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Rural livelihoods, forest law and the illegal timber trade in
Honduras and Nicaragua.

DRAFT FOR COMMENT

Adrian Wells, Filippo Del Gatto, Michael Richards, Denis Pommier, Arnaldo Contreras.

Based on research with: Gilberto Alcocer, Eduardo Ampié, Oscar Castillo, Ibis Colindres, Danilo Dávila, Jaime Guillén, Arístides Jiménez, Arnaldo Paniagua, and Abelardo Rivas.

A case study for CIFOR/PROFOR: "Forest Law Enforcement and Rural Livelihoods".

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(1) INTRODUCTION

Honduras and Nicaragua are HIPC qualified countries, among the poorest in the Western Hemisphere. Both countries have extensive natural forest cover,¹ and economic and livelihood dependence on forests is significant. In 1997, the forest sector in Honduras formed some 9 percent of GDP and 7 percent of national foreign currency earnings (Lazo 2001); while in Nicaragua it contributed 3.2 percent of GDP (FoE 1999). However, levels of deforestation are also high.² In remoter areas where dependence on forests is highest, this is partly the result of widespread illegal logging. Yet the links between illegal logging and rural livelihoods (and in particular poverty) remain poorly understood.

This case study presents the evidence generated by one of the first attempts at a systematic policy, legal and institutional assessment of illegal logging in Honduras and Nicaragua, conducted by a team of local and international researchers during 2002.³ The full results of this study are available on: www.talailegal-centroamerica.org.

The case study outlines the scale and dynamics of the illegal timber trade, focusing on the involvement of local communities, the legal, institutional and economic factors that drive this, and the livelihood and poverty implications (positive and negative) both directly, and in terms of impacts on state revenue. The case study examines how the existing legal and institutional framework, within and beyond the forest sector, presents community-based forest producers with significant barriers to legal compliance. These span denial of secure tenurial and resource rights, over-complex regulation and associated corruption.

Such “barriers to legality” criminalize local forest users. For example, the transaction costs of complying with complex regulation, combined with low timber prices (itself a result of illegal logging), renders legal forest production uneconomic for small-scale producers. This leaves them vulnerable to economic capture by powerful illegal timber traders who, in many cases, operate in collusion with forest governmental employees and law enforcement officials. This is especially the case in remote rural areas, with weak state presence and high levels of organized crime as a result of the drugs trade.

The case study shows that involvement in illegal logging is a source of valuable short-term income for the poor where few other livelihood options exist. But this is also at a considerable cost to natural and social capital, so important for the livelihood resilience of the poor in remote areas. The case study argues for a combination of measures to tackle illegality, while also securing the livelihood benefits of forests for the rural poor. These include regulatory and institutional reforms to reduce “barriers to legality”, as well as better targeted law enforcement to address corruption and organised crime – within and beyond the forest sector.

The case study is divided into eleven parts. Part 2 discusses the relationship between forests and rural livelihoods in Honduras and Nicaragua. Part 3 outlines the research process. Part 4 presents a working definition of illegal forest production. Part 5 outlines the scale of the illegal timber trade in Central America, while Part 6 describes key actors and, in particular, the role of local communities. Parts 7 and 8 address legal and policy barriers to legality, and how these provide an economic

¹ Covering about 47% of Honduras, and 48% of Nicaragua (Harcout & Sayer 1996).

² About 3.5% (80,000-100,000 ha) in Honduras and 2.3% (70,000-75,000 ha) in Nicaragua.

³ See Acknowledgement.

incentive for illegal logging. Part 9 focuses on failures in public administration, including institutional corruption, and how these compound the effects of regulatory barriers to legality. The impacts of the illegal timber trade (positive and negative) on rural livelihoods are addressed in Part 10. Finally, in the Conclusions, the case study recommends a range of policy prescriptions, and identifies gaps in the analysis to be addressed through further research.

(2) FORESTS AND RURAL LIVELIHOODS IN HONDURAS AND NICARAGUA

In both countries, around 40% of the population lives in and near forest areas. The majority are poor or extremely poor.⁴ The heavily forested Atlantic regions examined in this case study are home to some of the most persistent poverty, due to isolation and lack of investment. In Nicaragua, extreme rural poverty in these areas actually increased between 1993 and 1998, compared to other regions which saw significant reductions.⁵

Forests users in Honduras and Nicaragua include indigenous peoples and ethnic minorities,⁶ as well as migrant *mestizo* settlers. They also include increasing numbers of timber traders and urban-based landowners. Local communities use forests for hunting, gathering fruit and medicinal plants, and to access land for farming, mining and ranching. In addition, they use forests to access firewood and construction materials, mainly in young secondary forests (*guamiles*) including agricultural fields in the fallow period. In some areas small amounts of timber are extracted for traditional uses such as dug-out canoes (*cayucos*). Despite limited opportunities to operate legally, increasing numbers of local people are also involved in the commercial timber trade for at least part of the year. These include members of local agroforestry cooperatives and casual labourers, who work as manual sawyers, in transportation or processing. Many communities have also started to protect forested watersheds to safeguard water supplies.

Forest incomes have an important role in livelihood diversification. Even in the most remote areas, poor rural households are gaining a greater proportion of their income off-farm. This partly reflects policy and market failures affecting the agricultural sector (see section 4.2 below). In poorly integrated areas, with limited investment and fewer capabilities to access urban employment opportunities, forests constitute an important supplementary income to farming. Amongst others, the sale of forest products and employment in the timber trade help to finance accumulation in agriculture, and to pay off debts accrued during stress periods (McSweeney, 2003). Local people's involvement in timber cutting is less tied to the agricultural cycle than to the availability of permits and buyers (opportunistic).

The existing mix of forest users, especially on the Atlantic coasts of Honduras and Nicaragua, is a product of the advancing agricultural frontier. The agricultural frontier acts as an escape-valve for the effects of policy and market failures in more densely populated, drier areas to the south and west. These include highly skewed land distribution (in Honduras almost half the farms are less than two hectares); export-oriented agriculture which has left *campesinos* with the poorest soils (Vandermeer &

⁴ In Nicaragua, 70% of rural residents are poor, of whom 29% are extremely poor http://poverty.worldbank.org/files/Nicaragua_PRSP.pdf. In Honduras, 75% of rural households are poor and 61% of these are extremely poor http://poverty.worldbank.org/files/Honduras_PRSP.pdf

⁵ http://poverty.worldbank.org/files/Nicaragua_PRSP.pdf

⁶ Such as the Tawahka, Miskito, Pech and Garifuna in Northern and Eastern Honduras, and the Miskito, Mayagna and Rama in the Atlantic Coast regions of Nicaragua.

Perfecto, 1998); declining terms of trade for agriculture (in mid 2002 the coffee price paid to farmers was about a third of its peak 1997 value); lack of credit and rural marketing infrastructure; and declining domestic market opportunities due to more competitive (subsidized) grain imports. These pressures, compounded by natural disasters and land degradation, have led to declining productivity in many areas. Even the rural non-farm economy is struggling to maintain the rural poor (Richards, 2002c). This creates strong pressure for out-migration, mainly to urban areas, but also to the forest frontier.

The agricultural/forest frontier colonization process typically takes place in three main waves, as described by Denner & Overman (2002) and others. The first wave is commercial logging. In the Honduran Mosquitia there was a significant increase in commercial logging in the 1950s; this increased access to forest areas and enabled sawmill workers and logging crews to make land claims. They used company chain saws to clear agricultural plots, and bought out indigenous landholders. They would then often sell the plots to relations and friends, usually becoming ranchers with the proceeds. The second wave consists of displaced or land-seeking farmers pushed by land concentration, environmental degradation (especially in the increasingly arid south) and social problems, and pulled by a belief in the fertility of humid forest soils. These settlers came in on old pathways or newly opened roads (often for logging purposes), cleared an area and farmed it for 2 – 3 years (the maximum on humid forest soils when growing nutrient demanding crops such as maize and beans). They would then sow the land to pasture and sell it on to ranchers. The latter, who are sometimes urban-based, form the third wave; ranchers typically promote the process by providing chainsaws to the colonist farmers, thereby ensuring land purchase. In Nicaragua, resettlement of ex-combatants in forest frontier areas after the civil war has added to these pressures on land and resources.

(3) THE RESEARCH PROCESS

This case study draws on a diagnostic analysis of the illegal timber trade in Honduras and Nicaragua. This consisted of the following elements:

- (i) Six case study sites were chosen as a representative sample of illegal timber production chains serving local and foreign markets. In Honduras, the case study sites covered illegal logging operations in the Sico-Paulaya region in the north-east (Mosquitia); in Atlantida on the north coast; and in Culmí in the east (see Map 1). In Nicaragua, the case study areas comprised the El Castillo municipality in the southeast San Juan river area (bordering Costa Rica), and the municipalities of Puerto Cabezas (Bilwi) and Rosita in the northern Atlantic region (Map 2). All of these were illegal logging “hotspots” located in broadleaf forest areas.⁷ The availability of researchers with strong local knowledge and contacts also determined site selection.
- (ii) Studies of the legal, regulatory and institutional barriers to legality facing forest producers.
- (iii) Studies of the economic costs of illegal logging to the national governments.
- (iv) A preliminary regional assessment of illegal timber trade flows, including an analysis of timber import and export data for Honduras, Nicaragua and their main trading partners.
- (v) Multi-stakeholder meetings to discuss the study’s findings. Stakeholders included local forest users; small farmer (*campesino*) unions; local

⁷ While some case study areas also had pine forests, the main focus in this preliminary study was on broadleaf forest.

governments; the national forestry authorities; the state environmental monitoring services (*fiscalia*); and industry representatives.

MAP 1. Case study locations in Honduras



MAP 2. Case study locations in Nicaragua



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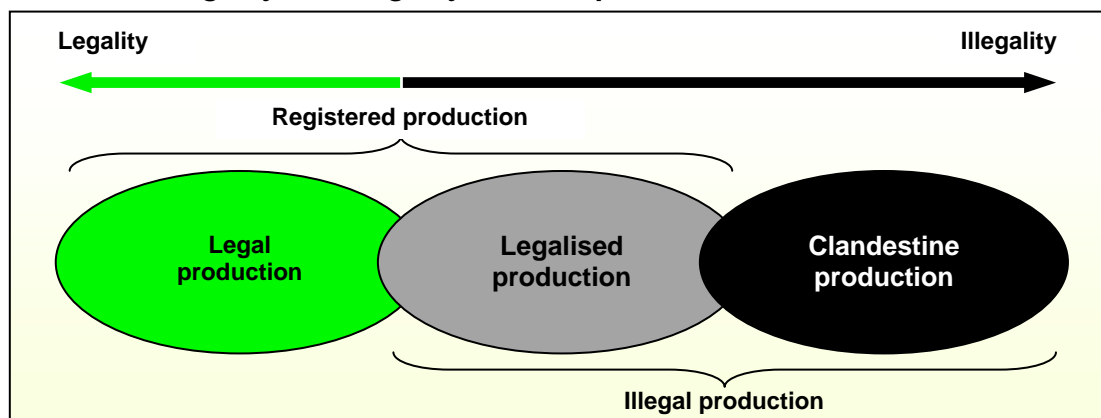
(4) ILLEGAL FOREST PRODUCTION – A WORKING DEFINITION (based on Del Gatto 2003a, and Richards et al 2003b)

This case study focuses on the role of local communities in activities considered illegal under national law. This provides a lens through which to identify legal, institutional and economic “barriers to legality” that work to criminalize local forests users’ livelihoods – be these a denial of tenurial and resource rights, or over-complex regulation. For these purposes, illegal forest production can be defined as that which fails to conform to national laws and standards regulating forest resource allocation, forest management and extraction, processing, transport and trade.

That said, “illegality” is a problematic concept. Societal objectives vary and also shift with time. The legitimacy of laws and regulations is therefore likely to be perceived differently by different sets of stakeholders. Local forest users may perceive national forest law as illegitimate if, for example, it ignores their customary rights in favour of assigning harvesting rights to third parties.

It is also hard to distinguish legal and illegal production. Much apparently legal forest production is fraudulently ‘legalised’ at some point along the production chain. In the Central American context, it is useful to group forest production into three (albeit overlapping) categories as suggested by Figure 1: legal, legalised and clandestine production. The latter two categories (legalised and clandestine) conform to ‘illegal logging’. Poor people are involved in, and impacted by, both.

FIGURE 1. *Legality and illegality in forest production in Central America*



Source: Del Gatto (2003a).

Legalised production is timber fraudulently legalised at the stump (for example, by adding timber from an unauthorised area), in transport (in Nicaragua, it is common for a transport permit to be used up to ten times) or in processing. Legalised production is accompanied by official documents, forest fees are paid, and it enters official statistics. Clandestine timber, by contrast, evades all documentation and fees, and remains unregistered.

Bribing the state forestry authority, local government and law enforcement (police) officials to secure permits, or ‘turn a blind eye’, forms an integral part of both legalized and clandestine timber. In official data there is therefore an overlap between legal and illegal logging, as shown in Figure 1, making it difficult to estimate the scale of illegal production and its impacts for national revenue.

(5) THE SCALE OF THE ILLEGAL TIMBER TRADE IN CENTRAL AMERICA (based on Del Gatto 2003a, Alcocer López 2003)

5.1 The illegal timber trade in Honduras and Nicaragua

Using a combination of secondary data,⁸ key informant estimates, and supply and demand analysis,⁹ clandestine production in Honduras is estimated at 75-85% (about 125,000-145,000 m³) of total hardwood production, and 30-50% (350,000-600,000 m³) of softwood production. For Nicaragua it represents about half (30,000-50,000 m³) and 40-45% (110,000-135,000 m³) of total hardwood and softwood production respectively. Anecdotal evidence suggests that most of the remaining or official timber production is fraudulently legalised. Levels of clandestine hardwood production could be higher given weak state presence in remoter source areas on the Atlantic coasts, as well as higher values compared to pine. Furthermore, a greater proportion of pine is in private or communal hands, whereas most broad-leaf forest remains under state control.

'Legalised' and clandestine timber production chains feed a variety of markets. In Honduras, processing and export industries mainly located in 'free processing zones' around the main cities consume pine and higher value timber including mahogany for export as furniture or furniture parts. Among the main mahogany buyers are Mahogany International, Caobas de Honduras and Wellington Hall. In Nicaragua, the main mahogany exporters are MADENSA S.A., AMERINICA S.A., Aserrio R. L, Maderas Porteñas, and IMCASA. The US and the Caribbean are key markets. Production chains also feed national markets (for urban consumption) and local demand (for mines, and construction in local towns and villages). National demand focuses on a broader spectrum of species, from traditional high value timbers like mahogany to pine and lower value hardwoods.

5.2 Transboundary movements of illegal timber

Across Central America as a whole an estimated 20-30% of the regional timber trade is undocumented (clandestine). Notwithstanding the limitations of the data, cross-country comparisons made on the basis of the FAOSTAT (2002) Bilateral Trade Matrices as well as anecdotal reports suggest considerable under-declaration of exports of Nicaraguan and Honduran softwoods and hardwoods, including mahogany, especially to the Dominican Republic¹⁰ and the US. In 1999, the US International Trade Commission registered the import of 2,222 m³ of Honduran mahogany (sawnwood) revealing the violation of Honduras' 1998 hardwood log and sawnwood export ban.

Anecdotal evidence also suggests that Honduras exports significant quantities of illicit timber to Nicaragua, only to re-import it as 'legal' timber. El Salvador, the least forested country in Central America, has been a significant consumer of both

⁸ For Honduras, data from a 1987 inspection survey of timber quantities in processing plants were available.

⁹ The clandestine cut can be crudely estimated as the residual of demand (composed of national consumption and exports) less the sum of official supply and imports. One problem of this calculation is the difficulty of estimating clandestine imports and exports.

¹⁰ Certain Caribbean countries appear to act as 'black holes' for Central American timber given that they absorb apparently large amounts of timber that are not recorded in the import statistics. While this is partly a reporting problem (unlike the US where reporting is efficient), it is also likely that this reflects illegal timber laundering on the international market - but this requires further research.

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Honduran and Nicaraguan timber, especially in recent years given the need for reconstruction following Hurricane Mitch and two earthquakes. On the Honduran - El Salvador border, the illegal timber trade is exacerbated by old territorial disputes – resulting in ‘timber conflicts’ involving the local authorities as well as local armed groups that include Salvadorans living in Honduras.

Costa Rica has been much more successful than its neighbours in controlling illegal logging (Campos Arce et al, 2001). But Costa Rica partly makes up for its national supply shortfall by importing illegal Nicaraguan timber across the highly permeable San Juan river border (Del Gatto, 2003c).

(6) KEY ACTORS IN THE ILLEGAL TIMBER TRADE; THE ROLE OF LOCAL COMMUNITIES (based on Del Gatto 2003e, Colindres 2003b, REMBLAH 2003, Ampie Bustos 2003, Paniagua 2003, NICAMBIENTAL 2002)

Illegal timber production chains in Honduras and Nicaragua involve a wide range of actors including forest owners, forest squatters, migrants, community leaders, forest professionals, timber truckers, timber industrialists and public officials. Arrangements between these actors enable: access to forest resources; provision of up-front capital and equipment; transportation, processing and marketing; as well as accompanying formal and informal transactions to 'legalise' production or circumvent the legal and fiscal system.

In both countries, timber traders/ intermediaries are instrumental in facilitating supply chains. The latter usually operate by advancing funds and equipment to local communities, including forest owners, local timber producer associations and individual sawyers.

The role of local communities in illegal timber production chains varies, depending on existing institutional structures and tenorial arrangements. In Nicaragua, some processing companies use intermediaries to systematically buy up community and/or non-commercial use permits, as a means to access the resource and 'legalise' illegal cutting. The role of indigenous communities and small-scale private forest owners is therefore often limited to giving permission for their land to be logged. In Honduras, intermediaries have infiltrated and even established forest producer organisations under the Social Forestry System (SSF). This allows intermediaries to obtain different types of cutting permits, which most of the time just serve as means to 'legalise' otherwise illicit extraction. Intermediaries take control of decision-making, using local sawyers as little more than hired labour (see Box 1). In return, well-connected intermediaries offer community producers the means to secure permits through patronage, as well as access to credit and markets. So giving local communities a role in forest management also provides a vehicle for elite collusion, in order to access resources and legalize production.

The fraudulent use of community permits to legalise production would not be possible without the collusion of technicians and senior government officials in the state forestry agencies. In Honduras, the State Forestry Administration (AFE-COHDEFOR¹¹) introduced a policy of issuing 'deadwood' licences following Hurricane Mitch (1998). This was used to fraudulently cut standing trees (see Box 1). In Nicaragua, informal schemes are negotiated between officials of the state forestry agency INAFOR¹², local government (municipalities), community leaders (*síndicos*¹³) and other interest groups to legalise production. This includes issuing permits to cut larger volumes than is obtainable from an authorised area.

¹¹ State Forestry Administration - Honduran Forestry Development Corporation

¹² National Forestry Institute

¹³ A *síndico* is an indigenous community leader in the northern Atlantic region of Nicaragua

Box 1: The Social Forestry System and illegal mahogany exploitation in the Sico-Paulaya Valley, Honduras.

The Honduran Social Forestry Systems (SSF) was introduced in 1974, granting management and harvesting permits to groups of farmers or indigenous people organised as agro-forestry cooperatives. In the years following Hurricane Mitch, AFE-COHDEFOR began issuing licenses to community-based producer groups under the SSF, authorizing the exploitation of *dead wood* felled as a result of natural causes (such as Hurricane Mitch) or due to changes of land-use to agriculture or animal husbandry.

In the Sico-Paulaya valley, this led to widespread forest exploitation over 2000 and 2001. In all, 8,696 m³ of mahogany timber was released for commercial exploitation, 93 per cent of it being 'dead wood'. What actually happened bore little resemblance to this official picture. Evidence suggests that around 80 per cent of the timber extracted came from other sources. In other words, the dead-wood licences that were issued just served as a cloak for trade in illegally logged timber.

Officially, forest exploitation is carried out by community-based groups, organised under the SSF of the state forestry agency AFE-COHDEFOR. However, implementation of the SSF in the Paulaya valley has been strongly influenced by the interests of timber merchants (a common pattern in high-value forests). Middlemen infiltrate local producer organizations under the SSF through a combination of backhanders, patronage systems and, where necessary, intimidation. They quickly seize control of the decision-making process, and of every stage of the production process (institutional management, production, and marketing). Intermediaries even find themselves establishing and/or acting as self-elected directors of community organizations. This provides intermediaries with a front to obtain timber use permits under the SSF system, transacting directly with AFE-COHDEFOR with little or no local participation.

Intermediaries advance money to local communities to cover the costs of production, and fix the price and place for the timber purchase. Cutting is carried out by dozens of sawyers working in small independent teams, each of 3-6 people with one or two chain saws. In spite of the SSF, local sawyers are frequently just daily workers. Intermediaries may also hire workers from outside the valley. The most common fraudulent practices associated with this system are summarised in Annex 2.

The regional and national associations of SSF organizations are not immune to infiltration of this kind. It is often important to obtain the backing of such associations to furnish a 'political' justification for the choices made by the bodies responsible for taking decisions. It is accordingly a key objective of groups with an interest in illegal logging to ensure that they can influence these associations (which they usually do, as with communities, through putting pressure on its leaders).

Source: Del Gatto, 2003e

(7) BARRIERS TO LEGALITY: LEGAL AND POLICY CONSTRAINTS

(based on Contreras-Hermosilla 2003, Colindres 2002, Del Gatto 2003d, Guillén 2002, Pommier 2003)

A variety of legal and institutional constraints leave local community organizations highly vulnerable to capture by timber traders. Actors may perceive the law as unfair and resist its application, where it fails to recognise local tenurial rights, restricts access to forests resources and/or places unjustifiable volume constraints on production. Other key constraints include inconsistent and difficult to comply with regulations, as well as overlapping or conflicting government responsibilities. These constraints criminalize livelihoods and increase the transaction costs associated with staying legal for community-based enterprises.

7.1 Tenurial constraints

In Honduras, around 63% of forest land is state-owned. The remainder constitutes *ejidal* land owned by municipalities (14%), and the rest is private (23%). The tenurial distribution of forest land in Nicaragua is currently unclear, given ongoing disputes with indigenous peoples and rural land titling processes.

The tenurial or use rights of people living on state forest land are also unclear – except for the few that have benefited from policy initiatives on co-management, for example under social forestry schemes or in protected areas. For example, Article 41 of the 2003 Nicaraguan Forest Law defines national forest land as that without owners, which is problematic given that 75% of land in Nicaragua lacks clear title (FAO, 2000).

Without legal recognition, migrants living on state forest lands are instead subject to a system of *de facto* rights, based on economic power. Individual *campesinos* may secure informal property rights depending on whether they are the first to claim and clear a piece of forest land, or have acquired such property rights from a previous owner. Tree-cutting is subject to the permission of these informal owners, though hunting and medicinal plants are generally considered open-access. In some cases, where communities have wanted to protect a watershed for water production, they have partially compensated informal landowners in the areas affected.

Informal rights may provide sufficient tenurial security in some areas. However, in more recently settled areas where households have not yet developed strong informal institutions, tenurial insecurity is often greater (Broegaard et. al., 2002). Combined with the rush to capture valuable resources on the forest frontier, this has led to endemic violence (Kaimowitz et al, draft).¹⁴ Evidence from Honduras also shows that informal property rights can easily be appropriated by other members of the community including groups of legal and illegal loggers, often with threats of violence and even official backing. Poor people are often pushed further and further into remote forests to find land not already claimed, as the cattle ranches expand. As unclaimed land becomes increasingly difficult to find, conflicts escalate.

In Nicaragua, a series of rural land titling schemes,¹⁵ have worked to formalize property rights, granting individual households title deeds to plots of land. In

¹⁴ Draft Chapter 3, 'Nicaragua and the Wild West'.

¹⁵ Land titling is currently the responsibility of the Office of Rural Titling; formerly INRA under Law No. 14, "Amendment to the Agrarian Reform Law" 1986, and before that MIDINRA under the Agrarian Reform Law 1963.

Honduras, the 1992 Law of Agricultural Modernization returned forest property rights to land owners and municipalities, reversing 1974 legislation which nationalised forests on private and municipal (*ejidal*) lands. It also conferred ownership rights to *de facto* owners of national forest land which had been under agricultural use for at least three years before 1992 (Lazo 2001).

Land titling can, however, increase tenurial insecurity for the poor due to delayed, partial, corrupt, improper or reversed implementation. The process of registering land title is long and expensive, and total costs may equal half the initial land price. In Nicaragua, lack of formal documents due to failures in the registration system mean that households are sometimes forced off their land by more powerful interests (Broegaard et. el, 2003). In Honduras, by allowing titling of state forest land under agricultural use for at least the past three years, the 1992 law appears to have resulted in widespread speculative land clearance by wealthy locals and outsiders, since they had the resources and lawyers to take advantage of the situation (Suazo et al, 1997). Titling has also been slower in more remote areas, meaning that many settlers and indigenous people continue to live without tenurial security.

Land reform and rural titling schemes have yet to fully address indigenous land claims. In Honduras, indigenous land rights are recognized under Article 346 of the Constitution of the Republic. Groups such as the Tawahka have had some success in securing title and protection for their lands.¹⁶ However, claims by other groups living on national land such as in the Rio Platano Biosphere Reserve remain unresolved. Such groups find themselves increasingly in conflict with settlers and extractive industries. In Nicaragua, indigenous land rights are recognized under the 1987 Constitution, Law 28 on Autonomy of the Caribbean Coastal Regions, and more recently Law 445 on indigenous communal property regimes in the Atlantic regions. Yet *Mayagna (Sumo) Awas Tingni Community v. Nicaragua* in the Inter-America Court (see Box 2), demonstrates problems in securing demarcation of indigenous territories. These include failures in public administration, differences between customary and state law, as well as difficulties in accessing justice, including language barriers and judicial delays.

Box 2 The Mayagna (Sumo) Awas Tingni Community v. Nicaragua

On June 4, 1998, the Inter-American Commission on Human Rights filed an application against the State of Nicaragua before the Inter-American Court of Human Rights. The application claimed the State had violated the American Convention on Human Rights, for not demarcating the communal lands of the Awas Tigni Community, nor adopting effective measures to ensure the property rights of the Community to its ancestral lands and natural resources. Furthermore, Nicaragua had granted a concession on these lands without the assent of the Community, or ensuring an effective remedy in response to the Community's protests regarding its property rights.

The Awas Tigni Community is an indigenous community living in the Northern Atlantic Autonomous Region (RAAN). Their territories are collectively managed for family farming and communal agriculture, as well as hunting and gathering. The Community lacked any formal

¹⁶ The 5 existing Tawahka communities in Honduras succeeded in obtaining land title (*títulos comunales*) to around 1000 hectares of their territory (covering their houses and surrounding agricultural plots). However, the political unfeasibility of securing title over the remainder (about 200,000 hectares) meant that the Federation of Tawahka Indians instead petitioned for creation of the Asangi Biosphere Reserve. The petition was based on the Wyke-Cruz treaty between Honduras and Britain, guaranteeing the rights of non-European peoples living in territory ceded by Britain to Honduras (Trackman et al, 1999). While the Tawahka don't have title over this reserve, they do have rights to collect forest products within it, and it has helped in reducing levels of encroachment by migrants.

property title to the land. However, they argued their claim was solidly founded in the existing traditional tenure system and associated community organisation and cultural practices. Furthermore, Arts. 5, 89 and 180 of the Nicaraguan Constitution recognise the right to property, and also establish direct guarantees for such rights of indigenous peoples, with no need for subsequent specification.

In January 1995, The Ministry of the Environment and Natural Resources (MARENA) approved a management plan submitted by Concession assigned to Sol del Caribe, S.A. SOLCARSA for timber extraction in the area. The community contested this decision. They requested that MARENA take no further steps to grant the concession until it had fulfilled its duty to "facilitate the definition of the communal lands and... avoid damaging.... the territorial claims of the community", under an earlier Forest Management Agreement concluded between the community, and the company Madera y Derivados de Nicaragua, S.A. (MADENSA).

The community failed to secure a response from the Minister of MARENA. The community subsequently made two *amparo* remedy applications to the Appellant Courts in Nicaragua against the decision to grant a concession, and to further a process to secure their property rights. These were rejected by the Supreme Court on technical grounds, and after significant delays in the judicial process. Furthermore, the authorities did not comply in a timely manner with a separate ruling by the Supreme Court, declaring the concession unconstitutional on grounds that it had not been approved by the Regional Council of the RAAN under the 1987 Law on Autonomy. For two years after that ruling, the community continued to suffer the affects of the logging concession.

In a judgment on August 31, 2001, The Inter-American Court found Nicaragua in violation of Art. 25 of the American Convention on Human Rights on the right to judicial protection, as well as Art. 21 on the right to property. It also ruled that the State must adopt, Pursuant to Art. 2 of the Convention (Domestic Legal Effects), "legislative, administrative and any other measures necessary to create an effective mechanism for delimitation, demarcation and titling of the property of indigenous communities...". The Court also ruled that the State pay reparation for "inmaterial damages" up to a total of US\$ 50,000, as well as costs incurred by the community in domestic and international proceedings.

Source: Mayagna (Sumo) Awas Tingni Community v. Nicaragua (2001) (Inter American Court of Human Rights - Eng. translation) 03/15/2002
Environmental Law Alliance Worldwide <http://www.elaw.org/resources/text.asp?ID=1050>

7.2 Limits on rights of access

Access to national forest land in Honduras

Three acts govern access to state forest land in Honduras: the 1971 Forest Act, the 1974 COHDEFOR Act and the 1992 Act for the Modernization and Development of Agriculture:

- The 1971 **Forest Act** promotes the multiple use of forest areas, maximum and sustainable yield, the conservation of special areas and national parks, and the notion of an 'inalienable public forest heritage', including measures to prevent the occupation or illegal separation of public forest areas (Lazo 2001). The Act is still in force, though may soon be replaced by a new Forest Law (see Conclusions and Policy Prescriptions).
- The 1974 **COHDEFOR Act** in effect nationalized all forests, placing even private forest areas under state control. COHDEFOR was empowered to harvest, industrialize and market forests, and to implement management plans to guarantee maximum and sustainable yields.

- The 1992 **Act for the Modernization and Development of Agriculture** reversed elements of the 1974 Act, by returning control of private forests to landowners. It also devolved ownership of *ejidal* forests to the municipalities. The Act restricted AFE-COHDEFOR's responsibilities to managing national forests, including natural protected areas, and controlling and setting standards for operations in private and municipal forests. The law established the auction system as the procedure for selling standing timber, relieving AFE-COHDEFOR of any responsibility for the direct exploitation of forests, or the industrialization and marketing of timber.

The 1996 **Regulation Governing the Rights of the People on National Lands with Forest Potential** limits access by people living on national forest land to so-called traditional uses of the land which do not involve logging. It only permits them to harvest fuel wood from trees that have died a natural death, or to extract timber after thinning-out and culling operations, resin, oil, latex and seed extraction, grazing, recreation, harvesting medicinal plants, hunting and fishing.

Since the mid-90s, AFE-COHDEFOR has begun to apply co-management of national forest land within protected areas; management plans are used to devolve the administrative responsibility and management of protected areas to municipalities, NGOs and communities – with the intention that each secures a share in benefits deriving from environmental goods and services.

However, the only means for local people to participate in timber harvesting is under the Social Forestry System (SSF), if they are able to organize themselves in order to prepare a management plan. The 1992 Law of Agricultural Modernization places the comprehensive development of rural communities with forest management plans under AFE-COHDEFOR's remit. Official support for the SSF has nevertheless declined and the System no longer provides a source of secure access rights for people living on state forest lands (see Box 3). In any case, beneficiary families only represent some 60,000 persons; many others have been excluded from the benefits of logging (Lazo 2001).

Box 3. The Social Forestry System – benefits but no secure rights

Community-based groups that organize themselves in order to prepare a management plan may secure legal rights to harvest timber, resins or other products under the Social Forestry System (SSF). The SSF was introduced in 1974 granting management and harvesting permits to groups of farmers or indigenous people organised as agro-forestry cooperatives. Initially it focused on resin-tapping cooperatives, but then provided a platform for communities to secure a much wider range of benefits, including sale of roundwood and stakes, as well as sawing of timber, boards and poles.

In the mid-90s forest usufruct agreements were established between AFE-COHDEFOR and community-based forest organisations, starting with those established within so-called Integrated Management Areas (AMIs). The firsts were granted for 30 years, while the duration of subsequent ones was extended up to 40 years. However community usufruct agreements were later opposed by the private sector, including the two main industry representatives ANETRAMA and AMADHO, who claimed that these were in reality like concessions. Concession contracts had been abolished under the 1992 *Ley de Modernización Agrícola*, replaced by the auction system now used to market pine. As a result of this opposition, no further community usufruct agreements were issued, though existing usufruct agreements were maintained.

In response to growing concern over the legal status of usufruct agreements, the subsequent political administration (January 1998 – 2002) instead developed Forest Management

Agreements. These were signed with a significant number of community producer groups under SSF, including communities that had originally received long-term usufruct agreements. But these Management Agreements expired at the end of that administration (January 2002), and have not since been renewed.

Consequently, community groups currently have practically no legal rights of access to the areas they manage, apart from a few indigenous groups with recognised land rights. In theory, this should not impact much on local communities; AFE-COHDEFOR places more importance on approved management plans which, in effect, constitute proof of rights. However, the complexity of management plans mean that most communities are unable to meet their technical specifications and are therefore forced to operate illegally. Furthermore, where such management plans have been secured (and especially in richer forests), community groups are often 'captured' by local elites or outsiders. This marginalizing the poor who, at best, work as daily hired workers.

The SSF has also suffered because of the decline in pine resin prices, over-complex regulation, the lack of administrative experience of the cooperatives, and the limited capacity of AFE-COHDEFOR to provide technical assistance and other support services.

Source: Lazo 2001, Colindres 2002a, Del Gatto 2003d

Nor do communities gain significantly from commercial cutting operations under the auction system, established by the 1992 Law to sell standing timber in national forests. Companies tend to 'cut and run' leaving communities with few benefits. The system has met stiff local opposition. In recent years, community groups have started to 'tax' logging operations with a 'fee' of 40 Lempiras (\$2.66) per m³. In Olancho, there have also been significant popular protests (lead by the Catholic Church) over logging by companies under the auction system, attracting huge media attention (see Box 4).

Box 4. Grassroots protests against logging in Olancho, Honduras

The northeastern Honduran department of Olancho has long been the country's main source of timber. For decades, licensed logging companies have carried out intensive timber extraction with few, if any, benefits for local communities and little or no concern for the environment. Because of the alleged collusion of local and national authorities, residents have been unable to influence the actions of timber companies and large local landowners, who have also resorted to intimidation and violence to defend their interests.

Given increasing awareness about land degradation and its impacts on water supplies, mounting discontent surfaced over the last 2-3 years in the form of a grassroots environmental protest movement (MAO – Movimiento Ambientalista de Olancho), organised by a coalition of religious leaders, environmental activists, community members and others concerned with the degradation of Olancho's forests.

In June 2003, a "March for Life" was organized – a six-day walk of some three thousand people from Olancho to the capital Tegucigalpa – to protest the "uncontrolled de-forestation, forest exploitation, and illegal cutting down of trees" in Olancho. The walk was supported by 27 religious, human rights, campesino, student, and worker organizations. Their demands included an immediate halt to commercial logging in Olancho, an "independent evaluation of the actual status of natural resources" in the department, and the creation of an independent commission to monitor the suspension of cutting and to facilitate its evaluation. In Tegucigalpa, march spokespersons requested a meeting with President Ricardo Maduro, but he refused to meet with them. He did, however, agree to talk with representatives a few weeks later.

Unfortunately, Olancho continues to suffer from a long legacy of political violence on the part of powerful economic interests in the department, and from the impunity which protects them. Predictably, there have been violent reactions to MAO. Following the march, a "death" list appeared with the names of people singled out for assassination, including the name of José Andrés Tamayo, a catholic priest at the forefront of the protests. Tamayo, a Salvadoran national, had already received several death threats, including an ultimatum to leave the country by May 30, 2003. On July 7, 2003, a group of timber industrialists demanded the government to officially expel Tamayo and another Salvadoran priest, Osmín Flores, from the country. On July 18, 2003, Oscar Arturo Reyes, a 23-year-old environmental activist involved in the organization of the march to Tegucigalpa, was murdered in the back yard of his house.

The situation has degenerated further with the appearance of an armed group, calling for violent action against timber companies. Logging crews have been threatened and some trucks damaged. MAO was quick to disclaim association, and accused that these were only tactics to discredit them. In effect, comparisons of the groups in Olancho with the Zapatistas and even Shining Path promptly appeared in the media.

Sources: Swedish, 2003; *La Prensa*, 2003a, 2003b and 2003c; *El Heraldo*, 2003; *Tiempo*, 2003.

Access to state forest land In Nicaragua

Access to state forest lands in Nicaragua are now subject to the recently passed 2003 **Law for the Conservation, Growth and Sustainable Development of the Forest Sector**.¹⁷ This seeks to clarify the existing mass of often contradictory legislation.¹⁸ This includes the 1993 Forest Regulation, which was the primary instrument governing the sector and the first attempt to rationalise forest law.¹⁹

Under Chapter VII of the 2003 Law, natural or juridical persons (save some exceptions defined in the Constitution) may obtain commercial forest concessions on state land, in accordance with the provisions of the new law and its implementing regulations (Article 43). Under Article 45, concessions are approved by the Ministry of Industrial Growth and Commerce (MIFIC), and may also be issued for the management, reforestation and subsequent exploitation of deforested or secondary growth areas (Article 44). At the start of each year, concession holders are required to pay a fee equivalent to USD1 per hectare, for the entire area of the concession (Article 46).

The granting of concessions is subject to **Law No. 445, on the Common Property Regime of the People and Ethnic Communities of the Autonomous Atlantic Regions and the Rivers Bocay, Coco and Indio Maíz** (2003). Under Chapter VII, the 2003 Forest Law requires the *approval* of the councils of the autonomous regions for granting concessions in areas subject to indigenous rights under Law 445. In these instances, indigenous people are entitled to 25% of fees (Article 50.1^a).

Under Article 21 of the 2003 Forest Law, it is also possible to obtain a permit to exploit natural forests on state land from the state forest agency INAFOR. This is subject to the approval of a management plan. Article 22 of the 2003 Forest Law requires the participation of local government representatives in the approval of management plans, before a public audience. Under Article 23, simplified procedures to be established by regulation will apply to approvals for commercial exploitation of 10 hectares.²⁰

¹⁷ An initial draft for a new forest law was tabled in 1996, as a combined effort of the private sector and civil society. However, the proposal was marginalised by the National Assembly, opening the way for new drafts by foreign consultants at the request of MAGFOR, the National Assembly, MARENA and other public and private entities. Postponement of discussion and final approval of this law reflected continuing lack of clarity over tax law, demarcation of indigenous territories, land tenure, and failure to regulate Law 28 (Atlantic Coastal Region Autonomy Law), amongst others (Guillén, 2002). In January 2002 a new National Assembly took office following the general election of November 2001, and passed the final draft in June 2003.

¹⁸ These included the general law on 'Exploitation of Our Wealth' (1958), the law on Conservation, Protection and Development of the Forest Wealth of the Country (1967), the Emergency Law for the Rational Use of Forests (1976), regulations to prevent forest fires (1972), the constitutional Law of the Nicaraguan Institute of Natural Resources and Environment (IRENA) in 1979, and the Decree Creating the Ministry of the Environment and Natural Resources (MARENA) in 1994 (Guillén, 2002).

¹⁹ The 1993 Regulation established a new framework for forest policy, and created tools for its implementation; it set out the functions of the National Forestry Service as the normative and regulating body, and those of Adforest as administrator of the state forests. It also created the National Forest Commission as the forum for consulting forest sector policies with the participation of representatives from relevant ministries, the private sector, the Nicaraguan Forest Association (AFONIC) and the (regional) governments of the autonomous regions of the Caribbean Coast. However, although the primary instrument governing the forest sector, the Regulation could not, as an executive degree, eliminate or substitute prior legislation - adding to the legal uncertainties (Guillén, 2002).

²⁰ Under Article 26, the Ministry of Environment and Natural Resources is responsible for managing protected areas in coordination with relevant institutions, including municipalities. Protected areas such as riparian strips are, however, under the care of the Municipalities (Article 27).

The ability of local communities to secure access through such exploitation permits will depend on the design of regulations and administrative procedures to implement the new law. To date, local communities have had difficulty in securing permits, and have instead resorted to innovative schemes to obtain a greater share of benefits. For example, in Bilwi, local community leaders (*síndicos*²¹) colluded with INAFOR officials and the Municipality to operate a system of 'community permits' for Caribbean Pine (*Pinus caribaea var. hondurensis*) extraction. Whilst strictly illegal, the community permit was created to facilitate access by indigenous community members to their forest resources, and thus raise their employment and income levels (Ampié Bustos 2002).

Access to private and *ejidal* forests in Nicaragua and Honduras

On private or *ejidal* land, the major constraint is not access rights but the transaction costs of complying with regulations governing the production and transport of timber (see section 7.4). For example, under the 2003 Forest Law in Nicaragua landowners are required to obtain permits subject to management plans for exploitation of natural forests on their own land,²² as well as permits to transport timber (not a requirement for agricultural produce).²³ In municipal or *ejidal* areas of Honduras the requirement for a management plan also constitutes a constraint given limited means to meet technical specifications. Management plans must be drawn up between the municipality forestry office²⁴ and local community groups such as resin-tapping cooperatives, and then approved by AFE-COHDEFOR. Municipalities with limited technical capacity have had difficulty in securing approval of management plans by AFE-COHDEFOR and continue to suffer rampant illegal logging.

7.3 Volume constraints

Even when local communities are assigned national forest land, strict harvest limits may be imposed. Under Nicaragua's forest law, farmers have limited rights to harvest planted trees on their own land. In Honduras, community timber cooperatives are not entitled to the full annual permitted cut stipulated in management plans for their area (see Box 4). Levels of harvesting permitted under management plans may not also reflect how farmers in reality draw on forest resources to cope in drier years or economic crises (Nitlapan-UCA, 2002).

²¹ Leader of a community or group of indigenous communities in the Atlantic North of Nicaragua

²² Though Article 23 states that permits for commercial exploitation of natural forests of less than 10 hectares will be subject to simplified procedures.

²³ Perversely, if a farmer were to replace natural trees with planted trees, this would count as a 'plantation' - exploitation of which is not subject to permits and fees (though a transportation permit is still required) (Nitlapan-UCA, 2002).

²⁴ These were established alongside Municipal Environmental Units (UMAs) and responsible for elaborating forest management and protection plans, as well as provide capacity-building and support to forest users and community enterprises (Vallejo Larios, 2003).

Box 4. Volume constraints in the approval process in Honduras

In accordance with Article 10 of the Regulations attached to *Clause VI (Forestry)* of the Law for Agricultural Modernization, which came into force on 20 July 1993, peasant farmer collectives, acting under the umbrella of the Social Forestry System and managing land in public forest areas, may not avail themselves of the full 100 per cent of the annual allowable cut (AAC) envisaged in the forest management plan for their area. Instead, they are restricted to only 200 cubic metres per organization per year in the case of broadleaf forest and to 1000 cubic metres per organization per year in the case of conifers. The unused portion of the CAP should then be auctioned off to the highest bidder.

Two hundred cubic metres divided among 20 or 30 members in a collective leaves an insufficient profit margin for members to stay with the collective. It means there is little or no incentive for them to protect the forest from theft or from the (illegal) frontier logging and clearance pressures, if they are only entitled to a small portion (often less than 20 per cent) of the sustainable production of the forest in question.

For several years, this new regulation was enforced only to a very limited degree, both because its possible negative impacts were plain to see, and because few potential purchasers were interested in the auctions. Since 1998, however, attempts have been made to ensure that it is applied more rigorously (even though there has not been a single broadleaf forest auction since then). The implications of this more rigorous application are, as the SSF groups recognize, extremely serious: (i) a loss of motivation and cohesion among the groups ; (ii) a drastic fall in membership as many ex-members became involved in illegal extraction (see, for example, the decline in COATLAHL's membership noted in Box 6); (iii) growth in the influence and power wielded by local and outside intermediaries; and (iv) the difficulty of producer groups building up capital as well as a fall in household incomes.

Source: Del Gatto 2003d

7.4 Unclear and complex regulations

The legal framework governing the forest sector comprises a complex mass of rules and regulations, as new legislation has progressively altered the ideas underlying earlier legislation. When a new law is enacted, little effort is made to ensure that it is complete, and previous legislation is only partially repealed. The resulting body of law therefore contains contradictions and duplications leading to arbitrary interpretation and confusion in law enforcement (Lazo 2001).

Forest regulations in both countries also require actors to comply with unrealistic rules. Communities are asked to prepare highly technical forest management plans, even though they lack the financial resources and technical know-how to submit them, and individuals growing a few trees are supposed to obtain transport permits which are not required for agricultural produce. Compliance can take up several days of work, often including wasted visits to distant offices (see Box 5). Compliance can appear meaningless when forest administrations obviously lack the capacity to control thousands of farmers, each logging and marketing a few trees. But as legal requirements proliferate, so too, does the custom of demanding and paying backhanders, creating a confusing and frequently damaging bureaucratic 'jungle'. This is compounded by arbitrary interpretation of rules, as well legal uncertainties where laws have been issued without their implementing regulations; or (as in Nicaragua) where forest regulations issued by Executive Decree have an unclear legal status vis a vis related legislation.

Box 5. Complex management plans as a regulatory barrier to legality for community-based forests producers in Honduras

The law in Honduras requires a management plan, duly approved by AFE-COHDEFOR, for 'all market-oriented cut or harvesting of forests'. It also makes AFE-COHDEFOR the legal body responsible for drawing up and implementing that management plan in national forests. But AFE-COHDEFOR does not have the staff or the money to do this. It is no surprise that the same can be said of the communities entrusted, under the aegis of the SSF, with managing and exploiting a national forest, especially in view of the technical complexity involved.

This situation has generally led to one of three scenarios:

- (i) a community draws up its management plan under the aegis of a project and, when the project comes to an end, drifts back into the same situation it was in before: that is, a mixture of dependence on intermediaries and illegal activity;
- (ii) not having access to any external help, a community fails in its bid to be admitted as part of the SSF and the local forest continues to be exploited in a thoroughly clandestine manner, usually on the orders of one or more intermediaries, until the supply of the most valuable timber is exhausted (this 'creaming off' frequently heralds complete forest clearance); or
- (iii) the management plan is financed by an outside intermediary (against an undertaking to repay the cost in timber). The intermediary then uses the local organization and its management plan as a front to mask his/her own direct access to forest resources (the end result being similar to that of the first scenario, once the project has come to an end).

In the first and third scenarios, the intermediaries, who now have access to the forest resources but no legal responsibility for how these are managed and exploited, have every incentive to operate outside the law and to concentrate their efforts on the most profitable timber. The situation is little different under the second scenario, save that the risks are greater because there is none of the protection provided by a recognized group with a management plan.

Source: Del Gatto 2003d

7.5 Overlapping or conflicting government responsibilities

Overlapping or conflicting forest governance responsibilities compound legal uncertainty and regulatory complexity. In Nicaragua there are often conflicts between central and regional 'autonomous' government, such as the Autonomous Region of the North Atlantic (RAAN), over the rights to assign harvesting permits (Ampié Bustos, 2002). The confusion is heightened by an unclear distribution of law enforcement responsibilities between forestry agencies and other state institutions like the police and judiciary. Such conditions create opportunities for corrupt public officials and corporate interests to "breach the law, either unintentionally due to confusion of roles or unclear procedures, or intentionally by exploiting the incoherencies" (Global Witness, 2002). In Honduras, the 2002 Administration Simplification Act presents an opportunity to correct the effects of administrative and regulatory complexity. Further research is needed to understand how this law can practically be applied to the forest sector, and especially how it could benefit community-based forest enterprises. Political will, however, may be the major

impediment – 18 months after the approval of the law, its implementing regulations have not yet been prepared.

8. HIGH TRANSACTION COSTS & LOW PRICES: THE ECONOMIC INCENTIVE TO OPERATE ILLEGALLY (based on Del Gatto 2002a, Paniagua 2002, Ampié Bustos 2002, Del Gatto 2003b)

Over-complex rules greatly increase the transaction costs of compliance, leaving legal producers vulnerable to market competition from lower cost illegal timber. The relatively higher cost of staying legal is a strong incentive to operate illegally. Although it is difficult to obtain completely credible data, analysis carried out in Honduras suggests that the costs of production and transportation of illegal wood may be about 75% of the cost of legally harvested wood (Del Gatto, 2002a). Studies in Rio San Juan in Nicaragua show similar results (Paniagua, 2002). And other analyses in Bilwi, Nicaragua, show that the differences between the cost of production increases for more valuable species (e.g., mahogany compared to pine). In other words the financial incentive to operate illegally is higher for precious woods, although they are still strong for lower value species. If a mahogany logger evades 60 percent of taxes and 50 percent of forest management plans and transport permits, the financial profit per cubic metre of sawnwood increases from about \$119 to \$200-250. In the case of pine, commercial profits jump from about \$29 to \$41 per cubic metre of sawnwood (Ampié Bustos, 2002). The case of the COATLAHL cooperative in northern Honduras (Box 6) illustrates how high transaction costs and 'unfair competition' from illegal loggers makes legal production unattractive.²⁵

²⁵ Note, however, that even operating illegally involves considerable transaction costs. Annex A sets out the formal and informal costs of producing 100m³ of fraudulently legalised mahogany in the Paulaya Valley, Honduras. Here, the producer group is left with a profit margin of ~ 15%, most of which will not go to poorer community members.

BOX 6. Economic and social problems of the COATLAHL cooperative

The COATLAHL timber cooperative on the north coast of Honduras has been supplied by small community groups in the surrounding mountains since 1977. Establishing legal and equitable forest management has been a costly foreign aid endeavour. Administrative, processing and storage inefficiencies, increased regulatory and stumpage charges, as well as excessive transaction costs, have been compounded by 'unfair competition' from illegal logging. The COATLAHL affiliated groups have found it difficult to survive given their higher production and transaction costs, and only marginally higher sale prices, than illegal loggers. Increasing conflict and insecurity is also discouraging long-term forest management, as timber is vulnerable to theft by armed bands. Ex-COATLAHL members have now switched to illegal logging as a livelihood option. They have been effectively criminalised by the economic consequences of illegal logging, as well as over-complex regulations. Since the early 1990s, the number of affiliated groups has halved, and grassroots membership has fallen by 75%. COATLAHL is now virtually bankrupt.

Source: Del Gatto, 2003b

The substantial financial incentive to operate illegally will continue so long as the costs of legal timber production are higher and its price only slightly above illegal timber. Since legal wood intrinsically carries higher costs due to the need to comply with forest management plans, obtain transport certificates, etc., the cost of illegal wood needs to be increased through a higher probability of detection and stiffer penalties, financial or otherwise. Such actions are also likely to improve the market price for legal operators by reducing the price-dampening effect of a market flooded with illegal wood. If, however, stiffer enforcement is not to harm the rural poor, this needs to be accompanied by efforts to reduce barriers to entry for legal forest management, including more secure rights in forest resources, a more realistic and predictable regulatory framework, and simplified administrative procedures.

9. FAILURES IN PUBLIC ADMINISTRATION: COMPOUNDING LEGAL AND POLICY BARRIERS TO LEGALITY (based on Contreras-Hermosilla 2002, Del Gatto 2003b, Pommier 2003)

Increased corruption, including illegal charges and politically or economically motivated interpretation of rules, compounds barriers to legality; in particular for community producer groups who lack the necessary connections to secure permits and other documentation through informal channels. Therefore, measures to remove constraints on legality for the benefit of those who wish to be legal, cannot be addressed without also tackling factors that encourage genuinely corrupt or criminal interests. These include weak penalties, limited institutional capacity to prevent, detect and enforce, as well as lack of information for effective forest sector monitoring and enforcement.

9.1 Institutional corruption and distortion of decision-making

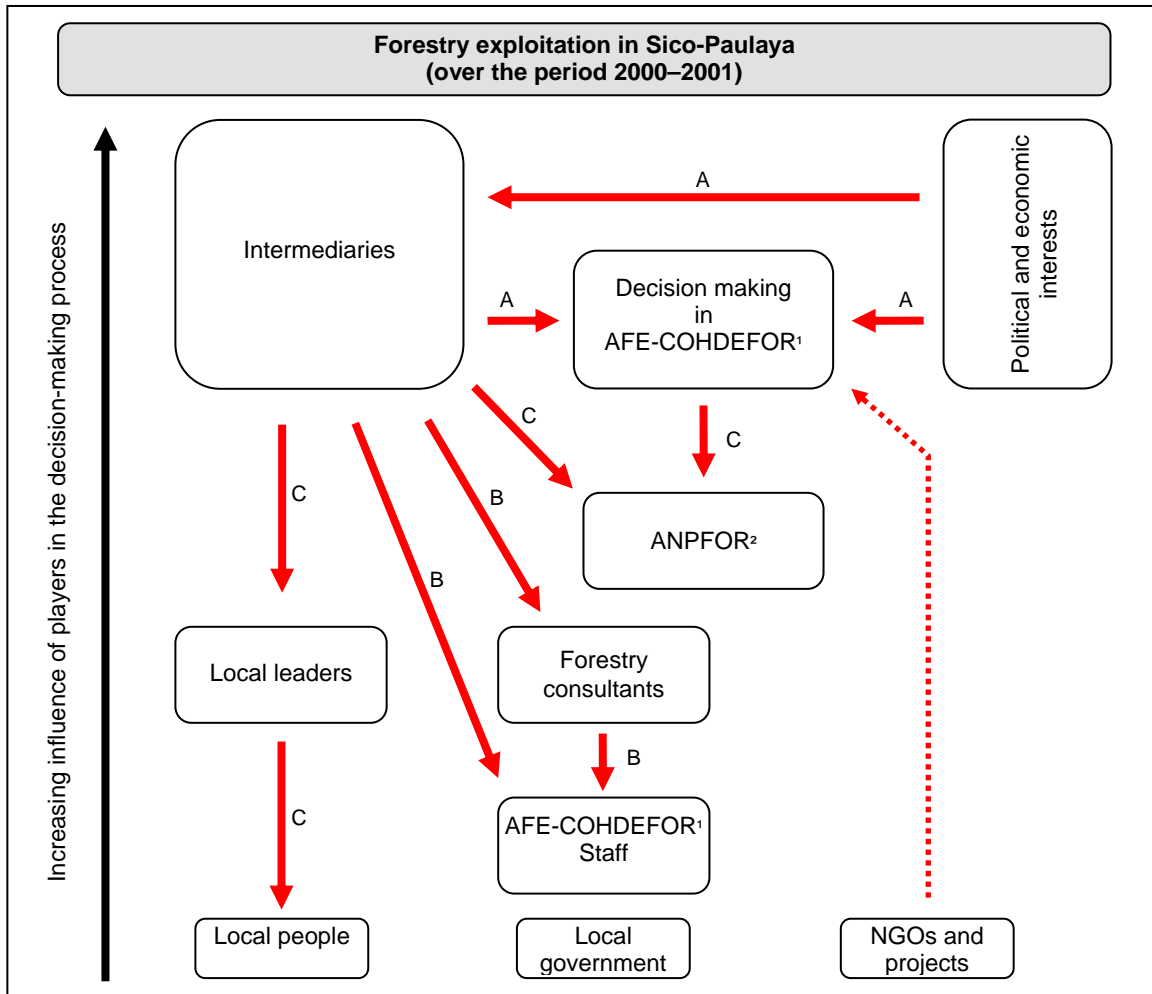
Surveys in both countries have identified corruption as a major cause of illegal logging and trade. Transparency International (2002) ranked Nicaragua as the twenty-first and Honduras the thirty-first most corrupt country globally. Recent World Bank sponsored surveys in Honduras show that corruption is particularly severe in the judiciary and police (WBI, 2001). There are various on-going measures in both countries to tackle corruption. In Honduras, a National Anti-Corruption Council and Anti-Corruption Strategy have been established (CNI, 2002).

Forestry-related corruption in Honduras and Nicaragua occurs at both political ('state capture') and bureaucratic levels. The latter includes facilitation payments to speed up regulatory/bureaucratic processes, as well as payments for officials to step outside of his/her legal mandate, for example to ignore illegal acts.

The susceptibility of cash-strapped state forestry agencies and local governments to distortion by illegal logging is high where forest fees constitute a major source of revenue. Logging companies and timber merchants nurture public-sector vested interests in order to gain a disproportionate influence in decision-making processes, cut through red-tape, and distort environmental monitoring procedures – through a combination of credit, bribes and threats. Forestry officials and field technicians become party to elaborate informal arrangements with traders and community leaders in order to fraudulently 'legalise' production. This has knock-on effects for the broader network of institutions, regulations and values, including police force standards and public respect for the law.

Figure 2 depicts the informal arrangements, and associated power relations between intermediaries, officials and local elites governing illegal forest exploitation in the Sico-Paulaya Valley, in Colón Province, Honduras over a two-year period (2000–2001) (see also Box 1).

Figure 2. Power relations governing forestry exploitation in the Sico-Paulaya Valley, Honduras



¹ State Forestry Administration – Honduran Forestry Development Corporation
² National Association of Broadleaf Forest Producers

Three sets of power relations are depicted in Figure 2, in which intermediary timber traders are instrumental in distorting decision-making:

- (1) **Influencing public decision-making on law and policy (“state capture”)** (arrows marked ‘A’) – in this case, to retain a policy granting community groups the right to harvest mahogany deadwood, when there was already ample evidence that this provided a front for legalising illegal harvesting;
- (2) **Influencing implementation by “street level bureaucrats”,** through a combination of bribes and threats (arrows marked ‘B’).
- (3) **Influencing community institutions and their representative institutions** (arrows marked ‘C’), to take control of the production chain, and to obtain the necessary political backing to influence public policy.²⁶

²⁶ However, in a regulatory environment that works against poorer forest communities, the social capital inherent in local patronage and “corruption” can be a vital channel for the poor in securing access to natural resources. See also Robbins, P.(1990) *The rotten institution: corruption in natural resource management*. *Political Geography* 19, 423 – 443.

9.2 Links to organised crime

In remote rural areas, a combination of timber, drugs, unemployed youth and arms appears to be behind the collapse of civil governance. Anecdotal evidence suggests that illegal logging is often linked to such criminal activities. The Sico-Paulaya valley in Honduras is part of a drug trafficking route and has become a refuge for people involved in criminal activities in urban centres (kidnappings, armed assaults, car robberies, etc.). This has generated significant sums of ready cash which can be conveniently invested in cutting and selling mahogany. One raid on an unregistered sawmill uncovered illegal timber, high-jacked lorries, stolen goods and firearms - *prima facie* evidence of the links between illegal logging and organized crime. The gang leader proved to be a timber merchant.

9.3 Weak penalties and enforcement

No law is applied in full, especially where this might threaten the interests of powerful groups. Most fines are substantially lower than the potential benefits of operating illegally. Weak inspection and enforcement systems mean there is a low probability of being caught, and therefore 'crime pays'. Yet, the fact that weak penalties and enforcement only encourage corruption and organised crime means that they may compound the legal and institutional barriers faced by would-be legal actors. Where law enforcement occurs, it usually takes the form of crack-downs, with little, if any, regard to conflicts this may generate at the local level or other poverty impacts (see Box 7).

Box 7. Crack-downs on illegal logging in the Rio Platano Biosphere Reserve?

In recent years, illegal logging in the Rio Platano Biosphere Reserve has attracted intense public and media attention. The most common response has been the organisation of field policing operations, aiming at detecting and suppressing illegal activities, usually with the participation of different public institutions and involving relatively large numbers of forest law enforcement officers, policemen and army soldiers. The results have rarely met expectations, especially if compared with the costs of such operations.

Although not carefully studied, the impacts on poor local people may be significant. Typically, undocumented timber is owned by logging crews or small community-level intermediaries, while more powerful intermediaries usually secure at least some 'legalising' paperwork before taking charge of timber. This means that most of the confiscated timber belongs to poorer stakeholders in the production chain, who lack equivalent income generating opportunities. In contrast, influential intermediaries suffered little, if any, of the consequences, apart from delays in the scheduled supplies of timber.

Furthermore, the law enforcement officers in charge of these operations often lack the capacity to move the confiscated timber from remote forest areas to safer places. As a result, the timber may remain 'on-the-ground' for weeks or even months. To avoid the loss of confiscated timber, law enforcement officers have often given custody to local community leaders, in some cases threatening them with sanctions (including imprisonment) in case of timber loss. This practice only creates conflicts between the unfortunate person 'responsible' of the timber and its former owners.

Weak penalties and poorly targeted enforcement reflects a variety of failures in public administration, including lack of financial and human resources. Box 8 reflects a typical situation. Loggers and companies have sometimes paid forestry officials for the logistical and subsistence costs of performing their official duties, casting doubts over official impartiality. Both INAFOR in Nicaragua and AFE-COHDEFOR in Honduras are financially dependent on forest revenues; revenue collection rather than forest law enforcement tends to become the main priority. The presence of armed gangs and drug traffickers, especially in agricultural frontier areas, makes law enforcement a dangerous and undesirable task for badly paid government staff. Enforcement officers in remote areas are highly vulnerable to pressure and bias when they come to report on the quantity of timber taken, the species involved, the exact location of the logging, and so on. Officers find themselves faced with a decision about whether or not to accept the version of events presented to them by powerful intermediaries and/or timber merchants.

BOX 8. Law enforcement in a Nicaraguan frontier region

The INAFOR office of Puerto Cabezas Municipality has one forestry officer, two assistants and a secretary. There is a single motorbike for transport. This team has to enforce the forest law in this and in the neighbouring Waspam Municipality – a total of more than 15,000 square kilometres or 1.5 million ha. Attempts to enforce the law are subject to death threats; salary levels do not justify taking such risks.

Source: Ampié Bustos 2002

9.4 Lack of information, transparency and accountability

The lack of information, transparency and accountability also compounds corruption and organized crime. Public knowledge about forest resources and their management is scarce in both countries. Forest inventories are incomplete or out of date, and the public have limited access to them. Forestry authorities lack the resources and data to control the implementation of forest management plans and monitor forest conditions. In Honduras, some municipalities have denounced agreements between professional foresters and industrialists for under-declaring timber stocks (to evade taxes) on public lands. This situation discourages social control mechanisms; NGOs find it hard to adopt a public watchdog role, both due to the lack of information and of public access to it.

10. IMPACTS ON RURAL LIVELIHOODS (based on Alcocer López 2003, Ampie Bustos 2003, Del Gatto 2003b, Pommier 2003, Richards et al, 2002, Richards et al 2003b)

10.1 The importance of illegal logging as a livelihood option

Illegal logging constitutes a livelihood diversification strategy. As explained in Section 2, the non-farm economy is now becoming increasingly important for rural households across Latin America, in part due to the decline in the small-farm economy. Timber extraction presents an important livelihood opportunity in remote areas where the ability to access credit for agricultural accumulation and other forms of non-farm employment are limited, and mobility constraints (such as lack of skills) prevent migration to urban areas (Richards et al, 2002).

10.2 Income and employment opportunities

Timber companies and traders provide employment opportunities for poorer rural households. However, remuneration is poor. It was estimated in Nicaragua that indigenous communities, local cooperatives and forest owners only receive 5-10% of the timber's gross value, whether extracted legally or illegally. Most of the benefits go to the *síndicos*, loggers, truckers, tradesmen and export companies.

Furthermore, while illegal logging may inject large amounts of cash into an area, the livelihood benefits are thin and temporary. In the Sico-Paulaya valley, Honduras, legalised and clandestine production of about 11,000 m³ of mahogany over 2000 and 2001 brought local people about US\$1.2 million in wages and profits. But over half the income was grabbed by powerful community members, eventually leaving only about a quarter of it for poorer groups. Table 1 sets out the profits, and how they were ultimately used, for one of the main cooperatives involved. After misappropriation of funds by elites and purchase of chainsaws for the cutting operation itself, only 6% of the value of the timber produced could ultimately have been invested in local livelihoods, and it is likely that the poorest households capture very little of this. The poor are more likely to benefit from wage labour earning sawing and transporting timber (e.g. running timber down rivers).

Table 1. Income (gross and net) and its use by the Collective Society of Romero Barahona and Associates, Sico-Paulaya, Honduras, over 2000 and 2001.

Description	Value in Lempiras	Value in US \$	% Gross income ²⁷	% Net income	Comments
Gross income	4,142,250	257,680	100		Assuming Lps. 315,000/ 100 m ³
Total cost of production and commercialisation	3,350,500	220,870	86		
Net income	591,750	36,810	14	100	
Misappropriation of funds by community leaders	220,000	13,685		37	Reported misappropriation by three community leaders for personal use.
Remainder distributed within the group	371,750	23,125			
Purchase of chainsaws	118,000	7,340		20	9 new chainsaws bought at Lps.12,000 each, and two second-hand chainsaws bought at Lps. 5,000 each.
Remainder for other uses	253,750	15,785		43	
1 US \$ = ~ 16,075 Lempiras (value in February 2002)					

While even this constitutes significant cash income for poor households, payments were either long delayed or came sporadically in part-payments, reducing the possibility of investing in capital assets like tools and equipment. Two years of intensive activity were followed in 2002 by a spell of very low production; after a few months, little or nothing was left of the money saved either in cash or liquid assets (livestock, jewelry, etc). Several chain-saw operators and local organisations ended the period significantly in debt.

This study did not specifically look at the livelihood impacts on women and children. But evidence from Bilwi, Nicaragua, suggests that they benefit little from timber income, with the men spending most of the money on alcohol, cigarettes, etc. It is estimated that only to 30-40% of their total income is spent on family welfare (Ampie-Bustos, 2002).

10.3 Foregone state revenues and loss of non-market benefits

Foregone state revenues and wasted state expenditure on SFM as a result of illegal logging could have knock-on effects on service delivery to the rural poor. This is assuming that: (i) there is a poverty component in the allocation of state revenues; (ii) revenues from permits and other approvals are not just ploughed back into forestry institutions; and (iii) there are also limited revenue gains through taxation of illegal production. So the fiscal link is, at best, indirect. The poor are also affected by the loss of non-market values, including environmental services (both a livelihood safety net and a potential source of income).

It is extremely difficult to quantify the exact cost of these losses to the rural poor. We can only infer this cost based on estimated losses for the country as a whole. However, without expensive, intensive and dangerous forest-based research

²⁷ The Gross income column shows the division of gross income between costs and net income. The Net income column indicates how this net income (\$36,810) was spent: 37% misappropriation, 20% chainsaws, and 43% other uses.

involving close contact with loggers and other forest users, even these estimates have to be based on second-best or indirect methods. The 'back of the envelope' type calculations presented here constitute 'order of magnitude' estimates.

The calculations are made using conservative assumptions and probably understate the real costs. They look at direct fiscal losses (considering both pine and broadleaf forests)²⁸ as well as indirect economic losses (including the loss of non-market benefits). However these calculations relate only to clandestine timber (timber which does not appear in official documentation), and so probably underestimate the true economic costs of illegal logging.

Direct fiscal losses

Figure 3 presents the estimated direct fiscal losses due to illegal logging in terms of the loss of forest fees (mainly stumpage charges on production from national forest land), municipal revenues, and income tax.²⁹

The direct annual fiscal losses came to approximately \$8-12 million for Honduras and \$2-4 million for Nicaragua. The level of forest revenue loss in Honduras was much higher due to the much higher state ownership of forests (almost all broadleaf forest is national forest), but income tax losses in Nicaragua were higher. These are annually recurring costs. Allowing for declining timber production in line with a constant deforestation rate, the net present value (NPV) was estimated in the range of about \$60-90 million for Honduras and \$16-30 million for Nicaragua.³⁰

In the case of Honduras, the fiscal loss was at least half the annual budget of AFE-COHDEFOR (\$16 million in 2003), or the combined budgets of the National Institute for Women (\$0.5 million), the National Patronato for Infancy (\$3.2 million), and the National Provider of Basic Products (\$5.1 million). In Nicaragua it was the equivalent of employing about 2,500 schoolteachers who would help educate about 150,000 children; or of providing technical assistance to 1,500 farmers.

Wasted expenditure on Sustainable Forest Management

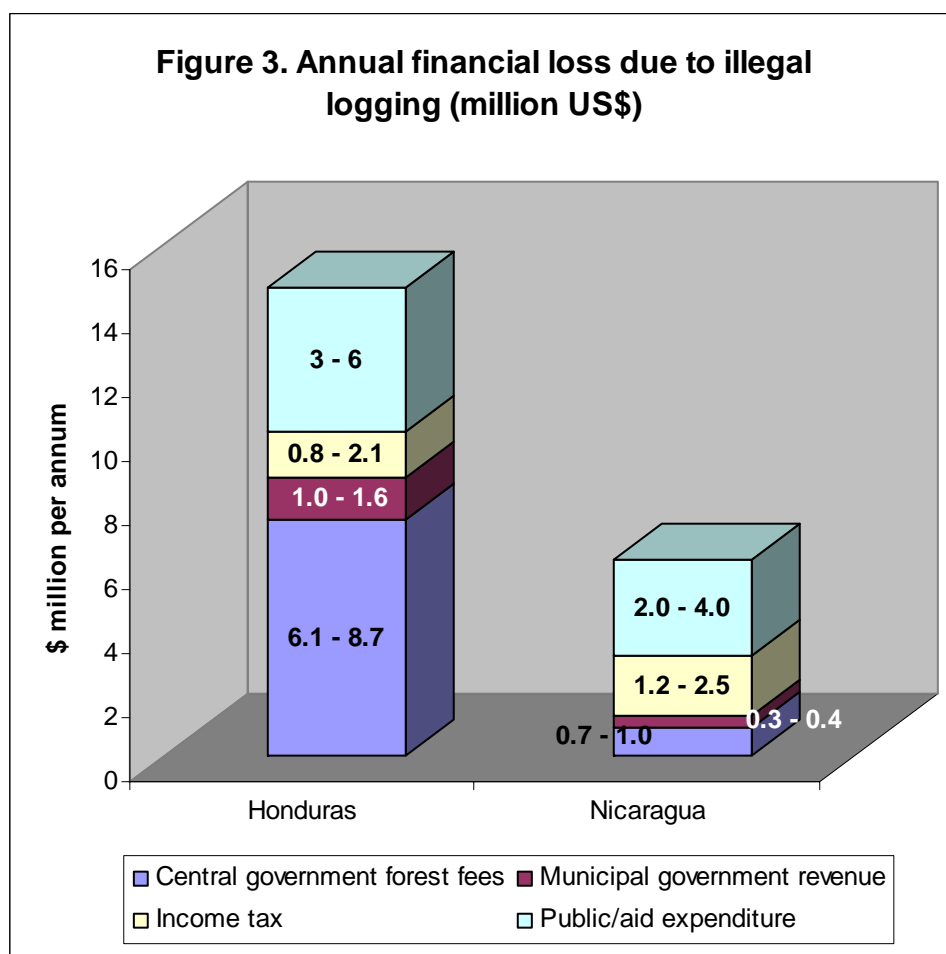
Another important economic cost is the opportunity cost of 'wasted expenditure' on 'sustainable forest management' (SFM) by both national forest sector and foreign aid. While the low effectiveness of foreign aid and state forest expenditure is also due to a range of policy, market and institutional failures, illegal logging results in major negative incentives for SFM.³¹ Based on expert opinion, this 'wasted expenditure' was assumed to be a modest 10-20%, resulting in an estimated annual opportunity cost of \$3-6 million for Honduras and \$2-4 million for Nicaragua (see Figure 3).

²⁸ The two major types of forest in Nicaragua and Honduras.

²⁹ The income tax calculations allow for recuperation of tax further along the processing chain, and were based on a modest 15-30% profit margin.

³⁰ All the net present value (NPV) calculations in this paper are based on a 10% discount rate.

³¹ Depressed national prices due to illegal timber flows and low cost 'unfair competition' combine with complex regulations and institutional constraints to make legal and/or SFM production unprofitable, and to cause excess demand pressure on the resource.



These figures underestimate the fiscal losses from the illegal logging trade and associated illegalities, since they exclude: additional income and sales taxes that would result from higher market prices (key informants in Nicaragua estimated that timber prices would be 20% higher without illegal logging); stumpage charge losses due to species falsification; the probable reduction in pine concession auction values in Honduras; foregone export levies from various border or customs irregularities; fraudulent use of community forest rights by loggers or timber merchants; and costs to the judiciary system, the police and the state environmental monitoring service ('fiscalia').

Indirect economic losses

An attempt was also made to estimate the economic loss of environmental services and other 'non-market' values from broadleaf forests attributable to illegal logging. A conservative estimate based on expert opinion is that 10-20% of broadleaf deforestation in Central America is caused by illegal logging. There are many economic studies of environmental and other non-market values from tropical forests. A review of these by Pearce et al (1999) found a reasonable consensus (ignoring extreme estimates) around a 'central' net annual value of \$100 per ha for *national* non-market benefits.³²

³² This is composed of non-timber forest product subsistence values (about \$50 per ha); environmental or ecological values (\$30), excluding carbon; eco-tourism and recreation (\$5-10); and non-use or existence values (\$2-27). The term 'national' is used since the calculation excludes net *global* carbon

The resulting estimated net annual losses of *national* non-market values from illegal logging were \$0.8-2 million for Honduras and \$0.7-1.6 million for Nicaragua (the estimated annual loss of *global* non-market values was \$5-20 million for Honduras and \$4-16 for Nicaragua). The NPV of the *national* loss from *each year's* deforestation due to illegal logging was \$6-15 million for Honduras, and \$5-12 million for Nicaragua, while the NPV of cumulative deforestation due to illegal logging was \$62-124 million for Honduras, and \$55-110 million for Nicaragua. These tentative estimates indicate that foregone non-market values are significant, and for broadleaf areas they are probably in excess of fiscal losses.

Finally there are various less quantifiable economic costs associated with illegal logging, listed by Contreras-Hermosilla (2002), Callister (1999) and others. These too have implications for the rural poor:

- illegal logging and corruption encourage inappropriate legal and institutional reforms, and distort private investment flows away from activities like SFM with high social and economic benefits, and towards rent-seeking investments,³³
- revenues from industrial scale illegal logging are more likely to be expatriated than spent in-country, resulting in loss of the national economy multiplier effect;
- macro-economic analysis shows a significant correlation between weak governance and per capita incomes, as well as with infant mortality, literacy and life expectancy rates; these impacts dilute the impact of development programmes (Thomas, 2000) – to the extent that illegal logging impairs governance (see below) it contributes to these adverse impacts;
- loss of tourism in dangerous areas, as may have happened in Atlantic coastal regions (although drug trafficking is another powerful driver in these areas).

Illegal logging affects the whole economy. The financial flows associated with illegal logging add to the informal sector and encourage speculative (e.g., real estate), shady and illegal investments. This dilutes the effectiveness of monetary and other macroeconomic policies, and encourages further corruption (Nalin Kishor, World Bank, personal communication).

retention values which, according to Pearce et al (1999), are in a range of \$600-4,400 per ha (depending on the forest type and subsequent land use) when using a climate change damage cost value for carbon. It is important to note that these average figures disguise major location-specific variations.

³³ A lax regulatory framework attracts less responsible international companies according to recent transition economy literature (Hellman et al, 2002). A characteristic of more responsible foreign direct investment is that it tends to avoid countries where illegalities and corruption are high.

10.4 Physical security, collective action & participation

Violence is never far away from illegal logging operations. In Rosita, Nicaragua, armed gangs make their living by threatening loggers and traders. This violence is compounded by insecure tenure and conflicts over land. In the Sico-Paulaya area of Honduras, many villagers invested in arms for family protection during the illegal logging boom; there have been various confrontations, including murders. Yet, because it is difficult and dangerous for forestry officers or the police to accuse armed and powerful actors, the poor are often the first to be accused of illegal logging.

Case studies from both Nicaragua and Honduras show how the social capital of the poor is eroded when timber merchants infiltrate community organisations; and how illegal logging can divide and alienate a community. In the Sico-Paulaya valley in Honduras, local people accused each other of 'grassing' to the authorities, and rival chainsaw gangs emerged. Grassroots membership of the COATLAHL cooperative in Honduras has fallen by 75% since the early 1990s as more and more find themselves forced into illegality. In Nicaragua, illegal logging has corrupted indigenous leaders and eroded traditional institutions. These negative effects on community social capital reduce resilience to outside shocks.

In all, illegal logging is contributing to an increasingly 'uncivil' society in remote areas where state presence is already weak.

10.5 Long-term supply of forest goods & services that poor households use

The impact of illegal logging on broadleaf forest environmental services has been mentioned under the indirect economic impacts (loss of non-market values). While not all the blame can be laid at the door of illegal logging, given that it is so species selective, but the latter is often the first step in a downward ecological spiral, leading to degradation of watersheds, flooding and landslides – to the extent that these can be linked to deforestation. As forest ecosystems degrade, and farm productivity gradually declines due to the loss of local eco-system benefits, it will tend to be the poorest farmers who can't afford cattle who are forced to move further afield, into remoter areas where health and education facilities are weakest or non-existent. Illegal logging also creams off the most valuable species, removing future sources of income generation (Campos et al., 2001; Del Gatto, 2003e). For example, Honduran mahogany, with an estimated annual extraction of 30,000-50,000 m³, may be nearing commercial extinction outside protected areas (Del Gatto, 2003b). This study did not gather field evidence of the direct impacts of these losses on rural livelihoods in and near forest areas. It is, however, arguable that the impacts are mostly likely to be felt by the poorest households, which are often the most forest-dependent.

11. CONCLUSIONS & POLICY PRESCRIPTIONS

This study found that 'barriers to legality' within the legal, regulatory and institutional framework governing forests leave small-scale rural forest producers with little option but to break or avoid the law, and expose them to economic capture by timber traders, often on highly inequitable terms. The transaction costs of complying with complex and unrealistic regulations mean that legal forest production is often uneconomic – especially in markets flooded with cheaper illegal timber. Weak public institutions, ineffective state enforcement capacity, administrative confusion and low penalties, create opportunities for corruption and organised crime. This compounds the barriers to entry for small-scale forest producers by distorting decision-making processes, and increases their reliance on powerful patrons in order to secure access to resources, credit and markets.

(i) *Policy prescriptions*

The results of this study were discussed in a series of stakeholder consultations in Honduras and Nicaragua between August 2002 and February 2003. These were attended by representatives of state forestry agencies, *campesino* unions, forest management networks, forest industry, national assemblies, state environmental monitoring services (*fiscalia*) and donors. Discussions prioritised the need to tackle discriminatory and over-complex regulation, better targeted and more effective law enforcement, and measures to reduce institutional corruption.

Measures to reduce legal barriers to entry for small-scale forest producers need to focus on:

- Strengthening rights in land and resources, including demarcation of indigenous land boundaries, land titling for migrant families, and allocation of secure community concessions. However, evidence from Nicaragua suggests that small-scale forest owners with title are equally vulnerable to 'capture' by the illegal timber sector if other legal and institutional constraints to production are not simultaneously addressed.
- Removing volume constraints where these cap harvesting by small-scale producers at a level below the annual allowable cut; as well as limitations on the rights of farmers to plant and harvest trees on their own land.
- Simplifying administrative procedures, including approvals for forest management plans, to reduce transaction costs and increase the returns to legal forest management for small-scale producers.

However, measures are also required to target law enforcement at actors with genuinely corrupt and criminal intent, given that they compound existing legal and institutional barriers by capturing and distorting decision-making structures. In particular, measures are required to increase the costs and risks of illegal logging through better detection and stiffer penalties.

To this end, stakeholder consultations suggested:

- Increasing transparency, data collection and access to information in order to make illegal logging and other forest crimes more difficult to hide.
- Strengthening monitoring, in partnership with NGOs and local community groups.
- Reducing the financial dependence of the state forestry agencies on forest fees, currently an incentive for forest officials to collude with illegal timber traders.

- Depoliticising the selection of senior forestry officials, to prevent 'state capture' of public decision-making processes.³⁴

Stakeholder consultations also stressed that reforms are contingent on:

- Enhancing civil society participation in decision-making, including through decentralized policy fora;
- Adequate incentives for SFM, including payments for environmental services and certification (controlling illegal logging can increase market prices and therefore the returns to legal operators).³⁵

However, the challenges to improved law enforcement in the forest sector are so great in these countries that it is doubtful whether the governments alone can accomplish much, and support from international donors, based on a sound understanding of the political power relationships, is essential. The reform agenda requires political mobilisation and action by actors both inside and outside the government, including the industrial sector, the general public, forest communities, NGOs, and consumer groups in importing countries.

Finally, analysis of the regional trade flow study (Del Gatto, 2003c) and other literature (Richards, 2003a) shows, that policy prescriptions also require coordination at the regional level, given that better control of illegal logging in one country (e.g., Costa Rica) increases demand pressures on illegal logging in normally poorer neighbouring countries with weaker regulations (e.g., Nicaragua). This strengthens the case for a regional forest law enforcement and governance (FLEG) approach – though clearly with poverty and livelihoods at the top of the agenda.

(ii) Policy opportunities

New legislative and policy initiatives in both Honduras and Nicaragua present a good moment to try and solve, or at least attenuate, barriers to legality. Nicaragua passed its law in 2003, after 8 years of debate. In Honduras, the existing draft is the product of an extensive review of the forest sector and multi-stakeholder dialogue involving campesino union actors, indigenous peoples, agro-forestry producers and other stakeholders within the framework for the Honduran Forestry Agenda (AFH) and the Honduran Agro-forestry Alliance (AHA).

The draft Forest Law in Honduras

Within the current administration in Honduras, there appears to be an awareness of the need to make the forest law more realistic, operational and less vulnerable to corruption. There is also growing political recognition of the role of forests in rural poverty alleviation, and of the need to provide equal opportunities for community-based forest producers.

The draft new law seeks to harmonize and consolidate into one single statutory instrument all existing legislation governing the administration and management of

³⁴ This has been achieved in Bolivia where the Head of the *Superintendencia Forestal* is selected through a transparent process and appointed for six years, straddling the presidential term of five years. This partly protects the agency from political interference and corruption. In Honduras, similar reforms have been achieved outside the forest sector, as in the case of the Supreme Court of Justice. Such experiences should inform forest institutional reform.

³⁵ This will also require parallel investments in support of the wider rural economy, including human capital development; low-technology agricultural inputs (as promoted by the *campesino-a-campesino* movement); agricultural extension; niche markets and pro-poor tourism (Richards et al, 2002).

forests, protected areas and wildlife, including their harvesting, conservation, protection, rehabilitation, and promotion. This should reduce much of the legal complexity and associated confusion. While bureaucratic barriers and “transaction costs” are not specifically considered in the present draft, opportunities to streamline regulations should emerge once the new law is passed and its implementing regulations prepared. The law should eliminate two important barriers:

- (i) The law establishes a Community Forest Management Contract. This should solve previous problems surrounding usufruct agreements and will grant long-term recognition of community forest rights.
- (ii) The draft law proposes eliminating the very limited harvesting quota to community-based producer groups established by the regulations of the 1992 Law of Agricultural Modernization.

The draft law also proposes facilitating the participation of community-based enterprises in timber auctions, partly by means of a new financing mechanism to facilitate access to auctions by agro-forestry groups which are able to show sustainable management practices and compliance with technical norms.

The new Forest Law in Nicaragua

The new 2003 Forest Law in Nicaragua³⁶ seeks to clarify the legal basis for SFM and tackle institutional corruption. Measures to strengthen transparency include independent auditing of INAFOR’s permit emitting functions. Enforcement measures include certification of origin to accredit legality, as well as provisions specifying various infractions (though fines remain relatively low). The Law also provides for a single payment to extract timber in natural forests (set at 6% of the price per cubic metre), with disbursement of a proportion of funds to indigenous communities and the municipalities. It also sets out a series of fiscal incentives for SFM and plantation development. Finally, Article 37 provides for a new policy encouraging the participation of legal and natural persons in forest management. However, while the Law is seen as an opportunity to clarify existing decrees and regulation, it does not explicitly address the regulatory barriers to legality currently faced by small forest producers. An exception is Article 23 which states that permits for commercial exploitation of natural forests of less than 10 hectares will be subject to simplified procedures. But, as in Honduras, systematic reform of secondary legislation (including decrees and bylaws) is also required.

Decentralisation

Over the past decade, Municipalities in both Honduras and Nicaragua have taken on a greater role in forest management. The decentralisation process in both countries is presenting an important opportunity for increased participation and transparency in forest management decision-making, and for reducing the legal and policy barriers to legality.

In Honduras, the Municipalities Act (1990) includes local governments in decision-making over any action relating to the production, use and conservation of forest resources (in their jurisdictions). The 1992 Law of Agricultural Modernization vested ownership of communal *ejidal* forests in the municipalities, and in 1993, the Environmental Law decentralized certain aspects of environmental protection. Local governments have subsequently joined decision-making bodies such as the National

³⁶ Ley de Conservación, Fomento y Desarrollo Sostenible del Sector Forestal, 2003

Advisory Council on the Environment, and the Advisory Council of the Honduran Forest Agenda (AFH).

Access to *ejidal* forests is governed by management agreements between community groups and the municipal forest offices, and approved by AFE-COHDEFOR. Some municipalities have made significant investments in participatory forest management; they have facilitated access by simplifying management plans and making it easier for farmers to understand them, and introduced simple enforcement systems.³⁷ They have also established committees and community support groups, and assigned roles and responsibilities for forest management and protection through public consultation (Vallejo Larios, 2003).³⁸

Municipalities are also joining forces with a variety of civil society organizations, including water boards and local development committees, to manage resources and take better account of the interests of local actors. At present, these movements are stronger in the more degraded areas of southern and western Honduras. The National Sustainable Rural Development Program (PRONADERS)³⁹ has helped institutionalise these movements as part of a 'new' approach to "rural development" (Colindres 2002a).

In Nicaragua, the Municipalities Law (as revised in 1997) grants local governments wide-ranging responsibilities for environmental and natural resource management, including monitoring and enforcement in coordination with national entities. Municipal governments also have the rights to:

- give their opinion (*aval*) prior to State approval of concessions on national lands and extraction permits on private lands.
- receive at least 25% of the income the Tax Office receives from these contracts.
- establish municipal parks for conservation, as well as develop land use plans.
- participate in environmental impact assessments (EIAs), manage protected areas, and other aspects of environmental management.

However, the system of incentives is such that the decentralisation process currently holds fewer prospects for pro-poor forest reform than in Honduras. The State still reserves for itself key decisions including concessions – sometimes in contradiction of a municipal *aval*. The devolved responsibilities are not matched by the fiscal transfers required for these new obligations. Municipalities claim they receive only a small portion, if any, of the tax revenues generated from concessions and other contracts approved by the State. Difficulties also arise over coordination with national agencies (Larson, 2002).

Furthermore, while special autonomy in 1987 granted the Atlantic regions substantial rights over their territories and resources, their regional governments have remained

³⁷ Under the "Sustainable Coniferous Forest Management and Use in Honduras (MAFOR)" programme, the municipalities of Guaimaca, Lepaterique, Ojojona and Villa de San Antonio in central Honduras are working to integrate forestry into the small farmer economy. The programme is working to build community action over 153 000 hectares of communal forest, including the planning and implementation of management plans that are easy to understand and implement by the small farmers and municipalities involved (Lazo 2001).

³⁸ Established under Decree No. 12 of 2000: Sustainable Rural Development Act. A variety of mechanisms exist which enable communities to participate in decision-making over municipal forests. These include local councils (*patronatos*), plebiscites, public meetings, municipal associations, protected area councils, local forestry committees, as well as agroforestry cooperatives (Vallejo Larios, 2003).

³⁹ The National Programme of Sustainable Rural Development (PRONADERS) was established to facilitate access by rural communities to production support services, to integrate rural communities into sustainable social and economic development, and reduce poverty.

only partly functional. The 1987 Autonomy Law was deliberately vague, leaving it open to interpretation by central government (Kaimowitz et, al., draft).⁴⁰

Where municipalities and regional governments have been more pro-active, key incentives have included the possibility of increased municipal income, pressure or aid from NGOs, projects or other civil society actors; and/or the need to solve conflicts. An appropriate legal framework establishing both the responsibility and authority for municipalities over forest management is also required for their interest to increase (Larson, 2002).

Poverty Reduction Strategy Papers

Both Honduras and Nicaragua are HIPC countries and have developed Poverty Reduction Strategy Papers (PRSPs). Nicaragua's PRSP is based on four pillars: (i) economic growth and structural reform; (ii) investment in human capital; (iii) better protection for vulnerable groups (the PRSP identifies indigenous groups on the Atlantic Coast as amongst the nation's poorest), and (iv) good governance and institutional development. The latter two constitute important policy entry points for pro-poor reform of the forest sector. It also identifies environmental vulnerability, social equity and the need to decentralize decision-making and service delivery as cross-cutting themes.⁴¹

Honduras' PRSP prioritises: (i) sustainable interventions for poverty reduction; (ii) interventions for the least developed groups in the country; (iii) civil society participation and decentralization; (iv) governance and participatory democracy; and (v) reduced environmental vulnerability and its impacts on poverty. All these constitute entry points for pro-poor reform of the forest sector. Furthermore, Honduras' PRSP specifically addresses forests. It links forest loss and environmental degradation with persistent rural poverty; highlights the need to invest in community forestry; and discusses how to strengthen participation and decentralised management of national forests.⁴²

However, the PRSP processes in Honduras and Nicaragua were not without controversy. Some civil society groups in Honduras withdrew from the official process given their inability to influence macro-economic aspects. In Nicaragua, while civil society groups succeeded in securing the PRSP's fourth pillar on governance, only a few organisations were invited to participate. In both countries, civil society groups instead chose to set up parallel PRS initiatives as a means to lobby on key issues.⁴³

Other policy opportunities

In Honduras, the multi-stakeholder debate that accompanied the preparation of the new Forest Law, as well as the anti-logging protests in Olancho (see Box 4), have reshaped the forest sector by increasing the participation and influence of civil society groups and community-based organizations. Honduras is now reframing its National Forestry Plan. Amongst others, this makes provision for a Community Development Programme based on community forestry.

The work of Honduras' National Anti-Corruption Council and, in particular, a handful of new legislative initiatives (the Citizen Participation Act and the Public Information

⁴⁰ Draft Chapter 3, 'Nicaragua and the Wild West'.

⁴¹ http://poverty.worldbank.org/files/Nicaragua_PRSP.pdf, pages x - xiii

⁴² Conlindres, 2002a; and http://poverty.worldbank.org/files/Honduras_PRSP.pdf, pages iv and 45 – 47.

⁴³ Bradshaw, S. and B. Linneker (2003), pages 14 - 15

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Act), present other windows of opportunity for pro-poor forest sector reform. An Administrative Procedures Simplification Act was also passed in August 2002.

Finally, CCAD and ACICAFOC are promoting forest sector reform at the regional level, using a rights-based approach.

(iii) **Gaps in the analysis**

The data presented here represents only a preliminary analysis. It does not provide a complete picture of the links between the illegal timber trade, rural livelihoods and forest law enforcement. There remain significant gaps which require further research. These include:

- Better understanding of the relative involvement of poorer and wealthier households, and of indigenous peoples and migrants, in timber cutting;
- The contribution that timber cutting makes to household incomes;
- Participation by and impacts on women;
- Impacts on other forest activities including NTFP collection;
- The level and seasonality of dependence on timber income;
- The role of timber cutting as a livelihood diversification strategy, given the depressed state of the small farm economy.
- More evidence of the specific livelihood impacts (positive and negative) of enforcement. The material presented here focuses more on the transaction costs of legal compliance, than the impacts of law enforcement itself. For instance, an enforcement sweep in the Sico-Paulaya valley during 2002 brought production to a virtual halt. We do not know what the implications have been for local peoples' livelihood strategies.
- Better evidence of the real impacts of fiscal losses, environmental service degradation, and governance impacts on rural livelihoods, as a result of the illegal timber trade. The study only infers this link on the basis of very provisional national estimates. It is also hard to disaggregate the negative impacts of illegal logging on wider economic growth from other aspects of poor governance. Probably the poverty effects from weaker governance (e.g., illegal loggers corrupting local government) are much greater.
- More information on the informal arrangements that have emerged at the local level, and the extent to which they have had *positive* livelihood benefits. For example, in Bilwi (Nicaragua), INAFOR, the Municipality and local community leaders (*síndicos*) operate a system of 'community permits' for Caribbean Pine (*Pinus caribaea var. hondurensis*) extraction. Whilst strictly illegal, the community permit was created to facilitate access by indigenous community members to their forest resources, and thus raise their employment and income levels, on the basis of a maximum of 3,000 board feet (equivalent to 7m³ sawnwood) per permit.

More research on the sequencing of a mixture of reforms that, on the one hand seek to reduce legal and institutional barriers, and on the other to strengthen accountability and enforcement. Such is the range of policy prescriptions that it may be difficult to tackle them simultaneously. Decision makers need to assess the potential costs to rural livelihoods as well as the likelihood of aggravating uncontrolled logging, depending on how they sequence regulatory reform and tougher law enforcement. The appropriate sequencing is likely to be highly context-specific. This includes the political feasibility of acting against powerful interests.

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ANNEX 1:

Formal and informal transaction costs incurred by the Collective Society of Romero Barahona and Associates, for the production and commercialization of 100 m³ of 'legalised' mahogany deadwood, Río Paulaya valley, Honduras (Del Gatto, 2003e)

Costs	Payment in Lempiras	Value in US\$	Comments
Fees			
AFE-COHDEFOR fee	56,400	3,510	Includes Lps. 48,000 of fees (half to the Forestry Reinvestment Fund) + Lps. 8,400 contribution by the Collective to the Reinvestment Fund.
Municipal fee	3,600	225	Lps. 0.20 per board foot (100 m ³ = 18,000 board feet).
ANPFOR quota fee	900	55	Lps. 0.05 per foot.
Subtotal	60,900	3,790	
Administrative and management costs			
Travel of 1 person to Bonito Oriental and La Ceiba for administrative transactions	7,000	435	Assuming a minimum of 2 trips at Lps. 3,500 each. The number of trips are greater if no payment of Lps. 9,000 or more is made to an intermediary to manage transactions (see <i>Informal Payments</i>).
Travel of 1 person from Palacios to La Ceiba and San Pedro Sula to deliver the wood and secure payment	1,300	80	
Subtotal	8,300	515	
Costs of production and transport			
Forest inventory	2,300	145	Amount of payment to consultants to inventory dead and waste wood, divided by the total volume inventoried. This is approximate and the figure differs between groups and consultants
Cutting the timber in the forest	31,500	1,960	Lps. 1.5 per board feet + Lps. 4,500 for helpers.
Transport by mule from the forest to the community	36,000	2,240	Lps. 2.0 per board foot
Transport by river from Copén to Palacios	36,000	2,240	Lps. 2.0 per board foot
Storage and care of timber in Palacios	2,500	155	Lps. 2,000 to guard (Lps. 200 for 10 days) + Lps. 500 to rent yard.
Subsistence of 2 people in Palacios waiting for boat	3,000	185	For 10 days (Lps. 1,200 food + Lps. 1,500 accommodation + Lps. 200-300 telephone calls).
Loading of boat	2,500	155	
Boat transport to La Ceiba	36,000	2,240	Lps. 2.0 per board foot
Unloading of boat in Ceiba and loading of 2 trailers	2,500	155	
Hire of 2 trailers for transport to San Pedro Sula	10,000	620	Lps. 5,000 per trailer.
Subtotal	162,300	10,095	

Informal Payments			
Payment to 'de facto' owner of forest area exploited	18,000	1,120	The production of deadwood, in reality live trees, happen on land (pastures or forest) which legally belongs to the State by locally is recognised as the property of particular individuals. To be able to cut a tree, it is necessary to pay the 'owner' of the tree (i.e. of the land on which the tree stands), normally at a rate of Lps. 1 per board foot.
Informal payment to an intermediary to procure a permit	9,000	560	Lps. 0.5 per board foot. This payment is made to an intermediary to secure a permit to cut 100 m ³ . The Collective is then obliged to sell that 100 m ³ to the same intermediary. Sometimes, the intermediary asks for more than Lps. 9,000.
Per diem for AFE-COHDEFOR technician to accompany (or verify afterwards) the forest inventory	750	50	The approximate amount of per diem paid to AFE-COHDEFOR technicians for inventory of dead wood, divided by the total volume inventoried.
Per diem for AFE-COHDEFOR technician to measure wood in Palacios	2,100	130	Including the cost of transport, accommodation and food + Lps. 500 for services rendered. Anecdotal evidence suggests that technicians sometimes receive much higher sums for services rendered.
Payment of costs of AFE-COHDEFOR technician for measurement of wood in La Ceiba	300	20	Including costs of taxis and food, + Lps. 1020 for services rendered. This sum can be double to accelerate the work using 2 AFE-COHDEFOR technicians.
Tips for services rendered by AFE-COHDEFOR administrative personnel	150	10	
Contribution to ANPFOR secretariat ⁴⁴	900	55	Lps. 0.05 per board foot.
Informal payments to posts on road from La Ceiba to San Pedro Sula	1,600	100	Lps. 200 per each of 4 posts, per trailer.
Subtotal	32,800	2,045	
Contributions and community payments			
Forestry management fund	900	55	Lps. 0.05 per board foot.
Rotating fund	900	55	Lps. 0.05 per board foot.
Social fund (contribution to community <i>Patronato</i> , or council)	1,800	110	Lps. 0.10 per board foot.
Subtotal	3600	220	
Minimum total	267,900	16,665	
Approximate total	~ 270,000	~ 16,800	In the calculation, this table has used minimum estimates based on different sources.
Amount paid for timber by processors in San Pedro Sula	~ 315,000	~ 19,595	Lps. 17.5 per board foot.
Profit margin		~ 15%	

1 USD = ~ 16,075 Lempiras (value in February, 2002)

⁴⁴ National Association of Broadleaf Forest Producers (ANPFOR)

ANNEX 2:

**Most common fraudulent practices in timber production in the Paulaya valley,
Honduras**

Administration and managing

- Informal payments and exchange of 'favours' to assure institutional support (favourable 'policies', issuing of permits, etc.)
- Abuse of community organization rights for personal interests
- Overestimation of forest inventory data
- Misclassification of timber in order to pay less tax
- Forging or repeated use of documents

Logging operation

- Cutting healthy trees instead of sawing fallen trees and dead timber (as authorised)
- Logging in forbidden areas, such as in proximity to rivers, steep slopes, and watersheds protected for water supply
- Cutting trees inside the Rio Platano Biosphere Reserve
- Harvesting trees with a diameter below the minimum cutting diameter (50 cm)
- Extraction of quantities above authorized figures

Transport

- Transport (with authorization) of illegally cut timber
- Transport without authorization or using expired documents