

Big trees, small favors: loggers and communities in Amazonia

Gabriel MEDINA, Patricia SHANLEY

Center for International Forestry Research (CIFOR)
Convênio Embrapa-CIFOR, Trav. Enéas Pinheiro s/n
CEP 66095-100 Belém-Pará
Brazil

This study of logging events over a ten-year time span in a 3 000 ha community identifies two socioeconomic factors that influence community decisions to sell timber despite the resulting losses in non-timber forest products. These factors are paternalistic relationships between buyers and community members and expanding market involvement requiring more cash to meet increasing needs.



Quiandeuá's villagers on timber exploited in their communities.
Photo G. Medina.

RÉSUMÉ

GROS ARBRES, PETITES FAVEURS : RELATIONS ENTRE LES EXPLOITANTS FORESTIERS ET LES COMMUNAUTÉS VILLAGEOISES EN AMAZONIE

L'évolution des moyens de subsistance et les choix de gestion des ressources de trois communautés rurales sont analysés dans une zone forestière dynamique riveraine du fleuve Capim, dans l'est du Pará, au Brésil. Une étude de treize opérations d'exploitation forestière menées sur vingt ans dans une forêt communautaire de 3 000 ha a montré que la relation entre les exploitants et les communautés villageoises est fortement ambiguë et qu'avec le temps la relation de compatibilité initiale évolue vers l'illégalité. Au cours d'une décennie, les communautés ont vu s'amorcer un déclin des essences fruitières, médicinales et cynégétiques, toutes de grande valeur pour leur subsistance quotidienne, sans jamais remettre en question la cession de leurs droits d'exploitation forestière. L'étude a identifié deux facteurs socio-économiques qui poussent les communautés à céder leur bois malgré la perte de leurs produits forestiers non ligneux : les relations paternalistes entre les acheteurs et les membres des communautés ainsi que l'augmentation de l'implication dans le marché, qui accroît la demande de liquidités pour faire face aux besoins croissants.

Mots-clés : extractivisme, produit forestier non ligneux (Pfnl), exploitation forestière illégale, déforestation, Amazonie.

ABSTRACT

BIG TREES, SMALL FAVORS: LOGGERS AND COMMUNITIES IN AMAZONIA

This article explores the changing livelihoods and resource management choices of three rural communities in a dynamic logging frontier region along the Capim River in the eastern Amazonian State of Pará, Brazil. A study of 13 successive logging events during a twenty-year time span in a 3,000 ha community forest demonstrated that the relationship between loggers and communities is a highly ambiguous one changing over time from compatible to conflictive. Over the course of a decade, communities began to experience loss of fruit, medicinal and game attracting species with high value to their daily livelihoods, yet they never faltered from selling their timber rights. Two socioeconomic factors were identified which influenced communities to sell timber despite the losses in non-timber forest products: paternalistic relationships among buyers and community members and expanding market involvement requiring more cash to meet increasing needs.

Keywords: extractivism, non-timber forest product (NTFP), illegal logging, deforestation, Amazonia.

RESUMEN

GRANDES ÁRBOLES, PEQUEÑOS FAVORES: RELACIONES ENTRE LOS CONTRATISTAS Y LAS COMUNIDADES CAMPESINAS EN AMAZONIA

Se analiza la evolución de los medios de subsistencia y las decisiones de ordenación de los recursos de tres comunidades rurales en una zona forestal dinámica a orillas del río Capim, al este del Pará, en Brasil. El estudio de trece actuaciones de explotación forestal, de veinte años de duración en un bosque comunitario de 3 000 ha, puso de manifiesto que la relación entre los contratistas y las comunidades campesinas es muy ambigua y que, con el tiempo, la compatibilidad inicial va evolucionando hacia la ilegalidad. Durante una década, las comunidades han asistido al inicio de una regresión de especies frutales, medicinales y cinegéticas, de gran valor para su subsistencia diaria, sin cuestionar nunca la cesión de sus derechos de explotación forestal. El estudio identificó dos factores socioeconómicos que impulsan a las comunidades a ceder su madera a pesar de la pérdida de sus productos forestales no madereros: las relaciones paternalistas entre los compradores y los miembros de las comunidades así como una mayor implicación en el mercado que acrecienta la demanda de liquidez para hacer frente al incremento de las necesidades.

Palabras clave: extractivismo, producto forestal no maderero (PFNM), explotación forestal ilegal, deforestación, Amazonia.

One major impact of the construction of highways throughout the Brazilian Amazon in the 1960's and 1970's has been increasing contact between large industries and remote communities. As highways allow ranchers and loggers to penetrate formerly inaccessible forest, remote forest communities suddenly find themselves living amidst powerful new neighbors. When timber resources become depleted close to the sawmills, timber companies migrate outward, seeking new resource rich frontiers to fuel rapid industry expansion (VERÍSSIMO *et al.*, 2002). The rapid growth of the timber industry has been guaranteed, in part, by the

success of loggers in convincing small forest-based communities and landholders to sell their timber rights.

Cash poor communities with few opportunities to accumulate capital routinely sell timber rights for meager financial return. In logging frontiers throughout the region, this scenario repeats itself in small communities daily. After timber sales, villagers frequently complain of declining access to the game, fruit and fiber resources that they depend upon to meet their subsistence needs. The cumulative negative effects of repeated timber sales for forest dependent people become more severe and yet, most continue to sell.



A peasant producing cassava flour.
 Photo G. Medina.



Figure 1.
 Location of Quiandéua's community area, along the Capim river in the eastern Amazonian State of Pará, Brazil.

From compatibility to conflict

Situated along the banks of the Capim River, the Quiandeuá community is located in the municipality of Ipixuna, in the state of Pará, Brazil. Today, forty-eight families live in three distinct villages sharing approximately 3 000 ha of common use (2 200 forest, 800 ha agricultural fields and secondary forest). Like many of the communities throughout the region, households are composed of *caboclos*, rural peasant farmers of mixed African, European and indigenous descent, with a large proportion of former African slaves. Households practice swidden agriculture, their principal market product being farinha (cassava flour), grow corn, bananas and squash and collect extractive products, such as game, fruits, fibers and medicinal plants.

Throughout the 100-year history of the Quiandeuá community, the forest represented a heritage that was used according to the needs and opportunities of in-migrating families, to guarantee the maintenance and development of the new households. During the 1960's and 1970's, forest products such as *maçaranduba* (*Manilkara* spp.) latex and pelts represented a fair source of income, but in the 1980's demand for these products declined. At this time, cattle and timber industries arrived, signaling greater market contact and allowing for direct exchange and sale of *farinha* and trees.



Timber stocked in the village area.
Photo G. Medina.

Among the first to arrive in the region were small-scale loggers whom exploited 390 ha of forest near the river, principally seeking seven species of soft wood, which could float and thus be transported by river. In the 1990's, large companies began to arrive, attracted by hardwood species with a higher commercial value, which were transported on barges. These companies explored *terra-firme* areas, at first selectively logging approximately a dozen species and over a period of seven years becoming increasingly predatory, extracting well over 50 species with commercial value (Figure 2).

In the initial years of timber exploitation, relatively little damage was incurred to the most valuable non-timber forest species and access to game, fruits and fibers was still considerably high. However, after 1997 the intensity of logging drastically altered the structure and com-

position of the 2 200 ha of community forest by removing almost all trees more than 50 cm diameter in areas logged. After 13 consecutive logging events over a twenty-year time frame between 1983 and 2003, average annual household consumption of wild fruit, fiber and game declined by and estimated 80%, demonstrating a conflict of use between timber and non-timber species, with a striking drop as of 1997, when fire swept through the community (SHANLEY *et al.*, 2002).

One major indicator and catalyst of the switch from compatibility to conflict between communities and industries was the sale of timber not by species or individual trees, but by area of forest. This small point of negotiation gave the loggers license to extract any trees in a given area, thus radically modifying the structure and composition of the forest. Although communities have the right to bargain and to negotiate less damaging and less intense extraction, they are rarely informed or prepared enough to try (SHANLEY, MEDINA, 2004). Instead, in spite of diminished access to game, wild fruits and fiber, the communities' dependency on and desire for market goods and paternalistic favors from loggers contributed to the repeated choices of various community leaders to sell wood.

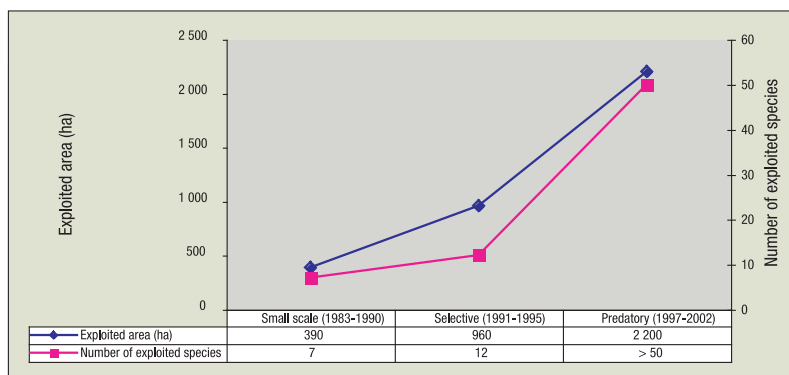


Figure 2.
Evolution of the logged area and the numbers of tree species exploited in Quiandeuá between 1983 and 2002.

Big companies, small communities

Families are uninformed, unprepared and have little bargaining power. Community leaders and heads of households agree to recurrent sales, often due to failing crops of manioc, poor weather, sick children and hunger. While some persons of the community have quietly protested sales — hunters, grandparents who are accustomed to eating game, and women — passivity and a strong proclivity towards avoidance of conflict both among community members and with loggers, have allowed sales to continue.

Understanding that the Amazon is a place where the old and the new are still confounded is essential to understand the context of the relationship between members of the community and the outside world. The advance of timber companies within the area marked the arrival of a modern economic front, however, modernization cannot be assumed as a linear tendency, a compulsory rationalizing of social life, or the predominance of social relations of the contractual type. In fact, relationships between loggers and communities are highly ambiguous and logging contracts are often conversational agreements made with one or two men of the community speaking along the riverbank. Recounting a negotiation that is similar to many throughout the region, a Quiandeuá man recalls, “A gentleman called Milton contacted us, a nice guy, first class. For love we do everything, don’t we? He asked “how much”? We said: whatever you offer. We would take any offer because he was such a nice guy”.

Along the Capim River, the communities and loggers shared parts of a life in common and certain social relations have been established with imbedded, invisible, powers characterized as paternalistic relationships. Beyond the cash offered for trees, loggers present both a symbolic and



Market for NTFP in Belém.
Photo G. Medina.



Market for NTFP in Amazonia.
Photo G. Medina.



A woman and her children working in a cassava field.
Photo G. Medina.



Timber exploited illegally in the community is mixed with legal.
Photo G. Medina.



A native of the community working for the loggers.
Photo G. Medina.



Hunter with a guariba.
Photo G. Medina.

actual link to the outside world bringing news, logging roads, free rides atop trucks to the city, creation of soccer fields, wood for house building, and marriage opportunities for village girls. Actual and symbolic instruments of social integration act as bridges between the two worlds, making possible a *consensus* about the world's meaning; and in turn, playing a fundamental role in evolution of a new social agreement (BOURDIEU, 2001).

Contact between rural people and loggers changes not only the social agreement, but the shared understanding of the value and significance of forest ecosystems to communities. Faced with cash in hand, community leaders rapidly forget the medicinal barks, fruits, and fibers collected from forests and the many kilograms of game that they caught beneath tree species now found only on the loading dock. With little bargaining power to negotiate a higher price for timber, and little information to weigh the costs and benefits of sales, villages often become more interested in favors such as candy, conversation and rides that the loggers offer. The elaboration of such personalized forms of relations have possibly allowed loggers and communities in the region to avoid violent conflict, a common characteristic in frontier areas (MARTINS, 1997). The tragic aspect of the Capim River frontier, more than in their explicit conflicts, is notable in the form of *friendly relations* (SCOTT, 1985) between natives and buyers.

Trading trees for modernity

Over the last 15 years, to gain access to cheap wood in the face of declining supply, loggers have developed various schemes. Most recently to facilitate negotiations, logging companies hire local persons known by the community and offer advance payments. In 2002 one company offered the equivalent of US\$ 10 000 to acquire logging rights to 1 200 ha, representing US\$ 8.30 per hectare.

Considering that on average nine trees were exploited per ha, each tree cost less than US\$ 1.00. In this case, US\$ 2 000 was offered in advance, with the remaining payment to be given in five installments. However, as of July 2003, the families had received only two payments. If history repeats itself with regard to previous negotiations throughout the region, the remaining will never be paid. Meanwhile, the community cannot claim their rightful payment because the agreement was informal. In the coming dry period when communities are in need of cash and loggers in need of wood, the same loggers will make new, successful bids for logging rights in neighboring communities.

Selling trees for cash requires little to no labor. In addition community members dedicate little to no time to timber sales as they do not accompany loggers throughout the forest, but allow loggers free reign to cut as they please. Such easy money

with no labor stands in stark contrast to the meager pay for manioc flour that requires an entire family's labor and substantial time to produce. Due to the loss of wild food resources post logging and less time spent on agriculture by men, families began to demonstrate a growing dependence on outside cash to meet even basic needs. Instead of game, families began to purchase and consume dried and canned meat and instead of home utensils fashioned from forest vines, plastic goods entered the community. The communities' newfound dependency on the market began to require consecutive timber sales to acquire the cash necessary for the acquisition of goods.

Beyond purchase of essential goods, timber sales provided families with enough cash to purchase high price items that they had never had access to such as cattle, chain saws, a truck, a generator, and supplies to improve boats. In addition to major acquisitions, for the first time, luxury goods began to enter the community. Recently, after a marriage, the groom was given special gifts such as the shirt of his favorite football team and the bride new pots and pans. At parties, the boys want to be well dressed and to have money to impress girls. Radios, bicycles, stoves, beds and other furniture represent newfound prosperity.



Large-scale logging in Quiandea.
Photo G. Medina.

Conclusion

In the case study described, locally perceived value and behaviors towards tropical forest resources contrast sharply with globally constructed views of tropical forest value. However promising estimates of the value of biodiversity and financial projections of non-timber forest resources seem, these have been poorly contextualized in a local economic and social framework. In many Amazonian forest communities such as along the Capim River, macroeconomic interests of powerful ranching, mining and logging exert strong pressure on communities, and through paternalistic relationships convince households to sell their trees – many times over – for scant cash. In the Capim region, for lack of more timber, the current 13th sale over this last decade may well be their last.

Initial sales were principally symbiotic, wherein a small number of species were logged that interfered relatively little with hunting and gathering activities. Over time, depletion of timber resources throughout the region fueled the timber industry to extract an ever-growing number of trees, including locally valued fruit and medicinal species. At this point, logging in the Capim demonstrated not only conflict of interests but also became illegal. National legislation requires a formally written and endorsed forest management plan to extract commercial volumes of timber.

No such plan exists for any of the logging companies that have exploited timber in the area nor do they follow basic tenets including cutting trees of only minimum diameter, leaving buffer areas along rivers and minimizing damage along logging roads. However, geographical remoteness, lack of implementation of the law and cooperation of sufficient numbers of male community members throughout the region has allowed loggers free access to large tracts of forest.

The scenario described here repeats itself in hundreds of small forest-reliant communities daily in Amazonia. Clearly, lacking market based information and having little notion of the consequences of various intensities of logging, communities have very little on which to base their decisions. For forest-based communities, valorization of forest resources is a complex phenomenon and subject to various conditions. The local perspective needs to be understood for development and conservation initiatives to work (LUKERT, CAMPBELL, 2002). Besides the conventional values attributed by ecology and economics, forests have a local value which is critical to understanding decisions of forest communities and the importance of forest resources in the context in which they are used.

Bibliography

BOURDIEU P., 2001. O poder simbólico. 4 ed. Rio de Janeiro, Brazil, Bertrand, 311 p. (p. 7-16).

LUKERT M. K., CAMPBELL B. M., 2002. Expanding our conceptual and methodological understanding of the role of trees and forests in rural livelihoods. *In: Campbell B.M. e Luckert M.K. (ed.). Undercovering the hidden harvest: valuation methods for woodland and forest resources* (People and plants conservation manuals). London, United Kingdom, Earthscan Publications, 262 p.

MARTINS J. S., 1997. Fronteira: a degradação do outro nos confins do humano. São Paulo, Brazil, Hucitec, 213 p.

SCOTT J. C., 1985. Weapons of the weak: everyday forms of peasant resistance. Massachusetts: Yale University Press, 389 p.

SHANLEY P., LUZ L., CYMERYS M., 2002. The interface of timber and non-timber resources: declining resources for subsistence livelihoods, p. 313-321. *In: Tapping the Green Market: certification and management of non-timber forest products*. Shanley P., Pierce A., Laird S., Guillen A. (ed.). People and Plants Conservation Manual. London, United Kingdom, Earthscan Publications.

SHANLEY P., MEDINA G. (ed.), 2004. Frutíferas e plantas úteis na vida amazônica. Belém, Amazon, CIFOR, 300 p.

VERÍSSIMO A., LIMA E., LENTINI M., 2002. Pólos madeireiros do Estado do Pará. Belém, Brazil, Imazon, 72 p.