The Impacts of Certification on Campesino Forestry Groups in Northern Honduras

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Background to the study

Certification is one of the most widely debated and critiqued market-based instruments to have emerged in the forestry sector in recent years. Broadly speaking, certification is designed to improve forest management by linking market demands for sustainably-produced forest products with producers who can meet such demands. Although there are positive indications that certification will be effective in achieving its purpose, many issues and uncertainties have yet to be resolved. These include the effectiveness of certification in relation to its alternatives (such as improved policy and legislative measures) and the costs and benefits of certification for different groups.

For community and smallholder forest enterprises, which are typically small-scale operations, the potential benefits of certification may be offset by internal constraints such as weak economies of scale (leading to high certification costs), a lack of marketing opportunities, and a limited capacity to bear market risks. The ability of certification procedures to deal successfully with socially differentiated and diverse rural communities, and their land use systems, is also unproved. As a first step towards resolving these uncertainties, practical assessments of the impacts of certification on individual community and smallholder enterprises are needed. Such assessments should not only allow certification procedures to be improved and adapted to local needs and potentials, but also support the development of local capacities for participatory monitoring and evaluation of certification.

This study is the second in a series of case studies designed to assess the economic, social and environmental impacts of certification on community and smallholder forest enterprises in developing countries. The study focuses on the experiences of certified *campesino* (small farmer) forestry groups operating in the tropical broadleaf forests of northern Honduras. These groups, many of which were formed in the 1970s under Honduras' Social Forestry System, and which have received support from the Honduran-Canadian Broadleaf Forest Development Project (PDBL) and the Regional Agroforestry Cooperative of Colón and Atlántida, Honduras, Ltd. (COATLAHL), were first certified by the Rainforest Alliance's Smart Wood programme in 1991. At that time, they were the first forest producers to be certified in Central America and only the second community-based forestry initiative to be certified anywhere in the world.

Using a combination of approaches, including field investigation, in-depth interviews with key informants, and literature review, the study assesses the impacts of certification on the technical standard of *campesino* forest management, relations between the groups and the communities in which they operate, the commercial viability of timber production and marketing, and the policy and legislative framework for forest management by *campesinos*. The study concludes with some observations on the wider role that certification could play in promoting policy dialogue and consensus between forest stakeholders in Honduras.

Campesino forest management in northern Honduras

The *campesino* forestry groups that are the subjects of this study are located in the Atlántida Forest Region on the northern coast of Honduras. Ranging in size from five to 50 active members, each group manages an area of publicly-owned forest under a usufructuary agreement with the Honduran Forestry Development Corporation (COHDEFOR). As part of this agreement, groups are expected to prepare and implement a five-year management plan for the sustainable production of timber. Although the use of chainsaws is becoming increasingly common, many of the groups still employ manual harvesting methods such as axe felling and pitsawing.

Despite the high species diversity of the remaining tropical forests in the Atlántida Region, harvesting has concentrated on a small group of commercially valuable timber species, including mahogany (*Swietenia macrophylla*), redondo (*Magnolia yoroconte*) and Spanish cedar (*Cedrela odorata*). Attempts to promote the use of lesser-known timber species have been frustrated by a lack of product development and marketing capacity, competition from illegal logging, and the traditional dependence of domestic timber markets on pine (*Pinus* spp.). Although not the initial driving force, the desire to create new export markets for lesser-known species was one of the main motives for pursuing certification. In 1991, the groups operating in the Atlántida Region were certified as 'well-managed' by Smart Wood. These groups were subsequently re-certified in 1993 and 1996 (again by Smart Wood). At present, 12 groups managing almost 14,000 ha of forest are certified as 'well-managed'.

Summary of certification's impacts

Technical standard of forest management

- Certification has served to consolidate, rather than raise, technical standards of management. All of the groups have received long-term donor support for improving management practices and strengthening planning procedures. Minimum requirements for management planning were also imposed by Honduras' Agricultural Modernisation Law of 1992, and subsequently reinforced by technical planning standards introduced in 1996.
- Certification has highlighted the lack of monitoring by groups of management impacts on the forest ecosystem. The ecological justification for current silvicultural parameters is weak and little research has been carried out on the growth and regeneration of crop species. Smart Wood has called for growth studies to be implemented, but this demand is beyond the capacity of most groups and must be met by externally-sponsored research.
- Under the conditions of certification, groups are required to incorporate non-timber forest products into their management plans. This process has already begun in certain groups with external support, although not as a direct result of certification.

Group and community relations

- The lack of community participation in either decision-making by the groups or the distribution of income from timber harvesting was strongly criticised during Smart Wood's evaluation in 1996. All of the groups are now required to prepare and implement community participation plans.

- The issue of community participation was acknowledged by the main forest stakeholders in the Atlántida Region before being highlighted by certification. However, securing wider community participation in forest management is hampered by the exclusive nature of the usufructuary agreement between the groups and COHDEFOR.
- Closer analysis suggests that the assumptions underlying the certifier's demand for forest management to be opened up to the wider community are not justified by present social conditions. The *campesino* communities in the Atlántida Region lack the social cohesion that is generally considered necessary for successful communal resource management. Furthermore, reducing group control over forest management may jeopardise the many benefits offered by forestry groups, including their ability to function as an economic 'motor' for the development of the wider community.

Commercial viability of timber production and marketing

- The main driving force behind certification in 1991 was the desire of a local furniture export company to secure a source of sustainably produced raw materials for its markets in the United States. This led to the first certification evaluation and the creation of a commercial relationship between the company and the groups that persists to the present day.
- In terms of direct export marketing, however, the groups have never been in a position to exploit the value-added potential of certification because they lack the capacity to process and market timber according to international standards. Only three shipments of certified timber have been exported since 1991—all were commercial failures affected by long delays, high wastage rates, and the diversion of resources into satisfying complex export procedures and regulations.
- These failures have contributed to the groups' current focus on consolidating other (non-certified) domestic markets and exploring regional markets, e.g. El Salvador. Certification continues to play a minor role in marketing small quantities of high-quality timber to the local furniture export company, as well as certain buyers in Europe.

Policy and legislative framework for campesino forest management

- Until the early 1990s, none of the groups had received legal recognition of the usufruct rights granted to them under Honduras' Social Forestry System. In order to rectify this situation, PDBL developed the concept of a legally-binding 'usufruct contract' between the groups and COHDEFOR. There is anecdotal evidence that the eventual endorsement of usufruct contracts by government was prompted by the certified status of the groups.
- In 1996, a forestry funding scheme established by PDBL to support group costs was frozen after a legal challenge by elements of the Honduran timber industry opposed to financial support for *campesino* groups. Following the 1996 certification evaluation, Smart Wood called for the legal problems blocking funding to be resolved. An inter-agency committee convened by PDBL to examine alternative funding options subsequently obtained provisional approval for a new municipal-level forestry funding scheme in 1998.

Conclusions

Despite some limited achievements in legal and commercial aspects of forest management, certification has not made any major contribution to the main constraints faced by *campesino* forestry groups. A number of conditions of certification have either overlapped with existing donor work programmes, or have been duplicated by new regulatory measures. Several conditions have substantially increased the cost and complexity of management planning, and the corresponding reliance of *campesinos* on external assistance. Furthermore, the commercial relationships established with certified products companies have not always worked to the *campesinos*' advantage. Due to their limited marketing capacity, the groups have derived little benefit from direct sales of certified products, and have instead provided a secure supply of certified timber to larger companies with the capacity to exploit demand in environmentally-conscious overseas markets.

The limited degree of success with (certified) forest management reflects two major weaknesses in the approach adopted by PDBL, COATLAHL, and other stakeholders:

1. Certification was pursued on the flawed assumption that it would, in itself, be able to open export markets for lesser-known species. Consequently, little consideration was given to the integrated production and quality control systems necessary to support marketing.
2. The preoccupation with the marketing potential of certification diverted attention from its potential to enhance group management capacities. *Campesinos* have been isolated from the certification process, and lack a clear understanding of the costs and benefits involved.

Given these weaknesses, and the persistent financial and technical constraints to forest management, the rationale for continuing with certification is questionable. Apart from the high costs involved, most groups are still not ready to exploit the opportunities offered by certification. At present, the most appropriate course of action would be to place forest management and (domestic) timber marketing on a sound economic footing, and then allow the groups to decide whether to pursue certification. This conclusion reflects the fact that community-based enterprises must attain a reasonably advanced level of development before they can cope with the demands (and implications) of certification. Although donor assistance can accomplish a great deal in this respect, it should not be allowed to obscure the basic need for financial commitment and management capacity within the enterprise itself.

Within Central America in general, and Honduras in particular, certification has yet to assume a high profile. However, the promotion of certification within Honduras could pay dividends for the Social Forestry System and, by extension, *campesino* forest management. Evidence from certification programmes in other countries suggests that a strong, inclusive national initiative could support policy dialogue and consensus between traditionally opposed elements within government, the corporate forest sector, and civil society. There is also scope for a national certification initiative to explore ways of linking forest management incentives with certification in order to support *campesinos* and other rural populations with usufruct rights in public forests.

RESUMEN EJECUTIVO

Antecedentes del Estudio

La certificación forestal es uno de los instrumentos de mercado más controvertidos que han surgido en el sector forestal en los últimos años. En términos generales, la certificación se ha diseñado para mejorar las prácticas forestales uniendo las demandas del mercado para la madera 'sostenible' con los productores que pueden satisfacer tales demandas. Aunque hay indicaciones positivas que la certificación será eficaz en lograr su propósito, aún tienen que resolverse muchos asuntos e incertidumbres. Éstos incluyen la eficacia de la certificación en comparación con sus alternativas (tales como la mejora de políticas y medidas legislativas), y los costes y ventajas de la certificación para distintos grupos.

Para las empresas forestales comunitarias, que son típicamente operaciones a pequeña escala, las ventajas potenciales de la certificación se pueden ver reducidas por limitaciones internas tales como economías de escala débiles (que conduce a altos costes de certificación), una carencia de oportunidades de comercialización, y una capacidad limitada de asumir riesgos de mercado. La capacidad de los procedimientos de la certificación de ocuparse con éxito de comunidades rurales variadas y socialmente diferenciadas, y sus sistemas de utilización de la tierra, tampoco ha sido probado. Para resolver estas incertidumbres, son necesarias evaluaciones prácticas de los impactos de la certificación en empresas comunitarias. Tales evaluaciones deberían permitir no sólo que los procedimientos de certificación sean mejorados y adaptados a las necesidades locales, sino también apoyar el desarrollo de las capacidades locales para la evaluación y seguimiento participativo de la certificación.

Este estudio es el segundo en una serie de estudios de caso diseñado para evaluar los impactos económicos, sociales y ambientales de la certificación forestal en las empresas comunitarias en los países en vías de desarrollo. El estudio se centra en las experiencias de los grupos forestales campesinos que trabajan en los bosques latifoliados del norte de Honduras. Estos grupos, muchos de los cuales fueron formados en los años 70 bajo el Sistema Social Forestal (SSF) de Honduras, y que han recibido la ayuda del Proyecto Hondureño-Canadiense Desarrollo del Bosque Latifoliado (PDBL) y de la Cooperativa Regional Agro-Forestal de Colón y Atlántida, Honduras, Ltda. (COATLAHL), consiguieron la certificación del manejo forestal por el programa Smart Wood en 1991. En aquella época, fueron los primeros productores certificados en América Central y la segunda iniciativa comunitaria certificada en el mundo.

Usando una combinación de métodos, como investigación de campo, entrevistas en profundidad y revisión de literatura, el estudio evalúa los impactos de la certificación en las prácticas de manejo forestal, las relaciones entre los grupos y comunidades en donde suceden, la viabilidad comercial de la producción y comercialización de madera, y el marco político y legislativo para el manejo forestal campesino. El estudio concluye con algunas

observaciones respecto al amplio papel que la certificación podría desempeñar en promover el diálogo y el consenso entre las partes interesadas (‘stakeholders’) del bosque en Honduras.

Manejo Forestal Campesino en el norte de Honduras

Los grupos campesinos que son tema de este estudio están ubicados en la Región Forestal Atlántida en la Costa Atlántica de Honduras. Cada grupo tiene entre cinco y 50 miembros activos, y maneja un área del bosque nacional según los términos de un acuerdo usufructuario con la Corporación Hondureña de Desarrollo Forestal (COHDEFOR). Como parte de este acuerdo, se espera que los grupos preparen e implementen un plan de manejo forestal de cinco años. Aunque el uso de la motosierra está llegando a ser cada vez más común en la Región Atlántida, muchos grupos todavía utilizan métodos de aserrío manual.

A pesar de la gran heterogeneidad florística del bosque húmedo tropical restante en la Región Atlántida, solamente se utilizan de forma intensiva las especies altamente comerciales, tales como la caoba (*Swietenia macrophylla*), el redondo (*Magnolia yoroconte*) y el cedro (*Cedrela odorata*). Los esfuerzos de promover el uso de especies menos conocidas han sido frustrados por una carencia de capacidad de comercialización, la competencia por aprovechamiento ilegal de la madera y la dependencia tradicional de los mercados internos de la madera de pino (*Pinus* spp.). El deseo de crear nuevos mercados de exportación para las especies menos conocidas fue uno de los motivos principales para conseguir la certificación. En 1991, los grupos en la Región Atlántida fueron certificados por el programa Smart Wood bajo la designación de 'Bien Manejado'. Estos grupos fueron certificados posteriormente en 1993 y 1996 (otra vez por Smart Wood). Actualmente 12 grupos, que manejan casi 14,000 hectáreas del bosque, están certificados bajo la designación de 'Bien Manejado''.

Resumen de los impactos de la certificación

Las prácticas de manejo forestal

- La certificación ha servido para consolidar, más que mejorar, los estándares técnicos de manejo forestal. Todos los grupos han recibido ayuda de las agencias externas a largo plazo para mejorar la planificación y las prácticas de manejo. Los requisitos mínimos para la planificación del manejo fueron también impuestos por la Ley para la Modernización y Desarrollo del Sector Agrícola (LMDSA) de 1992, y reforzados posteriormente por normas técnicas y reglamentarias introducidas en 1996.
- La certificación ha destacado la carencia de seguimiento por los grupos de los impactos de manejo en el bosque. La justificación ecológica de los parámetros silviculturales es débil y se ha realizado poca investigación sobre el crecimiento y la regeneración de las especies maderables. Smart Wood ha exigido que los estudios de crecimiento del bosque sean llevados a cabo, pero esta demanda está más allá de la capacidad de la mayoría de los grupos y debe satisfacerse mediante investigación financiada externamente.
- Bajo las condiciones de la certificación, se requiere que los grupos incorporen los productos no maderables en la planificacion de manejo. Este proceso ha comenzado en ciertos grupos con ayuda externa, aunque no como resultado directo de la certificación.

Relaciones comunitarias

- La carencia de participación comunal en la toma de decisión de los grupos o la distribución de los ingresos provenientes de las actividades forestales fue muy criticada durante la evaluación de Smart Wood en 1996. Ahora, se requiere que los grupos preparen e implementen planes de participación comunal.
- La cuestión de la participación comunal fue reconocida por las partes interesadas antes de ser destacada por la certificación. Sin embargo, la participación comunal más amplia en las actividades forestales está obstaculizada por la naturaleza exclusiva del acuerdo usufructuario entre los grupos y el COHDEFOR.
- Un análisis más cuidadoso sugiere que las suposiciones en que se basa la petición de que el manejo forestal quede abierto a la comunidad no estén justificadas por las actuales condiciones sociales. Las comunidades campesinas en la Región Atlántida carecen de la cohesión social que se considera necesaria para el manejo de los recursos comunales. Además, una reducción del control del grupo sobre el manejo forestal puede comprometer las ventajas ofrecidas por los grupos, incluyendo su capacidad de funcionar como un 'motor económico' para el desarrollo de la comunidad.

Viabilidad comercial de la producción y comercialización de la madera

- El impulsor de la certificación en 1991 fue el deseo de una empresa de muebles local de asegurar una fuente de madera ‘sostenible’ para sus mercados en los Estados Unidos. Esto condujo a la primera evaluación de la certificación y a la creación de un lazo comercial entre los grupos y la empresa que persiste hasta el día de hoy.
- Sin embargo, en términos de exportaciones directas, los grupos nunca han estado en condiciones de explotar el valor añadida por la certificación porque carecen de la capacidad de procesar y comercializar la madera según estándares internacionales. Solamente se han exportado tres envíos de madera certificada desde 1991: todos fueron fracasos comerciales afectados por demoras largas, grandes desperdicios de madera, y el desvió de recursos para la satisfacción de procedimientos y regulaciones complejos de la exportación.
- Estos fracasos han centrado la atención de los grupos en la consolidación de otros mercados internos (no certificados) y las posibilidades de los mercados regionales, por ejemplo en El Salvador. La certificación continúa desempeñando un papel de menor importancia en la comercialización de pequeñas cantidades de madera de alta calidad a la empresa de muebles local y algunos compradores europeos.

Marco político y legislativo para el manejo forestal campesino

- Hasta los principios de los años 90, ninguno de los grupos habían recibido el reconocimiento legal de los derechos de usufructo concedidos a ellos bajo el Sistema Social Forestal de Honduras. Para rectificar esta situación, el PDBL desarrolló el concepto de un ‘convenio de usufructo’ entre los grupos y el COHDEFOR. Hay evidencia anecdótica de que el estatus certificado de los grupos indujo al gobierno a aprobar los convenios de usufructo.

- En 1996, un fondo de manejo forestal establecido por el PDBL fue bloqueado tras un desafío legal que elementos de la industria maderera Hondureña opusieron a la ayuda financiera para los grupos campesinos. Después de la evaluación de la certificación en 1996, Smart Wood exigió la solución de los problemas legales que bloqueaban el fondo de manejo forestal. Un comisión interinstitucional convocada por el PDBL para examinar opciones alternativas de financiamiento obtuvo posteriormente la aprobación provisional del gobierno de un nuevo esquema de financiamiento a nivel de municipalidad en 1998.

Conclusiones

A pesar de algunos logros parciales en aspectos legales y comerciales del manejo forestal, la certificación no ha hecho una contribución importante a las limitaciones principales de los grupos campesinos. Un número de condiciones de la certificación se han traslapado con programas de trabajo de agencias externas, o han sido duplicadas por nuevas medidas reguladoras. Varias condiciones han aumentado de manera sustancial el coste y la complejidad de la planificación forestal, y la dependencia correspondiente de los campesinos de la ayuda externa. Además, los lazos comerciales establecidos con las empresas exportadoras no han trabajado siempre para ventaja de los campesinos. Debido a su capacidad limitada de comercialización, los grupos no han sacado muchos beneficios de las ventas directas de madera certificada; en cambio, han provisto a las empresas de mayor tamaño y capacidad de una fuente segura de madera certificada.

El grado limitado de éxito en el manejo forestal (certificado) refleja dos debilidades principales en el enfoque adoptado por el PDBL, la COATLAHL, y otras partes interesadas:

1. La certificación fue perseguida en el supuesto erróneo de que, en sí misma, pueda abrir los mercados de exportación para las especies menos conocidas. Por lo tanto, poca consideración fue dada a los sistemas integrados de producción y de control de calidad necesarios para apoyar la comercialización de madera.
2. La preocupación con el potencial de comercialización de la certificación distrajo la atención de su potencial para mejorar la capacidad gerencial de los grupos. Los campesinos han sido aislados del proceso de la certificación, y falta una comprensión clara de los costes y beneficios implicados.

Dadas estas debilidades, y las limitaciones financieras y tecnicales persistentes del manejo forestal, es difícil ver la lógica de continuar con la certificación. Aparte de los altos costes implicados, la mayoría de los grupos todavía no están listos para aprovechar las oportunidades brindadas por la certificación. Actualmente, el camino más apropiado a seguir sería poner el manejo forestal y la comercialización (doméstica) de la madera sobre una base económica sólida, y después permitir que los grupos decidan si perseguir la certificación o no. Esta conclusión refleja el hecho de que las empresas comunitarias deben lograr un nivel del desarrollo bastante avanzado antes de poder hacer frente a las demandas (y las implicaciones) de la certificación. Aunque la ayuda de las agencias externas puede lograr

mucho en cuanto a esto, no debe permitirse encubrir la necesidad básica de dedicación financiera y capacidad gerencial dentro de la propia empresa.

En América Central en general, y en Honduras en particular, la certificación todavía no tiene un papel importante. Sin embargo, la promoción de la certificación en Honduras podría dar dividendos al Sistema Social Forestal y, por extensión, al manejo forestal campesino. La evidencia de inicitativas de certificación en otros países sugiere que una iniciativa nacional fuerte podría promover el diálogo y el consenso entre elementos opuestos dentro del gobierno, el sector maderero, y la sociedad civil. También hay posibilidades para una iniciativa nacional de la certificación de promover los medios para enlazar incentivos al manejo forestal con la certificación, para apoyar a poblaciones rurales con derechos de usufructo en bosques nacionales.

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ACRONYMS AND DEFINITIONS

ADECAF	Apoyo al Desarrollo de Cooperativas y Otras Formas Asociativas de Producción Agroforestal (Support to the Development of Cooperatives and Associated Forms of Agroforestry Production)
AFE-COHDEFOR	Administración Forestal del Estado-Corporación Hondureña de Desarrollo Forestal (State Forestry Administration-Honduran Forestry Development Corporation)
AMADHO	Asociación de Madereros de Honduras (Honduran Timber Dealers Association)
AMHON	Asociación de Municipios de Honduras (Association of Municipalities)
AMI	Area de Manejo Integrado (Integrated Management Area)
ANETRAMA	Asociación Nacional de Transformadores de la Madera (National Association of Wood Transformers)
campesino	Small farmer
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza (Tropical Agronomy Teaching and Research Centre)
CCMSS	Consejo Civil Mexicano para la Silvicultura Sostenible (Mexican Council for Sustainable Forestry)
CEIBA	Red de Certificación Integral para los Bosques Americano (Integrated Certification Network for the Forests of the Americas)
CERTEC	Centro de Recursos y Tecnología (Centre for Resources and Technology)
CIDA	Canadian International Development Agency
COATLAHL	Cooperativa Regional Agro-Forestal Colón, Atlántida, Honduras, Ltda. (Regional Agroforestry Cooperative of Colón and Atlántida, Honduras, Ltd.: referred to in the text as 'the Regional Cooperative')
COSPE	Cooperazione per lo Sviluppo dei Paesi Emergenti (Development Cooperation for Emerging Countries)
COSUDE	Cooperación Suiza al Desarrollo (Swiss Development Cooperation)
CUPROFOR	Centro de Utilización y Promoción de Productos Forestales (Centre for Wood Use and Promotion)
CURLA	Centro Universitario Regional del Litoral Atlántico (Regional University Centre of the Atlantic Coast)
dbh	diameter at breast height (= 1.3 m above ground level)
DFID	British Department for International Development (formerly Overseas Development Administration, ODA)

EHM	Ecologische Handels Maatschapiij (Ecological Trading Company, Holland)
ejido	Mexican form of land tenure constituting a land grant for usufruct to a population group
ETC	Ecological Trading Company (UK)
FACACH	Federación de Cooperativas de Ahorro y Crédito de Honduras (Honduran Federation of Savings and Credit Cooperatives)
FAO	United Nations Food and Agriculture Organisation
FEHCAFOR	Federación Hondureña de Cooperativas Agroforestales (Honduran Federation of Agroforestry Cooperatives)
finiquito	Post-harvesting evaluation carried out by AFE-COHDEFOR (see above)
fob	free on board
FONAPROVI	Fondo Nacional para la Producción y la Vivienda (National Fund for Production and Housing)
FSC	Forest Stewardship Council
HSV	Honduras Siempre Verde (Evergreen Honduras)
ICD	International Cooperation for Development
IIED	International Institute for Environment and Development
INA	Instituto Nacional Agrario (National Agrarian Institute)
ITTO	International Tropical Timber Organisation
lempira	Honduran unit of currency (= 100 centavos).
LMDSA	Ley para la Modernización y Desarrollo del Sector Agrícola (Agricultural Modernisation Law)
manzana	Unit of area measuring 0.70 ha
NTFP	Non-timber forest product
ODI	Overseas Development Institute
OFI	Oxford Forestry Institute
OLAFO	Proyecto Conservación para el Desarrollo Sostenible en Centroamérica (Conservation for Sustainable Development in Central America Project)
PAGS	Proyecto de Apoyo a la Gestión Sostenible de los Recursos Naturales (Support for Sustainable Natural Resources Management Project)
patronato	Community council
P&C	Principles and Criteria
PDBL	Proyecto Desarrollo del Bosque Latifoliado (Broadleaf Forest Development Project: referred to in the text as ‘the Broadleaf Project’)
PROINEL	Proyecto Utilización Industrial de Especies Forestales Menos Conocidas en los Bosques Bajo Manejo Forestal Sostenible (Industrial Use of Lesser-known Species from Sustainably Managed Forests Project)

SPFEQR	Sociedad Civil de Productores Forestales Ejidales de Quintana Roo (Society of Ejido Forest Producers of Quintana Roo)
TRANSFORMA	Proyecto Transferencia de Tecnología y Promoción de la Formación Profesional en Manejo de Bosques Naturales (Technology Transfer and Professional Development in Natural Forest Management Project)
USAID	United States Agency for International Development

Note on currency exchange rates:

Except where otherwise indicated, the June 1998 interbank rate of US$1.00 = 13.31 Honduran lempiras is used throughout the report.

INTRODUCTION

This study is the second in a series of case studies designed to assess the economic, social and environmental impacts of forest certification on community and smallholder forest enterprises in tropical developing countries. The detailed background and justification for this work is given in Markopoulos (1998) and only a brief summary will be repeated here.

Certification is a market-based instrument, designed to improve forest management by linking market demands for sustainably-produced forest products with producers who can meet such demands. Although there are positive indications that certification will be effective in achieving its purpose, many issues and uncertainties have yet to be resolved. These include the effectiveness of certification in relation to its alternatives (e.g. improved policy and legislative measures) and the costs and benefits for different groups.

For community and smallholder forest enterprises, which are typically small-scale operations, the potential benefits of certification may be offset by internal constraints such as weak economies of scale (leading to high certification costs), a lack of marketing opportunities, and a limited capacity to bear market risks. The ability of certification procedures to deal successfully with socially differentiated and diverse rural communities, and their land use systems, is also unproved. As a first step towards resolving these uncertainties, practical assessments of the impacts of certification on individual community and smallholder enterprises are needed. Such assessments should not only allow certification procedures to be improved and adapted to community needs and potentials, but should also support the development of local capacities for participatory monitoring and evaluation of certification.

The results of the first impact assessment study in this series (the Lomerío Community Forest Management Project in Bolivia) showed that certification can have far-reaching, positive impacts in areas such as administration and marketing, provided that communities are able to make the necessary investments in infrastructure, production technologies and human resources development (Markopoulos, 1998). However, the incremental impact of certification on technical standards of forest management may prove to be low, particularly if high levels of external assistance and increasingly stringent forest policy and legislation (both national and international) have been important factors. Other key areas that may be influenced by certification include the legal status and external relations of a community forest enterprise. In the case of the Lomerío project, which is owned and managed by indigenous Chiquitano Indians, the favourable publicity generated by certification raised the profile of indigenous forest management and strengthened long-standing Chiquitano claims to traditional land and forest resources.

Overall, the findings of the Lomerío study point to certain key issues that appear to condition the viability of forest certification at the community level. These can be grouped into four main themes:

1. The demands made by certification on community resources, for example financial capital, social capital, or time;

2. The implications of certification for the scale, pace and direction of socially-oriented forest enterprise development;

3. The relevance of certification to local land management strategies, particularly where forests are only one component of an integrated land use system based on agriculture; and

4. The extent and significance of the social development role played by certification.

The aim of the present study is to explore and develop these themes in the very different socio-economic and environmental setting of *campesino* forestry groups operating along the mountainous northern coast of Honduras. These groups, many of which were formed in the 1970s under Honduras' Social Forestry System, were first certified by the Rainforest Alliance's Smart Wood programme in 1991. At that time, they were the first forest producers to be certified in Central America and only the second community-based forestry initiative to be certified anywhere in the world.[1]

The study is based on a three week period of field work in Honduras during June 1998, as well as a full review of all relevant certification[2] and project documentation. Details of the field programme are given in Appendix 2; an outline of the field methodology can be found in Markopoulos (1998). Funding for the field work in Honduras was provided by the UK Department for International Development (DFID), as part of a D.Phil. project under the joint supervision of the Oxford Forestry Institute (OFI) and the International Institute for Environment and Development (IIED). The opinions and judgements expressed in this report are those of the author and do not necessarily reflect the opinions or policies of DFID, OFI or IIED.

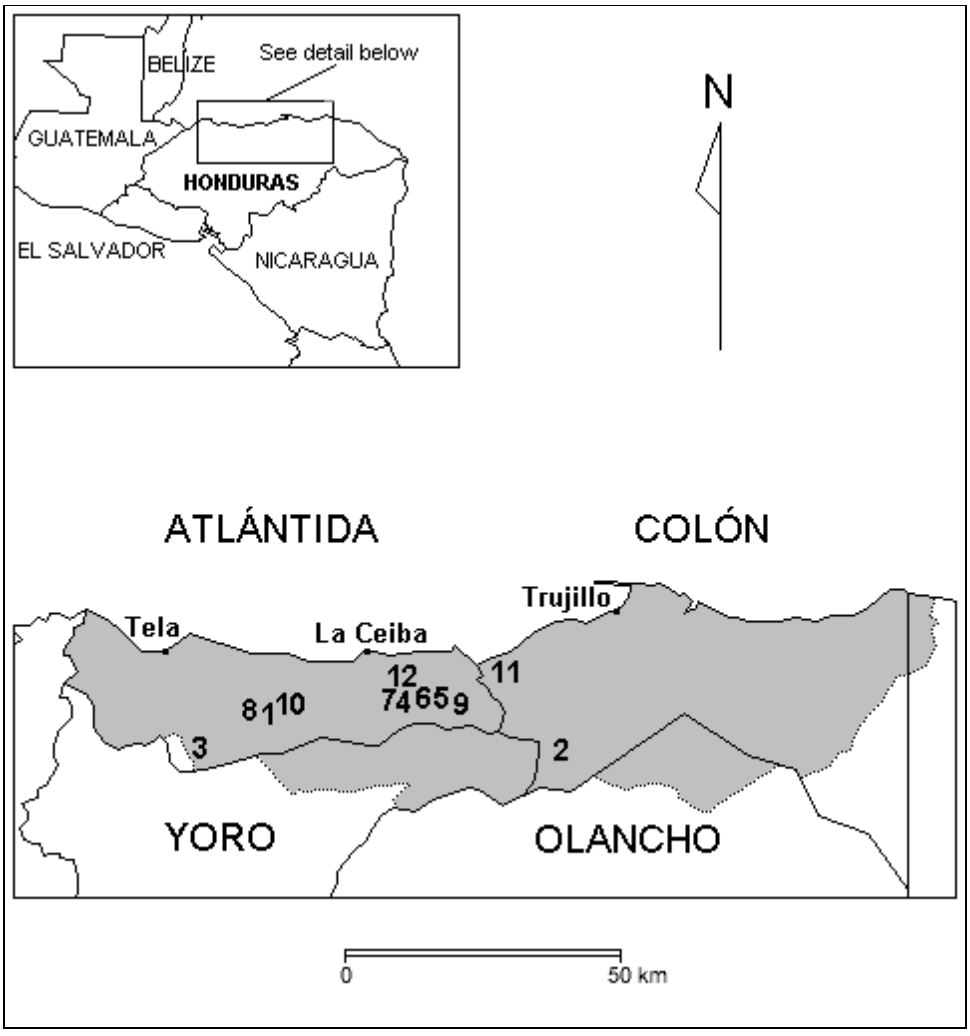
[1] The first being the *ejidos* affiliated to the Society of Ejido Forestry Producers of Quintana Roo (SPFEQR) in Mexico's Yucatán Peninsula.

[2] Permission to cite the Smart Wood report on the 1996 certification evaluation has been granted by PDBL and COATLAHL.

1 BACKGROUND TO CAMPESINO FOREST MANAGEMENT IN NORTHERN HONDURAS

1.1 Physical and social setting

The certified *campesino* forestry groups that are the subjects of this study are located in Honduras' Atlántida Forest Region, an area of approximately 22,500 km^2 that covers the coastal departments of Atlántida and Colón, and the northern parts of Yoro and Olancho departments (see Map 1 below).



Map 1*: Map of the Atlántida Forest Region (shaded area) of northern Honduras, showing the approximate locations of the twelve certified campesino forestry groups. For details of the name and affiliation of each group, see Table 5. The boundaries of the Atlántida Region generally follow departmental boundaries; however, where these diverge the boundary of the Region is indicated by a dotted line (Source: PDBL).*

The Atlántida Region is a rugged, mountainous area, characterised by superficial and erodable soils of low fertility, average rainfall levels of 3-4000 mm/yr, and average annual temperatures of around 25ºC (PDBL, 1995). According to the Holdridge life zone system

(Holdridge, 1967), the forests of the region are classified as humid to very humid tropical forest formations, known locally as *bosque latifoliado*, or broadleaf forest. High rates of deforestation and conversion to agro-pastoral uses have reduced the area of broadleaf forest to just over 750,000 ha, or around 33% of the Region's total area (F. Del Gatto 1998, pers. comm.). Over 400 tree species are found in the broadleaf forest, of which only 20-25 are used commercially, for example mahogany (*Swietenia macrophylla*) and Spanish cedar (*Cedrela odorata*) (Suazo *et al*., 1997). As a result of sustained over-exploitation, a number of the more valuable timber species, including mahogany and cedar, are now locally extinct or found only in small, isolated populations (COSPE, 1995).

The Region is an area of high demographic pressure with an annual population growth rate of 3.2% (Richards, 1993). Much of the population has settled in the area over the last 20-30 years, either under the sponsorship of government resettlement programmes, or by spontaneous colonisation along newly opened access roads (Giasson, 1990, cited by Szaraz and Irías, 1993; Richards, 1993). In recent years, the human pressure on forest resources has increased due to growing poverty and landlessness, and the influx of immigrants escaping conflicts in neighbouring countries such as Nicaragua and El Salvador. Current deforestation rates in the Region are the subject of some debate, although an estimate of 10,000 ha/yr (around 1.3% of the total forest area) given by Szaraz and Irías (1993) is still considered reasonably accurate (F. Del Gatto 1998, pers. comm.).

Land tenure in the Region is irregular—the majority of broadleaf forests are property of the state and many forest settlers are officially illegal squatters. The dominant agricultural system is a traditional shifting cultivation system used for the production of maize, beans and rice. Families generally tend plots of 2-30 ha on a rotational basis with cultivation periods of 22 months and fallow periods of 2 years (Rosales, 1983, cited by Szaraz and Irías, 1993). Growing population pressure is forcing farmers to reduce their fallow periods—a practice which is reducing the naturally low levels of soil fertility and productivity.

1.2 Origins and evolution of *campesino* forestry groups

Commercial timber exploitation by *campesino* settlers in the Atlántida Region dates back to the early 1970s (Ardón Mejía, 1997). The construction of access roads into the Region opened up timber markets in local urban centres such as La Ceiba, San Pedro Sula, and El Progreso. Local settlers responded by organising themselves into pairs or small groups to harvest trees, using rudimentary methods such as axe felling and pitsawing. The rough timber blocks produced in this fashion were transported from the forest to the roadside by means of water rafting, mules, or simply human force (Ardón Mejía, 1997; Mendieta, 1993; Szaraz and Irías, 1993). Often, harvesting was overseen by middlemen known as 'coyotes', who bought timber from the *campesinos* and, after having transported it from the mountains and rural areas, resold it to local woodworkers, manufacturers and exporters in the urban centres (P. Martins 1998, pers. comm.).

It was not until the creation of the Honduran Forestry Development Corporation (COHDEFOR) in 1974 that this informal and essentially unregulated harvesting was brought under closer control. COHDEFOR was established with the mandate of regulating the exploitation of Honduras' forest resources, encouraging more environmentally appropriate agricultural land use patterns, implementing reforestation schemes, promoting other forest and watershed protection programmes, and establishing industrial processing activities to add value to wood (Utting, 1993). In support of its commercial mandate, the agency was given exclusive ownership of Honduran forests and the power to market some forest products (Stanley, 1991).

One of the key elements of the drive to regulate forest exploitation and encourage more sustainable forms of forest management was the Social Forestry System. The intention of the Social Forestry System was to increase the participation of forest settlers and indigenous populations in the management and protection of the forest. To this end, the Social Forestry System organised *campesinos* and indigenous peoples into agroforestry cooperatives which were awarded usufruct rights to a limited area of forest. COHDEFOR was given the responsibility of providing organisational support, credit, training, and legal and technical assistance to the newly-formed cooperatives.

In 1976, COHDEFOR carried out a diagnostic study in the Atlántida Region which identified around 2,000 pitsawyers involved in informal forest harvesting operations (Richards, 1993). COHDEFOR organised around 700 of these sawyers into 25 groups under the Social Forestry System, and established the second-order marketing cooperative COATLAHL[3] in 1978 to provide transport, production and marketing services (Castillo and Roper, 1998; Richards, 1993) (see Box 1 below).

During the first decade of the Regional Cooperative's existence, its member groups continued with traditional harvesting techniques under the supervision of COHDEFOR, and with financial and technical support from the Canadian International Development Agency (CIDA). Despite the diversity of the broadleaf forest, production concentrated on a small group of six commercially valuable species (mainly mahogany and cedar, and to a lesser extent redondo (*Magnolia yoroconte*), granadillo (*Dalbergia tucurensis*), laurel negro (*Cordia alliodora*) and san juan guayapeño (*Cybistax donnell-smithii*)). However, the poor quality of much of the sawn timber, coupled to a passive marketing strategy which limited sales to the small local market of La Ceiba, led to heavy financial losses and the collapse of almost half of the groups.

[3] Regional Agroforestry Cooperative of Colón and Atlántida, Honduras, Ltd. (henceforth referred to as 'the Regional Cooperative').

***Box 1**: The Regional Agroforestry Cooperative of Colón and Atlántida, Honduras, Ltd. (COATLAHL)*

The Regional Cooperative was formed in 1977 and accorded legal status in 1978. Its headquarters are situated in the city of La Ceiba in the Department of Atlántida, although the organisation is able to operate throughout Honduras and overseas.

According to the Regional Cooperative's statutes, its main goal is to seek improvements in the economic, social and cultural conditions of its members, the communities in which they live, and Honduras in general (COATLAHL, 1989). The means by which this goal is to be achieved include the rational use of natural resources, development and application of modern production technologies, diversification of exports, promotion of savings and investment, and conservation of forests and wildlife in the areas assigned under usufruct agreements. In addition to transport, production and marketing services, the Regional Cooperative also provides technical assistance in health, training in cooperative law and other legislation, and support to other productive activities, for example agriculture (Sánchez and Del Gatto, 1996).

Under Honduran cooperative law, the Regional Cooperative is governed by three authorities. The General Assembly, formed by four elected delegates from each member group, is the highest authority. The General Assembly in turn elects the Board of Directors (*Junta Directiva*), which is responsible for administrative matters, and the Board of Vigilance (*Junta de Vigilancia*), which acts as a mechanism of control. Each of the Regional Cooperative's member groups has a similar governing structure, although one or more Boards may be defunct, or even absent, in some of the smaller and less active groups (Ortega and Tinoco, 1997). Day-to-day management of cooperative business is the responsibility of a general manager, who is supported in the field by two foresters (D. Dávila 1998, pers. comm.).

The Regional Cooperative's timber processing facilities consist of a 6" band saw donated by the Canadian Embassy in the early 1980s. The sawmill installation, which is also located in La Ceiba, employs five full-time workers (including one woman) and has an installed capacity of 20,000 board feet/day (Midence *et al*., 1997). In addition to the sawmill, the Regional Cooperative possesses a solar dryer with a capacity of 4,200 board feet/10 days, and a carpentry workshop (the latter was established in 1992 with funding from COSPE). The workshop currently employs 16 workers, and produces a number of finished articles including doors, cabinets, tables and parquet flooring (Midence *et al*., 1997).

In the latter half of the 1980s, the Social Forestry System entered a new phase with the development of Integrated Management Areas (AMIs). The AMI concept, which was introduced with assistance from FAO and CIDA, involved incorporating local communities into a land use system combining agriculture with the sustainable use of forest resources (Utting, 1993). This was designed to complement a new system of harvesting rights introduced in 1986, whereby COHDEFOR allocated the rights to an entire 'tributary area' (watershed) to a logging company on the condition that a management plan was prepared to ensure sustainable forest exploitation. The AMIs were intended to incorporate the population living within the tributary area into a micro-regional economy involving forestry, agriculture and social development.

In practice, the AMI concept was applied almost exclusively to the broadleaf forest of the Atlántida Region (Suazo *et al*., 1997). Here, the task of promoting social forestry through the AMI structure fell on the Broadleaf Forest Development Project (PDBL, henceforth referred to as 'the Broadleaf Project'), a bilateral initiative between Canada and Honduras which began in 1988. The Broadleaf Project was established to service 10 AMIs in the Atlántida Region, each covering approximately 20,000 ha and around 30 communities.[4]

At the time of the Broadleaf Project's inception, five of the remaining 13 member groups of the Regional Cooperative were situated in the AMIs covered by the project. These groups began receiving assistance from the Broadleaf Project in carrying out forest inventories, preparing operating plans, and strengthening their internal administrative procedures. The eight groups of the Regional Cooperative located outside of the Broadleaf Project area were unable to benefit from these developments until 1993, when the Italian non-governmental organisation COSPE began supporting management planning and capacity building amongst the Regional Cooperative's membership with funds from the European Union (Sánchez and Del Gatto, 1996).

The Broadleaf Project's strategy for forestry development in the AMIs was not based solely on the existing member groups of the Regional Cooperative. In certain communities and AMIs, it proved necessary to form new groups independently of the Regional Cooperative to manage forest resources. These groups, or associations (*sociedades colectivas*) as they are formally known, received not only technical and financial support from the Broadleaf Project, but also assistance with timber transport and marketing. By the end of the Broadleaf Project's first phase in 1995, a total of seven such associations had been established and their members trained in forest management planning, administration and accounting procedures (PDBL, 1995).

1.3 Legal and institutional framework

Until 1992, forest management in Honduras was regulated by two main legal instruments: the 1971 Forestry Law, and the 1974 Law which created COHDEFOR and the Social Forestry System, and nationalised all forests. Despite the explicit orientation of the 1974 Law towards local participation in forest management, the actual impacts on forest resources and rural living standards in the two succeeding decades proved to be minimal. One of the main reasons for this failure was the limited capacity of COHDEFOR to provide technical assistance, equipment, credit, and other support services to the cooperatives (COHDEFOR, 1988, cited by Utting, 1993). Another 'political' reason was the conflict of interests that arose

[4] Forestry was only one component of a range of rural development activities supported by the Broadleaf Project. The first phase of the Broadleaf Project (1988-95) concentrated on forestry, agroforestry, training and environmental education, womens' development and infrastructural improvements. In the second phase (1995-2000), the range of activities has been expanded and augmented with elements such as protected area management and rural savings and credit schemes.

between COHDEFOR's promotion of the Social Forestry System and its commercial logging activities (ODA, 1996; Utting, 1993).

In the Atlántida Region, COHDEFOR's ability to promote the Social Forestry System was further weakened by institutional clashes with the National Agrarian Institute (INA). Until 1992, INA's policies and national land reform laws facilitated forest conversion for agro-pastoral uses. Amongst other things, a Land Reform Bill introduced in 1974 encouraged large cattle holdings with highly inefficient stocking rates. These holdings, unlike forest lands, were legally protected against expropriation by organised *campesino* groups encroaching into the forest (Richards, 1993). The establishment of pasture lands on fertile alluvial valley soils forced *campesinos* onto marginal forest soils. Between 1974 and 1982, the pasture area in the Atlántida Region increased by 90,000 ha, helped by subsidised credit (USAID, 1990, cited by Richards, 1993).

These policy and land use conflicts retarded the process of obtaining greater security of tenure for the *campesino* forestry groups operating in the Atlántida Region. Until the mid-1990s, none of these groups had received legal recognition of the usufruct rights granted to them under the Social Forestry System. Instead, COHDEFOR followed a policy of prohibiting timber harvesting by outsiders in the areas of national forest assigned to the groups as usufruct (Richards, 1993).

In 1992, substantial changes were introduced to Honduras' agricultural and forest sectors by a new Agricultural Modernisation Law.[5] Originally drafted by USAID, the Agricultural Modernisation Law has three principal objectives: to eliminate all forms of state intervention in the agrarian sector; to limit expropriations and strengthen guarantees for private ownership of land; and to promote new foreign and domestic investment in agriculture (Norsworthy and Barry, 1994). In applying these objectives to forestry, the Law provided for:

- The introduction of mandatory management plans (under COHDEFOR supervision) for all forms of forest exploitation;
- The return of tree tenure to the land owner;
- The regularisation of rights of illegal settlers in national forests;
- The privatisation of the timber export trade; and
- The replacement of the 'tributary areas' concept with public auctions of standing timber (Suazo *et al*., 1997).

[5] Ley para la Modernización y Desarrollo del Sector Agrícola (LMDSA).

Under the new legislation, AFE-COHDEFOR[6] was assigned to promote social forestry on public land by incorporating *campesino* settlers into the new regulatory framework via AMIs and cooperatives. This involved the establishment for them of a management plan, a usufruct contract (based on a 30 year cutting cycle), and a forestry management fund to finance the management plan (ODA, 1996).

The usufruct contract introduced under the Agricultural Modernisation Law is an agreement between AFE-COHDEFOR and a legally constituted group of *campesinos* that authorises long-term management and harvesting rights on national (or municipal) forest lands (Castillo and Roper, 1998). In return for the rights of usufruct, the group is expected to implement sustainable management practices as specified in a five year management plan. Renewal of the usufruct is linked to compliance with the specifications of the management plan and takes place every five years. The management plans which underpin all harvesting activities vary in their level of detail according to the size of the management unit. To date, all usufruct contracts have covered areas greater than 500 ha, for which a technical study prepared by a qualified forester is required (see section 1.4).

The introduction of usufruct contracts has been a slow process and the area of forest under such contracts is still limited. The Broadleaf Project has played a key role in promoting usufruct contracts—of the 23 contracts currently in existence, 12 are held by groups operating in the AMIs covered by the Broadleaf Project. These cover a total forest area of 25,398 ha and are divided between the five Regional Cooperative groups and seven independent associations that are serviced by the Broadleaf Project (Castillo and Roper, 1998). None of the Regional Cooperative's member groups located outside of the Broadleaf Project's AMIs hold usufruct contracts (D. Dávila 1998, pers. comm.).

The concept of a fund for covering management costs in the broadleaf forest was first proposed by the Broadleaf Project in 1994. The Broadleaf Project proposal was subsequently approved by AFE-COHDEFOR and officially introduced in 1995 as a forestry management fund (*fondo de manejo forestal*). As originally conceived, forestry management funds were to be established by all producer groups operating under the Social Forestry System, and capitalised with 50% of the stumpage fees normally paid to AFE-COHDEFOR.[7]

In the case of the Regional Cooperative, its member groups were required to contribute an additional 10% of their annual profits to their management funds (Sánchez and Del Gatto, 1996). For the associations established by the Broadleaf Project, a variable production tax of 5-20 centavos/board foot was levied as their contribution to their management funds (F. Del Gatto 1998, pers. comm.). Funds were also open to other contributions, for example grants paid by environmental organisations, or voluntary fees paid by foreign purchasers of timber (see section 2.3.2 for details of payments by foreign timber buyers). The fund itself, as well as

[6] The title of State Forestry Administration (AFE) was added to COHDEFOR's name in 1992 to better reflect the organisation's new responsibilities for forest management under the Agricultural Modernisation Law.

[7] See Appendix 1 for details of current stumpage rates.

decisions on allocation, became the joint responsibility of the producer group and AFE-COHDEFOR, thus introducing a degree of genuine local participation into forestry decision making for the first time (Castillo and Roper, 1998).

By 1996, a total of 1.44 million lempiras (US$121,622 at 1996 exchange rates) had been accumulated in forestry management funds by producer groups in the Atlántida Region (Poirier, 1998). However, these same funds were frozen in 1996 following a legal challenge by the Honduran Timber Dealers Association (AMADHO) which questioned the constitutional validity of placing public funds and the responsibility for their administration in the hands of private groups[8] (Castillo and Roper, 1998; Poirier, 1998).

Currently, there is no financial mechanism for supporting forest management by producer groups in the broadleaf forest,[9] although an Inter-Agency Commission established to investigate and recommend alternative funding options has recently recommended the establishment of a national trust fund (*fondo de fideicomiso*) for this purpose (see section 3.4.4 for further discussion) (Poirier, 1998).

The new regulatory framework introduced under the Agricultural Modernisation Law has greatly increased AFE-COHDEFOR's responsibilities in the areas of social forestry and sustainable forest management. However, AFE-COHDEFOR has still not developed sufficient operating or technical capacity to prepare and supervise management plans in national forests. At a more fundamental level, the current emphasis on local involvement in forest management through the mechanism of usufruct contracts is under attack from those who question AFE-COHDEFOR's authority to dispose of national forests in this manner, as well as the capacity of local groups to implement forest management (Suazo *et al*., 1997).

For the *campesino* forestry groups of the Atlántida Region, the new regulations concerning management planning have placed much greater demands on their time and financial resources. Together with other consequences of the Agricultural Modernisation Law, including an increase in stumpage taxes, these changes have increased the attractiveness of illegal logging, which has long been a traditional activity in the broadleaf forest zone. Illegal logging is now being undertaken not only by operators outside the *campesino* communities but also by *campesinos* in the AMIs and even in some of the forestry groups. The existence of large quantities of illegal timber on local markets has depressed prices and significantly affected the commercial viability of legal marketing organisations such as the Regional Cooperative (see section 1.5 below).

[8] The underlying reason for this challenge was that AMADHO and other private sector interests were unhappy that only groups organised under the Social Forestry System were able to divert half of their stumpage taxes to management funds.

[9] In 1997, AFE-COHDEFOR introduced forestry reinvestment funds (*fondos de reinversión forestal*) to support forest management, but these are directed at national forests that have been auctioned to private companies (Poirier, 1998).

1.4 Forest management and administration

The composition of each *campesino* forestry group varies widely. Although most groups are based in a particular community, others may draw their members from several different communities. In some cases, *campesinos* may join another community's group even though a group already exists in their own community. The criteria for accepting new members into a group are based on financial considerations (for example, the ability to pay annual subscription fees to the Regional Cooperative) and physical considerations (for example, health and fitness levels). The latter are crucial—manual harvesting is highly demanding work, and many groups must extract timber to the roadside by human force alone.

As noted in section 1.3, all usufruct contracts in the Atlántida Region are for forest areas greater than 500 ha. The groups holding these contracts are therefore required to contract a qualified forester to prepare their management plans. In practice, the technical expertise for management plan preparation has been provided at subsidised rates by the Broadleaf Project and COSPE. Technical standards guiding the content and preparation of management plans in the broadleaf forest zone were formalised by AFE-COHDEFOR in 1996 (see AFE-COHDEFOR, 1996); these are based on management guidelines originally developed by the Broadleaf Project in the early 1990s (see Martins and Nuñez, 1992).

Management plans cover a period of five years, within a cutting cycle of 30 years. Every plan is based on a general inventory which covers 0.7% of the total area of productive forest. This sample area is sub-divided into sample plots of 0.1 ha, in which all trees of 50 cm dbh (diameter at breast height) and above are measured and recorded. Trees in two lower size classes (10 - 49.9 cm and <9.9 cm dbh) are also inventoried. On the basis of the inventory results, and the size of the producer group, the forest area is divided into annual harvesting areas.

Forestry operations in each harvesting area are based on an annual operating plan, which in turn is based on a pre-harvest inventory (100% intensity of sampling) of all commercial and non-commercial trees of 50 cm dbh and above. Trees in the two lower size classes (see above) are inventoried in sample plots covering 2% and 0.2% of the harvesting area respectively. Once all trees with commercial potential have been marked and recorded, the group can request permission from AFE-COHDEFOR to commence harvesting. The annual allowable cut is limited to trees with diameters above 50 cm; in practice, this means that groups selectively harvest approximately 35-40% of the available basal area in each harvesting area, up to a limit of 10 m^2/ha of basal area in the case of the AMIs (Rainforest Alliance, 1996a; R. Trudel 1998, pers. comm.).

Before leaving a harvesting area, groups must demonstrate to AFE-COHDEFOR their compliance with management regulations by undergoing a post-harvesting evaluation known as the '*finiquito*'. The primary aim of the *finiquito* is to determine whether the group has

followed AFE-COHDEFOR's technical guidelines and taken the necessary actions to ensure satisfactory protection and regeneration of future crop trees.

In addition to selection felling of crop trees, management planning in the broadleaf forest provides for two other silvicultural interventions: 1) a liberation felling, which removes all trees between 10 cm and 49.9 cm dbh that are competing with future crop trees; and 2) enrichment planting in felling gaps, principally with mahogany, cedar and redondo. Enrichment plantings are designed to complement, rather than replace, natural regeneration in harvested areas. In order to promote natural regeneration, the majority of management plans also specify the selection and retention of seed trees.

The technology used in forestry operations has changed in recent years from a predominantly manual approach involving axes and pitsaws to one that makes greater use of the chainsaw for felling and sawing. Until the early 1990s, almost all (legal) operations were manual, mainly because AFE-COHDEFOR was reluctant to permit the use of chainsaws in the broadleaf forest (Richards, 1993). Typically, a group would divide up into pairs, and each pair work independently on preparing a tree for harvest, constructing terraces and sawing benches, sawing the tree, and extracting the timber to the group depot. This was a slow process, and normally a pair would fell and saw only four to five trees during the six month working period between rainy seasons. Manual sawing could also be an inefficient and wasteful form of processing, with conversion rates of around 180 board feet per cubic metre of roundwood (42% conversion efficiency) for softer species such as mahogany and redondo (Richards, 1993).

In recent years, the difficulties involved in manual felling and sawing have driven many groups towards the use of chainsaws, albeit without the legal approval of AFE-COHDEFOR (Cruz, 1998). The extent to which chainsaws are now used varies: in some groups they are used only for felling; in others they are also used for shaping rough timber blocks that are subsequently sawn by hand; and in a small percentage of groups chainsaws are used at every stage of processing (Ardón Mejía, 1997). In 1997, the use of a chainsaw and guide-frame system for processing timber (known as the 'Alaskan mill') was introduced on a pilot basis by the Broadleaf Project and COSPE. The Alaskan mill was selected over other small-scale processing systems, such as the portable sawmill, because of the lower maintenance and servicing costs involved, the relative ease of use in the steep terrain of the management areas, and the greater local familiarity with chainsaw technology (P. Martins 1998, pers. comm.).

Despite some early reservations from AFE-COHDEFOR, the use of Alaskan mill technology as a means of improving output and quality is now generally accepted within the broadleaf forest zone, and actively supported by two other forest management projects: CATIE's TRANSFORMA project, and the ITTO-funded PROINEL project. A social, technical and financial evaluation of the Alaskan mill system carried out by PROINEL in the Toncontín group in 1997 demonstrated significantly higher output and conversion efficiencies compared to

manual and mixed manual-chainsaw systems, with correspondingly greater returns to labour and reduced physical risks (Cruz, 1998).

In adopting chainsaw technology, groups have begun moving away from a pairs-based harvesting approach to one based on small sub-groups. In the La Victoria group (one of the Regional Cooperative member groups situated in an AMI), which has three chainsaws and 15 members, forestry operations are carried out by three five-man groups, each organised around one chainsaw operator (information derived from author's interviews).

1.5 Markets, income and economic viability

Broadly speaking, marketing by *campesino* groups in the Atlántida Region follows three main pathways: 1) through the Regional Cooperative's central depot in La Ceiba for cooperative members; 2) indirectly through sales to private transport contractors; or 3) directly to buyers in La Ceiba, San Pedro Sula, or further afield (Aube *et al*., 1992). In the early 1990s, the Broadleaf Project drew up plans for establishing a timber yard in La Ceiba to provide a central distribution point for the independent *campesino* associations. In common with the Regional Cooperative's central depot, the timber yard would have offered drying, processing, grading and market promotion services to the independent groups (Aube *et al*., 1992). However, despite promising financial projections,[10] the plans for the timber yard were eventually dropped by the Broadleaf Project on the grounds that it would compete with the Regional Cooperative's depot (P. Martins 1998, pers. comm.).

The lack of competition has allowed the Regional Cooperative to remain the main legal source of timber in La Ceiba for almost two decades. For most of this time, the Regional Cooperative has bought timber from its member groups at previously established prices (see Table 1 for price details). This timber is subsequently resawn at the Regional Cooperative's sawmill for onward sale to local wood transformers. Approximately 30% of the sawmill's output is used in the Regional Cooperative's carpentry workshop, which sells its output either directly from the central depot or through a furniture showroom opened in La Ceiba in 1997 (G. Mendez 1998, pers. comm.).

[10] The investment in the timber yard and related market development strategy was expected to generate an internal rate of return of at least 20% (Aube *et al*., 1992).

SPECIES	QUALITY CLASS[a]		
	FIRST	SECOND	THIRD
1997			
Mahogany	5.70	5.25	4.90
Cedar	5.70	5.25	4.90
Granadillo	5.70	5.25	4.90
Redondo	5.25	5.05	4.80
Group 1[b]	4.80	4.60	4.25
Group 2[c]	4.70	4.55	4.20
Other species	4.16	4.02	3.70
1998			
Mahogany	6.00	-	-
Cedar	6.00	-	-
Granadillo	6.00	-	-
Redondo	6.00	-	-
Group 1	5.00	-	-
Group 2	5.00	-	-
Other species	4.16	-	-

***Table 1**: Guaranteed prices (in lempiras/board foot) for timber produced by Regional Cooperative member groups, 1997-1998. Since the beginning of 1998, the Regional Cooperative has bought only first class quality timber from its member groups (Source: COATLAHL).*

[a] *Quality criteria are determined as follows: First Class: Straight, one solid knot is accepted; Second Class: One solid knot, up to 2 or 3 stains, up to 4" of splitting, some curvature accepted; Third Class: Stains are accepted, up to 5 solid knots, some rot, up to 6" of splitting, more curvature accepted (Ardón Mejía, 1997).*

[b] *Group 1 includes marapolán (Guarea grandifolia), rosita (Hieronyma alchorneoides), santa maría (Calophyllum brasiliense), barba de jolote (Pithecellobium arboreum), huesito (Macrohasseltia macroterantha), cumbillo (Terminalia amazonia) and varillo (Symphonia globulifera).*

[c] *Group 2 includes jigua (Ocotea sp.), san juan (Vochysia spp.), piojo (Tapirira guianensis), cedrillo (Huerta cubensis), pepenance (Virola guatemalensis), and laurel negro.*

The Regional Cooperative's average annual production has steadily decreased over the past decade, from 932,800 board feet in 1990 to 384,000 board feet in 1997. At the same time, the proportion of valuable timber species such as mahogany and cedar has also decreased from 80% of production in 1991 to only 25% in 1995 (Rainforest Alliance, 1996a). This reduction in the proportion of valuable timber species is due more to over-exploitation of mahogany and cedar stocks than to active efforts to increase the use of lesser-known species. For example, the Suyapa group harvested only mahogany until 1992, by which time their stocks were exhausted and they were forced to turn to lesser-known species such as cumbillo (*Terminalia amazonia*), pepenance (*Virola guatemalensis*) and varillo (*Symphonia globulifera*). Not surprisingly, the period to 1992 was the most active and successful in Suyapa's history, and the group has since shrunk to almost a third of its original size (information derived from author's interviews with the Suyapa group).

The decline in the Regional Cooperative's production is due to a number reasons, many of which stem from the difficulty of finding new markets for lesser-known species. In comparison to other Central American countries with similar forest types, the timber markets of Honduras are relatively conservative. For example, a number of broadleaf species with ready markets in Costa Rica have little or no value in Honduras[11] (COSPE, 1995). This situation is due in large part to the widespread reliance on coniferous timber, principally pine (*Pinus* spp.). At present, over 90% of all timber production in Honduras comes from pine forest areas (Reis, 1998).

Although growing, the market for hardwood species is still small, and dominated by traditional species such as mahogany and cedar. Where lesser-known species are in demand, the volume required is often far outstripped by the volume available in the forest. In 1997, the combined national and local demand for huesito (*Macrohasseltia macroterantha*) and cumbillo was only 32,300 board feet, compared to a total volume of 327,657 board feet in the Regional Cooperative's commercial inventory (figures derived from Midence *et al*., 1997). Furthermore, an indeterminate, though significant, proportion of current demand is met by illegal logging. Contraband timber is widely available in the Atlántida Region at prices up to 30% cheaper than the legally produced equivalent (Del Gatto, 1995).

In the Regional Cooperative's case, the difficulties involved in developing new markets have been compounded by poor quality control during the production cycle. Until 1998, the Regional Cooperative offered guaranteed prices for all of the timber produced by its member groups (see Table 1). The existence of guaranteed prices, albeit differentiated according to quality, led to many groups neglecting quality concerns when sawing and preparing their timber. Factors such as open air drying and poor stacking practices have been responsible for much of the timber received by the Regional Cooperative suffering from fungal and insect infestations (Richards, 1993).

In 1997, 45% of the timber bought by the Regional Cooperative from its member groups was of third class quality, and only 20% of first class quality (Ardón Mejía, 1997). Much of this low quality timber cannot be sold, and is left to rot in the Regional Cooperative's depot. The resulting loss of sales revenue has meant that the Regional Cooperative often cannot pay for all of its members' production. Such defaults on payments have led to a loss of confidence amongst cooperative member groups and an increasing reliance on direct sales to local buyers, often at much reduced prices.

At the beginning of 1998, the Regional Cooperative took the decision to buy only first class quality timber from its members, thus providing an incentive for groups to improve the quality of their production (D. Dávila 1998, pers. comm.). Notwithstanding the effect of this measure on quality of production, any positive effect on the Regional Cooperative's finances is likely to be minimised by the continuing direct and indirect subsidies paid by the cooperative to its members. Table 2 provides a breakdown of the return to the Regional Cooperative for every

[11] Thus, in a regional context, the term 'lesser-used' may be more appropriate than 'lesser-known' when referring to hardwood timber species in Honduras.

board foot of timber sold of Group 1 species. As can be seen, the cooperative not only pays a guaranteed price for first class quality timber, but also subsidises stumpage taxes, municipal taxes, transport costs from the group depot to the central depot in La Ceiba, and the costs of preparing and implementing management plans. At current sales prices, the cooperative is making a loss on almost every board foot of timber it sells.

	Lempiras per board foot
PRICE COMPONENT	Group 1 species
Sale price La Ceiba	7.75[a]
Guaranteed price to member groups[b]	5.00
AFE-COHDEFOR stumpage tax[c]	0.78
Municipal tax	0.06
Transport	0.50
Forest management[d]	1.00
Administration/marketing	1.30
TOTAL COSTS	8.64
NET INCOME	*-0.89*

***Table 2**: Breakdown of return to the Regional Cooperative from sale of Group 1 species timber, 1998 (Source: COATLAHL).*

[a] Sale price does not include value-added tax at 12%.

[b] Price is now guaranteed for first class quality timber only.

[c] Stumpage taxes vary according to species—see Appendix 1 for details of current rates.

[d] Forest management costs are currently supported by COSPE.

Obviously, the subsidies enjoyed by the Regional Cooperative's membership distort the true costs and benefits of forest management for *campesino* groups. At present, the groups are only liable for the costs of equipment maintenance, transport of timber from the forest to the group depot, wages for community members employed in forestry operations, and any group funds established for contingency costs or other purposes. Table 3 provides a breakdown of the return to the Santiaguito group for every board foot of timber produced from species in Group 1. Although forest management is currently profitable, it would cease to be so should the Santiaguito group become liable for the stumpage taxes, transport and other production-related costs currently borne by the Regional Cooperative.

In purely financial terms, the net revenue from forest management compares well with alternative opportunities in the agricultural sector. Taking the Santiaguito group as an example again, the total production by the group in 1998 is estimated at 30,000 board feet. With 13 members in the group, and an assumed average income of 2.83 lempiras/board foot, individual incomes can be calculated at some 6,530 lempiras per annum. Assuming this requires 100 days work, the net return per day can be estimated at just over 65 lempiras. This

may appear low, but agricultural wages in the Atlántida Region do not exceed more than about 30 lempiras per day.[12]

	Lempiras per board foot	
PRICE COMPONENT	Group 1 species	
Guaranteed sale price[a]		5.00
Transport (forest to group depot)	1.00	
Chainsaw fuel and maintenance	0.65	
Community labour	0.02	
Group working fund	0.50	
TOTAL COSTS	2.17	
NET INCOME		2.83

***Table 3**: Breakdown of return to the Santiaguito group from sale of Group 1 species timber to the Regional Cooperative, 1998 (Source: Individual members of the Santiaguito group).*
[a] Price is guaranteed for first class quality timber only.

In general, any revenues earned by Regional Cooperative member groups remain in the group and, on the basis of decisions made at the group's General Assembly, are either distributed amongst members or retained for group projects (see below). In some groups, however, both marketing and the disposal of income can be monopolised by a small core of dominant members, to the detriment of the remaining group (Ortega and Tinoco, 1997; Castillo and Roper, 1998). The community in which a group is situated benefits only indirectly from the income earned through timber production, for example through employment in forestry operations, or through purchases made by group members in the community *pulpería* (general store).[13]

Amongst the member groups of the Regional Cooperative, income is commonly spent on food, medicine, housing and other necessities. Many of the younger, single members of a forestry group spend their income in local bars, although claims made by some observers that most of a group's income is spent on alcohol have been exaggerated (F. Del Gatto 1998, pers. comm.). A number of groups also invest part of their timber revenues in agricultural projects; for example, the Santiaguito group started a cocoa (*Theobroma cacao*) plantation on 16 *manzanas* (11.2 ha) of group-owned land in 1997. The group employs community members to work in the plantation, and pays them a minimum daily wage (information derived from group interview).

[12] A full economic analysis of land use systems (which is beyond the scope of this study) would be needed to determine the viability of forestry in relation to agriculture, both in terms of net returns per hectare and the relative contribution to overall household incomes.

[13] Groups with usufruct contracts have the sole legal right to harvest timber and non-timber forest products from the forest area covered by the contract. Traditional subsistence use of forest by communities is restricted to areas outside of the usufruct boundaries (see section 3.4.2 for a more detailed discussion).

2 EARLY EXPERIENCES WITH CERTIFICATION, 1991 - 1995

2.1 Driving forces and objectives

As noted in the introduction, the *campesino* groups of the Atlántida Region adopted forest certification at an early stage in its development. The initial driving forces behind certification did not originate within the groups, however; instead, they were the direct result of changing values and preferences in the overseas markets of local wood products exporters.

In 1990, the La Ceiba-based furniture company Victorian Reproductions was informed by its main buyer in the United States, Smith & Hawken,[14] that, due to consumer demand, all products would henceforth have to be derived from sustainably managed sources (R. Schenck 1998, pers. comm.). The American owner of Victorian Reproductions, who was aware that the Broadleaf Project was developing sustainable forest management practices, made contact with the newly established Smart Wood certification programme of the American non-governmental organisation Rainforest Alliance, and the British-based Ecological Trading Company (ETC), in order to obtain independent verification of the quality of management in the Broadleaf Project area.

Following an initial visit to the Broadleaf Project by ETC in 1990, the then director of the Smart Wood programme came to La Ceiba in 1991 and briefly surveyed forest management in three of the forestry groups operating in the AMIs. In recognition of both the groundwork that had already been laid, and the good intentions of the Broadleaf Project and the Regional Cooperative, Smart Wood decided to certify all of the groups operating in the AMIs as 'well-managed' (D. Irías 1998, pers. comm.). At the time, it was hoped that certification would provide a stimulus for groups to improve and develop their forest management.

In the following year (1992), the then national director of the Broadleaf Project, Dagoberto Irías, attended the first meetings on the formation of the Forest Stewardship Council (FSC). Irías subsequently became a member of the first Board of Directors of the FSC, and developed a close working relationship with the Smart Wood programme. Apart from its obvious potential as a marketing tool, Irías also saw certification as an important means of raising the profile of the Broadleaf Project and demonstrating the viability of *campesino* forest management to an indifferent AFE-COHDEFOR (D. Irías 1998, pers. comm.).

These two separate forces—consumer pressure in external markets on one hand, and the desire to prove the viability of a particular management model on the other—defined the early context for certification. In 1993, a Smart Wood team returned to the Broadleaf Project to carry out a more thorough assessment of management practices in the forestry groups. The team concluded that some progress had been made in developing forest management, and recommended that all of the groups operating in the AMIs be re-certified. In that same year, the Broadleaf Project's regular contacts with ETC resulted in the first overseas shipment of

[14] Smith & Hawken, Inc., is a mail-order garden equipment and furniture company based in California.

timber from *campesino* groups in the AMIs. This shipment was followed by one more in 1994, which went to ETC's sister company in the Netherlands, EHM (see section 2.3.2 below for details of marketing impacts).

2.2 Certification methodologies and results

The first certification evaluation of 1991 was a low-key, informal process. Smart Wood had yet to adopt clear guidelines and procedures for its operations, and the practice of assembling multi-disciplinary evaluation teams was still some way into the future. During his brief visit to the Broadleaf Project, the director of Smart Wood interviewed key project personnel and was taken to see forest management operations in two Regional Cooperative member groups and one independent association. The evaluation was followed not by a formal written report, but by a small number of general recommendations transmitted verbally to the Broadleaf Project. These recommendations overlapped with processes already under way within the Broadleaf Project, for example the development of management plans and annual operating plans for each forestry group, and the acquisition of secure tenure rights for *campesino* groups operating in national forests (D. Irías 1998, pers. comm.).

By 1993, Smart Wood had begun sending multi-disciplinary teams to certification audits, but still lacked formal evaluation and reporting guidelines. The four-man team of foreign professionals (no Hondurans were involved in the evaluation) that assessed group forestry operations in that year also interviewed other local actors, for example environmental groups and government officials, as well as community authorities. A draft report was produced, but this appears neither to have been finalised, nor followed by a formal certification contract (D. Irías 1998, pers. comm.).

The team that evaluated forest management in 1993 identified nine main weaknesses in the system of forest management promoted in the AMIs (Rainforest Alliance, 1996a). Of these, the following eight concerned management aspects affecting every group:

1. Forestry inventories had not been completed for all of the groups;
2. The groups still lacked secure tenure rights to their lands and the forests in which they operated;
3. Areas demarcated as productive forest were being encroached upon for the purposes of pioneer subsistence agriculture;
4. Weak institutional capacity in AFE-COHDEFOR meant that a number of groups lacked the financial and technical support mandated under the Social Forestry System;
5. Related to 4), *campesinos* required training in order to develop their forest management capacities;
6. Marketing, in particular of lesser-known species, was weak and the Regional Cooperative required support for the development of a properly integrated marketing strategy;

7. Chain of custody controls between the Regional Cooperative and the certified groups had not yet been defined; and
8. Regional Cooperative member groups located outside of the Broadleaf Project area required support for forest management planning and implementation.

The questions of tenurial rights and marketing are discussed in greater detail in sections 2.3.2 and 2.3.3 below. The following section deals with the technical issues raised by the certification evaluation.

2.3 Analysis of impacts

2.3.1 Forest management practices

In general, the technical recommendations made during the 1993 certification evaluation were addressed through the Broadleaf Project's existing programme of work with the *campesino* groups. Smart Wood's concern that groups outside of the AMIs should also receive financial and technical support was answered by the commencement of COSPE's project with the Regional Cooperative in 1993 (although COSPE's work was not directly informed by the certification recommendations).

Forest inventories for all 12 *campesino* groups in the AMIs were completed with support from COSPE and the Broadleaf Project by the end of 1994 (F. Del Gatto 1998, pers. comm). These were subsequently incorporated into management plans as required under the Agricultural Modernisation Law of 1992. With the completion of forest inventories and forest management plans, the main technical concerns of Smart Wood had been addressed.

2.3.2 Marketing of certified products

Despite the overriding interest in certification as a marketing tool, progress in market development between 1991 and 1995 was relatively slow. Indeed, only two shipments of timber were exported under a certified label[15] during this period (see below). Locally, the only buyer of certified timber at the time was the Victorian Reproductions company, which concentrated primarily on cedar for its American furniture markets, and paid only prevailing market prices for its raw materials.

In the early 1990s, the Broadleaf Project began developing a global marketing strategy aimed, amongst other things, at developing national and international markets for the lesser-known

[15] It should be emphasised that between 1991 and 1995, the Broadleaf Project and the Regional Cooperative were only able to make use of Smart Wood's proprietary timber label. The use of the FSC label was not possible until 1996, when Smart Wood received FSC accreditation and the *campesino* groups were re-certified under standards derived from the FSC global Principles and Criteria (see section 3).

species that dominate the broadleaf forest. (One element of this strategy—a timber yard in the city of La Ceiba—has already been discussed in section 1.5). The responsibility for implementing the strategy was placed in the hands of an inter-agency marketing committee, composed of representatives from the *campesino* groups, the Regional Cooperative, the Broadleaf Project, COSPE, AFE-COHDEFOR and CUPROFOR, a British government-funded wood technology project based in San Pedro Sula. One of the first actions of the marketing committee was to exploit the links that had been established between the Broadleaf Project and ETC and prepare a trial shipment of certified timber from several lesser-known species with commercial potential (PDBL, 1993).

The trial shipment, which was dispatched in August 1993, consisted of seven lesser-known species[16] with a combined volume of just over 18.5 m^3. Seven *campesino* groups were involved in the production of this timber, including four independent associations and three members of the Regional Cooperative. For the purposes of the trial shipment, all seven groups sold their timber to the Regional Cooperative at the standard guaranteed price for cooperative members. In addition to procuring the timber, the Regional Cooperative also bore the costs of resawing, classification and shipment. Once all of these costs had been taken into account, the net profit on the sale price[17] of US$350/$m^3$ was less than US$90/$m^3$ (PDBL, 1993).

The limited commercial success of the trial shipment served to highlight a number of important weaknesses in the social, technical and institutional framework of group forest management. One of the main weaknesses was a lack of experience amongst the groups in preparing timber according to internationally acceptable dimensions and standards of quality. Although the Broadleaf Project and the Regional Cooperative tried to select only the most capable sawyers in each group, between 30 and 40% of the timber produced for the shipment was rejected as unsuitable for export (PDBL, 1993). This problem was exacerbated by the fact that groups were unfamiliar with even the most basic processing and storage requirements for some of the lesser-known species. At the organisational level, the practice of pitsawing in pairs, as opposed to integrated teams, led to difficulties in coordinating production and significant delays in the delivery of sawn timber (PDBL, 1993). Finally, further delays arose because the timing of the shipment conflicted with the main period of crop sowing in the *campesino* agricultural calendar.

For the Broadleaf Project and the Regional Cooperative, the trial shipment also provided a salutary lesson in the demands of Honduran export regulations. Apart from the time-consuming procedures involved in obtaining the required export documentation, exporters must also inform the Honduran Central Bank, in advance, of the quantity, value and destination of the goods to be exported, as well as the value and currency of the anticipated export revenues. Furthermore, Honduras' Foreign Exchange Repatriation Law of 1990

[16] These species were: Rosita, varillo, cumbillo, santa maría, piojo, cedrillo, and san juan rojo (*Vochysia guianensis*).

[17] All export prices are free on board (fob) at the northern port of Puerto Cortés, Honduras' principal seaport.

requires exporters to repatriate all of their earnings through the commercial banking system within a fixed number of days after shipment (45 days in the case of sawn timber). Failing this, a fine of 20% of the total value of exports must be paid to the Central Bank. Unfortunately, in the case of the Broadleaf Project and the Regional Cooperative, the delays experienced during the trial shipment meant that ETC was unable to pay for the order before the deadline imposed on repatriation, and consequently a fine had to be paid to the Central Bank.

The trial shipment was followed in 1994 by two further orders from ETC for 40 m^3 of cumbillo, varillo, rosita and santa maría. In the end, only one of these orders was actually shipped from Honduras, and this was diverted to EHM in the Netherlands. This order was notable because, in addition to the sale price of US$350/$m^3$, EHM paid a premium of US$20/$m^3$ as a contribution to the forestry management funds that were then being established in each *campesino* group (see section 1.3) (Herrera, 1994a). In commercial terms, this order also proved a greater success than the preceding year's trial shipment. A financial analysis carried out by the Broadleaf Project revealed a net profit of US$2,963, or just over US$148/m^3 (Herrera, 1994b). This surplus allowed the inter-agency marketing committee to authorise a small premium of US$37/$m^3$ in addition to the base price paid to the four groups involved in the shipment. These same four groups also shared the proceeds of the US$20/$m^3$ forestry management fund premium.

Although more profitable than the trial shipment of 1993, the second shipment in 1994 again exposed many of the same weaknesses in production and marketing that had become apparent a year earlier. Once again, delivery schedules had to be extended as groups failed to meet production targets, and much of the timber produced did not meet the required quality standards. Furthermore, the Regional Cooperative's attempts to bolster the production of lesser-known species met with some opposition from those of its member groups which still possessed stocks of valuable traditional species (Herrera, 1994b). These groups saw little point in felling and processing lesser-known species (even for certified export markets) when they could receive higher prices locally for their remaining valuable species.

Despite the problems associated with the 1994 shipment, it served as an important validation of the forestry management fund concept proposed by the Broadleaf Project. On a practical level, the premium of US$20/$m^3$ paid by EHM was proof that foreign timber buyers would be willing to contribute towards the costs of establishing forestry management funds. On a more fundamental level, the premium could be taken as evidence that the social and environmental functions of forests, as opposed to their productive functions, could also command a value in international markets.

2.3.3 Land and forest tenure

One of the recurrent themes in the Smart Wood recommendations of 1991 and 1993 was the importance of secure land and resource tenure rights for the *campesino* forestry groups

operating in national forests. As already noted, this recommendation overlapped with one of the main activities of the Broadleaf Project, which was to obtain legal recognition of the usufruct rights awarded to *campesino* groups under the Social Forestry System.

The period of 1991-1995 saw the development and introduction of the concept of usufruct contracts by the Broadleaf Project (see section 1.3). Although this process was not directly prompted by certification, there is evidence that its eventual successful outcome was accelerated by the certification of all AMI forestry groups. According to the national director of the Broadleaf Project at the time, certification provided the Broadleaf Project with a key bargaining point against AFE-COHDEFOR's indifference towards the issue of tenure rights (D. Irías 1998, pers. comm.). Indeed, without certification, it is possible that the Broadleaf Project would still be arguing the case for usufruct contracts today (D. Irías 1998, pers. comm.)

The usufruct contracts for the twelve groups covered by the Broadleaf Project (five members of the Regional Cooperative and seven independent associations) were all awarded in August 1994, and average just over 2,000 ha per group (Castillo and Roper, 1998). Although the contracts were signed by representatives of the groups and the Director General of AFE-COHDEFOR, none of them have been approved by AFE-COHDEFOR's Board of Directors as required under the Agricultural Modernisation Law of 1992. Furthermore, the complex format of the contracts has given rise to uncertainty amongst producers as to their exact rights and responsibilities. This uncertainty has led to a loss of confidence and the widespread perception that usufruct contracts carry little legal weight (Castillo and Roper, 1998).

The actual impact of usufruct contracts on forests and forest management is difficult to determine. According to an evaluation carried out by the Broadleaf Project in 1995, average deforestation rates in forests under usufruct contracts were only 0.8% per annum between 1994-95, as opposed to rates of 1.5% in the surrounding unmanaged areas. A re-evaluation of deforestation rates in usufruct areas carried out in 1997 revealed a further decrease to 0.3% per annum (Castillo and Roper, 1998). However, the use of a surrogate indicator such as deforestation rates to assess the impact of usufruct contracts should be treated with caution. Amongst other things, the long-term presence of the Broadleaf Project and AFE-COHDEFOR in the AMIs, and the resulting achievements in forest management and raising local awareness, have undoubtedly contributed to the stabilisation of forest cover. The decline in deforestation rates can also be attributed in part to the consolidation of old colonisation zones in the AMIs and the gradual advance of the agricultural 'frontier' eastwards towards the relatively undisturbed forests of the Mosquitia region (F. Del Gatto 1998, pers. comm.)

Undoubtedly, usufruct contracts have had some effect on *campesino* attitudes towards forest management. Interviews conducted by the author in the Toncontín and La Victoria groups (two of the five Regional Cooperative members holding usufruct contracts) revealed a general opinion that usufruct contracts would guarantee the long-term benefits of forest management. However, the groups also felt that the wider community would respect the integrity of their usufruct areas not because of the existence of a legal contract, but because of the presence

and backing of the Broadleaf Project. Assuming this perception holds true, it does not bode well for groups outside the AMIs which may be hoping to obtain usufruct contracts. Without the support of a recognised sponsor such as the Broadleaf Project, such groups may have difficulties in convincing community members to respect the provisions of the usufruct contract.

One response to the question of long-term forest security is that producer groups should be awarded full property rights to the forest land under their control. Whether or not full property rights on their own would greatly strengthen local commitment to forest management is uncertain, however. More importantly, perhaps, there should be a package of incentives for forest management and protection, including (but not limited to) tenurial reform, restructuring of the policy and fiscal framework for timber harvesting by *campesinos*, and support for enhanced agricultural techniques designed to raise productivity and stabilise shifting cultivation.

3 RESULTS AND IMPACTS OF RE-CERTIFICATION, 1996 - PRESENT

3.1 Background

Smart Wood's third evaluation of the *campesino* forestry groups in 1996 merits separate treatment for several reasons. Firstly, it took place under the standards of FSC accreditation imposed on Smart Wood at the beginning of 1996. As an FSC-accredited certifier, Smart Wood was obliged to model its certification criteria on the FSC's global Principles and Criteria (P&C) and follow strict procedures for evaluation and reporting that had not existed at the time of the earlier evaluations in 1991 and 1993.

Secondly, the evaluation of 1996 was the first to be undertaken in conjunction with the Honduran member of Smart Wood's Latin American certification network.[18] In Honduras, Smart Wood's network member is Honduras Siempre Verde (HSV), an environmental non-governmental organisation founded in La Ceiba in 1995 by the ex-national director of the Broadleaf Project, Dagoberto Irías.

Lastly, and in another departure from previous evaluations, the 1996 evaluation was extended to all *campesino* forestry groups working with the Broadleaf Project and the Regional Cooperative (i.e. not just those situated in AMIs). Together with this change, the focus of certification moved from the project level (i.e. an emphasis on the Broadleaf Project as the institution representing *campesino* groups) to the group level, where each group was viewed as an independent entity, associated with either the Broadleaf Project or the Regional Cooperative for technical and administrative purposes (Rainforest Alliance, 1998a). In total, 12 member groups of the Regional Cooperative and seven independent associations supported by the Broadleaf Project submitted themselves for evaluation.

3.2 Certification standard and field methodology

The certification standard used for the evaluation was based on Smart Wood's Generic Guidelines for Assessing Natural Forest Management (see Rainforest Alliance, 1993a, for the guidelines in force at the time of the evaluation). These guidelines were adjusted by the evaluation team for compatibility with the prevailing social, economic and environmental circumstances of *campesino* forest management. For example, adjustments were made to reflect the non-mechanised nature of harvesting, the usufruct-based tenure regime, and the status of groups as independent entities linked to one or more communities (Rainforest Alliance, 1996a).

The evaluation was carried out over a period of 12 days in February 1996, by a ten member multi-disciplinary team. This team was led by the then vice-director of the Smart Wood programme, assisted by Smart Wood's network coordinator and the director of HSV (at that

[18] The network is known as the Red de Certificación Integral para los Bosques Americano (CEIBA).

time Dagoberto Irías). Five other Honduran team members were provided by HSV, including two foresters, two agronomists, and a biologist. The remaining two members of the team were a forest ecologist from Smart Wood's network partner in Mexico, the Mexican Council for Sustainable Forestry (CCMSS), and a Bolivian anthropologist with experience of forest management by indigenous groups in South America.

In common with all other assessments carried out by Smart Wood, the methodology followed during the evaluation was based on Smart Wood's Source Certification and Audit Procedures (see Rainforest Alliance, 1993b, for details). In the field, the team divided into four sub-teams, each composed of a forester and an environmental specialist. These sub-teams were given the task of assessing technical and environmental standards in a certain number of groups, varying from three to seven. For the social component of the evaluation, the groups were divided into two blocks according to their geographical location, and each block was then assigned to one social specialist for evaluation (Rainforest Alliance, 1996a). The team held interviews not only with the *campesino* groups, but also with representatives from the Broadleaf Project, the Regional Cooperative, other donor projects operating in the broadleaf zone, AFE-COHDEFOR, and the Victorian Reproductions furniture company. For reasons of poor weather, group inactivity, or group conflicts with encroaching cattle ranchers, the team was only able to complete the evaluation of 14 out of the 19 applicant groups.

3.3 Evaluation results and stakeholder responses

According to the Smart Wood audit procedures in effect at the time of the 1996 evaluation, the final certification decision can take one of following forms (Rainforest Alliance, 1993b):

A. Certification as a 'sustainable' source (which operates in strict adherence to the Rainforest Alliance's principles and guidelines);
B. Certification as a 'well-managed' source (which can demonstrate a strong operational commitment to the Rainforest Alliance's principles and guidelines);
C. Certification as one of A or B above, but with specific conditions that have been identified for improvement prior to the first annual audit;
D. No certification, with an explanation and stipulation of conditions that must be met in order to qualify in the future; and
E. No certification because there is not enough information. Information gaps must be specified and an agreement made to reconsider when the information has been provided.

All of the 14 groups assessed in full received an average score greater than three, out of a maximum possible score of five (see Table 4 below for results). Because a number of negative points were identified during the evaluation, the evaluation team recommended that 13 groups be certified as 'well-managed' under option C above. The remaining group (Sociedad Colectiva Montes y Asociados) was recommended for 'pre-certified' status under option D above.

	THEMES:	Forest Security	Management Planning	Sustained Yield Management	Environmental Impacts	Community Relations	Employee Relations	Economic Viability	Optimising Forest Potential	Chain of Custody	
No.	GROUP										Average Score
1	SC[a] Montes y Asociados	4.75	2.91	3.85	3.80	2.12	3.00	2.50	4.00	4.00	3.44
2	SC Varela y Asociados	4.75	3.01	3.28	3.73	3.00	3.00	3.25	3.50	4.00	3.51
3	SC García y Asociados	4.50	EVALUATION INCOMPLETE								-
4	SC Navarro y Asociados	4.50	EVALUATION INCOMPLETE								-
5	SC Pineda y Asociados	4.50	2.91	3.28	3.67	2.87	3.00	3.00	3.30	3.50	3.34
6	SC Fuentes y Asociados	4.75	3.19	3.42	3.67	3.00	3.00	3.00	3.70	4.50	3.59
7	SC Castellanos y Asociados	4.75	3.10	3.57	3.73	3.25	3.00	3.25	3.80	4.00	3.61
8	GC[b] Fuerzas Unidas	4.25	3.13	3.57	3.67	2.75	3.00	3.25	3.70	4.00	3.49
9	GC La Fortuna	4.75	3.04	3.57	3.80	2.62	3.00	3.25	4.00	4.00	3.57
10	GC San Marcos	EVALUATION INCOMPLETE									-
11	GC Toncontín	4.75	3.13	3.57	3.53	3.12	3.00	3.00	3.50	4.00	3.52
12	GC La Victoria	4.75	3.04	3.57	3.67	3.00	3.00	3.00	3.50	4.00	3.48
13	GC 7 de Marzo	EVALUATION INCOMPLETE									-
14	GC San Antonio	4.25	3.04	3.33	3.60	2.87	3.00	3.50	3.7	4.00	3.48
15	GC San Joaquín	EVALUATION INCOMPLETE									-
16	GC Piedras Amarillas	4.50	3.13	3.50	3.67	2.87	3.00	3.00	3.50	4.00	3.47
17	GC Santiaguito	4.25	3.04	3.33	3.60	3.12	3.00	3.50	3.70	4.00	3.51
18	GC Suyapa	4.50	3.04	3.66	3.80	3.00	3.00	3.25	4.00	4.00	3.59
19	GC Yaruca	4.50	3.13	3.66	3.53	3.12	3.00	3.00	3.50	4.00	3.50

***Table 4**: Summary of group scores from the 1996 Smart Wood evaluation (Source: Rainforest Alliance, 1996a).*

[a] Sociedad Colectiva (independent association)

[b] Grupo Cooperativo (Regional Cooperative member)

Due to an extended delay (see below) in finalising the report of the evaluation, the certification contracts were not ready for signing until July 1997 (almost one and a half years after the evaluation). In the intervening period, one group (Fuerzas Unidas) that had originally been recommended for certification was downgraded to 'pre-certified' status after the group began harvesting outside of authorised harvesting area boundaries (R. Trudel 1998, pers. comm.). In the end, separate contracts were issued not to each of the 12 certified groups, but to the Broadleaf Project and the Regional Cooperative as 'umbrella' organisations responsible for maintaining the overall standard of forest management in the groups under their supervision.[19] According to the terms of the five year contracts signed with the Broadleaf Project and the Regional Cooperative, Smart Wood imposed a set of 16 conditions on the *campesino* groups, some of which had to be met prior to the first annual audit, and the remainder by the end of the second and third years of the contract (see Table 5 below for a list of conditions). As the certificates were signed in July 1997, the first annual audit was scheduled for July 1998.

Stakeholder responses to the conduct and results of the third evaluation have been mixed. The main negative reaction was reserved for the extended delay in finalising the evaluation. According to an explanation given by Smart Wood, this delay was due to financial difficulties within Smart Wood that prevented completion of the certification procedures (R. Trudel 1998, pers. comm.). It seems that the delay was also exacerbated by problems in communication and coordination between Smart Wood and HSV, the latter of which was given the responsibility for drafting the evaluation report.

A number of stakeholders have also expressed concerns over the quality of the evaluation team. In particular, the relative youth and lack of experience of certain members provided by HSV have come under criticism. Such criticism could be seen as the reflection of a wider concern about Smart Wood's network strategy, which stems from Smart Wood's commitment to using network members in certification teams, perhaps at the expense of other, more appropriate, organisations or individuals.[20]

With regard to the recommendations and conditions imposed by Smart Wood, there was a general consensus that these were valid and appropriate, although not unexpected. The Broadleaf Project made few comments on the results of the evaluation other than to correct minor errors and misunderstandings in the evaluation report (R. Trudel 1998, pers. comm.). Similar responses were received from COSPE and the Regional Cooperative, although criticism from COSPE on the immediate relevance of demarcating protection zones in group forests resulted in what was originally a condition being downgraded to a recommendation (see Table 5 below).

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[19] A similar scheme exists in the case of SPFEQR in Mexico, where the Civil Society holds the Smart Wood certification contract and is responsible for ensuring that the four certified *ejidos* under its charge comply with the conditions of certification.

[20] The rationale for Smart Wood's network strategy, which involves regional non-profit organisations as either members or collaborators, is to provide a forum for technology and skills transfer in the area of FSC-accredited forest products certification, with the principle aim of developing viable, locale-specific certification services (Rainforest Alliance, 1996b).

No.	CERTIFIED GROUP	AFFILIATION[a]	CONDITIONS OF CERTIFICATION
1	SC Varela y Asociados	B'leaf Prj	**Year 1**:
2	SC Pineda y Asociados	B'leaf Prj	- Adjust management plans to incorporate watershed protection and community participation
3	SC Fuentes y Asociados	B'leaf Prj	
4	SC Castellanos y Asociados	B'leaf Prj	- Include CITES Appendices in management plans and educate groups on need to protect listed species
5	GC La Fortuna	Coop/B'leaf	
6	GC Toncontín	Coop/B'leaf	- Establish a general policy on seed trees and evaluate appropriateness of minimum diameter and basal area limits
7	GC La Victoria	Coop/B'leaf	
8	GC San Antonio	Cooperative	- Limit operations in harvesting areas to three years maximum
9	GC Piedras Amarillas	Cooperative	- Provide copies of management plans and maps to all groups
10	GC Santiaguito	Cooperative	- Address legal problems currently blocking forestry management funds
11	GC Suyapa	Cooperative	
12	GC Yaruca	Cooperative	- Implement protection and silvicultural plans in each group
	TOTAL AREA CERTIFIED:	**13,978 ha**	**Year 2**: - Initiate programme to monitor management costs - Initiate growth studies to determine appropriate cutting cycles - Refine mechanisms for integrating wider community into management decision making process - Develop policy on use of species for saw bench construction - (SC's only) Develop joint or separate marketing plans - Assess impacts of guidelines on use of chainsaws **Year 3**: - Incorporate NTFPs into management planning - Train groups in timber classification techniques - Improve directional felling practices to avoid contamination of water courses **General recommendations**[b]: - Seek cooperation to fill research gaps in the determination of growth rates and appropriate cutting cycles - Demarcate protection areas in each group's forest - Develop accident prevention and health strategy
			Pre-conditions:
1	SC Montes y Asociados	B'leaf Prj	- Incorporate community authorities into decision making - Ensure timely payment of stumpage taxes
2	GC Fuerzas Unidas	Coop/B'leaf	- Resolve tenure conflicts with cattle ranchers - Complete training in cooperative theory and practice - Limit operations to authorised harvesting area only

***Table 5**: Conditions (and pre-conditions) imposed by Smart Wood under the terms of certification contracts signed with the Broadleaf Project and the Regional Cooperative in July 1997. (Source: Rainforest Alliance, 1996a; 1998a; 1998b).*

[a] Groups denoted as Coop/B'leaf are member groups of the Regional Cooperative situated in AMIs serviced by the Broadleaf Project. All other groups are either independent associations located in AMIs (B'leaf Prj) or Regional Cooperative members situated outside of AMIs (Cooperative).

[b] Recommendations may implemented if time and resources allow—unlike conditions they are not obligatory under the terms of the certification contract.

In general, the response to the results of the evaluation amongst the *campesino* groups themselves has been neutral. Representatives from the Broadleaf Project, COSPE and the Regional Cooperative attended a meeting organised by Smart Wood in La Ceiba in 1996 to present the results of the evaluation, but no concerted effort was made after this meeting to disseminate the results and recommendations to each group (D. Hernandez 1998, pers. comm.). It seems that only project technicians were made familiar with Smart Wood's recommendations although, judging from the author's own observations, very few technicians have actually read the evaluation report.

Apart from the fact that the groups have not seen and understood the details of the evaluation report, much less discussed them, perceptions among group members have also been coloured by the extraneous nature of certification. Since 1991, certification of the forestry groups in the Atlántida Region has been organised and funded by foreign donors and timber buyers. None of the US$12,000 cost of the 1996 evaluation was borne directly by the groups. Apart from a small component of the evaluation that was subsidised by Smart Wood with funds from certified timber buyers in the United States and Canada, the main contributor was the Broadleaf Project. A small percentage of costs (approximately 10%) was borne jointly by the Regional Cooperative and COSPE, principally in the areas of food and transport for the evaluation team (D. Dávila 1998, pers. comm.).

The fact that the willingness of groups to pay for certification has never been tested has given rise to some serious misapprehensions. For example, members of the Santiaguito group interviewed by the author saw certification as a type of 'permit', much like the permission to commence harvesting required from AFE-COHDEFOR. As a result of this misapprehension, group members also grossly under-estimated the direct cost of certification—some placing evaluations at around a few hundred lempiras. Unsurprisingly, these misconceptions led a number of group members to state that the group, if so required, would be willing to pay for certification itself (information derived from author's group interview).

In general, the best informed members of a group are those that have served in some leadership capacity (for example, as a member of the board of directors of the Regional Cooperative) and have had direct contact with either certification bodies, foreign buyers, or other outside interests. These individuals have a sound, if quite limited, understanding of the aims and procedures of certification, and see it as a source of benefits not only for the group, but also for the wider community. However, the majority of group members have only a basic understanding of the concept of certification, and their primary interest is in the marketing benefits that certification might bring.[21] Even here, however, the lack of success with marketing certified timber in the past has dampened the *campesinos*' enthusiasm.

[21] Both the Regional Cooperative and HSV have concentrated almost entirely on the market potential of certification in their contacts with the *campesino* groups.

3.4 Analysis of impacts

3.4.1 Forest management practices

In terms of the technical standard of forest management, the performance of all *campesino* groups during the 1996 evaluation was uniformly good. Significantly, there was little difference in performance between the groups that were evaluated for the first time in 1996, and those that had been evaluated previously in 1991 and 1993. This uniformity can be attributed in large part to the management planning requirements imposed on all groups under the Agricultural Modernisation Law of 1992. As discussed in section 1.4, the composition of all management plans in the broadleaf forest zone are now regulated by AFE-COHDEFOR technical standards (*normas tecnicas*). Taken together, these standards specify a uniform level of technical performance which compares favourably with that of FSC-based certification standards (see Table 6 below).

Several weaknesses in the technical aspects of forest management were identified during the 1996 evaluation, however. For example, although seed trees are generally marked and preserved during harvesting, there are no clear guidelines on either identifying suitable seed trees or selecting an appropriate number to retain. The practices in use differ from group to group, depending on the disposition of the group and the quality of technical assistance it receives (Rainforest Alliance, 1996a). A further, more fundamental, problem lies in the weak ecological justification for current cutting cycles and minimum diameter limits. The problem is not that arbitrary values have been assigned to these variables, but that they are applied irrespective of species differences or ecosystem variations (Rainforest Alliance, 1996a). Similarly, silvicultural treatments such as liberation thinnings are applied indiscriminately (if they are applied at all) and a lack of resources has prevented monitoring of their impacts on regeneration and species composition.

To a certain extent, impact monitoring could be carried out through the post-harvesting evaluation known as the *finiquito* (see section 1.4). However, the limited capacity of many *campesino* groups has kept them in one harvesting area for several years, and thus very few have reached the stage where a *finiquito* is required. In 1997, only one *finiquito* was carried out in all of the groups of the Regional Cooperative (COSPE, 1998). Furthermore, the *finiquito* itself has a limited scope and cannot generate detailed ecological data.

If the *campesino* groups are to obtain the management information required by Smart Wood, they must rely on the Broadleaf Project and other organisations to implement the necessary research and monitoring programmes. In recognition of this, the Broadleaf Project is working with CATIE's TRANSFORMA project and the Regional University Centre of the Atlantic Coast (CURLA) to develop a system of permanent sample plots for the collection of growth and regeneration data. Existing data from sample plots established by CURLA in 1994 are being used as the baseline for this initiative (P. Martins 1998, pers. comm.; R. Trudel 1998, pers. comm.).

COMPONENT	TECHNICAL SPECIFICATION	
	AFE-COHDEFOR	Smart Wood
Management plan		
• Duration	5 years	Multi-year
• Content:		
- Analysis of inventory	✓	✓
- Annual work plans	✓	✓
- Forest protection plan	✓	✓
- Environmental impact analysis	✓	✓
- Community participation plan	✗	✓
- Marketing plan	✗	✓
- Financial analysis	✓	✓
- Maps	✓	✓
Annual operating plan		
• Content:		
- Analysis of pre-harvest inventory	✓	✓
- Provision for post-harvest evaluation	✓ (*finiquito*)	✓
General forest inventory		
• Sampling intensity	0.7-1.0%	✗
• Size of sample units	0.1 ha	✗
Pre-harvest inventory		
• Sampling intensity	100%	100%
• Size of sample units	0.1 ha	✗
Maps		
• Scale	1:10,000-1:20,000	'Adequate'
• Content:		
- Location and boundaries of forest	✓	✓
- Vegetation types	✓	✓
- Topography	✓	✓
- Hydrology	✓	✓
- Road and trail network	✓	✓
- Distribution of harvesting coupes	✓	✓
- Distribution of protection areas	✓	✓
- Distribution of buffer zones	✗	✓

KEY: ✓ Present ✗ Absent (or not specified)

***Table 6**: Comparison of AFE-COHDEFOR management planning standards and the modified Smart Wood Generic Guidelines for Assessing Natural Forest Management used in the 1996 certification evaluation. (Source: AFE-COHDEFOR, 1996; Rainforest Alliance, 1993a; 1996a).*

In terms of environmental impacts, the performance of the *campesino* groups during the 1996 evaluation was also good. Of course, the system of timber harvesting employed by most *campesino* groups is an intrinsically low impact activity. Manual harvesting and the use of watercourses, mules or human labour to extract timber means that forestry operations cause limited damage to residual forest stands, even on slopes that are commonly over 50%. Active protection measures such as the designation of at least 10% of each group's forest area as a protection zone, as well as AFE-COHDEFOR's prohibition on the harvest of certain rare and endangered tree species, also serve to minimise the human impact on the forest environment.

One of the few environmental deficiencies identified during the 1996 certification evaluation was the occasional contamination of watercourses with debris and residues from sawing. The steepness of forest slopes in the Atlántida Region is such that the direction of tree fall cannot easily be controlled during harvesting, and trees frequently fall across or into watercourses. Due to the difficulty of the terrain, groups will usually saw a tree where it falls, thus giving rise to many occasions where the sawing bench is built directly over water (Rainforest Alliance, 1996a). The resulting contamination of watercourses has been cause for complaint in a number of communities that are dependent on these water supplies, for example Toncontín.

Smart Wood has given the Broadleaf Project and the Regional Cooperative three years to implement directional felling practices that will prevent contamination of forest watercourses. Progress on directional felling is unlikely to be rapid, however, given the lack of resources for training and equipping groups. Nevertheless, groups have started to implement measures that will have a similar effect. For example, Regional Cooperative member groups will now leave trees situated along watercourses (even those that are seasonally dry) and, if a tree is felled across a watercourse, will move it back to the bank before commencing sawing (L. Pérez 1998, pers. comm.).

At the time of the 1996 evaluation, the use of chainsaws was becoming an increasingly common phenomenon amongst the *campesino* forestry groups. In recognition of the potential environmental impact of chainsaw use, Smart Wood stipulated that the impact of chainsaw use should be assessed by the second year of the certification contract. As discussed in section 1.4, the Broadleaf Project, COSPE, PROINEL and TRANSFORMA have all been involved in promoting the use of chainsaw processing methods amongst producer groups. Given that the use of chainsaws for processing purposes is still officially illegal, these projects have put much effort into demonstrating the potential benefits of this new processing model to AFE-COHDEFOR. Various trials of the economic, social and environmental impact of Alaskan mill technology have already been carried out by the PROINEL project (see section 1.4). These have demonstrated the significant advantages of this system over the old manual methods, and may be taken as evidence that the controlled use of chainsaws will not constitute a significant environmental hazard.

One final omission in management planning highlighted during the 1996 evaluation was the lack of consideration for NTFPs. Despite the diversity and commercial potential of NTFPs in

the broadleaf forest zone, most *campesino* groups lack the resources to develop suitable harvesting and management systems. However, Smart Wood has stipulated that NTFPs should be incorporated into forest management planning by the third year of the certification contract.[22]

In certain Regional Cooperative member groups, the management of NTFPs has already begun with support from COSPE. During 1997, COSPE carried out biological studies of four NTFPs with commercial potential; namely, caral (*Colpothrinax cookii*), cuculmeca (*Smilax panamensis*), zarzaparrilla (*S. domingensis*) and sangre de drago[23] (*Machaerium cirrhiferum*) (COSPE, 1998). COSPE has also initiated an NTFP management trial in a 30 ha block of forest managed by the Yaruca group. It should be stressed, however, that COSPE's NTFP work programme has not been influenced by the results of certification, but was determined during the project's design phase in 1995 (F. Del Gatto 1998, pers. comm.).

3.4.2 Group and community relations

The area of group and community relations was selected for particular criticism by the 1996 evaluation team, which identified the division between group and community roles as the main weakness of the current model of forest management. Six of the groups that were fully evaluated in 1996 received below average scores for the state of their relations with the wider community (see Table 4 above).

As a result of historical and political factors, the responsibility for forest management is concentrated entirely in groups. There are no mechanisms for incorporating community participation into forestry decision making, and nor are there mechanisms for channelling some of the economic benefits of timber production to the wider community. In the case of forests under usufruct contracts, the legal right to harvest and sell any type of forest product (timber or non-timber) is vested in the group holding the contract. There is no mechanism within the usufruct contract for either recognising, or allowing, traditional subsistence use of the forest by other community members. Ordinarily, this does not present serious problems if there is a sufficient area of forest outside the usufruct boundaries to support communal use (Castillo and Roper, 1998). Indeed, many communities remain ignorant of the legal provisions of a usufruct contract and simply continue to exploit the forest that has been placed under group control.

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[22] Management of NTFPs is one of the criteria in Smart Wood's Generic Guidelines for Assessing Natural Forest Management (see Rainforest Alliance, 1993a). The rationale for this criteria derives from the concept expressed in the Guidelines that "planning and implementation must incorporate sustained yield production for all forest products..." (emphasis added).

[23] Cuculmeca, zarzaparrilla and sangre de drago are medicinal plants. Caral is a common species of palm which produces fibres used in the manufacture of brooms and other utensils.

In a number of communities, the evaluation team noted that the lack of community involvement in forest management had generated conflicts between the group and the community that weakened the group's ability to protect the forest against pioneer shifting cultivation, illegal logging and other threats. Such conflicts were particularly serious in the case of the Montes y Asociados group, which is located in the community of El Carbón. Montes y Asociados is unique amongst the groups evaluated in 1996 in being the only group formed by indigenous Pech[24] Indians (El Carbón itself is a wholly Pech community). Furthermore, around 40% of the forest to which the group has usufruct rights stands on land owned by the community (Castillo and Roper, 1998). Conflicts have arisen in this case because the tribal council (*Consejo de Tribu*) of El Carbón was not involved in the signing of the usufruct contract and views the group as a challenge to the traditional structures of authority and economic activity (Rainforest Alliance, 1996a).

In response to these conflicts, the conditions imposed by Smart Wood include the development and refinement of mechanisms for integrating the wider community into the group management decision making process. As one of the pre-conditions for the Montes y Asociados group, Smart Wood has stipulated that a strategy should be developed for incorporating the tribal council into group decision making processes. The rationale for this pre-condition is that the El Carbón community has traditional rights to the forest and the tribal council represents the will of the community. The precise nature of integration between the tribal council and the group has not been specified by Smart Wood, but has been left to the group and the community to decide independently.

The question of community involvement in forest management raised by Smart Wood is one that the Broadleaf Project, the Regional Cooperative and COSPE had become aware of prior to the 1996 certification evaluation (F. Del Gatto 1996, pers. comm.). The responsibility for raising this awareness lies with OLAFO (Conservation for Sustainable Development in Central America Project), which has worked with the Regional Cooperative since 1995 on strengthening the capacity of communities (as opposed to just groups) to manage their natural resources.

[24] The Pech, or Paya, are one of the smallest remaining groups of Honduras' so-called 'forest indians'. They number between 700 and 1,800 individuals, and are confined to a few small communities in Olancho, Colón, Gracias a Dios and Yoro Departments (Norsworthy and Barry, 1994).

OLAFO has concentrated its efforts on the community of San Ramón, which is associated with the Regional Cooperative member group Piedras Amarillas. Relations between San Ramón and the Piedras Amarillas group have historically been poor, and have obstructed the group's efforts at forest protection. The group's forests are also under threat from illegal loggers in two neighbouring communities. In order to improve the security of forest resources, OLAFO has been helping the *patronato*[25] of San Ramón to establish a participatory system of forest guards encompassing all three communities (O. Castillo 1998, pers. comm.). OLAFO has also been supporting a process of integration between the Piedras Amarillas group and the three communities, and hopes that forest management will eventually be administered by community-level 'production' committees, which will have responsibility for decision making and the distribution of income from timber production (O. Castillo 1998, pers. comm.).

Despite OLAFO's efforts to integrate communities into forest management, there remain a number of constraints to this process. The fundamental legal constraint is that usufruct contracts cannot be issued to communities, but only to organised and legally constituted groups of *campesinos*. This situation is unlikely to change in the near future, despite strong support from the Broadleaf Project for community usufruct contracts. The process of awarding usufruct contracts has slowed considerably in recent years, largely as a result of the same legal problems that have frozen forestry management funds (see section 1.3). Seven usufruct contracts were issued in 1996, but only one in 1997. Furthermore, recent political changes in Honduras have replaced an AFE-COHDEFOR administration that was largely sympathetic to the Social Forestry System with one that is widely viewed as aggressively pro-industry.[26]

In lieu of a formal legal mechanism for community involvement in forest management, the Broadleaf Project has begun integrating community groups into the decision making process for all aspects of communal development and natural resources management. On the basis of a global Plan of Community Development prepared in 1997, the Broadleaf Project is supporting the formation of community development committees, or 'codecos'. These draw together representatives from the six main livelihood groups within a community[27] into a forum for discussing and evaluating all applications to the Rural Credit Programme,[28] as well as any other plans or proposals for resource development within the community (R. Trudel 1998, pers. comm). As of March 1998, two such codecos had been established (PDBL, 1998). Currently, the codecos are subordinate to the *patronato*, but they may eventually assume decision making authority.[29]

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[25] The *patronato*, or community council, is a modern political institution and the highest authority in *campesino* communities. Members of the *patronato* are selected by the district mayor (*alcalde*).

[26] At its General Assembly in May 1998, the Honduran Federation of Agroforestry Cooperatives (FEHCAFOR) accused the new AFE-COHDEFOR administration of negating its responsibilities under the Social Forestry System and publicly auctioning forests that legally should have been placed under usufruct contracts (Anon, 1998).

[27] These are the forestry group, the farmers' group, the housewives' group, heads of families, the water board (see Box 2), and the *patronato*. Each of these groups is responsible for electing their own representative to the codeco (Poulin, 1998).

[28] The Rural Credit Programme is an initiative of the Broadleaf Project and the Honduran Federation of Savings and Credit Cooperatives (FACACH) designed to promote good financial management by *campesinos* and provide loans for small-scale activities by forestry groups and womens' groups.

[29] The strategy for community development in the Atlántida Region is currently in a state of flux. Although the Broadleaf Project is pursuing the formation of codecos, there have been calls to

3.4.3 Marketing of certified products

Although the 1996 evaluation team recognised that earnings from forestry were significantly greater than those from agriculture (see section 1.5), they also identified a number of points along the production cycle where groups were failing to maximise their potential income. These included the sawing of timber in the forest (where commercially valuable species were being used in the construction of saw benches) and the preparation of timber prior to collection by the Regional Cooperative or independent buyers (where the absence of any attempt to classify timber was limiting the prices received by the groups).

In the case of the independent associations, the evaluation team also noted that these groups did not enjoy the same degree of marketing support as members of the Regional Cooperative.[30] Currently, marketing by the independent associations takes place on an *ad hoc* basis directly to individual buyers or through transport contractors. Two of the most important buyers have been the Victorian Reproductions and Atlantic Woods companies in La Ceiba, both of which are under American ownership. Around 80% of the total production from the independent associations is sold to these two companies (R. Trudel 1998, pers. comm.). The prices paid by these companies are not guaranteed as in the case of the Regional Cooperative, but are determined by the local market. However, the Atlantic Woods company in particular is a major buyer of the lesser-known species that dominate the groups' forests.

Under the conditions of certification, the Broadleaf Project was required to coordinate the development of a marketing strategy for the independent associations, either jointly or on a group-by-group basis. The former option is now being addressed by a collaborative effort between the Broadleaf Project, PROINEL and CERTEC (Centro de Recursos y Tecnología), the latter of which is a private non-profit foundation which supports small and medium-sized enterprise development (CERTEC, 1998a).

The main objective of this collaboration is to establish a Producers' Association in the Atlántida Region to share risk and realise economies of scale in business development and marketing for 34 independent groups (CERTEC, 1998b). The intention of the Association is not to function as a cooperative by centralising the purchase and sale of timber, but to establish commercial links between producer groups and the Honduran forest products industry (for example, through subcontracting arrangements). The current focus of the Association is therefore on domestic (i.e. non-certified) production and marketing, but it is expected that export marketing will be addressed in the near future (R. Trudel 1998, pers.

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concentrate on strengthening the capacity of *patronatos* instead (see Poulin, 1998). Furthermore, Honduras' new Municipalities Law provides for the formation of Municipal Development Committees, or 'codems'. One of the functions of codems will be to organise local development councils, although the precise nature and responsibilities of these councils is still uncertain (F. Del Gatto 1998, pers. comm.).

30 The inter-agency marketing committee established by the Broadleaf Project in the early 1990s (see section 2.3.2) has since ceased operating and its functions have not been assumed by any other group or organisation.

comm.). Two chapters of the Association have already been established in the Departments of Colón and Atlántida (PDBL, 1998).

No marketing-related conditions were imposed on the Regional Cooperative following the 1996 evaluation, although the evaluation team noted weaknesses in the tracing and tracking of timber through the Regional Cooperative's sawmill, and recommended that a separate chain of custody inspection be carried out in 1997 (this was eventually completed during the first half of 1998). In preparation for chain of custody controls, COSPE funded a study of the Regional Cooperative's sawmill by the University of Padua, Italy, in 1997. As a result of this study, the sawmill has implemented a two-tiered system of timber storage whereby timber is separated firstly according to its origin (i.e. certified group or non-certified group) and secondly according to species. One of the main impacts of this system has been to increase the area required for timber storage in the sawmill from $100m^2$ to $150m^2$ (G. Mendez 1998, pers. comm.)

More fundamental changes have been taking place within the Regional Cooperative itself since the 1996 evaluation, although not as a result of certification. The continuing decline in the Regional Cooperative's marketing performance (see section 1.5), coupled to increasing discontent amongst its members, has led to an internal crisis that threatens the survival of the cooperative. Despite the Regional Cooperative's social and political functions, its members see it primarily as a marketing organisation. Now that cooperative marketing has failed to deliver the expected results, many member groups have begun to question their obligation to sell to the cooperative and to demand greater freedom in seeking buyers.

Some of the largest and most successful member groups, for example Toncontín, which has around 50 active members, no longer see the Regional Cooperative as the solution to marketing and have questioned their continuing involvement in the organisation.[31] These groups apparently place little value on the ancillary benefits of cooperative membership, which include political representation, numerous social and technical support projects,[32] subsidised management costs (see section 1.5) and, of course, certification.

Given these internal pressures, it is perhaps understandable that the cooperative has not concentrated on exploiting certification. The current priorities for the Regional Cooperative are to stabilise its finances and establish a strong domestic market base with which to support its membership. In support of these objectives, the cooperative has, for the first time, drawn up a business plan to guide its operations. The plan, which covers the five-year period from 1998-2002, is an attempt by the Regional Cooperative's management to introduce a more regular enterprise-oriented culture to the cooperative. The plan outlines strategies for five main

[31] Information derived from a meeting between the Toncontín group and the Regional Cooperative's general manager, 14 June 1998.

[32] Over the past decade, the Regional Cooperative has attracted substantial external funding for its member groups. In addition to support from the Broadleaf Project, COSPE and CATIE, the cooperative has projects with the Swiss development agency COSUDE, the London-based development organisation ICD (International Cooperation for Development), and ADECAF (Support to the Development of Cooperatives and Associated Forms of Agroforestry Production).

enterprise components: administration, marketing, forestry, training and agriculture (COATLAHL, 1998).

In the area of marketing, the Regional Cooperative is planning to consolidate its markets in La Ceiba by the end of 1998, and to establish secure markets in La Ceiba, San Pedro Sula and Tegucigalpa for ten species[33] by the end of the year 2000 (COATLAHL, 1998). Only once domestic markets have been secured will the cooperative turn its attention to export markets. At this stage, the first priority will be regional Central American export markets, for example El Salvador. The potential of international export markets will not be seriously addressed until 2002, the final year of the business plan (COATLAHL, 1998). Even then, however, domestic transformation and marketing will continue to remain the focus of the cooperative, and only around 20% of production is ultimately intended for export (D. Dávila 1998, pers. comm.)

Despite its focus on domestic, uncertified markets, the Regional Cooperative has not altogether abandoned export marketing. In August 1996, a 20m^3 container of santa maría, cumbillo, varillo and rosita was shipped to ETC in England. This shipment was notable for two reasons: firstly, because it was the first to be organised by the Regional Cooperative without assistance from the Broadleaf Project; and, secondly, because the successful outcome of the 1996 certification evaluation allowed the Regional Cooperative for the first time to include timber from groups outside of the AMIs.[34] However, the 1996 shipment proved to be an even greater commercial failure than the previous shipments in 1993 and 1994 (see section 2.3.2). Due to poor quality control and a lack of coordination with its member groups, the Regional Cooperative was unable to return any profit on a sale price of US$450/$m^3$ (M. Caballero 1998, pers. comm.).

At the time of writing, the Regional Cooperative had accepted two further export orders: 388 m^3 of santa maría for EHM in Holland (at a price of US$517/$m^3$), and US$23,793 of mahogany, rosita and santa maría furniture for a Spanish retailing group. In the case of santa maría and mahogany, both of these orders exceed the Regional Cooperative's existing production capacity. The Regional Cooperative's commercial inventory for santa maría totals only 333 m^3, and the volume of mahogany is similarly limited. In order to meet these orders, the cooperative will have to buy timber from non-member producer groups. It is also likely that the Regional Cooperative's current financial difficulties will not allow any of the increased value of these orders to be passed on to its member groups in the form of increased prices (D. Dávila 1998, pers. comm.).

Future assistance with certified products marketing for the Regional Cooperative may be expected from two sources. One of these is Smart Wood, which in the past has provided minimal marketing support to its clients (other than through an entry in Smart Wood's public listing of sources), but which has now created the new position of International Marketing

[33] These species are: San juan areno (*Ilex skutchii*), rosita, santa maría, huesito, marapolán, cumbillo, barba de jolote, varillo, cedrillo and pepenance.

[34] Although the certification contract was not issued until July 1997, ETC's order was only dependent on groups successfully passing the certification evaluation.

Specialist to provide market promotion services for its clients. The other source is COSPE, which intends to carry out an analysis of the market potential for certified products from the Atlántida Region. The aim of this analysis will be not only to identify the products that have market potential in certified markets, but also to develop a strategy for linking producers with customers (COSPE, 1998).

3.4.4 Legal and institutional framework

One of the main conditions of certification for the first year of the certification contracts was to address the legal problems blocking forestry management funds, in order that *campesino* groups might be able finance their forest management operations. Currently, the legal case for the original forestry management fund concept is being considered by Honduras' Supreme Court, which will decide on its constitutional validity (Poirier, 1998). In the intervening period, and as described in section 1.3, an Inter-Agency Commission has been established to investigate and recommend alternative funding arrangements for forest management. The Commission, which met for the first time in April 1998 under the auspices of the Broadleaf Project, has been considering a new scheme of funding whereby forest management is financed at the municipal level using funds held in trust by a public financial institution (see Box 2 below for details).

The new fund structure proposed by the Commission was formally approved at a meeting of the Broadleaf Project Steering Committee on 8 May 1998 (R. Trudel 1998, pers. comm.). Currently, the legal requirements for establishing the fund are being finalised with a view to implementing a pilot funding scheme at the municipal level. With the introduction of this fund, it is hoped that the long impasse concerning forest management funding will finally be overcome. This outcome should also satisfy the demands imposed by Smart Wood, although it cannot be said to have happened as a direct result of certification. The creation of the Inter-Agency Commission and search for alternative funding mechanisms was not prompted by the report of the 1996 evaluation but by a long-standing concern for a sustainable financing mechanism for *campesino* forest management.

Legal issues aside, the only area in which certification appears to have had a direct impact on the institutional framework for forest management in the Atlántida Region is the indicators adopted by the Broadleaf Project for project monitoring and evaluation purposes. Here, there is evidence that certification is being consciously used as a 'project management' tool, as opposed to simply a marketing tool.

In addition to seeing the 1996 evaluation as a measure of the performance of the *campesino* groups, the Broadleaf Project also chose to see it as a project monitoring and evaluation measure (R. Trudel 1998, pers. comm.). Subsequently, in 1997, the Broadleaf Project adopted the Smart Wood Generic Guidelines for Assessing Natural Forest Management as indicators for the project's forestry development component (PDBL, 1997). At the end of the

current second phase of the Broadleaf Project (in the year 2000), the progress of the certified groups in the AMIs will be assessed according to the Smart Wood guidelines, and compared to the results of the 1996 evaluation. The Broadleaf Project's aim is that all certified groups will receive an average score of 3.75 during the year 2000 evaluation, compared to an average of 3.5 in 1996 (PDBL, 1997).

***Box 2**: Structure and functioning of the proposed new forestry management fund. (Source: Poirier, 1998).*

Under the proposals of the Inter-Agency Commission, the new forestry management fund will have a bipartite structure. At the national level, a forestry management trust fund will be established within the National Fund for Production and Housing (FONAPROVI) to hold the proceeds of a 35% levy on all stumpage taxes paid to AFE-COHDEFOR. This trust fund will be governed by a Consultative Committee formed by representatives from AFE-COHDEFOR, AMHON (Association of Municipalities), ANETRAMA (National Association of Wood Transformers), and producers' associations.

Funds from the national trust fund will be channelled under a formal agreement (*contrato institucional de crédito*) to municipal forestry management funds held within the commercial banking system. Municipal funds will also be open to contributions from four other sources: 1) a 15% levy on timber production taxes paid to municipalities; 2) a 5% levy on sales by timber producers; 3) a 10% levy on sales by the forest products industry; and 4) a 10% levy on sales under certification or a similar environmental labelling scheme. These municipal-level forestry management funds will be governed by a Municipal Committee composed of representatives from AFE-COHDEFOR, the municipality, producer groups, water boards (these coordinate activities aimed at watershed protection), and non-governmental organisations. The Municipal Committee will be responsible for approving and funding projects for forest management (in usufruct areas) and watershed protection.

The complex structure of the proposed new fund is a deliberate attempt to avoid the legal question of conveying stumpage taxes directly to producers. Under the new system, the responsibility for receiving and disposing of public funds (i.e. stumpage taxes) will rest with public bodies (i.e. FONAPROVI and municipalities). Producer groups will be able to contribute to decision making on the use of these funds, but will no longer have a direct controlling interest.

4 DISCUSSION AND CONCLUSIONS

4.1 Overview: The relevance of certification to *campesino* forest management

The analysis of *campesino* forestry groups presented in this report has highlighted the main constraints to *campesino* forest management in Honduras' Atlántida Region. Firstly, many of the groups still lack the capital, skills and other resources needed to plan and implement forestry operations themselves. Secondly, the organisations established to provide technical assistance and marketing services to the groups, such as the Regional Cooperative, lack the requisite business expertise and marketing capacity to exploit the growing domestic demand for hardwood timbers. Thirdly, a basic economic analysis of forest management by Regional Cooperative member groups reveals that, without current production subsidies, timber harvesting and marketing would not be economically viable under present market conditions. This poor economic situation has been exacerbated by widespread illegal extraction of timber, which has depressed prices and placed legal operators under great pressure to abandon formal management practices. Finally, the continuing threats of pioneer shifting cultivation and cattle ranching require that forest producers invest much of their time and resources in protection and conflict resolution, rather than active management.

The utility of any instrument designed to improve forest management must be judged by its ability to tackle the main constraints to management. If this criterion is applied to certification, and its effect on *campesino* groups, it is possible to concede a limited degree of success. Certification has promoted the development of forest inventories, management plans, and other tools of management. Certification has also supported the process of legal recognition for *campesino* usufruct rights, and there is anecdotal evidence that certification directly strengthened the Broadleaf Project's case for usufruct contracts in the early 1990s. In terms of marketing, certification has also laid the groundwork for commercial relationships with certified products companies in Honduras and Europe that persist to the present day.

Despite these achievements, it is difficult to discern any major contribution made by certification towards overcoming the real constraints faced by the *campesino* groups. A number of the conditions imposed by Smart Wood have either overlapped with the existing work programmes of organisations such as the Broadleaf Project and COSPE, or have been duplicated by new policy and legislative measures. Several conditions, for example the initiation of growth studies and the management of NTFPs, have substantially increased the financial and technical demands on the groups, and their corresponding reliance on external sources of assistance. The conditions of certification relating to community relations, and in particular the requirement for community participation plans, have further added to the cost and complexity of management planning (see section 4.2 below for further discussion of social issues).

In addition, the commercial relationships established between the *campesino* groups and certified products companies in Honduras and abroad have not always worked to the *campesinos*' advantage. The groups have never been in a position to exploit the value-added potential of certification because they have lacked the capacity to process and market timber according to internationally acceptable standards. The three shipments of certified timber exported by the Broadleaf Project and the Regional Cooperative in 1993, 1994, and 1996 were largely commercial failures, characterised by long delays, high rates of wastage, and the diversion of resources into unproductive attempts at satisfying Honduran export procedures and regulations.

Within Honduras, the relationship established with the Victorian Reproductions furniture company has provided groups with a guaranteed buyer for some of their timber, but with little additional financial gain. As was originally intended in 1991, certification of the groups has secured Victorian Reproductions (and Smith and Hawken in California) a source of sustainably produced timber and a share in rapidly expanding 'green' timber markets. Much of the value that has since been added by certification has accumulated higher up in the marketing chain, i.e. between Victorian Reproductions, Smith and Hawken and their customers. The *campesino* groups at the bottom of the marketing chain, who are obliged to sell their timber to Victorian Reproductions at local market prices, have benefited little from this added value.

Given the technical and financial constraints faced by the *campesino* groups, and the limited capacity of organisations such as the Regional Cooperative, it is perhaps surprising that certification has been promoted first and foremost as a marketing tool. However, there has always been an underlying assumption amongst the main actors in the Atlántida Region that certification in itself would be able to guarantee the transition from low-value, domestic markets to diverse, high-value export markets. The adverse experiences of the three export shipments made by the Broadleaf Project and the Regional Cooperative exposed the flawed reasoning behind this assumption, and have undoubtedly contributed to the current preoccupation with domestic markets shown by actors such as the Regional Cooperative.

The focus on the marketing benefits of certification, as opposed to the potential management benefits, has also meant that many opportunities to improve and expand the forest management capacities of the *campesino* groups have been missed. In the first place, the results of the 1996 evaluation were neither disseminated nor discussed within the groups. As a result, many *campesinos* are unaware of the findings of the evaluation and therefore unable either to contribute actively to the process of improvement, or to benefit from the fresh perspective provided by an external evaluation. The fact that *campesinos* have never been asked to contribute directly to the cost of certification evaluations has further increased their isolation from this process and, in some cases, has led to confusion over the true costs and benefits of certification.

The limited degree of success with (certified) forest management begs the question of whether the Broadleaf Project and the Regional Cooperative should continue to maintain the certified status of their affiliated groups. Apart from the cost of the triennial (now quinquennial) certification evaluations, as well as annual inspections and certification fees,[35] it could be argued that most of the *campesino* groups in the Atlántida Region are simply not ready to exploit the opportunities offered by certification. In view of the continuing constraints to forest management, the most appropriate course of action may be to first place forest management and (domestic) timber marketing on a sound legal and economic footing, and then decide whether to address the demands of a new stakeholder group (i.e. international consumers of certified timber). Although domestic markets cannot at present support the full costs of management, this may be due more to the quality of marketing than any inherent weaknesses in the market. As already noted, the demand for hardwood timbers in Honduras is growing, and there is evidence that well-managed, productive timber marketing and distribution operations can be profitable in a domestic context (P. Martins 1998, pers. comm.).

These conclusions do not imply that certification is unsuitable or even unnecessary for *campesino* forestry groups. However, they do underline the fact that small-scale, community-based enterprises such as these groups must attain a reasonably advanced level of development before they can successfully exploit certification. Although donor assistance can accomplish a great deal in this respect, it cannot substitute for the gradual accumulation of expertise, capacity and financial capital through normal enterprise development. This process is vital if community-based enterprises are to be able to decide *for themselves* when, and if, to invest the necessary resources in pursuing certification, rather than follow an agenda set by donors or other outside interests.

4.2 Group versus community: Appropriate institutions for forest management

The message that Smart Wood has given to the *campesino* forestry groups of the Atlántida Region is clear: forest management must be opened up to the wider community if it is to meet the criteria of social equity and justice dictated by FSC-based certification standards. Without full community participation in forestry decision making, or in the economic benefits generated by timber production, the incentives for better forest management will be fewer and the rate of forest degradation accelerated. Outwardly, this appears to be a reasonable argument, particularly as it has already been adopted without question by the Broadleaf Project, the Regional Cooperative, COSPE and the other organisations that currently support forest management in the broadleaf forest zone.

Community forest management is a fashionable concept. Like all community-based approaches to sustainable development, however, it is based on a number of assumptions

[35] The state of the Regional Cooperative's finances is such that Smart Wood has temporarily waived its US$500 annual certification fee (F. Del Gatto 1998, pers. comm.).

about community, environment and the relationship between them (Leach *et al*., 1997a). It is worth investigating these assumptions in greater detail, as they may not hold true for all communities in the Atlántida Region.

The fundamental assumptions are that a distinct, homogenous community actually exists, and that it is capable of collective action towards common economic and environmental goals (Leach *et al*., 1997a). In the *campesino* communities of the Atlántida Region, there is little justification for either of these assumptions. These communities have formed on the agricultural frontier, and many are no more than 20 to 30 years old. In many cases, what is officially recognised as a 'community' is no more than a loose agglomeration of socially differentiated families. The composition of such communities is constantly changing, as new immigrants arrive or as established members leave to seek work in nearby urban centres or abroad.[36] As a result of these movements, communities are becoming increasingly more heterogeneous, and mutual interests and relations of trust progressively weaker. Under such circumstances, the assumption that resource use could be regulated by community-level structures is clearly flawed.

Practical experience with so-called community forest management provides many examples where community organisations have failed to control resource exploitation in the face of conflicting priorities and ambitions. In the case of the Chinantu forestry *ejido* of Chihuahua, in Mexico, conflicts between the mestizo (mixed ethnic origin) leadership of the *ejido* and the majority indigenous population led to the financial collapse of the communal forestry enterprise and the establishment of numerous production groups, each managing and logging its forest plots independently (Wexler and Bray, 1996). Similar groups have formed in the major forestry *ejidos* of Mexico's Yucatán Peninsula, for example Nohbec, Tres Garantías and Caobas (Zabin and Taylor, 1997). The formation of these groups has been motivated largely by dissatisfaction with the voting system of the ejidal General Assembly, which allows community members with little interest or involvement in forest management to exercise decision making power over the organisation of timber production and the distribution of profits (Zabin and Taylor, 1997).

Flawed assumptions about the viability and representativeness of community structures also contributed to the collapse of the indigenous Yanesha Forestry Cooperative in Peru. Here, the multi-community cooperative, as a framework for pursuing economic and social goals, proved to be incompatible with the economic and social structure of Yanesha society. Although the four Yanesha communities that participated in forest management shared a common ethnic identity, they were artificial congregations of kin-groups with little history of economic cooperation (Morrow and Watts Hull, 1996). Competition between the different kin-groups weakened the management and administration of the cooperative and led to instability and poor leadership (CASA, 1994, cited by Benavides and Pariona, 1995; Gram, 1997).

[36] For example, the population of La Victoria in the Rio Viejo AMI is expanding rapidly due to high immigration rates from other parts of the country, such as the western Department of Copán. (Information derived from author's interviews).

One of the key lessons to be drawn from such failures[37] is that any approach towards community organisation for resource management should be based on a detailed analysis of social differences and the real institutional matrix within which resources are locally used, managed and contested (Leach *et al*., 1997b). Although beyond the scope of this study, there are good reasons for believing that such an analysis would show the present system of forestry groups in the Atlántida Region in a positive light:

- Firstly, a forestry group, by definition, represents a group of people who share a common interest in the sustainable management of forest resources. Provided that a group's recruitment policies are fair and transparent, there can be no question of timber benefits being monopolised by a privileged or undeserving minority;

- Secondly, the members of a forestry group are very often the poorest members of a community, who are forced into the physically demanding and dangerous work of timber harvesting by a lack of land, capital or other productive assets (F. Del Gatto 1998, pers. comm.). If one of the aims of community forest management is to empower the weakest groups, then the current system has already accomplished much in this respect;

- Finally, a strong forestry group has the potential to act as an economic 'motor' for the development of the wider community, either by generating employment or by investments in other productive activities. By opening up forest management to the wider community, there is a risk that these advantages may be lost, either by discouraging members of the core forestry group from devoting adequate effort or, as in the case of the SPFEQR *ejidos*, by allowing community members with little knowledge or interest in forest management to influence production and the destination of profits.

The foregoing arguments should not be taken to imply that the wider community does not have a legitimate claim to the goods and services provided by forests, or that the *campesino* communities of the Atlántida Region will never be able to take effective decisions on forest resource management at the community level. Rather, at their present stage of development, the *campesino* communities do not exhibit the social cohesion that is generally considered to form the basis for successful communal resource management (see Toulmin, 1997). On the other hand, it would seem that the existing forestry groups do meet a number of criteria for effective forest management. What is required, therefore, is an institutional arrangement that retains forest management under group control, but which also provides a protocol for liaison between group and community and possibly some form of profit-sharing.

It is clear that the question of an appropriate institutional basis for forest management is a complex one, and that a switch in emphasis from group to community may not necessarily guarantee the positive outcome presumed by the Smart Wood evaluation team. At this stage, it is worth revisiting the four themes outlined in the introduction. It will be recalled that the first

[37] The range of examples is not limited to Latin America alone. Schoeffel (1997) shows how similar misconceptions of community capacity have led to the failure of community-based development initiatives in Papua New Guinea, the Solomon Islands and Vanuatu.

of these themes deals with the question of certification's demands on community resources, and the fourth with certification's social development role. Furthermore, the concern is expressed that certification procedures might be unable to cope with socially differentiated and diverse rural communities. In the case described here, where Smart Wood has called for forest management to be opened up to the wider community, it is obvious that certification is demanding a level of social capital that is still lacking from the *campesino* communities. Furthermore, in attempting to impose a concept of 'community' forest management that owes much to the flawed assumptions discussed above, Smart Wood appears to be using certification as a tool to promote its own vision of social development, rather than one that is based on the realities of *campesino* society.

Much of the responsibility for inappropriate (or at least poorly conceived) certification conditions must lie with the procedures of certification. Here, the concern expressed in the introduction would seem to be justified. Certifiers must work within the constraints of the certification standard and the abilities of the evaluation team. This task will not be helped if evaluation teams approach their subjects with preconceived ideas and assumptions, particularly regarding social issues. The likelihood of inappropriate conditions will also be increased if evaluation teams attempt to tackle complex social questions that require detailed, site-specific analysis. In this context, it would be better to limit verification of the social impact of forest management to readily measurable 'outcome' criteria (for example poverty levels), rather than ambiguous and subjective 'input' criteria (such as the social organisation of forest management).

4.3 Certification and Honduras' Social Forestry System

It would be legitimate to ask whether the Broadleaf Project, which has done so much to promote sustainable broadleaf forest management in Honduras, has had a similar impact on the national status of forest certification. Here too, however, it seems that a number of valuable opportunities to explore the wider role of certification have been missed during the past decade.

In general, forest certification has not progressed rapidly within the Central American region. To a certain extent, the lack of progress can be explained by the structural characteristics of Central American timber markets. The majority of timber production is absorbed by national markets and only a small fraction is of export-quality standard. For many countries, the principal export markets are in the Caribbean and the United States, while European markets (currently the main markets for certified timber) play only a minor role. Finally, the bulk of exports is confined to plywood, with only small amounts of furniture, doors, and other finished products (FAO *et al*., 1997).

Nevertheless, against this background, a number of Central American countries have taken steps towards promoting certification within their forestry sectors and developing domestic

certification capacity. The furthest advanced of these countries, Costa Rica, has established a National Certification System, which is a voluntary initiative designed to provide forest managers with a means of ensuring that their management plans comply with required national standards. Under Costa Rica's Forestry Law of 1996, a National Certification Commission has also been created to develop national standards for natural forests and monitor and supervise certification bodies (De Camino and Alfaro, 1997).

In comparison to Costa Rica, and even countries such as Guatemala and Nicaragua, certification has yet to gain a high profile in Honduras. Despite the presence of a Smart Wood network member, Honduras Siempre Verde, no comprehensive initiative aimed at establishing a national certification programme has been started. Reportedly, a series of workshops aimed at raising awareness and defining criteria and indicators of forest management at a national level are being planned (Gamero, 1997, cited by De Camino and Alfaro, 1997). Attitudes towards certification amongst the Honduran private sector vary. According to the results of a survey carried out amongst 46 companies in six departments in 1997, receptiveness towards certification is highest amongst small enterprises, which see it as a potential market opening. In contrast, the medium to large-sized enterprises which control most of the timber production and consumption in Honduras see certification as a threat to their dominant position in the market and are less willing to adopt it (Orellana, 1997).

Raising the profile of certification in Honduras could pay dividends for one of Central America's more progressive rural development policies: the Social Forestry System. As discussed in this report, key elements of the Social Forestry System such as usufruct contracts and forestry management funds have been opposed by vested interests in the Honduran forest industry. The degree of commitment to the Social Forestry System from the new AFE-COHDEFOR administration has also been openly challenged. Consequently, there is an urgent need for a process of conflict resolution and consensus building between the different forest stakeholders in Honduras. As is becoming apparent in other countries, a strong and inclusive national certification initiative could well support this type of process. A strong national initiative could also explore and promote policy incentives for social forestry that draw on and extend certification, for example:

- Relaxation, or even removal, of certain management planning and monitoring requirements for certified *campesino* producers (such as the *finiquito*);
- Automatic extension of usufruct contracts for certified *campesino* producers;
- Tax and export incentives for certified agroforestry cooperatives (such as those currently provided to enterprises located in Honduran free trade zones and export processing zones[38]); or

[38] Enterprises located in a free trade zone, industrial park or export processing zone are exempt from the payment of import duties on goods and capital equipment, charges, surcharges, selective consumption taxes, and sales taxes. In addition, the production and sale of goods within these areas are exempt from Honduran and municipal taxes. Enterprises operating in these zones are also exempt from income tax for 20 years and municipal taxes for 10 years, and there are no controls or restrictions over the use of foreign exchange or the repatriation of capital profits (US Department of State, 1997).

- Preferential treatment for certified agroforestry cooperatives under government procurement policies.[39]

The foregoing options are suggestions only, and relate primarily to the policy and legislative environment for certified forest management within Honduras. Obviously, much work will also be required to develop the basic building blocks of a national certification scheme, i.e. certification standards, procedures and institutions. The point, however, is that organisations such as Honduras Siempre Verde and the Broadleaf Project, which have wide experience with certification and (at least in the case of the Broadleaf Project) a high internal profile, could position themselves at the forefront of a national initiative to promote certification and its role in bringing stakeholders together to advance policies for sustainable forest management.

[39] This option would have implications for Honduras' State Contracting Law, which requires most public works or supplies contracts to be offered through public competitive bidding.

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APPENDIX 1: Current AFE-COHDEFOR stumpage rates (Source: Poirier, 1998)

SPECIES CLASSIFICATION[a]	STUMPAGE TAX Lempiras per cubic metre[b]
Traditional species, Group 1	480
Non-traditional species, Group 2	140
Non-traditional species, Group 3	100
Non-traditional species, Group 4	90
Non-traditional species, Group 5	80

[a] *The species included in each of the five groups are as follows: Group 1: Mahogany, cedar and redondo; Group 2: Santa maría, rosita, huesito, marapolán, barba de jolote, laurel negro, and sangre real (Virola koschnyi); Group 3: Aguacatillo (Ocotea sp.), san juan areno, pepenance, paleto (Dialium guianensis), selillón (Pouteria izabelensis), varillo, cumbillo and cedrillo; Group 4: San juan, coloradito (Gordonia fructicosa), piojo, masica (Brosimum alicastrum), and cuajada (Alchornea latofolia); Group 5: (any other species not included in the preceding groups).*

[b] *AFE-COHDEFOR employs a conversion rate of 1 m^3 = 180 board feet for the purposes of calculating stumpage taxes. Thus, a stumpage tax of 140 lempiras/m^3 for non-traditional species in Group 2 is equivalent to 0.78 lempiras/board foot of sawn timber (see Table 2 in section 1.5).*

APPENDIX 2: Field Programme

Tegucigalpa, 2-3 June 1998

Persons interviewed:

- Denis Buteau, Forestry Adviser, PAGS (and ex-Co-director, PDBL)

La Ceiba, 4-20 June 1998

Persons interviewed:

- Danilo Dávila, General Manager, COATLAHL
- Lizardo Pérez, Head of Forestry Department, COATLAHL
- Gregorio Mendez, Sawmill administrator, COATLAHL
- Filippo Del Gatto, Project Coordinator, COSPE
- Ricardo Trudel, Co-director, PDBL
- Dagoberto Irías, President, HSV
- Medardo Caballero, National Coordinator, TRANSFORMA (and ex-General Manager, COATLAHL)
- Oscar Castillo, National Coordinator, OLAFO
- Robert Schenck, Owner, Victorian Reproductions (and General Manager, Atlantic Woods)
- José de la Paz Cortez, Treasurer, Suyapa Group
- Osman Romero, Member, Suyapa Group
- José Maria Hernandez, President, Santiaguito Group
- Ricardo Henrique López, Vice-President, Santiaguito Group
- Carmen Sosa, Treasurer, Santiaguito Group
- Santos Carlos Hernandez, Member, Santiaguito Group
- Candido López, Member, Santiaguito Group
- Eulalio López Ramos, Member, Santiaguito Group
- Bernardo Diaz Hernandez, Member, Santiaguito Group
- José Antonio García, (Founder) Member, Santiaguito Group
- Domingo Hernandez, (Founder) Member, Toncontín Group
- Rafael Cacéres, (Founder) Member, Toncontín Group
- Silverio Romero, President, Yaruca Group
- Leonardo Urbina, Member, Yaruca Group
- Victor Manuel Acosta, Member, Yaruca Group
- Isabel Tinoco, Member, Yaruca Group
- Carlos Peralta, Treasurer, La Victoria Group

San Pedro Sula, 19 June 1998

Persons interviewed:

- Victor Burclaff, Forest Industries Adviser, CUPROFOR
- Rosemary Gibbon, Technical Cooperation Officer, CUPROFOR