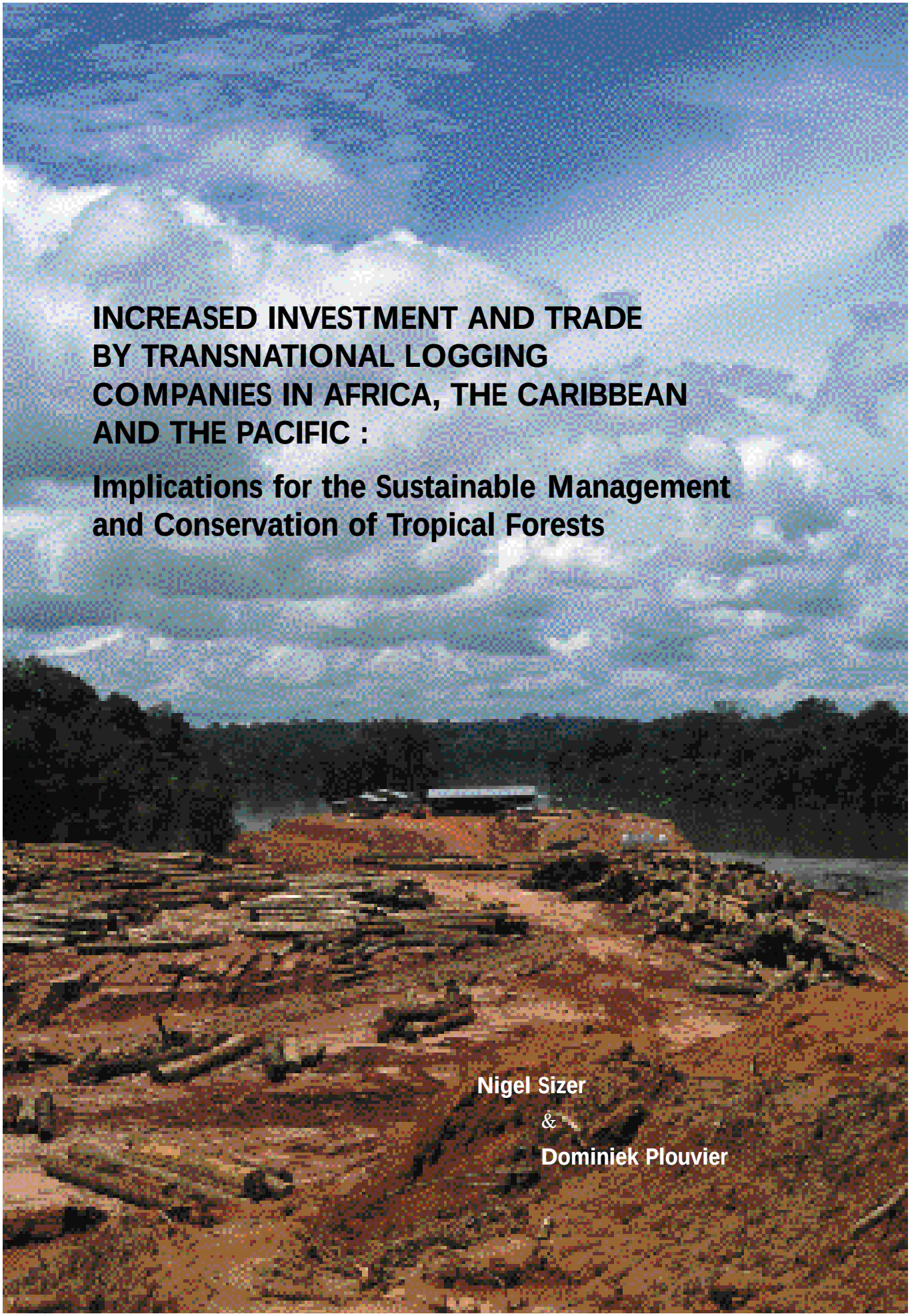


INCREASED INVESTMENT AND TRADE BY TRANSNATIONAL LOGGING COMPANIES IN AFRICA, THE CARIBBEAN AND THE PACIFIC :

Implications for the Sustainable Management and Conservation of Tropical Forests

Nigel Sizer
&
Dominiek Plouvier

Illustrations :
Laurent Debroux : pages 76, 96
Jean-Louis Doucet : pages 12, 33, 44, 46, 57, 65, 67, 88, 107, 110
Dominiek Plouvier : front cover and pages 4, 14, 17, 20, 25, 32, 36, 40, 70, 80, 85, 90, 103, 115, 119
Jean-Luc Roux : page 29
Nigel Sizer : pages 52, 62, 112

World Wide Fund for Nature – Belgium
World Resources Institute's Forest Frontiers Initiative
World Wide Fund for Nature – International

Financed by the European Commission
EC-Project B7-6201/96-16/VIII/FOR

D/1999/6732/03

The views expressed are those of the authors and do not necessarily represent those of the European Commission.

Layout : Safran, Brussels

INCREASED INVESTMENT AND TRADE BY TRANSNATIONAL LOGGING COMPANIES IN AFRICA, THE CARIBBEAN AND THE PACIFIC :

Implications for the Sustainable Management and Conservation of Tropical Forests

By

Nigel Sizer

and

Dominiek Plouvier

A new investor's log yard by the River Ogooue, south of Lambarene, Gabon.

Table of Contents

About the Authors

Nigel Sizer is Director of Forest Policy with the World Resources Institute, Washington DC, USA. Before joining WRI, Dr. Sizer was affiliated with the National Institute of Amazon Studies in Brazil and the University of Cambridge, from where he obtained his Ph. D.

Dominiek Plouvier is an independent forestry and timber consultant with experience in forest management and timber trade issues in Africa, Latin America, the Caribbean and Europe. He has worked on a number of major projects for World Wide Fund for Nature - Belgium.

Acknowledgements

This study has been made possible by financial support from the European Commission, through its Tropical Forests Budget Line. A special word of thanks is due to the Commission's subsequent Heads of Unit of Directorate-General VIII-A/6 (formerly A/1), and to the EC tropical forest experts responsible for ACP countries. A word of thanks is also due to the Desk Officers, Heads of Delegations and to other experts of the European Commission who have helped to make this research possible. Some financial support was also provided to WRI by the US AID CARPE program, by the AVINA Group and by the government of the Federal Republic of Germany.

Within World Wide Fund for Nature (WWF), valuable help and comments were received from Francis Sullivan, Jean-Paul Jeanrenaud, Rod Taylor, Wale Adeleke and Devendra Rana, WWF-International; Darren Gladman, WWF-South Pacific; Changjin Sun, WWF-China; Javed Hussain, Asia-Pacific Regional Forest Officer for WWF-International and Jean-Luc Roux and Geert Lejeune from WWF-Belgium. At the World Resources Institute (WRI), valuable assistance and comments came from Deanna Wolfire, Jake Brunner, Rob Day, Bob Repetto, Chip Barber, Walt Reid, Kenton Miller, Dan Tunstall, Tom Fox, Jonathan Lash, Laura Lee Dooley, Carol Rosen, Donna Wise, Adlai Amor and Ruth Nogueron.

The authors also want to express their gratitude to the consultants who carried out the field research, particularly Josette Justine and Godfroy Mballa for Cameroon; Maurice Courcier for Gabon; Laurent Debroux from the Faculté des Sciences Agronomiques, Gembloux, Belgium and Debra J. Callister.

The authors also appreciate the thoughtful comments and contributions provided by the external advisory group members: S. Bass and J. Mayers (International Institute for Environment and Development, UK), H.L. Stoll and J.-J. Landrot (Inter-African Industries Association, France), J.A. Sayer (Center for International Forest Research, Indonesia), V. Ferrer

(World Bank, US), A. Karsenty (CIRAD-Green, France), C.du Castel (Agence Française de Développement, France), S. Rietbergen (World Conservation Union, Switzerland), J. Williams (Environmental Investigation Agency, UK), M. Colchester and S. Ozinga (World Rainforest Movement, UK), and G. Medina (Caribbean Conservation Association, Barbados).

Finally, special thanks and recognition are due to Catherine Stoneman and Emmanuel Heuse for their support in adapting the final draft and to Jean-Luc Roux (formerly WWF-Belgium) for conceiving and managing this extremely ambitious project.

Nigel SIZER and Dominiek PLOUVIER,
Brussels, 2000

Foreword

The tropical forests of Africa, the Caribbean and the Pacific continue to suffer high rates of deforestation. Recent studies by World Wide Fund for Nature (WWF) and World Resources Institute (WRI) clearly indicate that the expansion of unsustainable logging operations is one of the major causes of forest loss worldwide. Farmers, hunters, and other loggers quickly move in along the roads that large industrial logging operations build, and with them comes serious forest degradation. At the same time, if properly managed, tropical forests can provide jobs and income for communities, governments and private companies, while still maintaining their biological riches, stores of carbon and ecological functions, such as watershed protection.

It is this dual threat and opportunity that led our organisations to embark on this study. The report that follows documents the role of transnational logging companies in those Lomé Convention* countries that continue to be relatively rich in tropical forest resources. Information is presented from the Congo Basin, Guyana, Suriname, Belize, Papua New Guinea and the Solomon Islands.

The picture that emerges is one of dramatic expansion of transnational investments in timber extraction from the last remaining tropical forest frontiers. Furthermore, there has been a shift in the origin of the capital for new logging and timber processing operations. **Historically, investment was led by companies from Japan, North America and Europe. Now Asian firms, mostly from Malaysia, but also from Indonesia, Korea, and China (Hong Kong), are responsible for the majority of new growth. South-south ownership and trade is replacing north-south commerce. In addition, a growing portion**

---

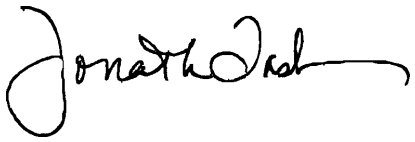
* The Lomé Convention is a cooperation agreement between 15 European Member States and 71 countries in Africa, the Caribbean and the Pacific.

of the production is destined for Asian markets. Hardly any of this new investment includes efforts to minimise environmental impact or to respect the rights of local communities. Furthermore, few of the firms appear to generate long-term economic benefit for the countries whose timber is being exported. In other words, almost all of the new investment focuses on short-term "cut-and-run" activities.

The authors of this report, and their many advisors and collaborators, have compiled comprehensive recommendations for governments, donors, non-governmental organisations (NGOs), and the logging companies themselves. These include measures to combat corruption, to establish incentives for longer-term management and stewardship of forests, and to better coordinate foreign assistance.

This report follows earlier work such as WWF's *Timber from the South Seas,* and WRI's *Profit without Plunder: Reaping Revenue from Guyana's Tropical Rainforests without Destroying Them,* as well as *Backs to the Wall in Suriname: Forest Policy in a Country in Crisis.*

Claude MARTIN,
Director-General,
WWF International



Jonathan LASH,
President,
World Resources Institute

The opening-up of new areas of primary forest for logging often attracts people to the forest, in the short-term for hunting, and in the longer-term for subsistence farming.

PART 1

SUMMARY OF MAJOR FINDINGS AND RECOMMENDATIONS

Floating of okoumé logs on the River Ogooue, Central Gabon.

I. MAJOR FINDINGS AND RECOMMENDATIONS

1.1 Purpose and Origin of this Report

This study was financed by the European Commission's Directorate General for Development (VIII) and has been carried out by World Wide Fund for Nature-Belgium. Its objectives are twofold. First, to analyse the increased South-South investments in logging and timber trade in the Africa-Caribbean-Pacific (ACP) countries, and second to present recommendations towards the different stakeholders to improve the state of logging and forest management in these countries. The ACP countries now number 71, mainly former colonies in Africa, the Caribbean and the Pacific region, with which the European Community (EC) has maintained a partnership since 1957. This partnership was first through the Yaoundé Conventions and, since 1975, through the Lomé Conventions.[1]

The EC policy on tropical forests and forest sector development is closely linked with other international policy processes. In the 1980s, European policy was tied to the Tropical Forestry Action Program launched by the World Bank and United Nations, and to the International Tropical Timber Agreement. In the 1990s, the accords of the United Nations Conference on Environment and Development (UNCED) and the Inter-Governmental Panel on Forests were influential. Following UNCED, the European Commission significantly increased efforts to promote the conservation and sustainable management of tropical forests and the Commission is now one of the largest donors in the field.

Protocol Number 10 on sustainable management of forest resources, under the Lomé IV Convention, provides a detailed framework for North-South cooperation on forest issues. This important Protocol was added in

1. The Courrier, 1996, Lomé IV Convention as Revised by the Agreements Signed in Mauritius November 4, 1995, The Courrier, number 155, Brussels.

Figure 1: ACP-EU Map

THE EUROPEAN UNION

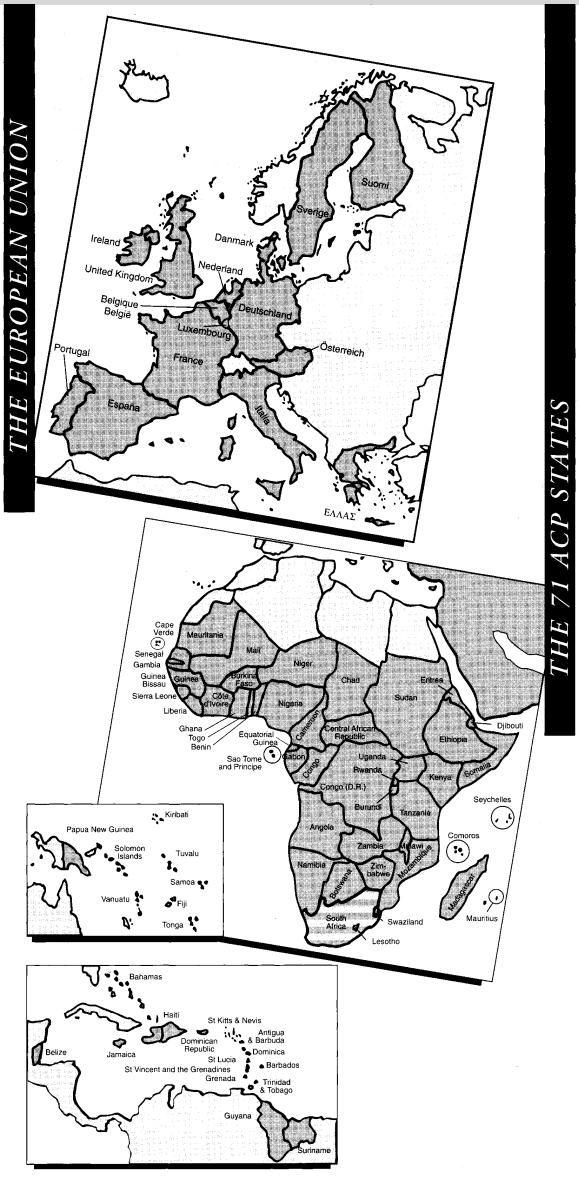
Austria
Belgium
Denmark
Finland
France
Germany
Greece
Ireland
Italy
Luxembourg
Netherlands
Portugal
Spain
Sweden
United Kingdom

France
(Territorial collectivities)
Mayotte
St Pierre and Miquelon
(Overseas territories)
New Caledonia and dependencies
French Polynesia
French Southern and Antarctic Territories
Wallis and Futuna Islands

Netherlands
(Overseas countries)
Netherlands Antilles
(Bonaire, Curaçao, St Martin, Saba, St Eustache)
Aruba

Denmark
(Country having special relations with Denmark)
Greenland

United Kingdom
(Overseas countries and territories)
Anguilla
British Antarctic Territory
British Indian Ocean Territory
British Virgin Islands
Cayman Islands
Falkland Islands
Southern Sandwich Islands and dependencies
Montserrat
Pitcairn Island
St Helena and dependencies
Turks and Caicos Islands



THE 71 ACP STATES

Angola
Antigua & Barbuda
Bahamas
Barbados
Belize
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Congo
Congo (ex-Zaire)
Côte d'Ivoire
Djibouti
Dominica
Dominican Republic
Equatorial Guinea
Eritrea
Ethiopia
Fiji
Gabon
Gambia
Ghana
Grenada
Guinea
Guinea Bissau
Guyana
Haiti
Jamaica
Kenya
Kiribati
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Papua New Guinea
Rwanda
St Kitts and Nevis
St Lucia
St Vincent and the Grenadines
Samoa
Sao Tome & Principe
Senegal
Seychelles
Sierra Leone
Solomon Islands
Somalia
South Africa*
Sudan
Suriname
Swaziland
Tanzania
Togo
Tonga
Trinidad & Tobago
Tuvalu
Uganda
Vanuatu
Zambia
Zimbabwe

*Not all provisions of the Lomé Convention apply to South Africa

General Secretariat
of the ACP Group
of States
Avenue Georges Henri, 451
1200 Brussels
Belgium
Tel.: 743 06 00

This list does not prejudice the status of these countries and territories now or in the future.

The Courier uses maps from a variety of sources. Their use does not imply recognition of any particular boundaries nor prejudice the status of any state or territory

Pristine forest near Ndoki-Nouabale National Park, northern Congo-Brazzaville.

1995 at the renegotiation of the Lomé Convention in Mauritius and was signed by all EU Member States and ACP states.

EC policy is also strongly guided by Council Resolution (EC) Number 3062/95 of December 20, 1995, on operations to promote conservation and sustainable management of tropical forests. This resolution provided the legal basis for the Tropical Forests Budget Line and has implications for the entire forest sector.

In order to carry out this complex study, WWF-Belgium formed a partnership with WWF-International, Gland, Switzerland and WRI, Washington, DC, USA. Several consultants were engaged by the three organisations in Europe, Asia, Africa, the Caribbean, and the Pacific in order to carry out field research and other related studies.[2] Furthermore, an external advisory group was created to comment on the draft version of the report and provide feedback. The external advisory group was comprised of 20 respected individuals from timber trade organisations, international NGOs, donor organisations and the governments of ACP countries. Almost all members have provided substantial written comments, which have added thoroughness and balance to the report.

The report includes discussion of the general state of the world's forests and forest management, with emphasis on ACP countries, and trends in the international trade in tropical timber. A chapter is dedicated to the rise of timber transnationals and the background of new investors, specifically those from Asia. Focus has also been given to the impact of these new South-South investments in selected ACP countries. Detailed information on forests and forest industry has been gathered from the

2. D. Callister, 1997, The Growth of Asian Transnational Logging Companies: An Overview, Report for WWF-International, Gland, Switzerland.
J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, Report for WWF-Belgium.
M. Courcier, 1997, Rapport d'études secteur bois au Gabon, Arthur Andersen, Libreville, Gabon, Report for WWF-Belgium.
D. Plouvier, 1997, Mission Report to Cameroon and Congo on behalf of the European Commission Directorate-General VIII, 16-28 February, 1997, WWF-Belgium, Brussels
D. Plouvier, 1997, Mission Report to Gabon on behalf of the European Commission Directorate-General VIII, 14-26 April, 1997, WWF-Belgium, Brussels.
L. Debroux, 1997, Visite de la Concession MPL Shimmer International (10/14 Mars 1997), Faculty of Agromonic Science, Department of Forestry, Gembloux, Belgium.
G. Mballa, 1997, Sociétés Forestières Asiatiques au Cameroun. Report for WWF-International.

ACP countries with significant amounts of remaining forest. These are Gabon, Cameroon, Equatorial Guinea, Central African Republic, Congo-Brazzaville, and the Democratic Republic of Congo in Africa; Suriname, Guyana, and Belize in the Caribbean; and Papua New Guinea and the Solomon Islands in the Pacific.

A summary is presented below of the major findings of the study as well as recommendations for governments, donors, NGOs and the investors themselves. The report does not pretend to cover all issues related to the subject. This would have been impossible within the short time provided. The authors as well as the consultants have tried to bring together many viewpoints and have made every effort to present a balanced report. As this report deals with sensitive issues, four explanatory statements must be made:

1. The authors have tried in every case to provide references and citations of sources of their information. However, some of the material in this report is new (based on personal visits by the authors or by consultants) and therefore citations of published, mainstream sources of literature were not always available.

2. In general, the report is very critical of current logging and timber trade activities in the ACP countries. However, it should be made clear that the authors firmly believe that responsible management of forests for long-term production of timber and other goods and services, based on sustained yields and with respect for basic social and environmental values, can be a valuable tool for the conservation of these forests.

3. The report focuses on the new South-South investments in logging and timber trade and does this through analysis both of the background of the activities of several Asian timber industries and through collection of field information regarding Asian companies in Africa, the Caribbean and Pacific. While the focus is on Asian firms, this does not pre-suppose that European or American enterprises are better or more responsible either in the regions studied or elsewhere.

4. Since most of the field data were collected during 1997, an update on the effects of the Asian economic crisis has been added in chapter 1.4.

Logs at the port of Tiko, Cameroon. The new investors ship all logs to processing sites in Asia, without differentiating between species and qualities at the port of the country of origin.

1.2 Major Findings of the Study

The findings presented below are drawn from the main body of the report, presented in Part 2. Most references, citations, and notes are contained in Part 2 and should be reviewed for detailed information on sources, literature, and other inputs that led to the conclusions presented here.

1.2.1 The Transnational Companies and their Investments

1. There has been an important shift in the origin of the investment and capital behind transnational logging operations in the ACP countries. A large part of the new investments can be characterised as "South-South", controlled by companies from countries such as Malaysia and Indonesia.[3] Ten years ago, almost all investment was from Japan, the United States and Europe.

2. Malaysian investors are by far the most active in the new South-South expansion. The trend is largely attributable to the activities of about half a dozen Malaysian companies. Estimates suggest that Malaysian investments account for more than 80 percent of the new South-South investments.[4] The total area of primary forest newly given in concessions by ACP countries, through South-South investment, is estimated at between five and ten million hectares. Further substantial areas are being prospected for possible new concessions. The main countries where new

---

3. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, Report for WWF-Belgium.
M. Courcier, 1997, Rapport d'études secteur bois au Gabon, Arthur Andersen, Libreville, Gabon, Report for WWF-Belgium.
D. Plouvier, 1997, Mission Report to Cameroon and Congo on behalf of the European Commission Directorate-General VIII, 16-28 February, 1997, WWF-Belgium, Brussels
D. Plouvier, 1997, Mission Report to Gabon on behalf of the European Commission Directorate-General VIII, 14-26 April, 1997, WWF-Belgium, Brussels.
G. Mballa, 1997, Sociétés Forestières Asiatiques au Cameroun. Report for WWF-International.
4. See endnote 2 above.
N. Sizer and R. Rice, 1995, Backs to the Wall in Suriname: Forest Policy in a Country in Crisis, World Resources Institute, Washington DC, USA.
N. Sizer N, 1996, Profit without Plunder: Reaping Revenue from Guyana's Tropical Forests without Destroying Them, World Resources Institute, Washington DC, USA.
C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, National Research Institute of Papua New Guinea, Monograph 32.

Figure 2: Trends in destination of the exports of logs from Cameroon and Gabon, 1991-1998

Source : ITTO, ATIBT.

South-South investments have taken place include Papua New Guinea and the Solomon Islands in the Pacific, Guyana and Suriname in the Caribbean, and Gabon, Equatorial Guinea, and Cameroon in Africa. However, despite the new trend, European companies continue to play a dominant role in logging activities in Africa, where the majority of logging and concessions continues under direct control of European investors.

Box 1: South-South Investment in Logging and the Timber Trade in Forest-Rich ACP Countries

Cameroon:

Since 1995, there has been a sharp increase in export of logs to Southeast Asia, notably to countries such as Taiwan, Thailand, and the Philippines, through new trading companies. In 1995, Malaysian and Thai companies began to invest in logging activities in Cameroon, mostly in close association with and on the concessions of Cameroonian nationals. Different ports have been used for the export of logs, and several new species such as ekop (*Monopethalantus sp.*) and okan (*Cylicodiscus gabunensis*) are being traded.

Gabon:

Since 1993, the export of okoumé (*Aucoumea klaineana*) logs to Asia has increased, especially to the Republic of China. By 1996, more than half of these logs were being exported to Asia, whereas previously the destination had been exclusively Europe. South-South investments in logging began in 1996 and by mid-1997, some Malaysian companies were active while others were prospecting for forest concession areas. Several traditional European concessionaires have been in negotiation to sell logging rights and timber processing plants to the new investors.

Equatorial Guinea:

While for decades commercial timber exploitation was limited to an annual production of between 100,000 and 200,000 cubic metres, the level has risen steadily since 1995. In 1996 and 1997, total production was 470,000 and 680,000 cubic metres respectively, most of which could be attributed to the activities of one Malaysian company. In 1998, the production of logs dropped again to 380,000 m^3 due to the effects of the Asian economic crisis.

Guyana:

Since 1991, a Malaysian/South-Korean company has been active in Guyana on a 1.7 million hectare concession in the northwest region. Large investments were made in a plywood mill. The government enacted a moratorium on new, large-scale logging contracts while it upgraded policy and laws, and strengthened the Forestry Commission. In 1997, bids for new exploratory licenses were invited.

Suriname:

By mid-1997, Indonesian and Malaysian groups were active in Suriname both through logging on small and medium sized concession areas and through the purchase of logs from Surinamese logging companies. Applications for the exploitation of one million hectares of forest by each of three groups was rejected by the National Assembly in 1996.

Papua New Guinea:

By the end of the 1980s traditional Japanese interests in logging were taken over by Malaysian logging companies. Around 50 percent of the production and log exports are controlled directly or indirectly by a Malaysian company. Environmental and social impacts have been serious and are well documented. Corruption has also been shown to be a key factor behind decisions to award new licenses.

The Solomon Islands:

During the last ten years a wave of foreign logging companies has moved into the Solomon Islands. Log exports are mainly to Japan and Korea (75 percent) with increasing exports to the Philippines, Thailand, China and India. Up to 1991, annual log harvests were approximately 300,000 to 400,000 cubic metres. Since then, the harvest peaked at over 800,000 cubic metres in 1995 and 1996. Under existing logging licenses, three million cubic metres of logs can be harvested annually, or nearly eight times the sustainable harvest. The industry has come to be dominated by Malaysian and Korean companies.

3. Over the past five to six years there has been a very noticeable shift in the destination of log exports from Central Africa. For decades, nearly all logs from the region were exported to Europe, especially the southern countries of France, Spain, Italy, and Portugal, as well as some Mediterranean States, including Lebanon, Egypt, Morocco, and Algeria.

Since 1996, more than half of all logs from Central Africa have been shipped to Asia, especially to China, Japan, Taiwan, Thailand, and the Philippines. (See Figure 2.) In 1998, export of logs to Asia dropped again, due to the effects of the Asian economic crisis.

4. There are many factors behind the new dynamics of logging in the ACP countries. These include the increasing log shortages faced by downstream wood processing industries (such as sawmills, plywood and furniture factories) in Japan, Korea, China, Taiwan, Malaysia, Thailand and the Philippines, coupled with the growing market for tropical timber in some of these countries. In addition, there have been more effective law enforcement and tax increases in Malaysia, acting as incentives in the

While logging and timber industry activities can generate substantial local employment, the roads built to extract timber often cause serious environmental damage by facilitating the entry of poachers and subsistence farmers.

home countries for investment abroad. Also, the majority of the remaining exploitable tropical forests in Southeast Asia are already covered by logging concessions. These, and other factors have provided a significant impetus to Asian companies to seek out new sources of logs in other parts of the world.

5. The capital needed for such expansion has come partly from the exploitation of forests in Southeast Asia, from loans from other Asian investors, and, in the case of some of the Malaysian firms, from the listing of subsidiaries on the Kuala Lumpur stock exchange[5]. Investigation of the information available on the world's capital markets suggests that the major new transnational logging companies originating in Malaysia are mostly privately owned and financed, with much of the cash borrowed through family and business networks. The public listings that some of the larger companies have recently established provide only a small part of the expansion capital.

6. The pattern of South-South investments in the logging and timber sector is similar to patterns of investments in the past led by Japan, the United States, and European countries. Japanese interests have a long history of investments in tropical forestry, especially in Indonesia and Malaysia in the 1970s and Papua New Guinea in the 1980s. North American timber companies had extensive concessions and logging operations in the Philippines in the 1960s and 1970s, with little or no attention to social and environmental impacts of their activities. European companies have dominated investments in logging and timber industries within their former colonies in Africa, where they have had access to timber-rich forests.

7. The new operations, as well as most of the former, European or local, investments in the ACP countries, are effectively mining operations, involving extraction followed by abandonment once the timber resource is depleted. Most investors mine the forests through selective harvesting of marketable species. Almost without exception, management plans are neither elaborated nor implemented, and even basic silvicultural principles based on sustained yield have not been applied.[6] The logging operations

5. World Rainforest Movement and Forest Monitor, 1998, *High Stakes: the need to control transnational logging companies: a Malaysian case study*.

have furthermore been characterised by a huge wastage of timber resources due to the very stringent demands of quality and species on the traditional European export markets, and the near absence of local markets in many ACP countries.

8. Only very recently have any of the European firms in Central Africa shown significant interest in improving their level of investment in responsible management. In Gabon for instance, four companies (Compagnie Equatoriale de Bois of the Groupe Thanry, Leroy, Rougier-Gabon, and Société des Bois de Lastourville) have started to elaborate contracts with the government based on long-term management planning.[7] In the Central African Republic, two companies (Société d'Exploitation Forestière de la Sangha-Mbaéré and Industrie Forestière de Batalimo), with the financial help of the Caisse Française de Développement and technical assistance from CIRAD-Forêt, France, have recently elaborated forest management plans and have started their field implementation.[8]

9. Although the pattern is similar, there are some important differences between the earlier waves of investment and the new South-South investments. The new investors are largely producing for the Asian timber market, which is much larger and accepts a wider range of species and qualities of wood than the European or American markets. Consequently, the new investors generally log with higher extraction rates per hectare, which leads to greater environmental impact. Sometimes, especially in Africa, there is a rapid shift of logging equipment from one country to another illustrating the high mobility of capital. In some cases there is also an unusually large use of imported, expatriate labour, rather than employment of local workers. The recent arrivals have not yet invested in long-term forest management and rarely in timber processing facilities within the countries.

---

6. Environmental Strategies Europe, 1995, Aménagement Forestier Durable, Enregistrement International des Forets et Eco-Certification du Bois, report for the French Ministry of Cooperation and European Commission Directorate-General VIII, Brussels, Belgium.
7. J. Valeix, 1996, Étude de Faisabilité et d'Engagement d'un Projet d'Aménagement, Exploitation et Transformation, Société Leroy-Gabon. National Forest Service, France.
8. C. du Castel, 1997. Financement des Investissements dans le Secteur Forestier: Rôle du Groupe Caisse Française de Développement. CFD, Paris, France. Note that SESAM has since been taken over by a new investor, Malaysia's WTK.

10. As the operations take place in countries with little or no enforcement of forest management requirements, the logging itself is often very careless, with high collateral damage to the surrounding forest. The roads built to extract timber create access to frontier areas, facilitating the entry of commercial hunters, farmers, miners, and others who cause further environmental damage.

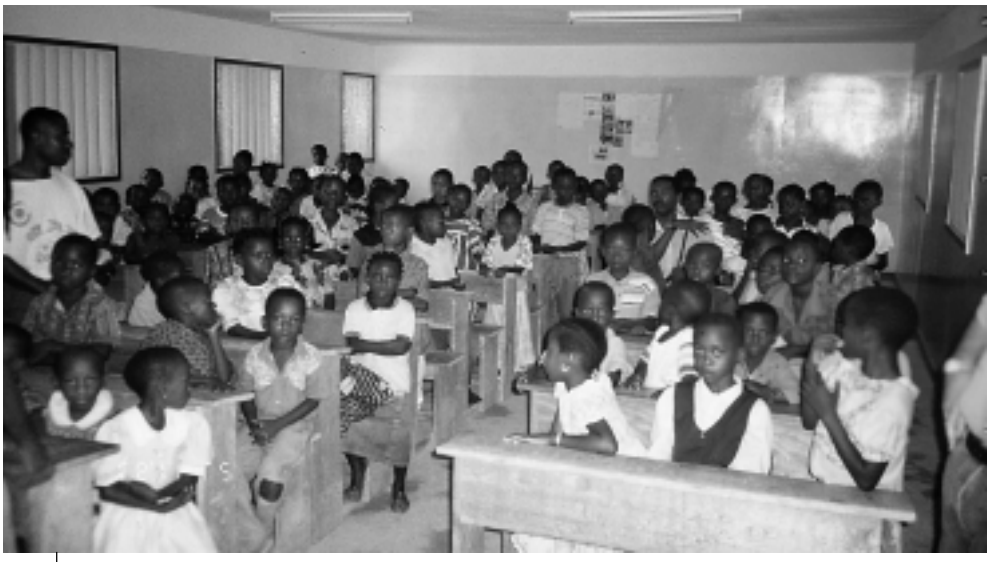
11. There have been cases of violent conflict between the companies, both new and traditional, and the local communities that consider themselves to be customary owners and stewards of the forest.[9] Often the areas awarded to large foreign logging companies are the customary lands of traditional and tribal peoples, although not demarcated and not recognised by the national government.

12. Logging operations can generate a substantial amount of local employment during the life of the operations, especially with investments in timber processing industries and other downstream activities. In many ACP countries however, such as Papua New Guinea, Gabon and others, both old and new companies tend to invest only in logging and log export because these operations seem to be the most profitable. Overall, relatively little investment in timber processing has been made during the past decade, notwithstanding existing regulations for increased in-country processing of the logs in some countries. Exceptions do exist, however, both with traditional European companies as with new investors. Companies such as CIB in Congo or CEB in Gabon employ several hundreds of local people in their timber processing activities. The Malaysian-owned Barama Company in Guyana employs about 1,000 Guyanese in addition to others who work for contractors, and Barama is one of the few new investors to base its operation on long-term forest management planning and in-country processing of the logs.

13. Apart from the social benefits of employment, logging and timber processing investments can potentially yield important improvements in the development of local communities. While to some extent this does hap-

---

9. J.J. Pagbe, 1996, Memorandum Adressé au Préfet du Dept. du Nyong et Kellé concernant l'Exploitation des Forêts du Canton Longue, Cameroun.
H. Verhagen and C. Enthoven, 1993, Logging and Conflicts in the Rainforests of Cameroon, Friends of the Earth and The Netherlands Committee for IUCN, Amsterdam, The Netherlands.



Investments should be based on sustained yields and long-term forest management objectives; social infrastructure, such as this school in the interior of Gabon, should therefore either be provided and maintained by the timber industry or financially supported by them on a long-term basis.

pen, improvements are often very temporary, lasting only as long as there is timber to extract. Because long-term forest management planning is generally lacking, improvements in infrastructure, schools, and health clinics made by timber industry companies are not maintained once the economic timber activity moves on to new areas.

14. The economic benefits from the logging and timber industry activities depend on the capacity and political will of ACP governments to negotiate good contracts and reinvest the benefits within the country. Where analysis is available, as in the case of Suriname, the economic benefit is minor, even in the short-term, and certainly far less than it could be if contracts were structured and negotiated differently.[10] While large amounts of capital are involved, the revenue to national treasuries can be small because most of the profits leave the country or accrue in the hands of very few, often already wealthy and powerful local people.

10. N. Sizer and R. Rice, 1995, Backs to the Wall in Suriname: Forest Policy in a Country in Crisis, World Resources Institute, Washington DC.

15. Some of the home countries of the new investors have started to address the important issues raised by logging companies working overseas. In September 1997, Malaysia's government began to announce some significant steps to curb the excesses of Malaysian transnational logging companies. The Minister of Primary Industries met with industry executives and demanded that they respect the laws of the countries in which they are investing and not take advantage of "weak governments."[11]

16. It is important to note that new investments are not limited to ACP countries, but include other countries with vast timber resources and unique primary forests such as Brazil, Cambodia, Russia, Canada, and Myanmar.

1.2.2 The Governments of the Countries in which the Investments are occurring

17. The new investments have been concentrated in countries with generally weak or outdated environmental and social laws and little enforcement capacity. During early 1990s investment was focused in Southeast Asia and the South Pacific, especially Papua New Guinea and the Solomon Islands. During the past decade however, expansion has reached countries in the Caribbean and Central Africa such as Guyana, Suriname, Cameroon, Gabon, and Equatorial Guinea. These countries represent a favourable environment for foreign investors, interested in short-term profits, because they have weak forest services, poor monitoring capacity, inefficient tax collection and auditing capacity, and, in some cases, widespread bribery and corruption.[12] On the other hand, these same countries present a very unfavourable investment environment for competing companies that are committed to more responsible long-term investment.

---

11. Malaysian Timber Bulletin, Malaysian Timber Companies Logging Overseas told to Safeguard National Image, Malaysian Timber Council, Kuala Lumpur, September, 1997. M. F. Nordin, Timber Firms told to Safeguard National Image, New Straits Times, Kuala Lumpur, September 26, 1997.
F. Ghazali, Lim Unveils Strategy to Assist Local Loggers, Business Times, September 26, 1997.
12. Environmental Investigation Agency, 1996, Corporate Power, Corruption and the Destruction of the Worlds' Forests, Environmental Investigation Agency, London, UK.
Les Amis du Pangolin, 1996-1997, Le Cri du Pangolin, several editions, Gabon.
SAILD, 1996-1997, La Voix du Paysan, several editions, Cameroon.

18. Many of the ACP countries studied are turning over huge areas of primary tropical forest to logging without having first identified and delimited areas of critical importance for biodiversity conservation, watershed management, or the production of other goods and services. Most have also not resolved land rights and indigenous territories issues. As many of these countries have very little monitoring or enforcement capacity, there is little information available about actual impacts of the logging. The ultimate effects can be very substantial and expensive, as illustrated by the massive forest fires in some countries in 1997, which were partially the result of poorly planned logging.[13]

19. All of the countries covered by this study have made important commitments to forest conservation and sustainable development, through their adoption of international accords such as the various United Nations Conference on Environment and Development agreements, the International Tropical Timber Agreement and regional accords such as the Amazon Cooperation Treaty and the Brazzaville Declaration of the Conference on Central African Rainforest Ecosystems. Furthermore, in 1995, a special Protocol 10 on Sustainable Management of Forest Resources was added to the Lomé IV agreement between the EU Member States and ACP countries. Although the many international commitments made by the countries have led to increased awareness, and in some countries to significant changes in forest legislation, they generally have not led to concomitant changes in forest policy nor to many positive changes in the field.

20. Many ACP countries are suffering severe economic difficulties with large foreign debts, high inflation, and unemployment. They therefore have very limited capacity to promote alternative investments and see little option but to welcome investors who may at least create jobs and short-term economic growth. Countries, such as Guyana, with an expressed commitment to seek alternatives, will not be able to fulfil such a commitment without further help from donor countries in establishing a trajectory toward development based upon conservation and a sustainable use of the resource base.

---

13. WWF International, 1997, The Year the World Caught Fire, WWF-International, Gland, Switzerland, page 13.

If logging is not sustainable, social benefits - such as employment opportunities - will fail to be long-term. Sylvicole de Bayanga, Bayanga, Central African Republic.

21. Lack of good governance is a key part of the problem. In quite a number of countries studied, decision making is controlled by a small group of powerful people or clans within the government who look at primary forests as a short-term source of personal revenue, not as a productive ecosystem which can generate social, economic, and ecological benefits on a long-term basis for the entire country and its people. This situation leads to contracts which are primarily beneficial to the investor and senior government officials.

22. While there is a broad spectrum of behaviour, in some ACP countries administrative procedures facilitate widespread corruption. Senior officials in countries such as Papua New Guinea have been shown to be awarding logging rights in exchange for bribes.[14] These decisions clearly

14. C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, National Research Institute of Papua New Guinea, Monograph 32.

A view of the Lopé forest in Central Gabon. Lopé is one of the national parks integrated into the ECOFAC-programme, a regional integrated conservation and development programme in Central Africa, financed by the European Commission.

are not based on a careful assessment of what is in the national interest, though they are often falsely justified by officials and investors on the basis of national economic development, job creation, establishing independence from the former colonial authorities, and "South-South cooperation."

1.2.3 Donors and the International Community

23. The major donors (including the World Bank, Japan, the EC, France, Germany, Great Britain, the Netherlands, Canada, and the United States) all have programmes designed to promote forest conservation and responsible management. Unfortunately, these programmes have gener-

ally not been linked to efforts to achieve good governance which is the key element for long-term social, economic and ecological improvements.[15]

24. Many of these initiatives are poorly coordinated and often simply fail due to a lack of real commitment from the recipient countries, as well as conflicting donor policies and competing political interests. Furthermore, many of the donor programmes are carried out by foreign agencies or consultancy bodies and are institutionally poorly anchored within the country.[16]

25. A striking area of policy discord is in the design and implementation of structural adjustment programs for macroeconomic reform. These programs, designed by the World Bank and the International Monetary Fund, include steps to increase government revenue from primary resource extraction, promote exports, liberalise laws restricting foreign investment, and cut backs in public spending. While such measures can have an overall beneficial effect on economic growth, they also have facilitated massive influxes of foreign capital into primary extractive sectors, such as logging and mining, without the concomitant strengthening of capacity to control and plan the activities to reduce environmental and social impacts.[17]

26. Conflicts in donor policy are also seen between narrowly-defined environmental programmes and other sectoral lending and grant making, such as for road building and expansion of energy generation and transmission infrastructure. The latter, where not carefully planned, can lead to major forest degradation.

27. During the last decade several donor agencies have concentrated their efforts in the forest sector of ACP countries on activities related to forest conservation, national parks, buffer zone management, and community forestry. By comparison, less attention has been paid to issues

---

15. Unpublished study by the Center for International Forestry Research on why donor-assisted forestry programmes have been widely unsuccessful in meeting their objectives.
16. F. Grison, 1997, Assistance Technique Forestière: La Ruée vers le Cameroun, Report prepared for meeting of donors to the forest and biodiversity sectors in the Congo Basin, CIRAD-Forêt, Montpellier, France.
17. D. Reed, (editor), 1996, Structural Adjustment, the Environment, and Sustainable Development, Earthscan Publications and World Wide Fund for Nature, London, UK.

such as the institutional strengthening of the forest services in the field and support for responsible forest management. This has been particularly the case with the forest programmes of the EC in ACP countries, where investments have been generally directed to conserving bio-diversity rather than encouraging responsible logging and forest management.[18]

1.2.4 Non-Governmental Organisations

28. Environmental NGOs have generally focused field activities on the establishment and management of national parks and conservation areas in ACP countries. Northern groups in particular, however, have voiced very strong criticisms and correctly directed the attention of the international community towards the threats of unsustainable logging and other activities that lead to forest degradation in the South. Nevertheless, the potential for responsible logging and forest management as a means to contribute to forest conservation has received far less attention.

29. Within ACP countries, NGOs are still poorly organized, suffer from lack of resources, and, in some cases, are persectuted by governments. As such, they may have limited ability to influence governments in many ACP countries.

30. In 1993, after more than a decade of instigating boycotts of tropical (and other) timber coming from unsustainable logging operations, several NGOs promoted the principle of forest certification and labelling of timber as a more constructive approach, to which end they have set up the Forest Stewardship Council (FSC). At the same time, NGOs have mobilised consumers and companies through new "buyers' groups" in several countries in the North, which favour products coming from well-managed forests. However, after seven years, by far the most certification under the FSC scheme has been in temperate/boreal forests and in plantations all over the world.

---

18. Planistat, 1997, Analyse Statistique des Projets Financés par la Communauté Européenne dans le domaine des Forêts Tropicale, Planistat-Europe, Paris, France.

Loggers are very often the first to build new roads into primary forests. While roads are needed for development, they can also cause environmental problems. Good land use planning and effective control of its execution are crucial for the reconciliation of development and conservation objectives.

1.3 Priority Recommendations for Action

A thorough analysis of the study's findings shows that there is a discrepancy in the ACP countries between long-term forest management objectives and the need for short-term profitability of foreign investors, a need driven by the market and the investors' shareholders. Investors are largely interested in capturing timber income from a forest, then moving on to new primary forest areas once existing areas are exploited (as long as the costs of infrastructure to open up primary forests can be borne). No investments take place for silvicultural treatments or any other measures to assure a new harvesting cycle. Reforming the role of the governments, as forest owners and stewards, is the key to any solution. Of course, governments should be advised and helped by the donors and international community. Through the Lomé Convention, the EC has a crucial role to play and therefore should strengthen its activities in the forest sector, including provision of sufficient funding through the Lomé Convention to help achieve the objective of forest stewardship.

While the economies of the ACP countries have been liberalised, facilitating the inflow of capital and the expansion of primary industry, there has been a great lag in the establishment of the various control, monitoring, and regulatory mechanisms that are, to some extent, taken for granted in developed countries. During this lag, investors are able to operate with little or no public scrutiny, creating the many problems described in this report, including, in some cases, substantial economic losses to the countries concerned. ACP governments should commit themselves to establishing the regulatory and planning framework needed to ensure that foreign investments in logging operations contribute to national economic growth while employing best practices to minimise negative social and environmental impacts. Where such commitments are made, the donor community should provide priority assistance. The United Nations Development Program has designed its new forest sector efforts based on such criteria.

Below, recommendations are made for the groups concerned, namely, governments, transnational investors, donors and NGOs. Recommendations have been addressed first to governments because they are legally both forest owners and forests stewards in most ACP countries, and consequently their decisions will be key to the fate of this vital resource.

1.3.1 Recommendations to Governments of ACP Countries

1. Enact moratoria on all new foreign investment in expansion of unsustainable logging activities until land use planning has been completed, legal and customary rights of local people have been defined, and effective regulatory capacity and incentives for responsible investment established.

A set of specific measures that should be taken before further investment is encouraged is presented below:

1.1. Define and demarcate the permanent forest estate with a clear indication of production, protection and conservation forests. Clearly demarcate the areas for indigenous peoples' communities, living in the forest and recognize their customary and land rights.

Before new logging rights can be awarded, there should be a thorough analysis of priority areas for watershed protection, and conservation of biodiversity and other non-timber values. Further, the resolution of resource use and land rights disputes with indigenous or tribal communities, who need to be involved in the decision making process from the very beginning, is necessary. Without such definition, investment will be far less attractive to more responsible investors seeking to reduce the risk of and disputes over property rights. A clear demarcation of the permanent production forest areas is key for any long-term forest management for timber production.

1.2. Where necessary, strengthen national forest legislation and ensure sufficient financial and technical support for the control of logging activities and the enforcement of long-term forest management.

In the majority of ACP countries the forest services do not have adequate funds to effectively control the operations of transnational logging companies. Very often, the forest services lack basic equipment, such as vehicles, and often are seriously short of qualified personnel. Before new logging rights can be awarded, sufficient investments should be made in institutional strengthening of the forest services. Government officials,

industry leaders, community representatives, and social and environmental interest groups should work together in a national working group in each country, convened by the government, to agree on national guidelines for forest management and certification as well as implementation approaches.

1.3. Ensure that timber-cutting rights are allocated in a transparent and competitive manner which discriminates in favour of investors with a proven commitment to responsible forest management.

Investors should be required to pass through a "filter" of assessment which selects those with a proven track record and commitment to responsible practice. Those that meet these criteria should then compete through a transparent auction system for logging and forest management rights. While auctions have not been widely used in the forest sector in the South, they are becoming standard practice in the minerals, hydrocarbons, and telecommunications sectors, with concomitant reductions in corruption and increases in revenue.[19]

1.4. Ensure that timber extraction is taxed through simple, easily enforceable means at an appropriate level and that sufficient funds are invested in increased education, research, capacity-building and training, as well as in the overall improvement of forest management.

The weak contract negotiation, tax assessment, auditing, and collection capacity of many ACP countries has resulted in widespread loss of revenues by the governments. Higher levels of taxation where industry profits are estimated to be above normal would help provide the funds needed for sustainable forest management.[20] Governments should also ensure that they have top quality international legal advice available when they negotiate with foreign investors.

---

19. N. Sizer and R. Rice, 1995, Backs to the Wall in Suriname: Forest Policy in a Country in Crisis, World Resources Institute, Washington DC.
20. R. Repetto and N. Sizer, 1997, Why Finance Sustainable Forestry? Paper presented at the Intergovernmental Panel on Forests Experts Meeting on Financial Mechanisms and Sources of Finance for Sustainable Forestry, June 4-7, 1996, Pretoria, South Africa.

The proliferation of hunting activities by concession workers is often perceived as a real threat to biodiversity. However, low-cost efforts by the logging company can substantially reduce the pressure on the large mammals, as some concessionaires have proved.

1.5. Develop specific measures to address the indirect impacts of logging operations such as commercial hunting, fires, and movement of farmers into forested areas along logging roads.

It is either up to the forest services or the logging companies themselves (through legal measures and financial incentives) to minimise the indirect effects of the operations that arise through the creation of access roads. Effective checkpoints on access roads, closure of feeder roads that are no longer in use, and the prohibition of commercial hunting can help greatly to reduce the indirect impacts of logging. Environmental impact assessments for all major investments should be used proactively to identify potential negative impacts and steps necessary to avoid them.

2. Through good governance, provide a stable socio-economic environment for long-term investments in responsible logging and forest management activities, including investments in secondary and tertiary wood-processing installations which generate jobs.

Responsible investors are attracted to profitable businesses in countries with relatively low risk. Governments have a major responsibility to provide an investment climate that is corruption-free and that is stable, predictable, and supportive. Governments that thrive on administrative discretion and complex regulations that are applied inconsistently, and that do not have well-defined land use, zoning and property rights, will not be able to compete successfully for large investments that can generate long-term returns, and that are committed to best practice.

3. Demonstrate leadership in the implementation of international commitments to forest management and conservation.

Most of the ACP countries with substantial forest reserves have signed and ratified important international accords such as the United Nations Conference on Environment and Development's Biodiversity Convention, and the Climate Convention, as well as the International Tropical Timber Agreement (ITTA). In 1995, at the renegotiations of Lomé IV in Mauritius, a special Protocol (10) on the Sustainable Management of Forests was added and signed by all EC member states and ACP states. Implementation of these accords would go a long way toward achieving conservation and sustainable development objectives.

1.3.2. Recommendations to transnational investors in logging and timber processing

4. Respect existing national and international laws.

Several transnational investors, both new and old, do not respect existing laws, making it more difficult for responsible investors to operate. Basic respect for the law regarding the negotiation of concession areas, correct payment of taxes, respect of boundaries of concession areas, adherence to minimum cutting diametres, and respect for workers' rights and for customary and land rights of local people, are minimum requirements.

The international organisations representing logging companies and timber industries such as the Interafrican Forest Industry Association

(IFIA) should establish a code of conduct for their members and act against members who do not respect the code. This could encourage the more responsible investors who are also members of these organisations. The establishment of producers' groups, consisting of companies committed to responsible forest management, should also be supported.

5. Start the elaboration and implementation of forest management plans, based on sustained yields and with full integration of social and ecological considerations.

A majority of logging in ACP countries is conducted as short-term timber mining operations, with firms creaming off the best logs and moving on to new primary forest areas without consideration for the protection and regeneration of the logged forest. Transnational companies should begin to invest on a long-term basis in sustainable management of the designated production forest areas. Forest management plans need to be elaborated and duly implemented. Plans should be based on long-term objectives for use and management of the forest resources based on a system of sustained yields (definition of rotations and annual allowable cut) and should include ecological and social considerations. Efforts should be undertaken to minimise the enormous wastage of timber resources that takes place in road-construction, log harvesting, and timber processing. Furthermore, investors should make a public commitment to independent third-party certification, as recognised by the Forest Stewardship Council or any other equivalent mechanism.

6. Establish strong relationships with the communities and peoples living in or near the concession areas.

Relationships should be based on mutual benefits for logging companies and communities. To this end, the investors should submit a long-range investment plan and before the start of any operation should establish clear and well-defined conditions with the local populations that are legally binding within the concession contract areas. These conditions need to stipulate the rights of the populations to conserve forest areas, special places, and trees, and the investments to be made in road-construction and permanent village infrastructure, including maintenance of this infrastructure, as well as investments in timber processing.

1.3.3 Recommendations to Foreign Donors and Development Agencies

7. Tie bilateral and multilateral assistance to good governance and a commitment to responsible forest management. Establish programmes to provide special assistance to governments and companies that are committed to trying to implement responsible forest management.

Governments that make and stick to commitments to behave responsibly should receive preferential attention from donors and technical assistance agencies. Preferential assistance should be given to those countries which have the courage to enact moratoria on new investments before they have established a national system of protected areas, have addressed indigenous and tribal land claims and have created sufficient technical capacity to monitor the logging activities. These countries will experience a significant short-term cost by making such decisions, which may in some cases be very difficult where there is substantial pressure to do otherwise. Funds should be made available by reallocating them from countries where there is not a clearly demonstrated political will at the highest levels to promote transparency, reduce corruption, combat poverty, and so on. It is vital that donors improve their coordination so that common conditionalities are upheld across programmes and agencies.

Transnational investors who make clear commitments to responsible forest management and third-party certification should receive special assistance from donors and development banks for the elaboration and implementation of specific elements of forest management plans related to ecological and social factors.[21] These factors should include elaboration of management plans, low impact logging training, natural regeneration studies, and elaboration of mechanisms to market non-timber products and services.

21. M. Adams, 1997, Resources Needed but Directed Where? International Tropical Timber Organization Tropical Forest Update, Volume 7, No 3.

The forest provides many products for the local people, like these edible ilomba caterpillars, which are an important source of protein.

8. Donors should focus their programmes on strategic activities related to logging and forest management that are more likely to lead to positive downstream effects.

Areas that may have especially large impacts include improving tax collection efficiency to generate more funds for national reform and institutional strengthening of the forest sector, establishment of monitoring capacity, supporting community forestry programmes, and assisting national governments in negotiations with foreign investors. Other priorities include targeted efforts for the design of measures to reduce commercial hunting and human migration into logging operations, and the development of capacity to work out practical guidelines for responsible forest management.

9. The World Bank should develop long-range social and environmental strategies to deal with the shortfalls of structural adjustment programmes.

As the largest multilateral funding organisation, the World Bank has a very special role to play and in fact is now engaged in a review of its internal forest policy which governs lending for forest projects. Through this process the Bank should also give special attention to amelioration of the potentially negative side effects of structural adjustment programs on forests, as well as to the indirect impacts of lending in other sectors such as infrastructure and energy. Specific steps should also include revising national economic accounts so that they register depletion and degradation of natural resources, as well as degradation of agricultural and forest lands and watersheds. Information about how the benefits of resource extraction are being used for public and private gain should be made available.[22] Furthermore, the Bank should hasten the implementation of its recent commitment to promote protection of large areas of primary forest and to assist in independent third-party certification.

10. The EC should continue to improve the coordination of its overall policy with the World Bank and other key-donors active in Central Africa such as France.

A coherent strategy and sufficient funds are needed to implement Protocol 10 of the Lomé IV Convention. To this end, the EC should urgently strengthen implementation of its forest policy in the field and improve the coordination of the forest policy with the World Bank and especially with France in Francophone Africa. Furthermore the EC should set aside sufficient funds within its overall development assistance (through, for example, the European Development Fund) to support activities related to the achievement of responsible logging and forest management, in addition to the activities related to the protection and management of national parks. This should take place through provision of financial and technical assistance to both governments and companies who have made commitments to responsible forest management.

22. For more information on this set of issues see, D. Reed, (editor) 1996, Structural Adjustment, the Environment, and Sustainable Development, WWF-International and Earthscan Publications, London, UK.

Logging road in Central Gabon. Traditionally, European loggers harvest very few trees per hectare. While this method does not lead to total forest destruction, it does involve a lot of wastage of timber and often disrupts the lifestyle of indigenous people living in the forest. Furthermore, it poses a threat to large mammals such as gorillas and forest elephants, in Central Africa.

1.3.4 Recommendations to Non-Governmental Groups

11. Develop NGO-capacity in the South in order to assist communities and local people.

Environmental and social NGOs within ACP countries are still very weak.[23] They should be strengthened in their organisational, technical, and financial capabilities. They have a very important role to play in helping local people and communities negotiate conditions with investors and as watchdogs for the correct application of forest management plans. Furthermore, such NGOs could provide more feedback on the local perspective to the international NGO community.

23. J. M. Bonis Charancle, 1996, Diagnostic des ONG de l'Afrique Centrale: Cas du Cameroun, du Congo, du Gabon et de la République Centrafricaine, PVO-NGO/NRMS Project, United States Agency for International Development.

12. Encourage individual and corporate consumers, especially in Japan and other parts of Asia, to demand that all forest products that they purchase come from well-managed, independently certified forests. Promote such products as environmentally friendly compared to most of their alternatives.

There is already rapid growth of buyers groups in Europe and North America through which corporate consumers of forest products are committing to sourcing material from certified forestry operations. The major growth in consumption of forest products is, however, taking place in developing countries and in Asia, where there is far less consumer awareness of forest management and environment issues. Much attention should be given to mobilising domestic interest in forest issues throughout Asia and the developing world.

13. Expand constructive partnerships with logging companies and governments that are committed to improving forest management.

Some investors are beginning to establish industrial-scale certified forest management schemes, based on long-term forest management plans and respecting social and environmental values. NGOs, with their networks of members and access to donors and private capital, should participate in strengthening examples of responsible forest management, especially in the ACP countries where such are badly needed. To this end, NGOs should improve their technical expertise in forest management and timber market issues, and elaborate a coherent approach toward responsible logging and forest management in primary tropical forests. While negative campaigning is needed when countries or companies refuse to cooperate, a constructive and coherent NGO approach is needed toward other countries and investors with a genuine interest in sustainable forest management.

1.4 Update: Impacts of the Asian Economic Crisis and Long Term Prospects

Since most of the data for this project were collected during 1997, the report has not considered the effects of the recent economic crisis that has hit the Asian continent. Signs of the economic crisis were obvious by the end of 1997 and it has continued throughout 1998 and part of 1999. In this chapter some data on the immediate effects of the crisis, as well as some reflections on the crisis' long-term impact on forests and the timber sector in the ACP countries, are presented.

It is clear that the economic crisis has slowed the expansion of new investments in timber trade activities in ACP countries described in this report. The reasons for this are twofold.

Firstly, the economic crisis reduced economic growth in Japan, South Korea, China, Thailand and the Philippines, leading to an overall reduction of the demand for timber from ACP countries in these new emerging markets. Imports of tropical timber into Japan, China and Korea account for most of the tropical timber trade in the world. In Japan and Korea imports fell substantially during 1998: the percentage drop in imports of tropical wooden products by Japan in 1998 compared to 1997 varies between 25 and 40 (according to the product); Korea's imports of tropical sawnwood and plywood have fallen by about 50 per cent.[24]

Log exports from ITTO producer members fell by 26 percent in 1998 to 11,7 million cubic meters due to the economic turmoil in the most important consumer markets. Malaysia still dominated the trade in tropical logs with exports of about 6 million cubic meters in 1998. Exports from Papua New Guinea decreased by half in 1998, as the country was badly hit by plummeting demand. This led to the closure of several major logging concessions in the country at the beginning of 1998.[25]

Africa supplies most of the remainder of the world's tropical hardwood log exports. The trade of okoumé and ozigo logs from Gabon to Asia was particularly hard hit. While in 1997 almost 60 percent of all Gabon's

24. M. Adams, 1998, 1998 Tropical Timber Trade in Summary, International Tropical Timber Organisation Tropical Forest Update 98/4.
25. M. Adams & S. Johnson, 1998, Turmoil in Asian Markets, International Tropical Timber Organisation Tropical Forest Update 98/1.

logs went to Asia (mainly to China), this figure was reduced by half during 1998.[26] This led to major problems for the state-owned *Société Nationale des Bois de Gabon (SNBG)*, which, by the end of 1998, was unable to pay the log producers. Consequently, in October 1998, SNBG liberalised the export of okoumé logs to Asia. This enabled timber producers in Gabon to sell logs directly to Asian markets, while SNBG continued to hold a monopoly on exports to the traditional markets of Europe and Mediterranean countries.[27]

A second aspect of the economic crisis in Asia was the devaluation of Asian currencies, both in importing countries like Japan, Korea and Thailand, and in tropical timber producer countries like Malaysia and especially Indonesia. This led to lower prices (between 20 and 50 percent less than in 1997) for all timber products from Malaysia and Indonesia, the two largest exporters of tropical timber products. As a result of these lower prices, there were higher imports of Malaysian sawn timber (meranti) into European markets, and meranti started to partially substitute sawn timber of similar African redwoods (mainly sipo and sapeli) in the European consumer markets.[28]

As part of the IMF package of assistance to Indonesia, taxes on the export of logs (and sawn timber) were almost totally removed during the spring of 1998. This meant that Indonesia was able to export logs at very low prices, a practice which had been stopped in 1985.[29] Therefore, in addition to already weakening demand for tropical logs in Japan, Korea, China and other importing Asian countries, the increased exports of logs from Indonesia further reduced demand for African logs.

However, while the Asian economic crisis has clearly slowed down the export of logs from ACP countries to the Asian continent, its impact on the trend of new investments in logging in ACP countries is not so clear. Since 1997-1998, the three main new Malaysian investors in Cameroon have

---

26. La lettre de l'ATIBT numéro 8, 1998, Statistiques forestières, ATIBT, Paris, France.
27. B. Jones, 1999, SNBG: an elegant advert for wood, Timber Trade Journal, Africa Supplement 3-10/4/99, TTJ, London, UK.
28. A. Karsenty, 1998, La crise asiatique et les conséquences sur le marché des bois tropicaux, Bois et Forêts des Tropiques, numéro 256 (2), CIRAD-Forêt, Montpellier, France.
29. D. Kaimowitz, 1998, Asia's crisis and Indonesia's forests, La lettre de l'ATIBT, numéro 7/1998.

almost stopped their activities; however, there are strong indications that they moved their logging equipment to neighbouring Equatorial Guinea and Gabon, where obtaining larger long-term permits is easier than in Cameroon.[30] In Suriname new concessions (of 150.000 hectares) were granted during 1998 to new investors from both China and Indonesia.[31]

The authors of this study believe that the long-term prospects for new investments in trade and logging involving ACP countries will not be affected by the economic crisis in Asia - which appears to be temporary - and that the new investments will soon recover to levels seen prior to 1997. The reasons presented elsewhere in this report for the initial increased investment in ACP countries are still valid, and are expected to continue as the economic situation in Asia corrects itself. These reasons include the declining availability of logs from natural forests in Malaysia and Indonesia in the long run, coupled with the short-term impossibility of replacing the tropical timbers from these natural forests by plantation timber, the existence of vast resources of quality timber in Central Africa (and Amazonia including the Guianas), and demand for timber from China, following that country's restriction on the cutting of logs.

Therefore the recommendations presented in Chapter 1.3. of this report remain valid, and should be implemented as soon as possible for the benefit of the conservation and sustainable management of the forests in ACP countries.

30. A. Karsenty, 1998, La crise Asiatique et les conséquences sur le marché des bois tropicaux, Bois et Forêts des Tropiques, numéro 256 (2), CIRAD-Forêt, Montpellier, France.
31. De Surinaamse Weekkrant, 1999, Bespreking van het verslag van de Rekenkamer1998, De Surinaamse Weekkrant, 1 april 1999.

PART 2

BACKGROUND INFORMATION AND ANALYSIS

Under the closed canopy only very few seedlings make it to become mature trees.

II. THE STATE OF FORESTS IN ACP COUNTRIES AND EC FOREST POLICY

2.1 European Community Policy on Tropical Forests in ACP Countries

In 1975, nine European Community states signed a cooperation agreement with 46 African, Caribbean and Pacific (ACP) countries in Lomé, capital of Togo, initially for a period of five years (the Lomé I Convention). Since then, the Lomé Convention has expanded and been renewed three times (in 1979, 1984, and 1989). The Lomé IV Convention is an agreement between 15 European Union Member States and 71 ACP countries and covers a period of 10 years (1990-2000). Lomé IV was evaluated and reviewed at mid-term in Mauritius, in November 1995. At that time, several annexes were added including a special Protocol (number 10) on the sustainable management of forests and timber resources in ACP countries. (*See Box 2*).[1]

The Lome IV-Convention expired at the end of 1999. A new convention is to be signed in May 2000. It has been agreed already that the European Union will set aside 13,5 billion ECU for the period 2000-2005 in the form of grants, special credit lines and direct assistance through the European Development Fund (EDF). Furthermore, the Convention foresees special aid for the promotion of trade and export of products from ACP countries through a General System of Preferences (GSP). Through this, 99 percent of all industrial goods from ACP countries can enter the EU market duty-free, while special mechanisms such as STABEX and SYSMIN provide a buffer against excessive price fluctuations for agricultural and mining products respectively.

---

1. Lomé IV convention as revised by the agreements signed in Mauritius, 4 November 1995, *The Courrier*, number 155, Brussels, January-February 1996.

Box 2: Protocol 10 of the Lomé IV-bis convention on the sustainable management of forest resources

(agreement signed in Mauritius, 4/11/95)

1. The Community and the ACP States acknowledge the importance and the need for the rational management of forest resources with a view to ensuring a long-term sustainable development of forests in ACP States in conformity with the Rio Declaration of Principle on the Environment and Development including the non-legally binding Forest Principles, the UN framework agreement on climatic changes and the Conventions on Biodiversity and Desertification.

2. Special priority shall be given to actions which support and encourage the efforts of ACP States and their organizations to preserve, re-establish and use sustainably their forestry resources, including the fight against desertification.

3. The Community and the ACP States shall concentrate their efforts on actions promoting :

(a) conservation of endangered tropical forests and their biodiversity and regeneration of the functions of tropical forests which have been damaged, bearing in mind the needs and interests of local populations in the sustainable use of forest products, the different actors and factors causing deforestation, the need to ensure participation by local populations in the identification, planning and implementation of actions, the differences between countries and regions and measures to address them,

(b) development of buffer zones to assist the conservation, regeneration and sustainable development of tropical forests, as a part of a broader land utilization plan,

(c) sustainable management of forests destined for the production of timber and other products derived therefrom, to ensure that by the year 2000 and based on appropriate management plans,

these products are derived from sustainable sources. Special priority will be given to community based and small scale forest operations,

(d) supporting and developing locally adapted re-afforestation and forest management activities as well as restoring the fertility of degraded forest lands, especially in the framework of national and regional campaigns against desertification,

(e) support for institution building in the forestry sector with emphasis on capacity building to address the need for training schemes for local populations, forest managers and researchers, for legislation, for increased political and social support and strengthening of institutions and for organizations and associations active in forestry operations,

(f) development and implementation of action plans at local, national and regional levels to improve the management, conservation and sustainable development of forests, taking into account the causes of deforestation from inside and outside the forest sector,

(g) introduction of a strategic and adaptive research policy aimed at imparting knowledge and the planning capacity required for the conservation and sustainable management of forests and also for the implementation of research monitoring activities in the framework of projects and programmes.

4. Acknowledging the importance of timber and timber products for the economies of the ACP States, the Community and the ACP States shall concentrate within the confines set out above on the following:

(a) improving the timber trade and marketing from forests under sustainable development;

(b) supporting the definition and development of certification systems for timber produced from tropical forests bearing in mind sustainable forest management principles as part of envisaged

internationally harmonized certification systems for all kinds of timber and timber products;

(c) supporting measures to increase the share of tropical timber and timber products from sustainable sources within the overall production of this sector in the ACP States with a view to stimulating economic development and industrialization in these States and increasing employment prospects and export earnings;

(d) promoting and diversifying international trade in tropical timber from resources rendered sustainable through the improvement of the structural characteristics of international markets taking account of prices which reflect the cost of sustainable management of forests and are at the same time remunerative and fair to both parties;

(e) supporting the development of ACP national policies aimed at the sustainable utilization and preservation of tropical timber producing forests and their genetic resources as well as the maintenance of an ecological balance in the regions concerned within the context of the tropical timber trade;

(f) promoting access to and transfer of technology as well as technical cooperation for attaining the objectives of sustainable development.

5. Acknowledging further the importance of tropical timber for the economies of the ACP States with timber producing forests and the imperative need to put an end to desertification in many ACP States and bearing in mind the incremental cost of achieving benefits associated with forest preservation and development, the Community will support the above activities. To this end the Community will in addition to the resources set aside for national indicative programmes, regional indicative programmes or all ACP activities and in accordance with the relevant provisions, use resources available under the Community budget for this purpose.

One of the key objectives of the Tropical Forest Budget Line is the protection of primary forests and its biodiversity. A picture of the endemic sun-tailed monkey (Cercopithecus solatus) *in Central Gabon.*

The EC policy regarding tropical forestry and forest sector development cooperation is closely linked to international processes, formerly through the Tropical Forestry Action Program, and more recently through the Forest Principles negotiated at the United Nations Conference on Environment and Development in 1992, and the follow-up Intergovernmental Panel on Forests and Intergovernmental Forum on Forests.

The resolution of the Development Cooperation Council, Tropical Forests: Development Aspects, of 29 May 1990, and its precursor, the *Communication of the Commission to the Council on the Conservation of Tropical Forest: The Role of the Community*, of October, 1989 (89/C264/01) were the most important EC policy and strategy documents for tropical forests until 1995. The Council Regulation (EC) No. 3062/95 of 20 December, 1995, on operations to promote tropical forests, provides the legal basis for the Tropical Forest Budget Line and has implications for the whole forest development sector complementing, in the more restricted ACP context, the Mauritius Protocol No. 10 (1995) (*See Box 2)*. In November

Box 3: Council Regulation 3062 (20 December, 1995) 'Operations to Promote Conservation and Sustainable Management of Tropical Forests'.

The priority themes of the Council regulation are:

a) Conservation of primary forests and their biodiversity and renewal of tropical forests which have been damaged, supported by analysis of the underlying causes of deforestation and taking into account differences between countries and regions and measures to address them.

b) Sustainable management of forests designed for the production of timber and other products, but excluding commercial logging operations in primary forests, except those which are community-based, on a small scale, sustainable, environmentally sound, and implementing sustainable forest management.

c) The definition and development of certification systems, combined with independent assessment systems, for timber produced from tropical forests according to sustainable forest management principles as part of internationally-harmonised certification systems envisaged for all kinds of timber and timber products.

d) Provision of prior information to forest peoples, followed by their support for the identification, planning, and implementation of actions.

e) Capacity-building to address the needs for training schemes for local populations, forest managers, and researchers; for legislation; for increased political and social support and institutional strengthening; and for organisations and associations active in forest conservation.

f) A strategic and adapted research policy aimed at supplying the knowledge required for the conservation and sustainable management of forests and also for the implementation of research monitoring activities in the framework of projects and programs.

g) Development of buffer zones to assist the conservation or regeneration of tropical forests, as part of a broader land utilisation plan.

h) Development and implementation of forest management plans aimed at conserving tropical forests and promoting sustainable exploitation of timber and other forest products.

'99 a new communication: 'Forests and development: the EC approach' has been issued by the Commission.

The TFBL had annual commitments of about 50 million ECU, of which approximately 15 million ECU were for tropical forest projects in ACP countries.[2] A proposal for a new Budget Line Tropical Forests has been submitted to the European Parlament for approval. However, indications are that annual commitments of funds might be substantially reduced. The TFBL is particularly suited to the funding of innovative, often small-scale, pilot approaches that can subsequently be supported by other financial instruments.

The European Commission has further emphasised the provisions set out in Protocol 10 of the Lomé Convention and the Council Regulation 3062/95 as a strategic approach and basis for tools for project cycle management. Guidelines have been published which aim to ensure the highest quality in all programs and projects. These guidelines were drawn up in consultation with EC member state representatives, Commission and delegation staff, and other donors working in forest sector development cooperation.[3]

---

2. Planistat Europe, 1997, Statistical Analysis of Tropical Forest Projects Financed by the European Community, Final Report, Planistat, Paris, France.
3. European Commission, 1996, Forests in Sustainable Development: Guidelines for Forest Sector Development Cooperation, Volumes I and II, Directorate-General VIII, European Commission, Brussels, Belgium.

2.2 The State of Forests in ACP Countries

Although ACP countries are grouped through a convention with the EC, they are diverse and have a wide array of forest ecosystems, including dry and humid forests. In some countries the forest is highly degraded; in a few others it is still more or less intact. For the purpose of this report, only those countries with a substantial area of closed tropical moist forest and significant industrial timber production potential are analysed. These are Cameroon, Central African Republic, Congo, the Democratic Republic of Congo (formerly Zaire), Equatorial Guinea and Gabon in Africa; Belize, Guyana and Suriname in the Caribbean; and Papua New Guinea and the Solomon Islands in the Pacific. For some countries, in-depth information was gathered; for others less was available. In this Chapter some general information is presented; we refer to the country sections in Chapter IV for more specific information.

Table 1, derived from the latest United Nations Food and Agriculture Organization (FAO) statistics, gives an overview of natural forest cover in 1980, 1990 and 1995 in the selected, forest-rich ACP countries that are the subject of this report. Since FAO does not make any distinction in its latest statistics between closed and open forests, the figures comprise all natural forests (especially important in the interpretation of figures of Central African Republic and Democratic Republic of Congo).[4]

ACP countries, especially in the Congo Basin, the Guiana Shield, and the islands of the Pacific, have some of the most important tropical forest cover in the world.[5] The total area of humid closed canopy forests in ACP countries is estimated at 270 million hectares. This represents 25 percent of the remaining humid closed tropical forests world-wide.[6] While some regions, such as West Africa, have almost completely lost their original

---

4. United Nations Food and Agriculture Organization (FAO), 1997, State of the World's Forests, United Nations and Agriculture Organization, Rome, Italy.
5. D. Bryant et al., 1997, The Last Forest Frontiers: Ecosystems and Economies on the Edge, World Resources Institute, Washington, DC.
6. World Conservation Union (IUCN), 1996, The Conservation Atlas of Tropical Forests: The Americas, IUCN, Gland, Switzerland.
   FAO, 1997, State of the World's Forests, United Nations Food and Agriculture Organization, Rome, Italy.
   FAO, 1993, Forest Resources Assessment 1990: Tropical Countries, United Nations Food and Agriculture Organization, Rome, Italy.

Table 1: Change in natural forest cover in some forest rich ACP-countries (in millions of hectares)
(FAO, 1997)

	1980	1990	1995	% change
	Natural forest			1980-1990
Cameroon	21,57	20,23	19,60	-6,2
Central Afr. Rep.	31,85	30,57	29,93	-4,0
Congo-Brazzaville	20,19	19,71	19,50	-2,4
Dem. Rep. of Congo	120,60	112,90	109,20	-6,4
Equatorial Guinea	1,90	1,83	1,78	-3,7
Gabon	19,40	18,29	17,84	-5,7
Belize	2,05	1,99	1,96	-2,6
Guyana	18,60	18,61	18,57	–
Suriname	14,89	14,77	14,71	-0,1
Papua New Guinea	37,13	37,57	36,91	–
Solomon Islands	2,44	2,39	2,37	-1,9

forest cover, others, including the Guianas, have the world's best conserved tropical forests.

Africa's rainforests represent slightly less than one-fifth of the world's tropical rainforests. They can be divided into the forests of the Upper Guinea Zone (West Africa) and the Lower Guinea Zone (Central Africa), separated by the Dahomey Gap. Most of the countries of West Africa were once covered in forest from the coastline to deep inland, but now only small relics of these forests remain. It is estimated that only about 11-12 percent of the original forest cover in West Africa remains. Annual deforestation rates in West Africa are among the highest in the world. The FAO

Suriname is one of the few countries in the world where more than eighty per cent of the total land area is still unlogged, primary forest.

cites a figure of 2.1 percent annual forest loss for the region, with countries like Ivory Coast facing extremely high deforestation rates of more than five percent annually.[7] Today, Liberia is the only country in West Africa with considerable tracts of little-disturbed forest.

In Central Africa there still is a vast, more or less continuous expanse of rainforest. Although whittled away by fire and agriculture on its borders, and increasingly opened up by timber exploitation, areas of undisturbed forest still remain. It is estimated, however, that with approximately 185 million hectares of closed forest left, not more than 60 percent of the original forest cover of Central Africa remains today.[8] The FAO deforestation rate for the closed humid forest zone in Central Africa is estimated at 0.6 percent. This part of the continent still has the opportunity for strategic long-term planning for conservation and economic development.

---

7. FAO, 1997, State of the World's Forests, United Nations Food and Agriculture Organization, Rome, Italy.
8. IUCN, 1992, The Conservation Atlas of Tropical Forests: Africa, IUCN, Gland, Switzerland.

The massive depletion of African rainforests started only about 50 years ago. At the time of their independence (late 1950s to early 1960s), most of the forests of Ghana, Liberia and Ivory Coast, as well as the Central African region were largely intact. The wide availability of improved medical services led to an acceleration in the rate of population growth, and deforestation and environmental degradation in Africa are close correlates of such growth.* Africa's population increase is now running at 2.9 percent (doubling every 24 years), an expansion that is resulting in massive demands for agricultural land, water, fuelwood, and other natural resources.

At the same time, mobile chainsaws and heavy vehicles have made the logging and clearing of the forests much easier, and economic growth in Europe has provided a rapidly expanding market for timber and commodity crops from the forests. These factors, coupled with incentives to cultivate cash crops such as coffee and cocoa, have pushed people into the forests. As a result of these pressures, Africa's rainforests have suffered more radical change in the past 50 years than throughout their 10,000 year post-glacial history.[9]

The causes of deforestation and degradation of African rainforests are often closely interrelated. It is clear that currently the single greatest direct threat to the rainforests of Africa is the increasing intensity of shifting cultivation agriculture by migrant populations. However, this is frequently associated with the opening-up of new forest areas by logging, which therefore serves as the catalyst for deforestation. Obviously, the underlying and direct causes of deforestation and degradation vary enormously between, and even within, countries.

The forests of Guyana and Suriname have been particularly well preserved. The reasons for this are a combination of different factors, of which the most important ones are very low population pressure, no pressure from transnational logging industries until very recently, and little inclination for setting up large-scale cattle-raising, as seen in neighbouring Brazil and other Latin American countries. The only impact on the forest in both countries has been some logging by national companies in a

---

* Deforestation is removal of forest cover for other land use purposes, mostly agriculture, while selective logging leads to a degraded forest.

9. IUCN, 1992. The Conservation Atlas of Tropical Forests: Africa, IUCN, Gland, Switzerland.

relatively narrow forest belt, and some limited industrial agriculture (mostly rice and palm oil) and mining projects. As of 1997, both Guyana and Suriname preserved most of the largest part of their forest cover, a quite unique situation world-wide. However, as we will see below in the country sections, these forest-rich countries are now under great pressure from expanding logging, mining, and infrastructure development, as both transnational logging and mining companies turn their attention to the region.[10]

The forests of the Pacific Islands remained relatively intact until some decades ago. However, logging has rapidly transformed the forests of Papua New Guinea, the Solomon Islands and their Pacific neighbours in the past decade. Papua New Guinea still possesses about 80 percent of its original forest, which is home to high levels of biological diversity. The country probably contains at least five percent of the world's species in less than one percent of its land area.[11] However, at least 85 percent of Papua New Guinea's forests are under threat from logging. Furthermore, sedimentation following deforestation is threatening the country's very species-rich coral reefs and coastal fisheries.[12]

While the expansion of logging operations in the frontiers of the three regions poses a significant threat to forest conservation efforts, it is also a significant driver of economic development and a generator of employment. For some ACP countries, forest products, especially timber, make up a large part of the national economy. The production, trade and consumption of logs has risen substantially in many ACP countries over recent years. For example, Cameroon's production grew 29 percent between 1992 and 1996, Gabon's by 52 percent, and Papua New Guinea's by 35 percent. Unfortunately, almost all operations are based upon rapid extraction of the most valuable species, with little or no effort to ensure that production can be sustained.

---

10. D. Bryant et al., 1997, The Last Frontier Forests: Ecosystems and Economies on the Edge, World Resources Institute, Washington, DC.
11. Department of Environment and Conservation, Conservation Resource Center, and the Africa Center for Resources and the Environment, Papua New Guinea Country Study on Biodiversity, Waigani, Department of Environment and Conservation, 1995, p. 6.
12. D. Bryant et al., 1997, The Last Frontier Forests: Ecosystems and Economies on the Edge, World Resources Institute, Washington, DC.

Where population densities become high, shifting cultivation can become a threat to the long-term survival of the forest. Ngoto, Central African Republic.

2.3 Forest Policy in the ACP Countries

Apart from some notable exceptions, governments of ACP states tend to treat their countries' forests as a source of revenue and foreign currency. They may have little alternative, given their large external debts and the pressure of structural adjustment programs. Declining prices of export commodities, particularly oil, cocoa and coffee have recently exacerbated the situation. Yet a significant number of governments of ACP countries have failed to obtain a reasonable percentage of the financial benefits accruing from timber harvests, and certainly not enough to offset the ecological, economic, and social costs of logging.

In most of the countries of Africa and the Caribbean (the countries in the Pacific are an exception) forested land is nominally under government control. Good forest management depends therefore on the effective implementation of appropriate government policies. But, although some

countries have committed themselves to basic sustained-yield policies in their forest legislation, little of this commitment can be traced in the field.

The weakness of forest departments in ACP countries is a major problem. In general, forest legislation is poorly applied and forest protection not enforced. Few of the concession areas in Africa have been classified as "permanent production forest." Even today, there are cases where logging permits are granted in "legally protected forest reserves." Salaries are so low that government employees are easily tempted to accept bribes for approving logging plans they have never seen, or for accepting volume return forms filled out by the logging company without verification. Logs are often under-scaled, under-reported or mis-classified. It is clear that ACP countries lose a lot of income in this way, while it would seem essential that governments secure greater revenue from the harvesting of their timber resources.[13] Another problem is corruption. A large part of the profits that remain in the country benefit only some already wealthy individuals.

The control of logging and its impact on the residual forest in concession areas is equally problematic. In the tropical rainforests, future timber harvests depend on advanced growth of commercial species left undamaged after logging. However, measures to limit damage to residual stands are generally not required. Even when they are required, the lack of enforcement does not encourage compliance by the loggers. Responsible forest management in many ACP countries is effectively left to the logging companies themselves. As the companies are largely driven by economic factors and market pressures, and with concession agreements often lasting only 5 or 10 years, their commitment is generally low.

The environmental, social, and economic impacts of uncontrolled logging can be very high. In Africa most logging has traditionally been carried out by European consortia. They exploit the commercially important species in timber concessions (varying from 10,000 to 500,000 hectares) through a system of logging permits. Once the timber species have been cut, the company moves on to new areas. Due to the selective timber markets, this so-called "creaming" of the forest is the general case, but

13. IUCN, 1992, The Conservation Atlas of Tropical Forests: Africa, IUCN, Geneva, Switzerland.

exceptions do exist and some new trends have appeared. In general, this kind of selective logging does not lead to deforestation of the rainforest, and properly managed, the forests should be able to provide new timber harvests. Unfortunately, the conditions for good forest management are generally not available. Estimates suggest that in Africa not more than one million hectares of forest are being brought under sustainable forest management, in comparison with the 30-60 million hectares that have been logged so far, of which much has since been deforested.[14]

Without any management, logging produces a series of negative side-effects for the people and the ecosystem. (*See Box 4.*)

A serious environmental problem related to logging in the Congo Basin is the expansion of commercial hunting activities.

14. J-P. Kiekens and J-J. Faure, 1995, Aménagement forestier durable, enregistrement international des forêts et eco-certification du bois, Report for the French Ministry of Cooperation and the European Commission, Brussels, Belgium.

Box 4: Potential Impacts of Uncontrolled Logging in Tropical Rainforests

One of the main problems of uncontrolled logging in primary tropical rainforests is the indirect impacts. The construction of roads and other infrastructure in virgin forests very often leads to an influx of people who convert the forest for agriculture. The Ivory Coast provides one of many examples of the serious nature of the indirect impacts of logging, resulting in total deforestation.

Hunting is also closely associated with logging. The flourishing bushmeat trade is an important economic factor in attracting people into the forest. A timber worker can earn more money for instance by poaching a chimpanzee than he can from one month's hard work for the timber company. Logging roads, in combination with the increased frequency of transport to large cities, greatly increase the threat of hunting to animal populations, especially large primates. The proliferation of modern hunting equipment and the emergence of important urban markets for bushmeat has exacerbated this problem.

In some regions logging produces serious side-effects on traditional forest-dwellers such as the pygmies in Africa, by disrupting their lifestyles and cultures. Logging frequently leads to conflicts with local people, who do not receive sufficient benefits from it. Logging in Africa is generally carried out by large foreign-based enterprises, leading to the feeling by local people that the companies "steal the resources without paying for them". Taxes are paid to government authorities and local people therefore receive little benefit from the logging. This has led to problems and conflict in countries like Ghana, Cameroon, and others. Another negative consequence of current logging practices (generally based on exhausting forest concessions and moving on to new ones), is that the infrastructure, including schools and medical services, established during logging operations, is left to deteriorate, and people lose their jobs once commercially important species have been cut.

Natural forest management for timber production can be practised at various intensities. At a minimum, it involves demarcation and protection of the production forest, inventories, the regulation and control of exploitation, and the elaboration and implementation of a long-term forest management plan, including social and ecological considerations. More intensive management involves silvicultural interventions such as the release of regenerating timber trees by clearing unwanted competitors and cutting climbers. The minimum conditions for good forest management do not exist in most parts of the ACP region.[15] Responsibility for better forest management lies in the hands of both the government authorities and the logging companies. The companies tend to blame the authorities for not having a clear long-term forest policy and argue that they cannot support more taxes. Government authorities tend to look at logging primarily as a source of income and employment. Both generally look only at the short-term benefits the logging offers and not enough at the long-term potential.

Efforts to enhance forest management in ACP countries should involve a combination of political, social, economic, and ecological considerations, concentrating on the following factors:

– Legal definition of a permanent forest estate, including field delimitation and demarcation of concession areas.

– Consultation with and involvement of local people to identify the rights and benefits of each stakeholder, and to define boundaries in order to assure protection of the production forests against encroachment.

– Legal definition of long-term concession agreements (at least 40 years) in order to assure an interest in long-term management.

– Elaboration of forest management plans, including definition of a sequence of harvesting areas based on inventories and expected yields, planning of infrastructure, prescriptions for carrying out felling, skidding, and so on.

---

15. J-P. Kiekens and J-J. Faure, 1995, Aménagement forestier durable, enregistrement international des forets et eco-certification du bois, Report for the French Ministry of Cooperation and the European Commission, Brussels, Belgium.

– Effective control on logging operations by the national forest services. This requires institutional strengthening of the forest service in most cases.
– Control of hunting in logging concessions.
– Training and education of forest workers, company executives, and local leaders to better understand forests management and conservation issues.
– Equitable distribution of benefits and reinvestments in the forest.

In some countries, efforts are being made to put some of these elements in place, through better laws and application in the field. One of the countries with the most advanced forest policy within the ACP context is Ghana. There is a genuine political interest at the highest level to implement sustainable long-term forest management and assure that the permanent forest estate is well-defined and long-term concessions and management plans have been adopted.

Indigenous people, like the pygmies living in the forests of the Congo Basin, often do not have any legal rights of tenure over the land or resources they depend upon.

2.4 Production, Consumption, and Trade in Tropical Timber Worldwide

2.4.1 Production of tropical timber

The global forest industry is huge, accounting for nearly three percent of the world's gross economic output, or around $330 billion in annual sales. Total industrial demand for wood is currently around 1.5 billion cubic metres per year, which is about the same amount of wood consumed annually in the form of firewood.

Table 2: Composition of exports by region, 1996-98
(Thousands of cubic metres of round wood equivalent)
(ITTO annual review and assesment of the world tropical timber situation 1998)

	Log production			Log exports		
Region	1996	1997	1998	1996	1997	1998
Africa	9 903	11 102	9 416	4 208	5 370	3 437
Asia-Pacific	85 058	83 371	78 106	10 420	10 273	8 175
Latin America	36 439	36 952	35 781	35	215	221
Total	131 400	131 425	123 303	14 663	15 858	11 833

	Processed exports			Total exports		
Region	1996	1997	1998	1996	1997	1998
Africa	2 781	3 122	3 212	6 989	8 492	6 649
Asia-Pacific	35 646	29 876	27 970	46 066	40 149	36 145
Latin America	4 328	4 170	3 369	4 363	4 385	3 590
Total	42 755	37 168	34 551	57 418	53 026	46 384

Figure 3: Major tropical log producers

(ITTO annual review and assesment of the world tropical timber situation 1998)

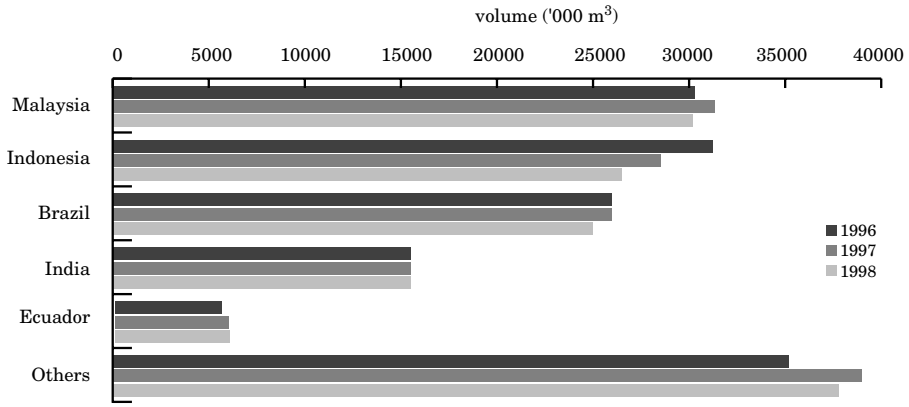
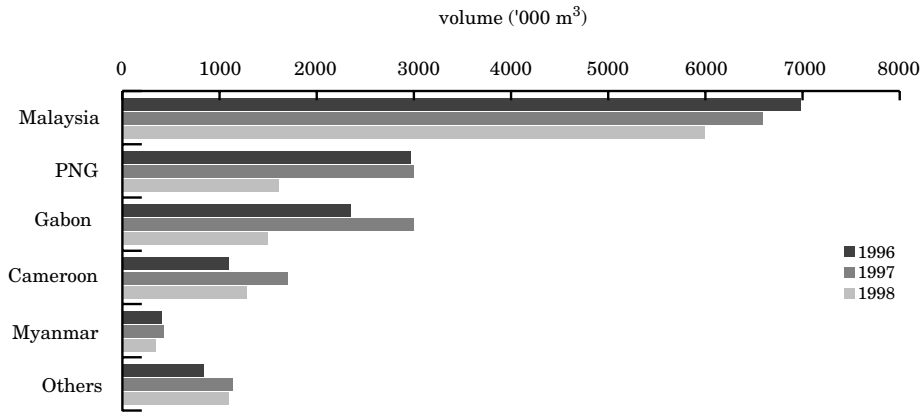


Figure 4: Major tropical log exporters

(ITTO annual review and assesment of the world tropical timber situation 1998)



Production of tropical saw and veneer logs totalled 141 million cubic metres in 1998, less than 10 percent of global industrial wood production.[16] Of this 141 million cubic metres, more than 67 percent was produced in Asia (representing less than one fifth of all tropical forests), 25 percent in South America and not more than eight percent in Africa. (*See Figure 3.*)

Over the last 20 years, Indonesia and Malaysia together have produced more than half of the world output of tropical timber. The third most important producer, Brazil, increased its output of tropical logs steadily to more than 25 million cubic metres.

Most of logs produced are transformed within the countries themselves into sawn timber, veneer sheets, plywood, and, increasingly, semi-finished and even finished products. Several important producer countries such as Brazil long ago imposed log export bans to stimulate in-country processing. However, some other countries remain important exporters of logs such as Malaysia, Papua New Guinea and Gabon. (*See Figure 4.*)

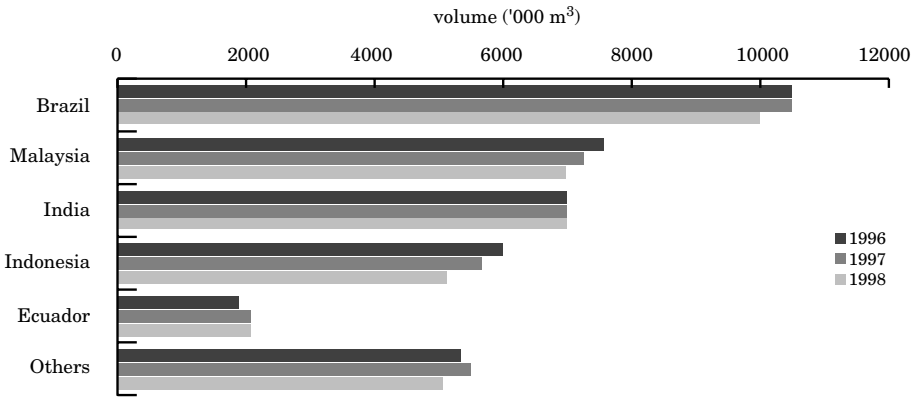
In 1998, production of tropical sawnwood reached 36 million cubic metres, whereas total exports were only 5.7 million cubic metres because much of the sawnwood is consumed in the country in which it is produced. The most important producers of tropical sawnwood are Brazil, which produced more than 10 million cubic metres in 1998 (mostly destined for the internal market) and Malaysia, with production of 7.2 million cubic metres in 1998 (mostly destined for export).[17] (*See Figure 5.*)

Tropical plywood production is dominated by Indonesian, Malaysian, Japanese, and, to a much lesser extent, Brazilian producers, who together account for around 80 percent of all tropical plywood output.[18] Total tropical plywood production reached 18.2 million cubic metres in 1998,

16. International Tropical Timber Organization (ITTO), 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.
17. S. Johnson, 1997, Production and Trade of Tropical Sawnwood, ITTO Tropical Forest Update, 1997(3), ITTO, Yokohama, Japan.
18. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.

Figure 5: Major tropical sawnwood producers

(ITTO annual review and assesment of the world tropical timber situation 1998)



which is about one third of the global plywood output. (*Figure 6.*)

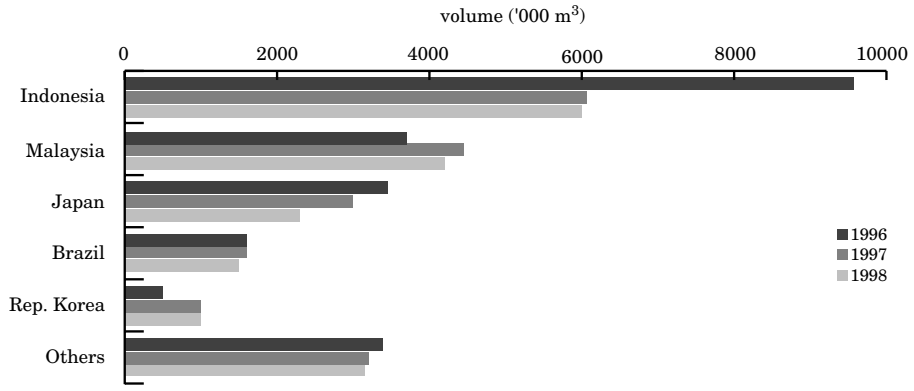
Non-plywood veneer is another important end-product of tropical timber. Veneer is thin peelings from logs, often used as the plies (layers) of plywood, but sometimes used as an external, visually appealing layer in furniture and other secondary processing industries. Total world production of non-plywood veneer reached almost 6 million cubic metres in 1998, of which approximately half was tropical timber based.[19]

Until now, only a handful of species from tropical forests have been used for timber. These are well-known to the markets in which they were sold, and have superior and consistent handling, strength and appearance characteristics. For plywood, for instance, some species are preferred, such as okoumé (*Aucoumea klaineana*) in Africa, meranti (*Shorea* spp.) in Southeast Asia, and virola (*Virola* spp.) in Latin America. Buyers of tropical plywood are familiar with the performance of these species and can expect relatively consistent colour and quality with them. This same pattern is seen for sawntimber and veneer.

19. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.

Figure 6: Major tropical plywood producers

(ITTO annual review and assesment of the world tropical timber situation 1998)



It is difficult to introduce a new species into the market. It requires detailed testing and study of the characteristics of the wood, and sufficient volumes so that the new species can establish a name in the market. However, as the traditionally-preferred species become scarce, the markets are becoming more accepting of new species.

2.4.2 Gradual shifts in production areas of tropical timber

For more than two decades, Asian forests have supplied the major share of the world's tropical timber. Led by Malaysia and Indonesia, this region has fed growth in Japan, China, and Europe. However, as tropical forests begin to shrink in Asia, forest laws gets stricter, and controls are applied, the major forest products suppliers of Asia are looking elsewhere for timber supplies. Because this industry was, until recently, very cash-rich, the search for new resources has resembled a land-rush, with companies buying forest concessions around the world as quickly as possible. While some of this new investment was still in Asia, with expansion in Papua New Guinea, Burma, and Cambodia, much of it left the region. Substantial investments went into the tropical forests of Latin America and Africa.

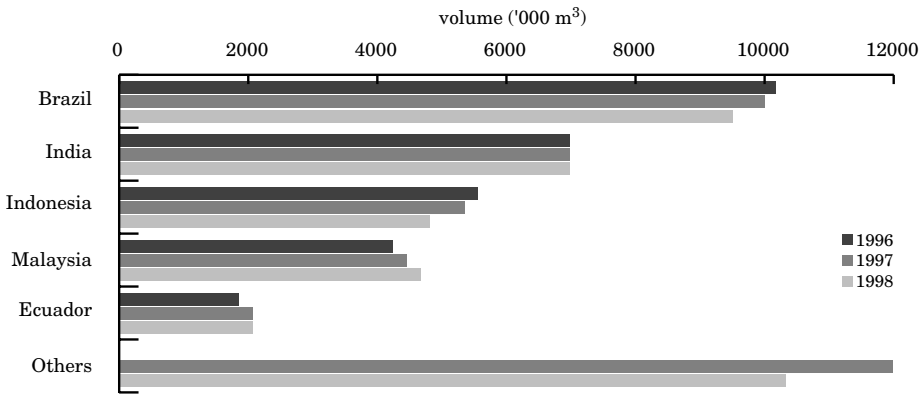
On behalf of the Cameroon government, the private certifier SGS monitors the export of logs from Cameroon.

Latin America is home to the largest remaining reserves of tropical timber in the world, and seems likely therefore to continue to attract investment. The quality and value of the forests, however, is generally lower than the rich forests of Indonesia, Malaysia, and Central Africa, with in general smaller trees, heavier species, and more heterogeneity.

The traditional, conservative European market has been the historical destination of most African timber. This has changed gradually. By mid-1997, Asia had become the most important destination for African logs. The emerging presence of Asian buyers has meant that both the new Asian investors and the traditional European suppliers have begun to harvest more species and thus more volume per hectare, to sell to these markets.

Figure 7: Major tropical sawnwood consumers

(ITTO annual review and assesment of the world tropical timber situation 1998)



2.4.3 Applications of tropical timber

Apart for some exceptions in Southeast Asia and for fast-growing fiber plantations in the tropics, tropical timber tends not to be used in pulp and paper production. The diverse nature of tropical forests does not provide adequately consistent fiber input for quality pulp production at high enough supply levels. Indeed, only one percent of the world's pulp raw material is obtained from mixed tropical hardwoods. Most industrial tropical timber is used in sawnwood, structural panel, and veneer applications.

Sawn hardwood is used in the developing countries for low-cost construction and furniture manufacturing. In more developed countries, it is mainly used as high-end applications such as joinery (window frames, doors, mouldings), cabinets, and furniture. In 1998, Brazil, India, Indonesia, Malaysia, and Japan represented the five biggest consumers of tropical sawnwood, with Western Europe collectively close behind and United States consumption very small in comparison.[20] (*See Figure 7.*)

20. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.

Structural panels are used in a variety of construction and furniture applications. By far the most important structural panel is plywood, which is made up of layers of peeled logs glued together. In recent years, other types of engineered wood products have emerged in the structural panel market which make greater use of low-quality wood. Oriented strand board, medium-density fibre-board, and particle board each have preferred applications, but are all to some extent substitute products for plywood and can be much cheaper to produce than standard plywood.

Malaysia is the largest producer and consumer of tropical non-plywood veneer, with a little over half of world output and use. Other important consumers are Japan, Taiwan, China, Brazil and Western Europe. Often the use of veneer is tied to consumption of structural panels, as the attractive veneer facing is overlaid onto low-cost plywood or alternative engineered wood products.

2.4.4 Consumption of tropical timber

Japan, South Korea, and Taiwan have always been the major importers of tropical timber products. Japan annually still imports nearly four million cubic metres of tropical logs and almost four million cubic metres of plywood.[21] Taiwan, the Republic of China, and South Korea each import two million cubic metres of tropical logs per year. Together, these four economies have absorbed much of the timber exports from Malaysia and Indonesia over the past few decades.[22] The Japanese market in particular is noted for its strong ties to producers from these countries, not only buying their products but also supplying the countries with capital investment. Japanese, Taiwanese, and South Korean demand is believed to have peaked due to the slowdown in economic growth in these countries and growing competition from softwood from New Zealand, the Americas, and the Russian Far East.[23]

---

21. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.
22. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.
23. Jaakko Poyry, 1995, Unpublished draft project report, Helsinki, Finland. Tropical Timbers, UK, several numbers.

One factor that has affected tropical timber consumption has been growing environmental awareness and concern about tropical forest loss. Concern has been most strongly expressed in Western Europe. One outgrowth of this has been the establishment of means to independently certify the origin and quality of management behind the production of timber from all sources. This is most developed in the form of the Forest Stewardship Council (FSC), a global, independent membership organisation governed by an elected combination of environmental, social, and private sector groups. The FSC has developed a set of principles for forest management, including plantations, and the Council accredits a growing number of companies and non-profit groups to apply the principles and certify producers of forest products that wish to position themselves in the market as environmentally and socially responsible. So far, most of the more than fifteen million hectares certified under the FSC is in the temperate/boreal zone, with much less activity in ACP countries.

Certification, and environmental consciousness in general, are not a significant issue for the Asian market, or for markets in most developing countries. Ironically, according to industry insiders the typical high-end consumer in these countries is more knowledgeable about wood characteristics and values than their counterparts in other regions of the world, and yet preservation of tropical forests is not a very important issue for these consumers. There are some movements in Japan to begin organising corporate buyers groups to stimulate greater demand for certified forest products, but these are weak and still at an early stage.[24]

It is in the emerging economies that growth in demand for tropical timber is expected to expand most. Southeast Asia has been experiencing rapid economic growth, until recently, and there is a very significant population growth in the region. Notwithstanding the recent economic crisis, in the long run the demand for forest products in the region is expected to grow substantially. By the year 2000, China's timber demand will total 230 million cubic metres of logs, but projections indicate significant shortfalls in supply which will be dealt with through the use of bamboo-based and medium density fibreboard structural panels, increased sawmill

24. D. Propper de Callejon et al., 1997, Sustainable Forest Management - An Emerging Market Opportunity, Report for The MacArthur Foundation, Chicago, United States.

Loading of sapeli (Entandrophragma cylindricum) *logs at a concession in Northern Congo. Logs are transported by truck over a distance of more than 1,000 kilometres from the concession to the port of Douala, Cameroon.*

efficiency and massive plantings of fast-growth plantations.[25] To a lesser extent, such high growth in demand for tropical timber products will be seen in the other emerging countries of Asia.

The European market has historically been a major consumer of tropical timber. In 1998, Western Europe alone consumed around 2.4 million cubic metres of tropical hardwood lumber and more than 1.2 million cubic metres of tropical plywood.[26] Demand for tropical wood in Europe, however, has stabilised and may even be in decline. This is partly due to shifts in market preferences away from tropical timber and toward substitute products. Years of effort by European NGOs to discourage the use

25. China's Forestry Demand, China Wood, March 11, 1996.
26. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.

of wood from tropical forests have had a significant impact on the market, driving consumers toward softwood, temperate hardwoods, and other substitutes like plastics and aluminium.

Certification by FSC or other schemes is an increasingly important factor in European markets. Although it has since backed off from its commitment, Austria, in 1992, attempted to increase tariffs on "unsustainably" produced timber and required labelling of all tropical timber products. Additionally, buyers groups in many countries such as the UK, made up of wholesalers and retailers of forest products, have pledged to increase the presence of certified wood on their shelves. While these examples do not represent a major proportion of global tropical timber consumption, they do point to developing trends in consumption. Certification may eventually become a cost of doing business for suppliers of the tropical timber market in Europe. This effect varies widely even within Europe, though. French consumers, for example, are much less likely to buy certified tropical timber than German consumers.

In North America, because of the availability of temperate hardwood and softwood as a substitute, tropical sawnwood consumption is much lower than in Europe, although tropical plywood consumption is as high if not higher. In 1998, North America consumed only 300,000 cubic metres of tropical hardwood lumber, but also consumed nearly 1.4 million cubic metres of tropical plywood.[27] Certification is not nearly as important a market force in this region; nevertheless, the emergence of major buyers groups similar to those in Europe suggests that it may increasingly be a factor in the future. Growth in tropical wood imports is expected to taper off in this region, as in Europe, with intensification of competition from substitute products and overall moderate economic growth rates.

27. Tropical Timbers, 1999, volume 14 number 2, "US-the worlds' largest timber importer", p. 1-2.

2.4.5 Conclusions

The following conclusions can be drawn from the available information on market trends in the tropical timber industry:

– Global demand for wood products overall is expected to increase in the next few decades. Although demand in developed economies should be fairly stable, in the emerging economies it should rise substantially.

– The economies which will experience the highest demand growth rates are also the ones least likely to make certification and other environmental issues important market factors.

– Substitution of tropical timber by use of other products and wood sources will increase to some extent, as has begun to be seen in Europe (for sawn timber through competition with plastics and for plywood through competition with other structural panels) and Japan as well (through competition with softwood-plywood, medium density fibreboard, and other panels).

– For decades, the most important consumers of tropical timber have been Japan, Korea, and Taiwan. This demand will probably not drop substantially. Until recently there was increasing demand elsewhere in Asia, in mainland China, Thailand, and the Philippines for example. The long-term effects of the recent economic crisis in Asia on these trends are, however, difficult to predict.

_ Supply has begun to diminish in Southeast Asian forests. Thus, additional demand will put increasing pressure on the forests of Africa or Latin America.

2.5 Production and Export of Tropical Timber in ACP Countries

During the last two decades the production of industrial tropical timber has been largely dominated by Asia. Malaysia and Indonesia together produced nearly two thirds of the global industrial tropical timber production, notwithstanding the fact that they possess only 20 percent of the total area of humid tropical forest. The situation has been much the same

on the consumption-side as well. For decades, nearly two thirds of the total consumption of industrial tropical timber has been absorbed by Asia with Japan, Korea and Taiwan playing the dominant historical role, and new consumer countries such as Malaysia, Indonesia, Thailand, China and others, with an emerging role.

The production of industrial tropical timber from ACP countries accounts for 10-15 percent of total international tropical timber production. The following are the most important producer countries from the ACP region:

Table 3: Production of tropical timber (in 1000 m^3) in the most important ACP-countries

(ITTO 1999, Annual Review and Assessment of the World Timber Situation in 1998)

Country	Logs	Sawn timber	Plywood	Veneer
Cameroon	2 895	588	89	59
Ivory Coast	2 000	600	66	275
Papua New Guinea	2 000	150	40	5
Gabon	1 700	150	60	2
Ghana	1 100	590	71	80
Congo-Brazzaville	900	70	10	60
Guyana	550	34	60	-
Central African Rep.	375	85	2	-
Dem. Rep. Congo	280	80	10	10

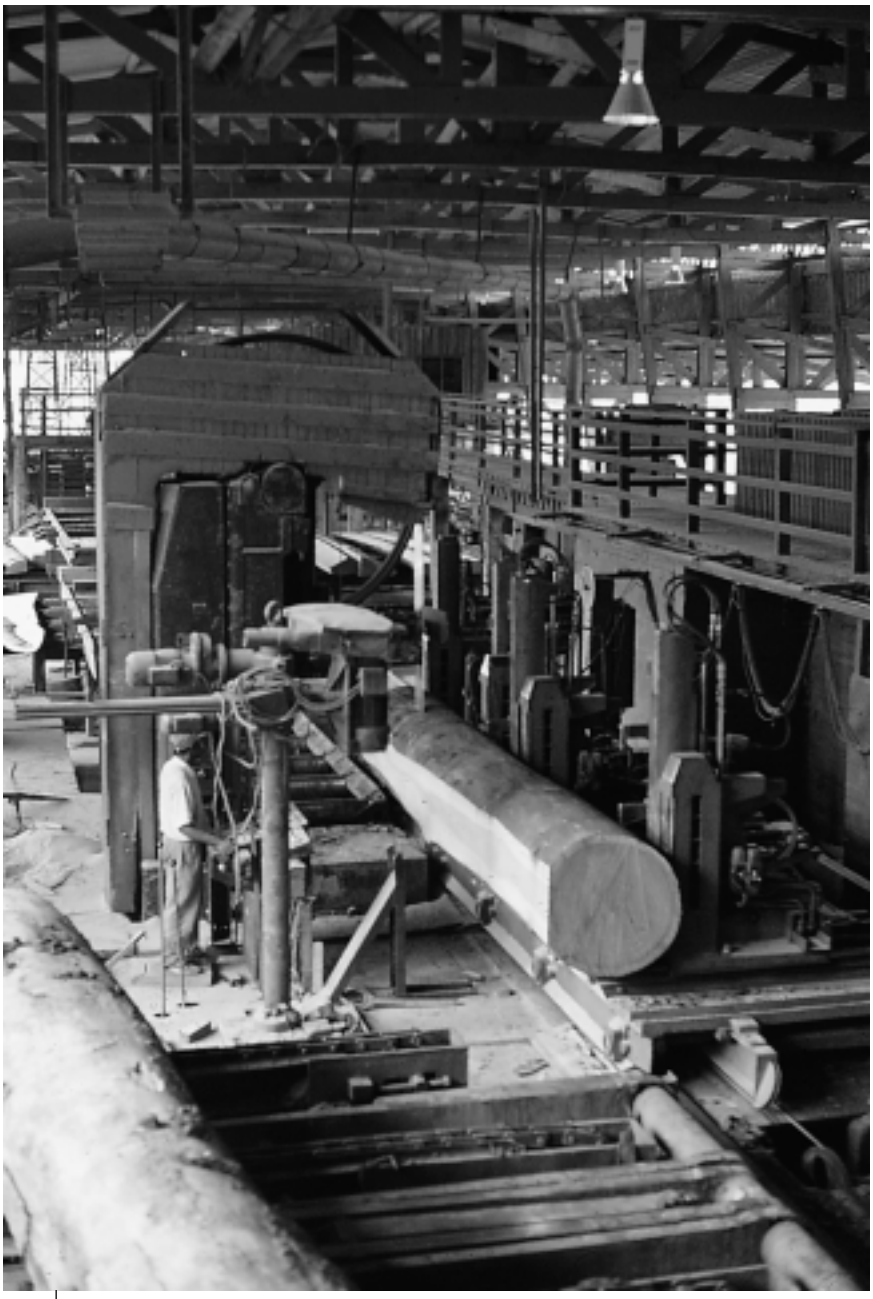
The figures indicate the extremely low level of industrialisation in the timber sector of ACP countries, with the notable exception of Ghana, Ivory Coast and (very recently) Guyana. Papua New Guinea still exports all of its production in the form of logs. Gabon still exports more than 90 percent of its log production.

Ghana was the first country on the African continent to impose a total ban on log exports in 1995, followed by Ivory Coast. Although West African countries such as Ghana and Ivory Coast do not possess more than five percent of remaining African rainforests, their overall production still represents more than a third of total African log output.

Since 1994, production has risen substantially in countries such as Cameroon and Gabon, due to two factors. First, the devaluation of the Central African franc in 1994, which led to an increase in investments in logging equipment. Second, the emergence of new markets in Asia leading to substantial increases in log production in several Central African countries. International Tropical Timber Organization statistics indicate that log production in Cameroon increased by more than 50 percent in 1994 and 1995.

Europe has long been the traditional market for African timber products. However, during the last 20 years, EU timber imports from Africa and from ACP countries have declined steadily. In 1995 timber imports from ACP countries into the EU amounted to no more than 2.8 percent of the total timber imports, compared to 6.7 percent in 1976. The main import items have been logs (total EU imports in 1995 equalled 594 million ECU) and sawnwood and veneer (491 million ECU). This downward trend has taken place despite the lowering of import tariffs and the preferential treatment of ACP countries in the EU market. Asian producers have been gaining in the EU market at the expense of ACP countries, emerging as the leading exporters of all tropical timber-based products in the world.[28] Table 4 shows which EU countries import the most tropical timber from ACP countries[29].

28. Indufor Oy, 1997, Trade Development Strategy for ACP States: Guidelines for the Timber and Timber Products Sector, Study for the European Commission, Brussels, Belgium.
29. Union pour le Commerce des Bois Durs dans le U.E., 1998, Statistics for the year 1997.



In-country processing of logs can provide extra jobs and other socio-economic benefits for local people.

Table 4: Imports of tropical timber into selected European countries in 1997 (in 1000 m³)
(UCBD, 1998)

	Tropical logs import		Tropical sawnwood	
	from ACP-countries	from non-ACP	from ACP-countries	from non-ACP
France	731	1	137	201
Italy	261	—	134	55
Spain	251	—	300	64
UK	14	—	106	131
Germany	132	2	80	94
Netherlands	88	—	82	206

France, Italy, Spain, Greece and Portugal all rely heavily on Africa to satisfy their needs for tropical timber. The larger part of the tropical timber supply for these South European countries is as logs, mainly from Gabon (okoumé) and – until recently – Cameroon (ayous and sapelli). France imports annually 400,000 cubic metres of okoumé logs from Gabon to supply its own plywood industry.

Countries from Northern Europe (UK, Netherlands) import small quantities of timber from Africa. They rely much more on products from Asia (especially meranti in the form of sawn timber from Malaysia and plywood from Indonesia). The European market, in contrast with others such as the Asian market, is very selective as to species and quality. Only some species will have a market value for specific applications. Furthermore, the Northern European market has a strong preference for kiln-dried sawn timber which is still not available in large quantities from Africa.

Although Europe has long been the traditional market for African timber products, a remarkable change has been noted since 1994, with exports to Asia substantially increasing. The direct cause of this was the ban on log exports imposed by Sabah, Malaysia, in 1992. This led to an acute shortage of tropical logs for the Japanese timber processing industries. Price increases of more than 300 percent for meranti logs from Sarawak, Malaysia, were noted in 1993, from US$150 up to US$450 per cubic metre, in order to meet the demand for sufficient raw materials for the mills in Japan and other countries such as Korea and Taiwan. Since then, Asian buyers have been looking for other supplies of tropical timber in Africa and South America.[30]

An influx of Korean traders to Ghana resulted in massive overproduction of timber and port congestion in 1994, and subsequently a complete destabilisation of the Ghanaian timber market. This phenomenon led the government to ban log exports in 1995. In Cameroon, Asian traders have been buying logs in increasing volumes since 1994 from traditional European or Lebanese exporters. Since 1995, various Asian logging companies (especially from Thailand and Malaysia) have begun to import logging equipment and to negotiate the approval of concession areas to start logging in Cameroon. In Gabon, Chinese and Japanese groups have begun buying logs in increasing quantities.[31] According to government statistics, Gabon's log exports to Asia represented more than half of all log exports, rising from 130,000 cubic metres in 1990 to over 1,200,000 cubic metres in 1996. Of this, 650,000 cubic metres went to the Republic of China and 330,000 cubic metres went to Japan (see country-by-county sections in Chapter IV for more details).

30. Tropical Timbers, Several editions, 1993-1995, UK.
31. ATIBT, La lettre de l'ATIBT, Several editions, 1996-1997.

An okoumé tree in the forest (Aucoumea klaineana).

III. THE RISE OF TROPICAL TIMBER TRANSNATIONAL COMPANIES

3.1 A Brief Overview of Transnational Logging Companies

Transnational companies are corporations involved in business investments outside their country of origin.[33] Although they vary in size and structure, they tend to be larger than local businesses and have greater opportunities for vertical integration, global linkages, and even an influence on international investment patterns. Those firms most active in the expansion of logging in ACP countries have huge assets and integrated operations spanning several continents. Their resources and expertise often far outweigh those of the governments of the countries in which they are seeking contracts or investments.

The decision by a corporation to invest overseas is influenced by a complex range of factors, including market trends, government policies, local versus offshore production costs, taxes, raw material supply, economic growth levels, and the size, profitability, and level of capitalisation of the company. In general, there is a positive correlation between increasing industrialisation of a country and the likelihood of national firms expanding abroad.[34]

Timber has historically been a vital resource for Northern economies. At the same time that the forests of Europe began to disappear, the use of wood for construction, shipbuilding, and other structural uses increased

---

33. F. von Kirchbach, 1983, Economic Policies Towards Transnational Corporations: The Experience of the ASEAN Countries, Nomos Verlagsgesellschaft, Baden-Baden.
34. K. M. Khan, 1986, Multinationals from the South: Emergence, Patterns and Issues, In, K.M. Khan (editor), Multinationals of the South: New Actors in the International Economy, Prances Pinter Publishers, London, UK, pp. 1-14.

with economic growth. Northern companies began to look overseas for their fibre supplies. For those countries with colonies, the focus of investment tended to centre in these regions, a pattern which generally continued even after the independence of many colonies. However, in Asia, domestic timber industries became more powerful.

As economic growth in the Northern economies slowed, the economies of Asia and Latin America began to grow very quickly, creating greater local demand for products dependent upon forest production. This contributed to the emergence of the Indonesian, Malaysian and Brazilian tropical timber industries. Until the recent Southeast Asian economic troubles, the Southern tropical timber industry, especially that based in Indonesia and Malaysia, was cash-rich, well-financed, established in every major market, and continuing to expand with new investments in the world's last forest frontiers, including the difficult regions of Central Africa, Russia, and mainland Southeast Asia. Indications are that the expansion has slowed following the economic downturn in Asia, but this is expected to be temporary.

Sawn timber, ready for shipment to Europe. Port of Douala, Cameroon.

3.2 European Investments in Logging in ACP Countries

European companies with interests in logging and tropical timber processing have generally limited their investments to their former colonies in Africa, where they had easy access to the resource. Here they continue to play a dominant role, with most logging and concessions being under the direct control of European investors.

These European logging companies have been working in Central Africa for the last 30-40 years. Very few new investors from Europe have entered the business. Some traditional European logging companies from France and Germany have recently acquired large concession areas in Northern Congo-Brazzaville. They have either shifted their activities from the Democratic Republic of Congo (former Zaïre) or extended their activities from Cameroon and Gabon into Congo-Brazzaville.

The UK and France are amongst the largest European importers of tropical timber. The wood industry in these two countries clearly expresses the different approaches they promoted as colonists. The UK installed timber processing capacity in its African colonies, so that processed goods, rather than logs, were exported. France, and also Italy, Spain and Portugal instead developed large domestic processing industries at home based on imports of raw logs and to some extent sawnwood and veneer sheets.

European logging companies claim their selective method of exploitation does not destroy the forest, and that they cannot be held responsible for the side-effects of logging, such as movement into logged areas by small farmers and hunters. However, very few European-owned operations have developed forest management plans or inventories, clearly indicating little intention to plan resource use and management for the long-term. Less than 1 million hectares of Africa's forests are currently being brought under management.[34] This area is very small in comparison to the more than 60 million hectares which have been opened up for logging in Africa, largely by Europeans, much of which has already been deforested by over logging and invasion by hunters and farmers.

---

34. J-P. Kiekens and J-J. Faure, 1995, Aménagement forestier durable, enregistrement international des forets et eco-certification du bois, Report for the French Ministry of Cooperation and the European Commission, Brussels, Belgium.

3.3 The Asian Timber Transnational Companies

Asian logging companies have been investing in overseas forestry operations since the 1960s, starting with their near neighbours, particularly Indonesia, Malaysia, Philippines and Thailand, followed by Indochina and Melanesia. It is only much more recently, in the 1990s, however, that Indonesian and Malaysian firms have moved further afield to Africa and South America.

There are a number of factors that are likely to have had particular influence on the decision by Asian companies to invest in overseas logging or wood processing operations. Reasons include log export bans or tariffs, incentives in home countries for investment in timber processing, more effective law enforcement and tax increases, new concessions as equity for leveraging loans to finance aggressive take-over bids, fear of losing market share, and international trade accords. Other reasons include logging companies becoming sufficiently large and profitable that they have the capital required for overseas expansion; search for lower costs, particularly in the face of increasing labour costs; the effort to decrease risk through diversification of market locations, the export of the competitive advantage companies have acquired in particular fields; a limited domestic market; the existence of government policies that restrict further domestic expansion, favourable attitudes towards intra-regional investments by members of regional economic integration programs (e.g. ASEAN); and, the provision of an institutional framework for multinationalisation by the national public sector.

In the remainder of this chapter we provide more detailed descriptions of the extent and ownership of the rapidly expanding transnational logging trade and investment. We focus on Japan, Malaysia, Indonesia, and South Korea, as these are the major players, and provide some additional information on Hong Kong, the Philippines, Taiwan, and Thailand.

3.3.1 Japanese Investments in Transnational Logging Operations

Japan is the world's largest importer of tropical logs. Almost three-quarters of Japan's wood needs are being met by imports,[35] although imports of tropical logs have dropped sharply in recent years from 10.4 million cubic metres in 1991 to 6.6 million cubic metres in 1995 and 3.8 million cubic metres in 1998.[36] There has also been a subsequent increase in the import of manufactured products. Japan is the Asia-Pacific's leading producer and consumer of sawn timber, wood pulp and paper, and paperboard and runs second to China and Taiwan (combined) for consumption of industrial roundwood, veneer sheets, and particle and fibre board.[37] Japan runs second to Indonesia in regional plywood production, but is the region's largest consumer of this product.

Japan sources most of its tropical logs from the Asia-Pacific region but has recently increased imports from African and Latin American countries including the Congo, Gabon, Ghana, Ivory Coast, Brazil, and Honduras. Direct investment in logging or processing in ACP countries is limited to Papua New Guinea. The very large Japanese trading houses have also shifted the focus of their buying and investment to expansion in temperate and boreal areas, especially Russia and North America. They cite unreliability of log supply from the tropics, as well as price and politics, as reasons.[38]

Japanese interests have a long history of investment in tropical forestry. They were involved in Indonesia, for example, as far back as the 1930s.[39] In 1985, Japanese companies were the third largest foreign in-

---

35. D. Callister, 1996, Asia-Pacific Wood Product Trade: An Overview and Preliminary Assessment of Implications for WWF's Forest Conservation Activities, Unpublished report for WWF's Forests for Life campaign, Gland, Switzerland.
36. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, International Tropical Timber Organization, Yokohama, Japan.
37. FAO, 1995, FAO Yearbook of Forest Products 1982-1993, United Nations Food and Agriculture Organization, Rome, Italy.
38. Information from personal interviews by Nigel Sizer with senior executives of Japanese trading houses in November 1997.
39. L. Potter, 1988, Indigenes and Colonisers: Dutch Forest Policy in South and East Borneo (Kalimantan) 1900 to 1950, In, J. Dargavel, K. Dixon and N. Semple, (editors), Changing Tropical Forests: Historical Perspectives on Today's Challenges in Asia, Australasia and Oceania, CRES, Canberra, Australia, pp.127-154.

vestors in Indonesia's wood products industry, holding 20.1 percent of foreign interests.[40] In Papua New Guinea in the late 1980s, the companies owned or controlled by the Japanese had logging concessions covering 1 million hectares, representing 52 percent of the total area being exploited at that time.[41] Vietnam is also attracting increasing Japanese interest, particularly for plantation investment.[42]

The Japanese government is directly involved in facilitating overseas investment in forestry. It is not uncommon for Japanese aid to be provided by Japan's foreign assistance agencies in the form of loans or direct equity to Japanese firms investing overseas.[43] For example, in 1980, 78 percent of the Japanese companies investing in Malaysia (in all manufacturing sectors) were receiving some form of government subsidy or incentive.[44]

There has been a steady decline in the level of Japanese joint venture forestry investment abroad in recent years.[45] Companies have, for example, decreased their level of investment in logging in Papua New Guinea while at the same time continuing to import large amounts of logs from this country. None of the nine Japanese companies said to be the major buyers of logs from the Solomon Islands are concession holders.[46] Japanese companies are able to influence the tropical forestry sector through their buying power and the reliance that local logging operations place on

---

40. H. Hill, 1992, Manufacturing Industry, In, A. Booth, (editor), The Oil Boom and After: Indonesian Economic Policy and Performance in the Soeharto Era, Oxford University Press, Singapore, pp.204-257.
41. G. Marshall, 1990, The Political Economy of Logging: The Barnett Inquiry into Corruption in the Papua New Guinea Timber Industry, The Ecologist, 20(5), pp.174-181.
42. V. de Bohan et al., 1996, Corporate Power, Corruption and the Destruction of the World's Forests, Environmental Investigation Agency, London, UK.
43. R.A. Forrest, 1991, Japanese Aid and the Environment, The Ecologist, 21(1), pp.24-32.
44. J. Saravanamuttu, 1988, The Look East Policy and Japanese Economic Penetration in Malaysia, In, Jomo, (editor), Mahathir's Economic Policies, INSAN, Kuala Lumpur, pp.4-28.
45. N. Dudley and S. Stolton, 1994, The East Asian Timber Trade and its Environmental Implications, WWF-United Kingdom, Godalming, UK.
46. JATAN, undated, Commercial Logging out of Control in the Solomon Islands, Unpublished Paper, JATAN, Japan.
47. N. Dudley and S. Stolton, 1994, The East Asian Timber Trade and its Environmental Implications, WWF-United Kingdom, Godalming, UK.

Japanese importing firms for their lines of credit,[47] while these companies may not necessarily be investors in the forestry sector of the exporting country. Part of the motivation for Malaysian logging companies expanding operations in Papua New Guinea and elsewhere, for example, has been to secure logs to supply long-term contracts to buyers in Japan and elsewhere in East Asia.[48]

Japanese companies have been implicated in transfer-pricing and other tax avoidance practices in Papua New Guinea. Other problems attributed to companies with Japanese interests operating in Papua New Guinea include failure to complete environmental impact assessments, ignorance of environmental clauses in permits, cheating landowners of profits, failure to meet promises made to landowners, raising conflicts between rival landowner groups, destruction of villages, and failure to employ Papua New Guinea nationals.[49] Japan also appears to have been a destination for smuggled timber sourced from the Philippines[50] and possibly Indonesia.[51]

Meanwhile, some of Japan's large trading companies have made small investments in efforts to promote more responsible forest management through the establishment of demonstration schemes and model reforestation programs in Papua New Guinea and Indonesia. Japanese foreign aid agencies are also committed to further spending on forest conservation and responsible management.[52]

---

48. R.C. Duncan, 1994, Melanesian Forestry Sector Study, International Development Issues No. 36, AIDAB, Canberra, Australia.
    R. Callick, 1995, An Unread Message from a Rainforest: Logging Media and Social Conflicts, In, F. Kürschner-Pelkmann, M. Trott and I. Wöhlbrand, (editors), Our Trees and All the Wildlife Have Gone, Association of Protestant Churches and Missions in Germany, Hamburg, pp. 71-110.
49. G. Marshall, 1990, The Political Economy of Logging: The Barnett Inquiry into Corruption in the Papua New Guinea Timber Industry, The Ecologist, 20(5), pp. 174-181.
50. F. Nectoux and Y. Kuroda, 1989, Timber From the South Seas, WWF-International, Gland, Switzerland.
    D.J. Callister, 1992, Illegal Tropical Timber Trade: Asia-Pacific, WWF-International, Gland, Switzerland.
51. D.J. Callister, 1996, Asia-Pacific Wood Product Trade: An Overview and Preliminary Assessment of Implications for WWF's Forest Conservation Activities, Unpublished report for WWF's Forests for Life campaign, Gland, Switzerland.
52. The Overseas Economic Cooperation Fund, Japan, 1997, Annual Report 1997, OECF, Tokyo, Japan.

The new investors have made use of a substantial amount of imported, expatriate labour rather than employing local workers, as shown in this camp in Cameroon.

3.3.2 Malaysian Investments in Transnational Logging Operations

Despite reductions in log exports in recent years, Malaysia is still easily the world's largest exporter of tropical logs.[53] During the period 1990-93, Malaysia exported US$14.2 billion of forest products[54] accounting for 23.5 percent of the value of all forest product exports from the Asia-Pacific over these four years, and ranking it second behind Indonesia. The Asia-Pacific region is the main market for Malaysia's wood product exports.[55]

53. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, International Tropical Timber Organization, Yokohama, Japan.
54. FAO, 1995, FAO Yearbook of Forest Products 1982-1993, United Nations Food and Agriculture Organization, Rome, Italy.
55. D.J. Callister, 1996, Asia-Pacific Wood Product Trade: An Overview and Preliminary Assessment of Implications for WWF's Forest Conservation Activities, Unpublished report for WWF's Forests for Life campaign, Gland, Switzerland.

The country has been facing a shortage of timber supply and an overcapacity in its timber processing industry.[56] Despite this, production of wood products such as furniture and re-constituted panel products are projected to continue to increase. Many of Malaysia's privately owned timber giants have expanded into new activities and begun to search for new logging concessions abroad.

The first truly transnational Malaysian corporations emerged in the mid-1970s as a result of government take-overs of foreign companies operating in Malaysia. Investment has since spread beyond the Asia-Pacific region. The growth in foreign investment is commensurate with general patterns of growth of overall foreign investment by Malaysian firms. Countries where Malaysian companies are currently operating include Brazil, Cambodia, Cameroon, Canada, China, Equatorial Guinea, Gabon, Guyana, Indonesia, Laos, Myanmar, New Zealand, Papua New Guinea, Philippines, Romania, Singapore, Solomon Islands, Surinam, and Vanuatu. Estimates suggest that Malaysian investments (involving just half a dozen companies) account for more than 80 percent of new South-South investment.[57]

Malaysian government attitudes regarding the activities of Malaysian transnational companies operating in offshore logging ventures have been largely sympathetic to the companies involved. Recently, however, there has been a very significant change of tone coming from the Minister of Primary Industry who oversees the Malaysian timber industry, and stated that companies should follow certain basic guidelines of good corporate citizenship in their operations abroad, including obeying national laws and not "taking advantage of weak governments."[58]

---

56. L.T. Chew, 1995, Malaysia Timber Industry: Present Status and Future Trends, Paper given at Asia Pacific Timber & Forestry Conference 1995, 16-17 October 1995, Kuala Lumpur, Malaysia.
57. N. Sizer and R.Rice, 1995, Backs to the Wall in Suriname: Forest Policy in a Country in Crisis, World Resources Institute, Washington DC, USA.
58. M.F. Nordin, Timber Firms told to Safeguard National Image, New Straits Times, Kuala Lumpur, Malaysia, September 26, 1997.
F.Ghazali, Lim Unveils strategy to assist Local Loggers, Business Times, Kuala Lumpur, Malaysia, September 26, 1997.

Malaysian logging companies operating overseas have been involved in a number of corruption controversies in the Solomon Islands[59] and Vanuatu.[60] Allegations of illegal logging and smuggling of logs have also been made.[61]

Malaysia has responded to international and local criticism of its domestic forest policies with a number of significant moves.[62] However, among the Malaysian transnationals, perhaps only one company stands out as having made an effort to promote more scientifically-based forest management and respect local social needs and promote environmental awareness. The company has moved very cautiously in its international expansion and employed expert consultants to provide thorough input on environmental and social aspects, though there are still substantial criticisms of its activities.

3.3.3 Indonesian Investments in Transnational Logging Operations

Indonesia has considerable forest resources and is one of the most significant timber producers in the Asia-Pacific region. Harvest from production forest has declined from around 24 million cubic metres in 1990 to

---

59. R. Callick, 1995, An Unread Message from a Rainforest: Logging Media and Social Conflicts, In F. Kürschner-Pelkmann, M. Trott & I. Wöhlbrand, (editors), Our Trees and All the Wildlife Have Gone, Association of Protestant Churches and Missions in Germany, Hamburg, pp. 71-110.
    M.L. O'Callaghan, Keating attacks Asian Log Exploiters, Sydney Morning Herald, 2 August, 1994.
60. R. Callick, 1995, An Unread Message from a Rainforest: Logging Media and Social Conflicts, In, F. Kürschner-Pelkmann, M. Trott & I. Wöhlbrand, (editors), Our Trees and All the Wildlife Have Gone, Association of Protestant Churches and Missions in Germany, Hamburg, pp. 71-110.
61. SKEPHI, 1993, Timber Stealing in Protected Forests, Setiakawan, 11, pp. 30-34.
    C. Martin, 1996, Transnational Loggers Threaten Africa's Forests, Arborvitae, 4, p. 12.
62. These include an effort to create the National Committee on Sustainable Forest Management, a task force working to implement forest management criteria outlined by the ITTO, which includes a commitment to meet ITTO's Objective 2000. A National Timber Certification Centre has been established and there is also a National Commission for Long Term Forestry Management. The government has also invested heavily, in partnership with industry, to create the "Malaysian Criteria and Indicators for Sustainable Forest Management," and this could soon become a fully functional independent third party certification mechanism.

16 million cubic metres in 1998.[63] However, when timber from other sources such as conversion forest and plantations is added to this figure, the total annual cut is set to rise from 36 million cubic metres in 1994–1995 to 40 million cubic metres by 1998–1999. Latest figures, produced by the Tropical Forest Management Program, a joint Indonesian-British program, indicate that the annual log harvest in Indonesia in 1998 reached 78 million cubic metres, well over three times the legally sanctioned volume.[64]

Indonesian companies are not as active overseas as their Malaysian neighbours. Firstly, since Indonesia has far more forest of its own to exploit, Indonesian firms can grow very large without looking overseas for resources. Second, the government of Indonesia has actively discouraged them from investing overseas, choosing instead to promote domestic investment to stimulate local growth and employment.[65]

Most Indonesian foreign investments, with the exception of two recent ones in Suriname, are in the Asia-Pacific region.

3.3.4 South Korean Investments in Transnational Logging Operations

South Korea imports most of its timber. It has been the third largest importer of forest products by value in the Asia-Pacific region, after Japan and China. Around half of its imports of industrial roundwood came from within the region, but only around a quarter of veneer, particle and fibre board and paper and paperboard, and very little of its wood pulp imports. South Korea was the third largest importer of tropical logs among ITTO member countries from 1991 to 1995.[66] Imports over this period declined from 3.7 million cubic metres in 1991 to only 1.9 million cubic metres in 1995. While most tropical logs were sourced from Malaysia and Papua New Guinea, non-Asia-Pacific countries such as Ivory Coast, Gabon, Ghana, and Guyana have also exported logs to South Korea in recent years.

---

63. Tropical Timbers, 1998, vol. 14 n° 12, "Indonesia: plywood gives way to paper".
64. Tropical Timbers, 2000, volume 15 number 1, "Indonesia: illegal logging threatens trade stability".
65. Personal communication, 1997, Chief Executive Officer of the Kalimanis Group.
66. ITTO, 1996, Annual Review and Assessment of the World Tropical Timber Situation, International Tropical Timber Organization, Yokohama, Japan.

South Korean companies are likely to influence investment patterns in tropical forestry through their ongoing import demand for tropical logs. Indeed, it has been suggested that long-term contracts to supply logs for mills in Korea have acted as an impetus for Southeast Asian logging companies to look elsewhere for supplies due to increasing restrictions on log exports from their own countries.[67]

From the late 1960s, the South Korean government has actively encouraged foreign direct investment by local companies and provided a range of incentives to boost exports of goods, capital, and services in order to obtain raw materials for local processing industries, with the location of investments dictated by the availability of natural resources.[68] More recently, South Korean companies have moved some of their processing facilities for the manufacture of plywood, furniture, doors and cabinets to Southeast Asian countries, or increased investment in these industries in the region.[69] These moves have been attributed to lower labour costs in Southeast Asia and a desire to be closer to tropical log resources.[70]

---

67. R.C. Duncan, 1994, Melanesian Forestry Sector Study, International Development Issues No. 36, AIDAB, Canberra, Australia.
R. Callick, 1995, An Unread Message from a Rainforest: Logging Media and Social Conflicts, In, F. Kürschner-Pelkmann, M. Trott and I. Wöhlbrand, (editors), Our Trees and All the Wildlife Have Gone, Association of Protestant Churches and Missions in Germany, Hamburg, pp. 71-110.
68. ESCAP/UNCTC, 1985, Transnational Corporations for Developing Asian Economies, ESCAP/UNCTC Publications Series B, No. 7, ESCAP/UNCTC Joint Unit on Transnational Corporations, Bangkok, Thailand.
B. McKern, 1993, Introduction: Transnational Corporations and the Exploitation of Natural Resources, In, B. McKern, (editor), Transnational Corporations and the Exploitation of Natural Resources, Routledge, London, UK, pp. 1-33.
69. B. Ghazali, 1990, The Malaysian Timber Industry: Growth Factors for Success, In, J. Millett, (editor), Log Export to Processing — Policies Revisited the Risk Evaluation, Institute of National Affairs, Port Moresby, Papua New Guinea, C2-C16.
G. Gresham, 1994, Timber Prices on Roller-Coaster Ride, Tropical Forest Update, 4(1), pp. 12-13.
70. S. Johnson, 1995, Production and Trade of Tropical Logs, Tropical Forest Update, 5(1), pp. 21-23.

3.3.5 Other Asian Investments in Transnational Logging Operations

Hong Kong is largely an importer of forest products, and serves as transit point for timber imports into China. There was strong growth in the import and export of most timber products over the last decade.[71]

Hong Kong companies have a long history of offshore investment in forestry (mainly in Indonesia and Malaysia), but details of specific companies that are or have been involved, and any impacts that their operations may have caused in host countries, are scarce. Investments outside the region are in New Zealand and Papua New Guinea. Recently, a Hong Kong holding company was reported to be interested in obtaining concessions for most of Gabon's remaining timber resources.[72]

By 1993, nearly half of the **Philippines**' log processing was accounted for by imported logs.[73] Almost three-quarters of the Philippines' imports of industrial roundwood and sawn timber came from elsewhere in the Asia-Pacific region.[74] Around 20 percent of wood production is exported, going mostly to Taiwan, the United Kingdom, Japan, and the United States.

The local annual allowable cut declined from 4.7 million cubic metres in 1990 to 840,000 cubic metres in 1994, and since local shortages of timber are likely to continue, the Philippines is likely to remain a timber importer and imports will continue to grow.[75] Faced with declining forest resources, one of the Philippines' earliest outflows of foreign direct investment was targeted towards the Indonesian timber industry.[76] Current rates

---

71. D.J. Callister, 1996, Asia-Pacific Wood Product Trade: An Overview and Preliminary Assessment of Implications for WWF's Forest Conservation Activities, unpublished report for WWF's Forests for Life campaign.
72. V. de Bohan et al., 1996, Corporate Power, Corruption and the Destruction of the World's Forests, Environmental Investigation Agency, London, UK.
73. D. Seabright, 1994, Projected Economic Upturn to Spur Demand of Wood Products, Asian Timber, 13(6), pp. 22-23.
74. FAO, 1995, FAO Yearbook of Forest Products 1982-1993, United Nations Food and Agriculture Organization, Rome, Italy.
75. D. Seabright, 1994, Projected Economic Upturn to Spur Demand of Wood Products, Asian Timber, 13(6), pp. 22-23.
76. ESCAP/UNCTC, 1985, Transnational Corporations for Developing Asian Economies, ESCAP/UNCTC Publications Series B, No. 7, ESCAP/UNCTC Joint Unit on Transnational Corporations, Bangkok, Thailand.

of investment by Filipino firms in Indonesia's timber industry are not known but have most likely declined with the advent of log export restrictions in the latter country in the mid-1980s. Firms from the Philippines are also known to have invested in Sabah in Malaysia and are known to buy logs from as far afield as Africa.[77] There are no available data on investment by Philippines-based companies in the ACP countries.

Thai companies have been investing in the forestry sector of other countries in the region for some years. **Thailand** has progressively introduced local controls over logging and timber, culminating in a ban on commercial logging in 1989.[78]

During 1990–93, Thailand was the Asia-Pacific region's sixth biggest importer of forest products, with a growing trade deficit in wood products. Around three-quarters of Thailand's industrial roundwood imports and about two-thirds of its sawn timber and veneer were sourced from elsewhere in the Asia-Pacific region.[79] In 1991, Thailand was the world's fourth largest importer of tropical logs among ITTO members, dropping to number five in 1994 and 1995. Sources of tropical logs included Malaysia, Myanmar, Papua New Guinea, Gabon, and Ivory Coast.[80]

There have been considerable problems with log smuggling across the Thai border and concerns frequently expressed regarding the impacts of Thai loggers on the forests of adjacent countries.[81] Furthermore, the operations of these companies have become entangled in political conflicts in the region.[82]

---

77. A.S. Mather, 1990, Global Forest Resources, Bellhaven Press, London, UK.
G. Gresham, 1994, Timber Prices on Roller-Coaster Ride, Tropical Forest Update, 4(1), pp. 12-13.
78. D.J. Callister, 1992, Illegal Tropical Timber Trade: Asia-Pacific, WWF-International, Gland, Switzerland.
79. FAO, 1995, FAO Yearbook of Forest Products 1982-1993, United Nations Food and Agriculture Organization, Rome, Italy.
80. ITTO, 1996, Annual Review and Assessment of the World Tropical Timber Situation, International Tropical Timber Organization, Yokohama, Japan.
81. D.J. Callister, 1992, Illegal Tropical Timber Trade: Asia-Pacific, WWF-International, Gland, Switzerland.
82. Global Witness, 1995, Forests, Famine and War - the Key to Cambodia's Future, Global Witness, London, UK.

Logs ready for shipment to Asia. Lambarene, Gabon.

Imported timber accounts for about 90 percent of **Taiwan**'s domestic timber needs. Imports of further manufactured products such as plywood are increasing.

Between 1991 and 1995, Taiwan was the world's second biggest importer of tropical logs.[83] The vast majority of Taiwan's tropical log imports came from Malaysia, with Papua New Guinea, Gabon, Congo, Ghana, and Ivory Coast being other sources. However, log imports are declining, reflecting reduced log availability in traditional Asia-Pacific sources.

During the 1990s, Taiwan's main source of plywood imports was Indonesia, with an increasing amount coming from Malaysia in recent years. Taiwanese firms were among the first to invest in tropical timber concessions, following on the heels of companies originating in former colonial powers.[84]

---

83. ITTO, 1996, Annual Review and Assessment of the World Tropical Timber Situation, International Tropical Timber Organization, Yokohama, Japan.
84. R. Repetto, 1988, The Forest for the Trees? Government Policies and the Misuse of Forest Resources, World Resources Institute, Washington, DC, US.

IV. FOCUS ON THE ACP COUNTRIES: THREE REGIONS AT RISK

In this section we describe the dynamics of investment by transnational logging companies in Central Africa, the Caribbean Rim, and the Pacific. Many of these countries are still rich in forest resources and represent some of the last opportunities to protect large areas of intact tropical forest. Many also have weak monitoring and enforcement of laws, face serious economic problems, and depend for revenue largely on the extraction of their natural resources. This combination of circumstances increasingly threatens the last remaining forest frontiers in ACP countries.

4.1 Central Africa

Since colonial times, European companies have dominated logging activities and timber exports in the region. These companies still have a dominant, if declining, influence in the sector. Very few new European investors have engaged in the business during recent decades[85]. European firms are traditionally selective in the species and quality of timber they harvest and export, logging vast areas of forest at low intensity. Indirect impacts of such logging, such as allowing people access into the forest, can be substantial.

While for decades the export of tropical timber from Africa went almost exclusively to Europe, in the past years increasing volumes are being shipped to Asia.[85] In 1996, more than half of all logs from Central Africa were shipped to Asia. This new trend is leading to the cutting of larger volumes of wood, and of more species than before. Asian logging

85. V. De Bohan et al., 1996, Corporate Power, Corruption and the Destruction of the Worlds' forests, EIA, London, UK.
86. ATIBT, 1999, La lettre de l'ATIBT, n°10, Statistiques d'Exportations des Pays Africains, ATIBT, Paris, France.

companies have also started to import logging equipment into the region. Change has been most striking in Cameroon, Gabon and Equatorial Guinea, the three countries most accessible from the coast and with the lowest transport costs.

4.1.1 Cameroon

The humid tropical forest of Cameroon covers 17.5 million hectares. Annual production of tropical timber was about two million cubic metres annually until 1994, when it increased due to local currency devaluation which stimulated exports. In 1994, total production of logs peaked at 3.3 million cubic metres, while figures for 1995 and 1996 were 3.0 and 2.7 million cubic metres.[87] In 1997 and 1998, total log production was respectively 3.0 and 2.9 million cubic metres.

Cameroon was the first country in the Congo Basin to implement a World Bank-sponsored reform programme to increase tax income from logging and to achieve sustainable forest management. In January 1994, a new forest law was approved in Cameroon which requires that the country's production forest be divided into Forest Management Units ranging from 20,000 to 200,000 hectares each. The leases are valid for 15 years and are renewable, a management plan must be drafted and a processing unit installed.[88] Forest classified as *domaine national* is divided into areas of 2,500 hectares which will be auctioned periodically (*ventes de coupe*). These leases last for one year. The new law also includes the possibility of community forests.

During the transition period to the new law, which lasted for more than three years, the situation has been very confused. Contrary to the spirit of the new law, old licenses have been renewed for several companies, while one year *ventes de coupe* licenses have continued to be granted.[89] It is extremely difficult to get a clear picture of what has happened and of which forest is open for logging for which period under which conditions.

---

87. ITTO, 1999, Annual Review and Assessment of the World Tropical Timber Situation in 1998, International Tropical Timber Organization, Yokohama, Japan.
88. D. Plouvier, 1997, Mission report to Cameroon and Congo on behalf of the European Commission Directorate-General VIII, Brussels, Belgium, 16-28 February, 1997.
89. G. Mballa, 1997, Sociétés Forestières Asiatiques au Cameroun, report prepared for WWF-International, Gland, Switzerland.

Currently, there are 295 operations cutting and exporting logs in Cameroon, made-up of 25 national and 270 foreign companies. For years the most important groups active in logging in Cameroon have been from France, Italy, the Netherlands, and Lebanon. These companies account for more than half of timber production and export. Exports of forest products to Asia, particularly logs, however are rising. In July 1995, only five percent of Cameroon's logs were sent to Asia, but this rose to 40 percent in June 1996, and to 60 percent by the end of the year. It dropped again in 1998, due to the effects of the Asian economic crisis (see *Figure 2*). Part of Cameroon's increase in exports to Asia comes from Asian logging companies working in the country on Cameroonian operations, but, by the end of 1997, the majority of logs exported to Asia were being delivered by traditional European or Lebanese companies.[90]

In 1995, Malaysian and Thai companies began to invest in logging activities in Cameroon, mostly in close association with, and on the concessions of, Cameroonian nationals. By mid-1997 three Asian trading groups were also buying logs. Companies are becoming involved in buying up large concessions and in take-over bids of other logging companies. At least four Asian groups have brought in equipment. They work under a variety of names and have succeeded in establishing important connections with influential people in Cameroon.[91] Several companies do not export through the SEPBC (*Société d'Exploitation des Parcs à Bois du Cameroon*), the official log yard at the port of Douala, but have their own port.

Several problems have occurred with local people blocking roads and protesting the logging. At the end of 1996, police were sent to several of the villages to stop the upheavals.[92] Concerns have also been raised over logging in ecologically-sensitive areas.[93]

---

90. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
91. G. Mballa, 1997, Sociétés Forestières Asiatiques au Cameroun, report prepared for WWF-International, Gland, Switzerland.
92. J.J. Pagbe, 1996, Memorandum Adressé au Préfet du Dept. du Nyong et Kellé Concernant l'Exploitation des Forêts du Canton Longue, Cameroon.
93. GTZ, 1997, Preliminary findings and recommendations of the Environmental Impact Assessment (EIA) in the timber concessions MPL and CAFECO within Korup Project Area. Mission report GTZ, Yaoundé, Cameroon.

Preparation of an okoumé tree for felling. Okoumé (Aucoumea klaineana) *is the most important tree for export from Gabon.*

4.1.2 Gabon

The total forest area in Gabon is estimated at 22 million hectares, more than 85 percent of the total land area. Deforestation is low (estimated at 0.1 percent per year), due to the very low rural population density. With 2.3 million cubic metres of exports in 1996 and 1.5 million cubic metres in 1998, Gabon is by far the largest exporter of logs in Africa.[94] Total log production has risen steadily from 1.4 million cubic metres in 1990 to more than 2.5 million cubic metres in 1996 and 1.8 million cubic metres in 1998.[95] This increase is due to the devaluation of the local currency in 1994, and an increase in the demand from the Asian market. In 1990, only seven percent of log exports went to Asia, in 1995, this figure had risen to more than 50 percent. As in Cameroon, one of the largest buyers of logs is a Chinese group.

Forest management and timber exploitation are regulated by the *Loi d'Orientation*, signed in 1982, which divides the forest domain into *forêts domaniales classées* and *forêts domaniales protegées*.[96] The former include national parks and conservation zones. The latter include the concessions (*permis forestiers*), with no obligation for management plans. Although the processing of logs in Gabon has been stimulated for years by the government, 90 percent of timber is still exported as logs. A new draft law is under discussion, the main elements of which are sustainable production, local processing, maximum area of forest concession, forest management plans, and community forests.[97]

The interest in African timber, and more specifically *okoumé* by the Asian market, began in 1993 when Sabah in Malaysia implemented a ban on the export of logs. Asian logging companies began investing directly in logging activities in 1996. By the end of 1997, five or six companies were

---

94. Ministère des Eaux et Forets-DIARF, 1997, Annuaire des Statistiques Forestières du Gabon: Portrait Statistique, Government of Gabon, 1995.
ITTO, 1999, Anuual Review and Assessment of the World Tropical Timber Situation in 1998, ITTO, Yokohama, Japan.
95. ATIBT, La lettre de l'ATIBT, several editions, 1996-1997.
96. S. Dondyas, 1996, Étude de Faisabilité sur la Certification des Forêts et la La-bellisation du Bois au Gabon, EC/WWF-B project B7-5041/95.8/VIII, WWF-Belgium.
97. DIARF, Minsitère des Eaux et Forêts, 1996, L'aménagement Durable des Forêts au Gabon: Recommendations en vue d'une Nouvelle Législation Forestière, Government of Gabon.

in Gabon, all of them Malaysian. In total more than two million hectares of concessions were in the hands of Asian companies by the end of 1997, either directly or through third parties.[98] Chinese and Japanese groups in particular have started to buy logs in increasing quantities. Several traditional European concessionaires have been in negotiations to sell logging rights and processing plants to the new investors.

Officials from Gabon's Ministry of Forests generally view the new investors positively. They represent new capital, new possibilities for investments in local processing, and more employment. However, partly as a result of Asian competition, some of the most important European operators have been working to improve their management and move toward certification.[99]

4.1.3 Congo

The Republic of Congo-Brazzaville possesses about 20 million hectares of forest of which 14 million hectares are considered feasible for timber production. By 1995, 7.5 million hectares of forest had been awarded under exploitation permits.[100] As in the other countries of the region, most of the timber is exported in the form of logs. Due to poor infrastructure, annual timber production in Congo has never surpassed one million cubic metres although there is potential for more.

In mid-1997, civil war struck the country and led to several thousand deaths and to massive deterioration of the economy. While most state-owned logging companies had serious financial problems even before the civil war, the activities of all companies were seriously affected by the conflict. Timber production in 1997 declined to 300,000 cubic metres from arround 560,000 cubic metres in 1996. In 1998, log production was estimated at 600,000 cubic metres.[101]

---

98. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
M. Courcier, 1997, Rapport d'études Secteur Bois au Gabon, Arthur Andersen, Libreville, Gabon. Report for WWF-Belgium.
D. Plouvier, 1997, Mission report to Gabon on behalf of the European Commission Directorate-General VIII, Brussels, Belgium, 14-26 April, 1997.
99. Dondyas, S, 1996, étude de Faisabilité sur la Certification des Forêts et la Labellisation du Bois au Gabon, EC/WWF-B project B7-5041/95.8/VIII, WWF-Belgium.
100. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
101. Tropical Timbers, 1999, volume 14 n° 2, 'Congo-Brazzaville'

An old kosipo (Entandrophragma candollei) *tree in Forêt des Abeilles, Central Gabon. Although its timber is valuable, it is rarely exploited by traditional European concessionaires.*

The forestry law in Congo is spelled out in the 1974 Code. This is one of the most advanced forestry laws in the region, integrating concepts of forest management with definitions of forest management units and with the need for a forest management plan. However, more than two decades later, very few management plans have been written and none have been applied in the field.[102]

By the end of 1999, only one Asian logging company had installed itself in Congo, having obtained three permits. However by 1999, a large German company had acquired a 1.2 million hectare concession in the north of the country.

---

102. J-P. Kiekens and J-J Faure, 1995, Aménagement Forestier Durable, Enregistrement International des Forets et Eco-certification du Bois, report for the French Ministry of Cooperation and the European Commission, Brussels, Belgium.

4.1.4 Central African Republic

The CAR's dense humid forest covers 3.8 million hectares. The annual production of logs is small but has risen from 114,081 cubic metres in 1991 to 325,595 cubic metres in 1995.[103] A substantial part of the production is transformed into sawn timber. Export figures for 1995 totalled 64,813 cubic metres of logs and 37,810 cubic metres of sawn timber. Nearly half of the total humid forest area is in the hands of half-a-dozen foreign logging companies,[104] including Syrian, French, French-Lebanese and Malaysian.

A new forest code was introduced in 1990, and it includes the issuance of permits for the lifetime of an enterprise, with an obligation to draft a *cahier de charges* including basic forest management principles.

4.1.5 Equatorial Guinea

Mainland Equatorial Guinea is still mostly covered with tropical rainforest, some 2.2 million hectares, of which 400,000 hectares is officially exploited.[105] Almost all logs are exported, unprocessed. During the 1970s and 1980s, commercial timber exploitation in the country was limited to an annual production and export of 100,000 - 200,000 cubic metres. This figure has risen steadily in the 1990s, especially during the last years, because of the influx of new Asian logging companies. While total production in 1995 was 360,000 cubic metres, the figures for January-September 1997 indicate a total export of 507,000 cubic metres of logs, half of which were sent to China.[106] The forestry law states that annual log production cannot exceed 450,000 cubic metres.[107]

Traditionally, the logging companies in Equatorial Guinea have been of either Spanish or Lebanese origin, and the markets were Spain and other Mediterranean countries. The picture has changed since late 1995 due to the arrival of a Malaysian company, which has been exporting logs

---

103. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
104. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
105. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.
106. ATIBT, La lettre de l'ATIBT, Numero 4/97, ATIBT, Paris, France.
107. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.

Logs ready for shipment overseas at the port of Bata, Equatorial Guinea.

mostly to Asia, including China, Taiwan, Japan and Thailand. Other investors come from Korea and China (Hong Kong). Between 1993-96, exports to Asia increased 551 percent. By 1996, 70-80 percent of the logs were going to Asia, but 99 percent of transformed products went to the European market.

The country passed a new Forest Sector Law in February 1997 which states that concessions should have a maximum size of 50,000 hectares, that only one permit be issued per person, and that concessions have a maximum period of 15 years and be renewable. Furthermore, each concession must have a forest management plan, and loggers are required to transform 60 percent of their output into processed products. The law also mandates that logging companies hire Guineans exclusively and contribute to the needs of communities around the area being exploited.[108]

108. J. Justine, 1997, La Filière du Bois dans la Zone UDEAC, report for WWF-Belgium.

4.1.6 Democratic Republic of Congo

The DRC contains 12.5 percent of the world's remaining tropical rainforest; only Brazil and Indonesia have more. In 1993, the country extracted only 500,000 cubic metres of timber,[109] tiny compared to Indonesia's annual cut of about 40,000,000 cubic metres. Most exports go to Portugal, France, and Germany. The DRC lacks the infrastructure to handle much more than this amount and, consequently, approximately 86 percent of its rainforest is still intact. Concessions are allocated through 25-year leases. The Tropical Forestry Action Plan prepared in the late 1980s suggests increasing annual logging to 5,000,000 cubic metres by the year 2020.

There were roughly 30 logging companies operating in DRC; by far the most important one was a German company. There is very little information available about any recent developments following the installation of the new government. However, with the continuation of the civil war in the interior of the country, a majority of logging companies have left.

4.2 The Caribbean Rim

In the Caribbean, transnational logging companies have tried, and in some cases been successful, in setting up very large operations in the past five years in Belize, Suriname and Guyana, all countries with very rich tropical forest resources.

4.2.1 Belize

About 70 percent of Belize's land area is covered by broadleaf tropical forest. Belize has prided itself on a history of environmental protection.[110] However, the government is now seeking to increase revenues from forest exploitation, and since the 1980s has been granting large logging concessions.[111]

---

109. ATO, 1993, ATO Information Bulletin 1, pp. 39-40, African Timber Organisation.
110 R. Loftis, For Love of Land, Dallas Morning News, September 15, 1996, 1A, 32A, 33A.
111. Maya Land on the Chopping Block in Belize, Rainforest Action Network, Action Alert 124, November 1996.

Seventeen concessions, totalling about 200,000 hectares, have been granted by the government, 16 of them since 1993.[112] Some timber concessions were negotiated in private sessions with the government and very little is known about them. However, one has been linked to a Malaysian company, which is reported to have paid only $1.50 per hectare for the land.[113] Many of the concessions are situated in the Columbia River Forest Reserve, a protected area.[114] Some concessions almost completely overlap Maya Indian villages and threaten to deprive these groups of their livelihood.[115] The logging concessions appear to be closely linked to longer-term plans to develop the region, including the Inter-American Development Bank US$70 million loan to pave the Southern Highway.[116]

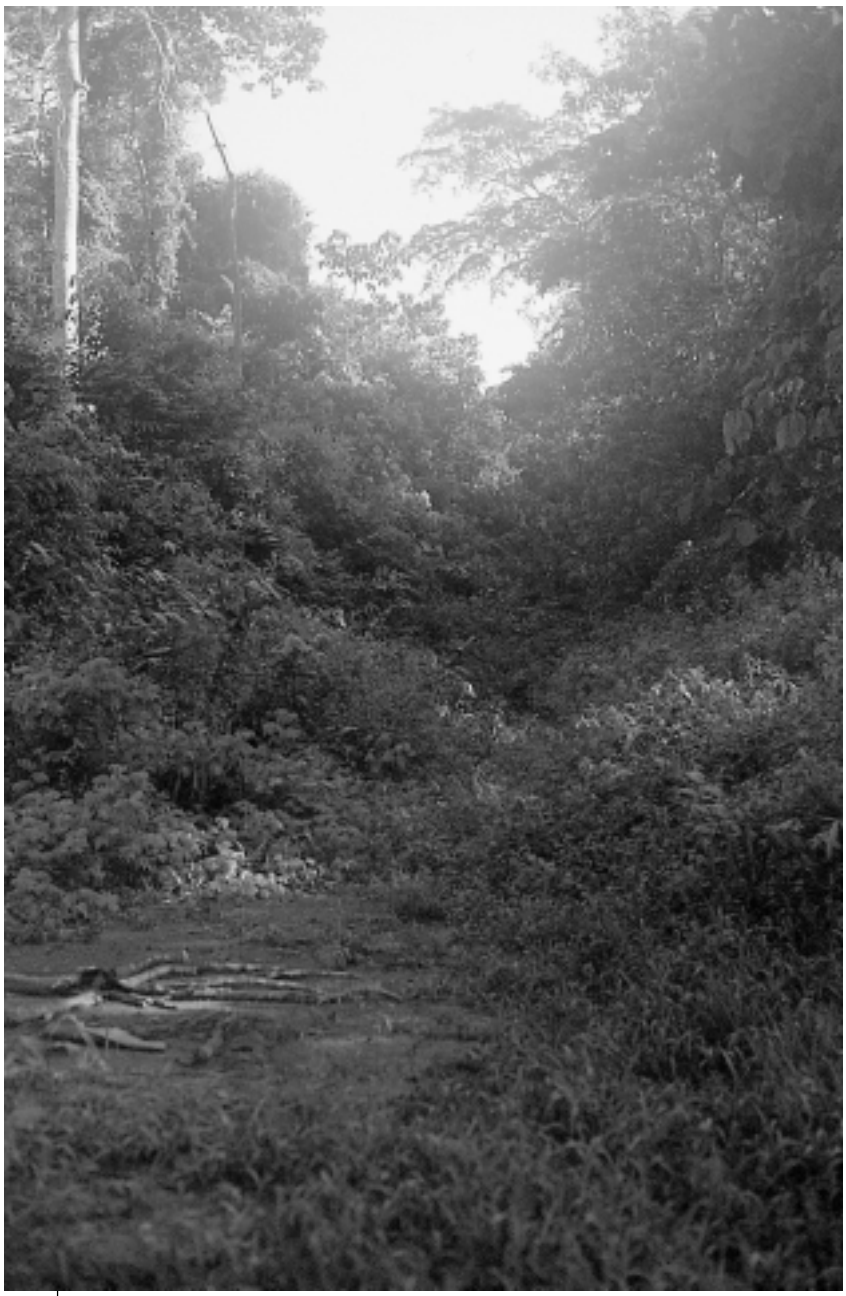
4.2.2 Suriname

In 1993, emerging from more than ten years of civil unrest and unfavourable economic conditions, the new democratic government of Suriname sought aid to restructure and build its economy. Timber exploitation has increased in response. As of February 1995, at least five foreign investors had sought forestry concessions for timber production that were greater than the maximum size of 150,000 hectares permitted under the 1992 Forest Management Act. By mid-1997, Indonesian and Malaysian groups were logging on small and medium concessions, and also purchasing logs from Surinamese companies.

The government of Suriname has very limited capacity to monitor logging operations or to enforce the Forest Management Act of 1992. It is clear that the economic benefits of logging to Suriname are far less than if

---

112. J. Cho, Massive Logging in Toledo Still Imminent, Toledo Maya Cultural Council, Belize 1996.
Secret Belize Logging Concessions Threaten Maya Homeland Tropical Forest, Indian Law Resource Center, Washington D.C., 1996.
113. Maya Land on the Chopping Block in Belize, Rainforest Action Network, Action Alert 124, November 1996.
114. R. Loftis, For Love of Land, Dallas Morning News, September 15, 1996, 1A, 32A, 33A.
115. R. Loftis, For Love of Land, Dallas Morning News, September 15, 1996, 1A, 32A, 33A. Maps reveal Conflict between Mayas and Logging Licences, The Reporter, Belize, October 13, 1996, p. 4.
116. More logging? Newsweek, January 20, 1997.



The regeneration capacity of humid tropical forests in flat areas is remarkable. View of a skidding trail one year after skidding operations.

contracts were structured and negotiated differently.[117] However, the new government publicly committed to put a hold on issuance of the proposed major new logging concessions. This commitment held fairly steady until mid-1997, when reports of large-scale illegal logging in Suriname's interior began to circulate. Negotiations with companies that were previously refused concessions were quietly going on.

4.2.3 Guyana

Guyana is one of the most heavily forested countries in the world, with forest cover over 16 million of its 19 million hectares. Guyana began in the early 1990s to seriously consider granting concessions to Asian and North American companies. At least eight foreign loggers have made requests for concessions of over 500,000 hectares in recent years, including several Malaysians. Since 1991, a Malaysian company has been active on a 1.7 million hectare concessions, with a plywood mill. Deals include 10-year tax holidays,[118] and thus little revenue is collected from the concessions.

Starting in 1995, the British Government and other donors began work with the government to implement a process of capacity strengthening to monitor logging and enforcement of the law. Commitments were also made to update Guyana's laws affecting use of forest resources. As part of the process, the Guyanese agreed to halt the issuance of new large logging licenses.

However, despite an expressed commitment to seek alternative routes by the Guyanese government, there could still be a significant expansion of logging operations while the country continues to lack even a basic network of protected areas.

---

117. N. Sizer and R. Rice, 1995, Backs to the Wall in Suriname: Forest Policy in a Country in Crisis, World Resources Institute, Washington DC.
118. Investment Contract Between Government of Guyana and Sunkyong Limited of Korea, Samling Corporation Sdn. Bhd. of Malaysia and Barama Company Limited of Guyana, p. 4.

4.3 The South Pacific

By virtue of their proximity to the rapidly expanding Southeast Asian economies, and the huge Japanese market, these islands have been the focus of intense logging activity by multinational logging companies, particularly from Malaysia. They provide also perhaps the best documented history of severe environmental, social and economic impact, as well as entrenched corruption.

4.3.1 Papua New Guinea

Papua New Guinea (PNG) holds one of the largest tropical rainforest wildernesses remaining on the Earth, with about five percent of the world's terrestrial biodiversity. Recent estimates of PNG's forest cover vary from 36 million hectares (77 percent of total land area) to 39 million hectares (85 percent of the country).[119] Within the past decade the export of raw logs by multi-national corporations has grown rapidly. PNG is one of the few countries in the region from which raw log exports as opposed to processed timber is still permitted.

The industry today is dominated by Malaysian multi-national logging companies selling to Japan and other Asian timber processing countries. To date, about 10 million hectares of forest have been acquired from landowners by the government for logging, out of 12 million hectares of identified production forest.[120] Approximately 4.5 million hectares have been allocated to logging companies.[121] Since 1992, logging in PNG has grown to unprecedented amounts, increasing by over 300 percent in 1993 alone.[122] Export volumes and values have continued to rise since 1993, up to volumes of 3,000,000 m^3 in 1997. However, in 1998, exports plummeted to a level of

---

119. Papua New Guinea Forest Authority, 1996, Annual Report for 1995, PNGFA, Boroko.
Papua New Guinea Forest Authority, 1996, The National Forest Plan for Papua New Guinea., PNGFA, Boroko.
The World Bank, 1989, The Forestry Sector: A Tropical Forestry Action Plan Review, The World Bank, Washington DC.
120. Hakiso So-Omba, personal communication.
121. C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, The National Research Institute of Papua New Guinea, Monograph 32, and the International Institute for Environment and Development, London, UK.
122. Unpublished report by the Pacific Heritage Foundation.

1.07 million cubic metres, as a direct consequence of the Asian economic crisis.[123]

One Malaysian company controls approximately half of PNG's log exports, and possibly more.[124] According to the PNG Forest Authority, Japan is the destination for over half of the logs leaving the country, and South Korea consumes about one quarter of the raw log exports. There has also been a very rapid growth in exports to the Philippines following exhaustion of their domestic forest resources.[125]

It is estimated that 84 percent of PNG's forest frontier is threatened by expansion of logging operations.[126] In 1989, the Barnett Commission of Inquiry into the Timber Industry identified a number of serious problems, including an absence of adequate forest working plans and environmental plans, inadequate inspection procedures, and a low level of capacity on the part of field forestry personnel to monitor operations and enforce compliance.[127] Recently, PNG has imposed a moratorium on new logging concessions and plans to review all existing logging licenses. The move was announced in December 1999 in response to allegations of corruption in the timber industry.[128] PNG's new government has already reinstated log export taxes, removed by the previous government during the Asian crisis.

---

123. Bank of PNG, 1999, Quarterly Economic Bulletin, Vol. XXVII, Number 1, March 1999, BPNG, Port Moresby.
124. C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, The National Research Institute of Papua New Guinea, Monograph 32, and the International Institute for Environment and Development, London, UK.
125. C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, The National Research Institute of Papua New Guinea, Monograph 32, and the International Institute for Environment and Development, London, UK.
126. D. Bryant et al., The Last Frontier Forests: Ecosystems and Economies on the Edge, World Resources Institute, Washington DC.
More detailed impacts on the environment and local communities has been documented by C. Filer, (editor), 1997, The Political Economy of Forest Management in Papua New Guinea, The National Research Institute of Papua New Guinea, Monograph 32, and the International Institute for Environment and Development, London, UK.
127. T. Barnett, 1989, Report of the Commission of Enquiry into Aspects of the Forest Industry: Final Report, unpublished report to the government of Papua New Guinea.
128. Tropical Timbers, 2000, volume 15, number 1, "PNG imposes concession moratorium".

Often no efforts are made for long-term investment in a concession by the new investors, the primary objective being the rapid removal of logs.

4.3.2 The Solomon Islands

Around three-quarters of the Solomon Islands, or 2.4 million hectares is covered with tropical rainforest. Over 80 percent of land are customarily owned. Traditional forest use has recently been complemented by exploitation of forests for timber and cash income. Log exports have until recently provided 45 to 55 percent of the Islands' foreign exchange and 20-30 percent of government revenue: the Solomon Islands' government has become highly dependent upon log exports.[129]

The timber industry is composed of about 30 companies, five of which represent 70 percent of the market. By 1993, the timber boom was fully in progress with 11 major commercial forestry companies in operation. The market is dominated by Malaysian and Korean companies. Log exports

129. United Nations Development Program, Pacific Island Economic Report, UNDP, New York, December 1997.

are mainly to Japan and Korea (75 percent) with increasing exports to the Philippines, Thailand, China and India. The harvest peaked at over 800,000 cubic metres in 1995 and 1996.[130] Under existing logging licenses, three million cubic metres of logs can be harvested annually: nearly eight times the sustainable harvest.

After years of booming growth, in March 1998, due to the East Asian financial crisis, virtually the entire industry shut down temporarily. Companies continued to operate on the assumption that the market would rise and make operations profitable again by 1999.

Until recently, the Forest Resources and Timber Utilization Act 1969 was the basis for regulating both natural forest and plantation harvest in the Solomon Islands. The act is complex and difficult to interpret. In 1989 and 1994 drafts were prepared to update the legislation, but were not implemented. A new forest legislation was passed in 1999.

The Solomon Island forest sector has been characterised by unsustainable levels of harvests, minimal monitoring, forest degradation through poor management practices, excessive and unnecessary environmental impacts, considerable excess logging license capacity, undervaluing of the forest resource, improper taxation structures, transfer pricing and inadequate national capture of resource rental.

130. United Nations Development Program, Pacific Island Economic Report, UNDP, New York, December 1997.

Table of Figures, Boxes, Tables

Figures

Boxes

Tables