining to the NAME OF ASSOCIATION located in the community of NAME OF COMMUNITY according to the plan for sustainable forest management developed by the consultant (including other legal documents) attached as an annex to this contract.

2. SECOND CLAUSE - THE AREA

2.1 The area in which extraction is to take place is constituted by the combined area from the legally available portion of NUMBER OF SMALLHOLDERS IN ASSOICATION lots as displayed in the map contained within the plan for sustainable forest management developed by the consultant and attached to this contract

3. THIRD CLAUSE - SPECIES TO BE EXPLORED

3.1 -- The species to be explored by the CONTRACTOR are those considered as commercial and those having commercial potential, identified by the Forest Inventory and listed in the Community Multiple Use Plan for Sustainable Forest Management, both prepared and carried out by NAME OF FIRM

4. FOURTH CLAUSE - EXPLORATION TERMS AND CONDITIONS

4.1 - The term in which the CONTRACTOR will complete the Forest Exploration activities, object of this present contract, will be in accordance with the size of the agricultural lots owned by NAME OF COMMUNITY ASSOCIATION.

4.1.1 - The stipulated term may be extended or anticipated according to previous agreements between both parties, as a result of situations arising related to the exploration, as long as these are properly proven and justified and do not compromise the basic objectives set forth in the Community Multiple Use Plan for Sustainable Forest Management.

4.2 - During the execution of the Community Multiple Use Plan for Sustainable Forest Management there will be no allowance of any type of interference by “clandestine” loggers. “Clandestine” loggers are those who explore and transport wood illegally, in other words, not in accordance to the current laws.

4.2.1 - During the execution of the Community Multiple Use Plan for Sustainable Forest Management the transportation of wood logs will not be allowed without proper authorization by the representative of the CONTRACTOR.

4.3 - In order to execute the Community Multiple Use Plan for Sustainable Forest Management, the following laws, plus all other valid environmental laws shall be followed: (e.g 4th, 5th and 6th Instructional Norms of December 8th, 1998, 48th IBAMA Decree of July 1st, 1995, and Law 4,771 of September 15th, 1965, altered by Temporary Measure 1956-50 of May, 2000).

5. FIFTH CLAUSE - PRICE OF THE WOOD

5.1 The CLIENT will pay the CONTRACTOR R\$ 13,00 (Thirteen reals) per m³ (cubic meter) or R\$ 52,00 (Fifty-two reals) per tree cut.

6. SIXTH CLAUSE - FORM OF PAYMENT

6.1 - The payment relative to the volume of logs extracted and piled in the clearings during the month shall be made by the CLIENT, without exception, up to 15 (fifteen) days consecutive days of the following month. The payment shall be made directly to the owner.

6.2 - The trees will be checked stacked and have ten centimetres discounted both from the length as well as their circumference, the only exception being the Jatobá and Jutaí species, who will have 20 centimetres discounted from the circumference. These operations will be carried out in the clearing and after that the logs(trees) will be registered in the proper documents. The trees extracted by specie will be verified by the client's representative and will be considered appropriate documents for calculating the value of the monthly payment to be made by the CLIENT, with a copy of this document being kept by the owner of that rural property.

6.3 - The monthly payments due but not paid, shall suffer a financial increase, interest rates and fines, according to the guidelines set forth as follows:

6.3.1 - In the case of late payments the amount owed shall be financially corrected from the due date until the date of the actual payment, and the following increases shall be made:

6.3.1.1 - Interest of 1% (one percent) in arrears according to the calendar month or fraction;

6.3.1.2 - Fine of 5% (five percent) in arrears on the corrected amount of the debt reduced to 2% (two percent), if the payment is made until the thirtieth day after the due date.

7. SEVENTH CLAUSE - CLIENT - READJUSTMENT

7.1 - The price of the tree, paid for all species established in the FIFTH CLAUSE, will be readjusted to a higher or lower amount, according to variations occurring during the period, following the IPA index (Gross Price Index) - Global offering, column 45 (wood), of the *Conjuntura Econômica* Magazine published by the Getúlio Vargas Foundation (FGV), in a period of less than 1 year.

7.2 - It will be the CLIENT'S responsibility to calculate the readjusted prices e present them to the owner of the NAME OF COMMUNITY ASSOCIATION.

8. EIGHTH CLAUSE - OBLIGATIONS AND RESPONSIBILITIES OF THE CLIENT

The CLIENT accepts and is bound to carry out the following responsibilities:

8.1 - Employ the foresting techniques in the forest inventory, cutting and extraction activities established by the Community Multiple Use Plan for Sustainable Forest Management, be responsible for the expenses resulting from pre-exploratory, cutting, tracing, and dragging activities, preparation and maintenance of the stockpile clearing areas, clearing of trails, roads, physical installations and other expenses related to the exploration.

8.2 - Provide maintenance for the roads, crossroads, drains and other upkeep necessary during the execution of the project, as well as building the main road.

8.3 - Build a bridge over the xxx River during this year, which will provide access to the main crossing section of road xxx. It is important to note that the CLIENT will be responsible for the expenses related to labour and the Association will be responsible for providing the raw materials.

8.4 - The client will be responsible for providing a copy of the summary of the forest inventory with its respective spatial distribution map of the trees found in the managed forest area of the rural property.

8.5 - In the case of substitution or re-grouping of the work force, the CLIENT will be responsible for complementing its number of employees, giving priority to the hiring of workers in the areas where the Community Multiple Use Plan for Sustainable Forest Management will be implanted. The workers hired will go through a trial period, defined by the CLIENT, after which they may or may not be hired.

8.6 - During the trial period the workers will receive orientation about proper forestry techniques related to the activities to be carried out. After being hired, the workers will receive training and update courses on Forest Management techniques

NINTH CLAUSE - OBLIGATIONS AND RESPONSIBILITIES OF THE CONTRACTOR

The CONTRACTOR accepts and is bound to carry out the following responsibilities:

9.1 - Monitor the execution of the Community Multiple Use Plan for Sustainable Forest Management;

9.2 - Issue documents related to the wood extracted during the month;

9.3 - Employ measures necessary in order to overcome problems related to the execution of the work, when the solution is within their reach or to which they may contribute effectively;

9.4 - Refrain from entering the Managed Forest Area with the purpose of producing wood logs, before the completion of the period determined by law of the second cutting cycle (currently twenty years);

9.5 - Not allow the entry of hunters and loggers in the Managed Forest Area, who transport wood in logs or sheets/boards;

9.6 - Each settler shall be responsible for the organization and upkeep of the association, and to this end a "fund" will be created into which each member will contribute with at least 10% (ten percent) and at most 20% (twenty percent) of the value received with the sale of the wood from his area. The money from the fund will go towards the acquisition of agricultural equipment which will be used by all members of the association.

9.7 - Not allow the logs to be transported by any company other than the CLIENT, without previous communication by the CONTRACTOR and authorization by the CLIENT

9.8 - The settler must be aware that he will only receive any advance payment, before the extraction of the wood, in order to legalize the property documentation;

9.9 - From this date on, the next president elect by the community must be a settler who actively participates and shows interest in the community's problems, as well make it known to the members of the association that the role of president should be voluntary, in other words, no payment will be received, therefore the CONTRACTOR is exempt of the responsibility of offering payment and transportation to the president, even if he is fulfilling his duties as president of the association, compliance with the rules set forth in this paragraph are essential for the better realization of this project.

10. TENTH CLAUSE - INSPECTION

10.1 It is up to the CONTRACTOR to prohibit access or any type of vehicle that transports wood without previous authorization of the CLIENT'S representative.

11. ELEVENTH CLAUSE - PENALTIES

11.1 - For the partial or total lack of execution of the conditions agreed upon, regarding the exploration of the object of this contracted, guaranteed by previous defence, both the CONTRACTOR and the CLIENT are subject to the following sanctions:

11.1.1 - Verbal and written warnings;

11.1.2 - Fines;

11.1.2.1 - The percentage of the fine will be stipulated at 2% on the amounts effectively paid by the CLIENT, in relation to the wood extracted, until the date this penalty is applied;

11.1.2.2 - The fine referred to in the previous sub-item shall be collected in the maximum period of 10 consecutive days, counted from the date the formal notice of the CLIENT or CONTRACTOR is received, with the possibility, if necessary, of judicial collection;

11.2 - The sanctions predicted in sub-item 11.1.1 may be applied together with that of sub-item 11.1.2, considering the previous defence of the CLIENT or CONTRACTOR, within a period of five (5) business days;

11.3 - The fine predicted in sub-item 11.1.2 does not have compensatory effects and its payment will not exempt the CONTRACTOR or the CLIENT from the responsibilities of losses and damages resulting from the violations committed.

12. TWELFTH CLAUSE - COMMUNICATION

12.1 - The necessary communication in lieu of this contract shall be made in written form and sent to the addresses of the CONTRACTOR and of the CLIENT.

12.2 The CONTRACTOR is responsible for informing the CLIENT of any changes decided upon in general assemblies.

13. THIRTEENTH CLAUSE - FINAL AGREEMENTS

13.1 - Any necessary contract alterations shall be formalized through an Additional Term

13.2 - This agreement shall be governed by the laws of the city of xxx, state of xxx, COUNTRY in order to settle any issues regarding this present contract

In order to validate and confirm the present agreement, 03 (three) copies shall be signed by both parties, equal in content and form, by both the client and the contractor, in the presence of witnesses who testify to its validity.

CONTRACTOR: _____
Community association president

CLIENT: _____
Firm representative

WITNESSES:

1. _____

2. _____

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