

INDONESIAN FOREST-RELATED POLICIES  
A MULTISECTORAL OVERVIEW  
OF PUBLIC POLICIES IN INDONESIA'S FORESTS  
SINCE 1965

Benjamin Singer

**DRAFT**

This Report is Part of a PhD on Tropical Forest Policies  
at the Institut d'Études Politiques and CIRAD, France

January 2009

## TABLE OF CONTENTS

<b>Acknowledgments</b> .....	6
<b>1. GENERAL INTRODUCTION</b> .....	<b>9</b>
<b>2. FOREST-RELATED POLICIES IN INDONESIA</b> .....	<b>10</b>
<b>2.1. BACKGROUND</b> .....	10
2.1.1. Geography .....	10
2.1.2. Natural History .....	11
2.1.3. Population, Culture and Religion .....	12
2.1.4. Economy.....	14
2.1.5. Political and Administrative Institutions.....	15
2.1.6. Foreign Policy and Geopolitics .....	16
2.1.7. Indonesia’s forests.....	17
<b>2.2. METHODS AND MATERIALS</b> .....	19
<b>2.3. HISTORY OF INDONESIA</b> .....	23
2.3.1. Indianisation and Islamisation.....	23
2.3.2. European Rivalry in the Archipelago (1511-1641).....	26
2.3.3. The Rise and Fall of the VOC (1641-1799).....	27
2.3.4. Constructing the Dutch Colonial State (1800-1912).....	29
2.3.5. Twentieth Century Colonialism (1912-1942) .....	32
2.3.6. Japanese Occupation (1942-1945) .....	36
2.3.7. Revolution and Independence (1945-1949) .....	39
2.3.8. Soekarno and Guided Democracy (1949-1965).....	40
2.3.9. Suharto and the New Order (1965-1998).....	43
2.3.10. Reformasi and Stabilisation (Since 1998).....	48
<b>2.4. FOREST-RELATED POLICIES IN INDONESIA</b> .....	50
2.4.1. Timber Policies .....	50
2.4.1.1. <i>Timber Production until 1967</i> .....	51
2.4.1.2. <i>The Development of the Log Export Industry (1967-1978)</i> .....	52
2.4.1.3. <i>From Logs to Plywood (1978-1998): the Rise of Apkindo</i> .....	55
2.4.1.4. <i>The Demise of Apkindo and the Hardwood Industry (Since 1998)</i> .....	59
2.4.1.5. <i>Decentralisation and Recentralisation Laws</i> .....	63
2.4.1.6. <i>The Explosion of Illegal Logging</i> .....	65
2.4.1.7. <i>Responding to Illegal Logging: Donors, NGOs and the Government</i> .....	68
2.4.1.8. <i>Certification</i> .....	70
2.4.2. The Rise of the Pulp and Paper Industry.....	72
2.4.3. Agriculture and Palm Oil .....	75
2.4.4. Communities, Adat, Transmigration and Agrarian Reform.....	79

2.4.4.1. <i>Social Policies in Forested Areas to 1965</i> .....	79
2.4.4.2. <i>The New Order: Transmigration at the Expense of Adat</i> .....	81
2.4.4.3. <i>From Transmigration to Adat</i> .....	86
2.4.4.4. <i>Community Forestry</i> .....	90
2.4.4.5. <i>Reforma Agraria</i> .....	93
2.4.5. Environmental and Conservation Policies .....	94
2.4.6. Military Policies .....	99
2.4.7. Foreign Environmental Policies and Avoided Deforestation.....	101
2.4.8. Who's Who in Education and Research.....	103
<b>3. FOREST-RELATED POLICIES IN CENTRAL JAVA.....</b>	<b>106</b>
<b>3.1. GEOGRAPHY</b> .....	106
<b>3.2. HISTORY OF JAVA AND JAVANESE FORESTS TO 1967</b> .....	108
3.2.1. The Growing Power of the VOC: Javanese History to 1799 .....	108
3.2.2. The State Takes Over: 1800-1942.....	109
3.2.3. 1942-1967: The Dutch Leave, the State Remains.....	113
<b>3.3. FOREST-RELATED POLICIES SINCE 1965</b> .....	115
3.3.1. The Reign of Perum Perhutani .....	115
3.3.2. "Empty Forests" .....	121
<b>3.4. COMMUNITY FORESTRY ON JAVA</b> .....	123
3.4.1. Historical Overview .....	123
3.4.1.1. <i>The New Order</i> .....	123
3.4.1.2. <i>Reformasi Riots</i> .....	126
3.4.2. PHBM: Collaborative management in public forests .....	128
3.4.2.1. <i>An Overview</i> .....	128
3.4.2.2. <i>The Case of Blora</i> .....	129
3.4.3. Hutan Rakyat: Community-based forest management on private lands .....	133
3.4.3.1. <i>An Overview</i> .....	134
3.4.3.2. <i>The Case of Wonogiri</i> .....	136
3.4.4. PHBM and Hutan Rakyat: Competing Models? .....	142
<b>4. FOREST-RELATED POLICIES IN RIAU.....</b>	<b>146</b>
<b>4.1. GEOGRAPHY</b> .....	146
<b>4.2. HISTORY</b> .....	148
4.2.1. Pre-Colonial Riau .....	148
4.2.2. The Dutch Takeover.....	150
4.2.3. Riau Province .....	151
<b>4.3. FOREST-RELATED POLICIES SINCE 1965</b> .....	153
4.3.1. The Rise and Fall of the Timber Sector .....	154
4.3.2. The Growth of the Pulp and Paper Industry.....	160
4.3.3. Agricultural Policies.....	165

4.3.4.	Conservation Policies .....	169
4.3.5.	Tesso Nilo National Park: A Case-Study .....	171
4.3.6.	The Indigenous Issue.....	176
<b>4.4.</b>	<b>CONCLUSION.....</b>	<b>178</b>
<b>5.</b>	<b>FOREST-RELATED POLICIES IN PAPUA .....</b>	<b>180</b>
<b>5.1.</b>	<b>GEOGRAPHY .....</b>	<b>181</b>
<b>5.2.</b>	<b>HISTORY: THE EDGE OF EMPIRES .....</b>	<b>183</b>
5.2.1.	Explorations .....	183
5.2.2.	Dutch New Guinea .....	184
5.2.3.	Netherlands versus Indonesia.....	186
5.2.4.	From Irian Barat to Irian Jaya .....	191
5.2.5.	Papua since Suharto: Autonomy and Partition.....	194
<b>5.3.</b>	<b>FOREST-RELATED POLICIES SINCE 1965 .....</b>	<b>195</b>
5.3.1.	Timber Policies .....	195
5.3.1.1.	<i>Timber Production during the New Order.....</i>	<i>196</i>
5.3.1.2.	<i>The Ups and Downs of Reformasi.....</i>	<i>197</i>
5.3.1.3.	<i>The Community Dimension .....</i>	<i>199</i>
5.3.1.4.	<i>The Illegal Logging Crisis.....</i>	<i>201</i>
5.3.2.	“Fastwood” and Oil Palm Plantations.....	204
5.3.3.	Mining and Infrastructure.....	205
5.3.4.	Conservation.....	207
<b>5.4.</b>	<b>“PRIMITIVE” VERSUS “DEVELOPED”: A CASE-STUDY .....</b>	<b>209</b>
5.4.1.	Semantics of Primitivism and Development.....	209
5.4.2.	History of development policies in Papua.....	212
5.4.2.1.	<i>Governmental Policies .....</i>	<i>212</i>
5.4.2.2.	<i>The Role of Missionaries.....</i>	<i>213</i>
5.4.2.3.	<i>The Influence of Documentaries and Tourism .....</i>	<i>215</i>
5.4.3.	The Brazza-Eilanden Triangle .....	217
5.4.3.1.	<i>Kabupaten Asmat .....</i>	<i>218</i>
5.4.3.2.	<i>“Opening the Hinterland” .....</i>	<i>219</i>
5.4.3.3.	<i>The Brazza-Eilanden Triangle Comes of Age.....</i>	<i>220</i>
5.4.3.4.	<i>Bese versus Dajup .....</i>	<i>222</i>
5.4.3.5.	<i>Future Prospects .....</i>	<i>226</i>
5.4.4.	Conclusion.....	228
	<b>Bibliography .....</b>	<b>228</b>

## TABLE OF ILLUSTRATIONS

### Tables

Table I. — Indonesia at a glance (with France as a comparison).....	11
Table II. — The selection of case-studies according to the three main criteria. ....	22
Table III. — Definitions of <i>Masyarakat Adat</i> collected by the author.....	88
Table IV. — List of public or national organisations involved in the management of Wonogiri Dam and its surroundings .....	140
Table V. — Indonesian terms used to describe isolated inhabitants of Papua.....	210
Table VI. — Indonesian terms used to denote development as opposed to primitivism.....	211

### Figures

Figure I. — Indonesia's forest estate ( <i>Kawasan Hutan</i> ) in 1997.....	19
Figure II. — Indonesian log production and export.....	54
Figure III. — Indonesia's plywood capacity and production 1973-1987 .....	56
Figure IV. — Indonesia's share of world tropical plywood exports 1980-1991 .....	58
Figure V. — Official log and plywood production 1998-2006.....	61
Figure VI. — Boom and Bust: the rise and fall of Indonesia's hardwood industry. Total surface area of concessions (HPH) in Indonesia 1968 to 2006.....	62
Figure VII. — Imports and exports of paper in Indonesia 1999-2005 .....	74
Figure VIII. — Number of migrants under Soekarno's and Suharto's transmigration programmes 1951-1994. .	82
Figure IX. — Structure of Perum Perhutani in the 1990s .....	120
Figure X. — Teak forest age classes 1984 and 2001 .....	122
Figure XI. — Riau's forest estate broken down into its different categories.....	147
Figure XII. — Changes in forest cover in Riau between 1982 and 2004.....	154
Figure XIII. — Timber production in Wilayah panglong in Riau between 1905 and 1953.....	155
Figure XIV. — Roundwood production in natural forests of Riau Province 1971-2004.....	156
Figure XV. — Sawwood production in natural forests of Riau Province 1977-2004.....	157
Figure XVI. — Total surface area and number of concessions (HPH) in Riau 1975-2000 .....	157
Figure XVII. — Changes in area of natural & planted forest concessions (HPH and HTI) in Riau 1999-2005..	161
Figure XVIII. — Growth of oil palm plantations in Riau between 1982 and 2005 .....	166
Figure XIX. — Log production in Papua <i>per annum</i> 1997-2006 .....	197
Figure XX. — Plywood production in Papua <i>per annum</i> 1997-2006.....	198
Figure XXI. — The unilinear scale from “primitive” to “developed” based on the criteria most frequently used by interviewees in Asmat and the Brazza-Eilanden Triangle.....	211

**Boxes**

Box I. — Defining forest-related policies .....	20
Box II. — The importance of trade in Indonesian history .....	25
Box III. — Malay and Indonesian.....	35
Box IV. — Constructing Indonesian regalia .....	38
Box V. — From acacia to paper.....	73
Box VI. — Intersectorial planning.....	76
Box VII. — Palm oil.....	77
Box VIII. — Indonesian <i>Transmigrasi</i> versus Brazilian <i>Colonização</i> .....	86
Box IX. — Mining Policies .....	99
Box X. — Conservation policies in Central Java.....	119
Box XI. — Java's traditional rural caste system.....	136
Box XII. — The institutional configuration of Tesso Nilo National Park .....	172
Box XIII. — Freeport.....	206
Box XIV. — Gaharu .....	221

## **Acknowledgments**

For my stay and fieldwork in Indonesia I am especially grateful to both CIRAD and CIFOR whose common memorandum of understanding enabled me to benefit from CIFOR facilities in Bogor. In particular I wish to thank Jean-Guy Bertault, Alain Karsenty, Robert Nasi and Annie Molina at CIRAD, and Frances Seymour, Doris Capistrano and Moira Moeliono at CIFOR. A large number of CIFOR researchers were also instrumental in helping me prepare fieldwork in Central Java, Riau and Papua: their contributions are acknowledged below.

Life as a lone “bule” can be challenging at times, even in such a friendly country as Indonesia. For their help through harder times, in the logistics of settling down in Bogor and teaching me Indonesian in the first months, I wish to thank Irma Nurhayati, Galuh Sekar Arum, Dinda Trisnadi and Langlang, along with Chandramaya Siska Damayanti and Ibu Jum. Many thanks also to Romain Pirard and Lorelou Desjardins for their precious tips on Indonesian life and equally valuable contacts in the forest and indigenist sectors respectively.

For my fieldwork in Central Java, my thanks go to Philippe Guizol (CIRAD/CIFOR) and Levania Santoso (CIFOR) who used many of their contacts in Central Java to make my research as fruitful as possible. Pak Hariadi Kartodiharjo (Institut Pertanian Bogor) also helped me establish essential contacts such as Pak Taryanto (Persepsi), whom I wish to thank for having provided me with the bulk of my data on the Wonogiri case-study and proved to be a great host.

I am also greatly indebted to Pak San Afri Awang (Universitas Gajah Mada) and his entire team (especially Ambar Astuti and Titik) for having facilitated my fieldwork in the villages of Tanggel and Gempol, Kabupaten Blora. In Tanggel, I would like to thank Pak Mulyoto and his wife Ibu Titik for their hospitality. Last but not least, my research would never have gone so smoothly had my friend, assistant and occasional interpreter Andika Didit Junianta not been there to teach me about Javanese etiquette and way of life.

For my stay and research in Riau I would like to thank Chris Barr (CIFOR) and Rusli Rustam (IPB Bogor / UNRI Pekanbaru) for having introduced me to Riau, and Mustafa Kamal (UNRI) for having greatly helped me out with logistics and in contacting interviewees. Whilst some local contacts were less forthcoming, others greatly facilitated my data collection, notably Zulfahmi (Jikalahari), Nurul Qomar (UNRI), Eliezer Lorenzo (RAPP/APRIL), Pak Jafri (representative of the *adat* movement) and Prof. Tabrani Rab (UNRI). My thanks also go to the organisers of The Forests Dialogue who kindly invited me to attend their meeting on the pulp and paper industry held in Pekanbaru in March 2007.

My research in Papua would probably not have taken place without the help of several people at CIFOR (Bogor) who were fundamental (i) in directing and accompanying me to the most interesting places, notably Krystof Obidzinski and Agus Adrianto, and (ii) providing me with the necessary paperwork to get around with minimal hassle, especially Mohammed Nuzul Bahri, Hidayanti and Juniarta Leli Panjaitan.

In Papua my thanks go to Ibu Herlin (Sentani) for introducing me to many contacts in the Jayapura area; the team of local NGO Alma Mater in Merauke for helping out with logistics to get to Agats; Sam (Binam, *kabupaten* Asmat) for suggesting places to study; and Demet (Tokuni, *kabupaten* Yahukimo) a Yali missionary and teacher but also an excellent guide, without whom I might still be in the forests of the Brazza region. I would also like to thank

Desi, Daku and their relatives who accepted the intrusion of a couple of white men into their daily lives for a month.

This report is part of a PhD on tropical forest-related policies in Brazil, Cameroon and Indonesia which has benefited from two scholarships, one from the French Ministry of Research (*Allocations doctorales*) and one from the French Embassy in London (*Entente Cordiale*). Last but not least, I am very grateful to Malik Aït-Saïd for his moral support in the trip's most challenging times.

## **1. GENERAL INTRODUCTION**

This report has been written up as part of a PhD on a comparison of forest-related policies in Brazil, Cameroon and Indonesia. It is structured so as to reflect the four case-studies selected to illustrate the diversity of forest-related policies in Indonesia: policies at the national level and at three regional levels (Central Java, Riau and Papua). Each chapter is structured to provide (i) a general geographical and historical background and (ii) a narrative of the evolution of forest-related policies sector by sector. The last three sections all include one or more local case-studies (Wonogiri and Blora for Central Java; Tesso Nilo National Park for Riau; and the Brazza-Eilanden Triangle for Papua).

Two features immediately strike the scholar when briefly comparing the Indonesian case with the other two countries studied for this PhD. First, Indonesian forest-related policies are driven to a much greater extent than in other countries by powerful conglomerates in a number of highly lucrative sectors, notably timber, pulp and paper, and oil palm. As a result, the country's policies are particularly dynamic, but so is the drive towards deforestation.

Secondly, the forest sector, and in particular timber production during the New Order, was an essential instrument in the consolidation of Indonesia as a unitary, centralised state. The fact that a single Ministry controls some three quarters of the archipelago's surface area is a clear illustration of this, and undoubtedly helped the central government dominate social, political and economic affairs even in the most remote parts of the country. Yet despite this, Indonesia is one of the only countries in the world to still be home to a number of uncontacted forest-dwelling populations – a paradox which is described in greater detail in the section on Papua.

Where appropriate or necessary, a minimum of interpretation has been provided to better understand each case-study. For deeper interpretation using more specific tools of public policy theory as well as a comparison with similar policies in Brazil and Cameroon, please refer to the body of the PhD thesis.

## 2. FOREST-RELATED POLICIES IN INDONESIA

In the minds of Westerners, Indonesia's forests conjure up two opposed images. On the one hand, they are reminiscent of a distant imaginary past of oriental opulence and a wealth of spices, which in a modern context translates into a vision of tropical paradise of untouched forested islands with exceptional biodiversity and exotic cultures. On the other, they convey a picture of environmental disaster and destruction in a country marked by one of the world's highest rates of deforestation, as is all too often grimly portrayed in Western media.

Indonesia's forests are indeed disappearing at a more alarming rate than either of the other two countries studied in this PhD, Brazil and Cameroon. Behind this simple fact lies a bewildering array of factors and actors, all entangled in a complex web of ideas, institutions and interests which nobody has yet been able to undo to reduce the damage it is causing to the country's forests. By analysing the issue of forest management at national, provincial and local levels and from the perspective of all connected sectors, this research tries to understand how Indonesia's forest-related policies have come to be what they are today.

### 2.1. BACKGROUND

#### 2.1.1. Geography

Indonesia, the world's largest archipelago, is home to a staggering 17,500 islands (Raillon 2007:53) that straddle the Equator. Although the country's land mass is less than 2 million km<sup>2</sup>, its territorial waters are five times this size. As a result of these exceptional traits and the cultural importance given to the sea by Indonesians, the country has earned two popular names: *Nusantara* – literally “the islands in between [the two continents of Asia and Australia]”, and *Tanah Air*, an oxymoron that roughly translates as “the land of water”. Table I provides a country profile by summarising the main figures in geography, economy, politics and forestry.

The country is generally split by geographers into eight regions, namely (from west to east) Sumatra, Java, Kalimantan (*i.e.*, the Indonesian part of Borneo), Bali, Sulawesi (formerly known as the Celebes), Nusa Tenggara, Maluku (formerly known as the Moluccas) and Papua (formerly known as Irian Jaya). From the northern tip of Sumatra off the coast of Aceh (the town of Sabang on the island of Weh) to the southern end of the border with Papua New Guinea, near the town of Merauke lie more than 5,000 km – a length which, as Indonesians like to remind many Westerners, is greater than the entire breadth of Europe. Hence another popular expression used to refer to Indonesia: *Dari Sabang sampai ke Merauke* (from Sabang to Merauke).

		Indonesia	France
Geography	Population size*	237,512,355 (July 2008 est.)	60,876,136 (July 2008 est.)
	Surface area (km <sup>2</sup> )*	1,919,440	547,030
Economy	GDP per capita (PPP) (US\$)*	3,700 (2007 est.)	33,200 (2007 est.)
	Human development index 2007 (rank)**	0.728 (107)	0.952 (10)
Politics	Corruption perceptions index 2007 (rank)***	2.3 (143 <sup>rd</sup> )	7.3 (19 <sup>th</sup> )
Forestry	Forest cover in km <sup>2</sup> 2005 (% of country's surface area)****	884,950 (48.8%)	155,540 (28.3%)
	Percentage of world's forests****	2.24%	0.39%
	Annual rate of forest cover change in km <sup>2</sup> /yr 2000-2005 (%)****	-18,710 (-2.0%)	+410 (+0.3%)
	Removal of wood products in 1000 m <sup>3</sup> o.b. 2005 (1990)****	11,257 (26,560)	51,475 (55,621)
	Formal employment in forestry 2000****	162,000	35,000

**Table I. — Indonesia at a glance (with France as a comparison).**

\* CIA World Factbook (<https://www.cia.gov/library/publications/the-world-factbook/index.html>, retrieved 26 August 2008)

\*\* Wikipedia's list of countries by Human Development Index, ([http://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_Human\\_Development\\_Index](http://en.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index), retrieved 26 August 2008)

\*\*\* CPI table by Transparency International ([http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2007](http://www.transparency.org/policy_research/surveys_indices/cpi/2007), retrieved 26 August 2008). Transparency International's methods have been severely criticised by some observers. For instance, it is believed that the Cameroonian ranking for 1999 (when the country came top in terms of corruption) resulted from only 8 questionnaires.

\*\*\*\* FRA 2005 Global Tables (<http://www.fao.org/forestry/32006/en/>, retrieved 26 August 2008). Some of the figures are to be taken with caution; for instance, Karsenty *et al.* (2006:40) finds that the number of people officially employed in the Cameroonian timber sector varied between 12,012 and 17,140 between 1998 and 2004 according to different sources; however, it never reached the figure of 20,000 put forward by FRA 2005. Data for Indonesia thus might also be questionable.

### 2.1.2. Natural History

The great diversity of Indonesia's natural history reflects the archipelago's fragmentation. The vast majority of Indonesia's territory was once covered with dense tropical rainforest. The only exceptions are (i) the string of islands east of Bali (known as *Nusa Tenggara*, or the "islands of the southeast" where the drier climate has never allowed the lush vegetation of

neighbouring islands to grow, and (ii) mountaintops, in particular the central mountain range of Papua.

Everywhere else, rainforest dominated the landscape, many of which can still be found today. To the untrained eye, the forests of Sumatra might appear identical to those of Papua or even Myanmar and Queensland (Australia). However, fundamental structural differences have led biologists and ecologists to confirm British naturalist Alfred Wallace's hypothesis that Indonesia straddles two very different groups of ecosystems.

The western group, part of the greater Asian realm, is known as Sunda, where forests are dominated by trees of the *Dipterocarpaceae* family and very high species richness similar to that found in the Amazon. Flagship animal species include the Sumatran tiger, the Sumatran and Bornean elephants, the Javanese rhinoceros and a wealth of primates from orang-utans and gibbons among the apes to miniscule tarsiers. The eastern group, known as Sahul, is more similar to forests of the rest of Papua and Australia than it is to Asia. Although also mostly dominated by Dipterocarps, forests of southern Papua are strongly reminiscent of Australian forests which are dominated by a few species of eucalyptus. Likewise, animals resemble Australian fauna and mostly include marsupials such as tree kangaroos and cuscuses.

Alfred Russel Wallace drew a line, known today as the Wallace line, between Sulawesi and Kalimantan and that crossed right through the island of Lombok to clearly separate Sahul from Sunda, but the reality is much more complex. In fact, there appears to be a cline in the shift from one group of ecosystems to the other, in other words some sort of overlap where characteristics of both groups are found. This overlap area is quite extensive and includes much of Sulawesi, Nusa Tenggara, Maluku and even parts of Papua itself, where dipterocarps can still be found in abundance. Likewise, although Maluku and Sulawesi are firmly located in Sahul according to the Wallace line, primates such as tarsiers and certain species of macaques can still be found in these regions.

In recent years, Indonesia has made itself notorious for having a particularly unstable geology. The country is located along eastern Asia's "fire belt" along the edges of the Eurasian, Pacific and Australian tectonic plates, the two former currently undergoing major adjustments. As a result, Indonesia is a land of volcanoes, many of which are active (such as Gunung Merapi which threatened to erase the Javanese city of Yogyakarta in 2006), and most infamously earthquakes. These are such a regular occurrence in Indonesia that not a single month goes by without the ground moving somewhere in the archipelago. Of course, the greatest earthquake to date was the one which took place on 26 December 2004 off the western coast of Aceh, causing a giant tsunami obliterating entire towns, reached the coasts of East Africa and caused a global death toll of over 300,000.

### **2.1.3. Population, Culture and Religion**

Indonesia probably displays the greatest diversity in terms of populations, cultures and religions of any of the three countries studied for this PhD. First, the country's population is distributed extremely unevenly across the archipelago. By far the largest concentration of people is on the island of Java which, with a population of 124 million in 2005, is home to an average population density nearing 1,000 inhabitants per km<sup>2</sup> (primarily due to flourishing civilisations and an intensive cultivation of rice made possible by rich volcanic soils). This

makes Java one of the most densely populated rural areas on earth, although the island is home to some of the country's largest cities such as sprawling Jakarta (13 million including the metropolitan area), Surabaya (3 million), Bandung (2.5 million) and Semarang (1.4 million).

Although almost 4 times the size of Java, Sumatra is "only" home to 45 million people located primarily in the south, west and along the island's coastline. The other regions are comparatively unpopulated, except for Java's neighbouring islands of Madura, Bali and Lombok where population densities are similar to Java. The western part of the island of New Guinea is the least densely populated with a mere 6.3 inhabitants per km<sup>2</sup> (*i.e.*, 150 times less than Java).

Indonesia is an arch example of a multiethnic country, with over 600 languages spoken, half of which are believed to be spoken in Indonesian Papua alone. Indonesian (*Bahasa Indonesia*) is the most spoken language in the archipelago and since 1945 has been the country's official language taught in schools and used in public life. This language is actually a slightly modified form of Malay (*Bahasa Melayu*) which originated in Sumatra and/or peninsular Malaysia and spread across the region as a *lingua franca* spoken by traders, in a similar way to Swahili in East Africa.

Despite the predominance of Indonesian, a number of regional languages continue to dominate certain regions of Indonesia, if not the entire country. Such is the case of Javanese, spoken by 75 million people in Central and East Java notably, and which has contributed much vocabulary to modern Indonesian. Sundanese (27 million speakers) is the second largest regional language, spoken mainly in West Java, followed by Madurese (9 million on Madura), Minangkabau (6.5 million in West Sumatra), Buginese (*Bahasa Bugis*, 3.5 million in South Sulawesi) and Balinese (*Bahasa Bali*, 3 million speakers in Bali).

This rapid picture of the country's languages is sufficient to understand its ethnic diversity and the dominance of certain ethnic groups (*suku*) in Indonesia. By far the largest ethnic group is that of the Javanese which dominate the country's political and cultural life to the extent that Acehese separatists denounce the state of Indonesia as RIJ (*Republik Indonesia Jawa*). Along with a large majority of other ethnic groups and their languages, they form an ethno-linguistic family known as Austronesian. In fact, the Austronesian (literally "southern islands") family encompasses societies found from Madagascar to Easter Island, including any Malagasy societies, most of Malaysia, Indonesia and the Philippines, a group in continental Southeast Asia known as the Cham, and all Polynesians (Tongans, Samoans, Tokelauans, indigenous peoples of French Polynesia and Hawai'i, as well as the Maori of New Zealand, etc.).

Austronesians are believed to have originated in Taiwan before spreading to insular Southeast Asia several thousand years BC. They are generally characterised as societies turned towards the sea which depend on fish as a primary source of protein and which can travel across great distances on the ocean thanks to outrigger canoes. Accordingly, Austronesian languages share a common core of words and grammatical rules such as the use of affixes to modify the meaning and/or function of a term.

The other main group found in Indonesia, albeit in much smaller numbers, are the Papuans and indigenous inhabitants of nearby islands which are usually categorised as "Australoid" as a result of their physical similarities with Australian Aboriginal populations. These are of

course located primarily in Papua but these populations share physical, cultural and linguistic elements with nearby islands such as Timor and in *Nusa Tenggara Timur* (Eastern Nusa Tenggara). Unlike Austronesians, this group – whose ancestors are believed to have arrived at least 60,000 years ago (*i.e.*, before even Neanderthals had gone extinct in Europe) – is characterised by much greater heterogeneity in linguistic and cultural terms and cannot be categorised as displaying specific traits other than very general physical features.

Indonesia's religions largely reflect the country's history of external influences. It is believed that until the period of "Indianisation" of the archipelago most societies had animistic religions, but by the end of the first millennium AD the region's largest empire such as Sri Wijaya and Sailendra were based on Hindu and Buddhist practices directly originating from India. Little of Hinduism remains today because of the spread of Islam (again through India) beginning in the late 13<sup>th</sup> century in Aceh, with the notable exception of Bali, where a majority of the inhabitants are labelled as Hindu.

Islam fundamentally changed the identity of Indonesia's societies as the religion spread across the archipelago, firmly implanting itself above all on Sumatra and Java. Today, over 80% of Indonesia's population is said to be (Sunni) Muslim. The Portuguese were the first to bring Catholicism to the region and succeeded in converting many, especially in the East where they were most active (notably Nusa Tenggara, Timor and Maluku). Although Dutch authorities had always been wary of missionary work, they nevertheless allowed Christianity (both Catholicism and different Protestant denominations) to spread, particularly in areas where Islam was not fully implanted such as the eastern islands and Papua. Finally, the regular influx of Chinese immigrants since the 15<sup>th</sup> century has maintained a small but tightly-knit Buddhist and Confucian community, notably in main cities. Jews are virtually unheard of in Indonesia, although there is a semi-cryptic community of a hundred or so centred on a single Synagogue in Surabaya, originating from nineteenth century Irak.

The state of Indonesia requires that every citizen have a religion which becomes part of the citizen's official identity and is mentioned on official papers, just like a name is. The state traditionally recognises five "authorised" religions, namely Islam, Protestantism, Catholicism, Hinduism and Buddhism, to which a sixth religion was added in the early 2000s – Confucianism. Whatever the ethical implications of such a phenomenon, religious labelling does allow official statistics to be produced, although it undermines the diversity within each category, many people belonging to a specific religion only by name. It also leads to an underestimation of the diversity of religions and beliefs that are still prevalent in many parts of the country. This is especially the case of more remote areas such as Papua but even in Java Islam is still coloured with strong traditional mysticism and a variety of spirits and ghosts – which (as some would point out) go against the first pillar of Islam itself.

#### **2.1.4. Economy**

With a GDP per capita of US\$ 3,700 in 2007 (see Table I), Indonesia ranks as an emerging country situated near the average for Southeast Asia – poorer than Singapore and Malaysia but wealthier than Myanmar or Cambodia.

Agriculture was once the most important sector: in 1970, it contributed 55% of the country's GDP, as opposed to a mere 15% today. Yet the sector remains a vibrant part of the Indonesian

economy as the country reached self-sufficiency in food in 1983 and as agriculture remains an essential component of the livelihoods of a large proportion of the population. Moreover, cash crops and plantations (notably cocoa, coffee and rubber) have always constituted a major export, whilst the palm oil sector has recently undergone exponential growth, bringing agriculture back as one of the largest sources of foreign income (see section below on the palm oil sector).

The country's major source of foreign income has remained oil since the 1970s, which continues to rank top in the country's exports (12.5% in 2000 according to De Koninck 2005:146) ahead of natural gas (10.7 % in 2000 [De Koninck 2005:146]). In recent years, oil production has fallen from 510 billion barrels in 2000 to 380 billion in 2004 (Manuelle Franck, personal communication), but natural gas production has been on the increase, from 45 billion m<sup>3</sup> produced in 1990 to 73 billion in 2004. Riau and East Kalimantan account for much of this production (see section on Riau below). Other products include coal (whose production shot up from 11 to 132 million tonnes between 1990 and 2004), tin (35% of world production), nickel (8% of world production) and of course timber and other forest products, described below in the relevant sections.

Whilst Indonesian economy was primarily driven by exports of raw agricultural products until the 1960s, in the 1970s and 1980s it was dominated by industrial exports spearheaded by booming oil production. The political economy of this period was characterised by strong state intervention, a planned (yet market-based) economy and the predominance of public-owned companies. The mid-1980s saw rapid change with the fall in oil prices and the government's decision to liberalise its economy and welcome foreign investment. As a result, new sectors flourished, notably that of textiles which today ranks top in Indonesia's exports after oil and natural gas. Other sectors that followed suit include leather and shoes, and electronics. Last but not least, the services sector recently overtook the industrial sector in importance as it contributes to 45.3% of the country's GDP, as opposed to 40.7% for industry.

Indonesia was one of the worst-hit countries by the 1997 Asian financial crisis. Within months of foreign investors suddenly pulling out of the region, the value of the Indonesian Rupiah (Rp.) fell from 2,000 to 18,000 to the US dollar. This in turn prompted severe recession, a contraction of the GDP by 13.7% (after a decade of growth at 7%) and social unrest which eventually led to the fall of Suharto. The decade since has been marked by economic turmoil followed by a hesitant recovery, although by 2008 the Rupiah had been stable at around 10,000 to the US dollar for several years. Today, Indonesia's trading partners are all situated in Asia (Japan, China and Singapore for both exports and imports), with the exception of the United States which ranks second in the country's export markets.

### ***2.1.5. Political and Administrative Institutions***

Today, Indonesia is a democracy with a presidential system (the current president being Susilo Bambang Yudhoyono, elected in 2004). Following the declaration of independence in 1945, Soekarno became the country's first president and remained in power until 1967 when he was replaced with Soeharto (known since the spelling reform as Suharto). When he resigned in 1998, a quick succession of presidents took place, with Yusuf Habibie (1998-9), Abdurrahman Wahid (1999-2001) and Megawati Soekarnoputri (2001-4). Susilo Bambang

Yudhoyono, commonly known as SBY, has thus been the longest serving president since Suharto.

The Indonesian equivalent of the Houses of Parliament is known as *Majelis Permusyawaratan Rakyat* (People's Consultative Assembly or MPR). MPR is divided in two houses, the more famous *Dewan Perwakilan Rakyat* (People's Representative Council or DPR) and the *Dewan Perwakilan Rakyat* (Regional Representatives Council or DPD). Although it once played a largely consultative role during the rule of Suharto, the powers of DPR have been largely increased since 1998.

Indonesia has always been home to a multiparty system, although under Dutch occupation and during the rules of Soekarno and Suharto politics were heavily dominated by one party, the remaining ones playing largely a role of façade. Since 1999 (when Habibie was replaced), however, Suharto's party, Golkar (*Partai Golongan Karya* or "the Party of Functional Groups") has not seen any of its representatives gain power again. A number of parties have been created since 1998 and the era of Reformasi, but the main larger parties already existed, including (i) the Islamic *Nahdlatul Ulama* Party linked to Abdurrahman Wahid's *Partai Kebangkitan Bangsa* (People's Awakening Party), (ii) *Partai Demokrasi Indonesia Perjuangan* (PDI-P) which saw Megawati Soekarnoputri become president, and (iii) *Partai Demokrat* (PD) whose head SBY currently holds the office of president.

The administrative divisions of the Indonesian territory have a very high number of levels. Indonesia is divided into 33 provinces (*propinsi*, headed by a *Gubernur* or Governor), five of which have a special status (mostly related to greater autonomy), and three of which are studied in greater depth in the sections below (Central Java, Riau and Papua). Each province is divided into a number of *kabupaten* (headed by a *Bupati*) which are usually translated as "regencies" (derived from the Dutch colonial term) or "districts". However, given the connotations associated with the former term and the confusion over the latter (which is sometimes used to refer to the lower level of *kecamatan*), this report will use the original term of *kabupaten* rather than use an equivalent term in English.

Further divisions are *kecamatan* and *kelurahan* (sometimes also known as *desa* or "village"). At the level of neighbourhoods one finds further divisions, namely *dusun*, *rukun warga* (literally "citizens' harmony") and *rukun tetangga* (literally "neighbours' harmony"). These lowest levels are inherited from the period of Japanese occupation when they were introduced as a means of surveying populations at the lowest level. Today, each *Rukun tetangga* is still headed by a *Pak RT* ("Mr Rukun Tetangga") who maintains "order and harmony" in the neighbourhood in a similar way to a concierge.

### **2.1.6. Foreign Policy and Geopolitics**

Over the course of its short history Indonesia has changed its bilateral relations several times with its immediate neighbours and the world's main powers. Following a violent war of independence in which the Dutch but also the British were involved, Soekarno sought to cut all political ties with several European countries and especially the Netherlands. Since then, relations with European countries have remained few and far between, signalling the abrupt end of European supremacy which had ruled the region for several hundred years.

Soekarno also had a difficult relationship with the United States given his populist left-leaning views on politics and spearheaded the Non-Aligned Movement with the 1955 Bandung Conference. Yet he successfully played on US support in the period leading up to the handing over of Dutch New Guinea to Indonesia in 1963 (described in greater detail in the section on Papua). After Suharto came to power, however, close ties were built with the United States as the new President was instrumental in crushing Communist sympathisers in Indonesia, leading to ties being cut with the People's Republic of China (which were eventually re-established in 1990).

Regional relations have been equally tense and volatile. Given Soekarno's dreams of a Great Indonesia (*Indonesia Raya*) which included British possessions in the region – leading up to open conflict with Kuala Lumpur over the control of Borneo – Indonesian-Malaysian relations have always remained difficult. Likewise, Indonesia's decision to halt the sale of sand to Singapore (which uses it to claim land from the sea) is witness to the complex relations between the two states.

East and South, relations with Papua New Guinea, Timor Lorosae and Australia have not fared any better. Since its independence from Australia in 1975, Papua New Guinea supported the Papuan independence movement spearheaded by OPM (see section on Papua), although in 1992 the two countries came to an agreement on preventing OPM guerrillas from benefiting from New Guinean soil as a refuge. Australia's relations have also been marked by the Papuan issue in recent years as Canberra has granted visas to refugees, causing considerable anger in Jakarta. Finally, Indonesia's controversial handling of the Timorese issue over the country's independence has tarnished the country's image still for many years to come.

Indonesia is one of the founding members of ASEAN, the Association of Southeast Asian Nations, founded in 1967. ASEAN has often been criticised for being a toothless organisation unlike the European Union which plays an essential political role. However, as ASEAN representatives themselves point out, ASEAN never had the objective of acting as a supranational political institution with statutory powers. Instead, the Association has focused on economic issues such as creating a free trade area in 1992. More recently, following the issue of forest fires in the late 1990s, the Association's members signed the ASEAN Agreement on Transboundary Haze Pollution in 2002 (described in greater detail in the section on Conservation Policies in Indonesia).

### **2.1.7. Indonesia's forests**

Indonesia has undoubtedly displayed the world's most formidable example of large-scale deforestation in recent decades. Once the second largest tropical forest "bloc", the country's forests have shrunk to little over half the cover they used to be in the mid-1960s, from an estimated 148 million hectares in 1950 (Matthews 2002:8) to 88 million in 2005 (FAO 2005).<sup>1</sup> According to FAO statistics, Indonesia suffered a 1.7% deforestation rate *per annum* throughout the 1990s – a figure which worsened to 2.0% between 2000 and 2005. Indonesia has now slipped behind the DRC in terms of overall forest cover. Today, forests are still located across the archipelago, from Sumatra to Papua, although the greatest blocs of forest

---

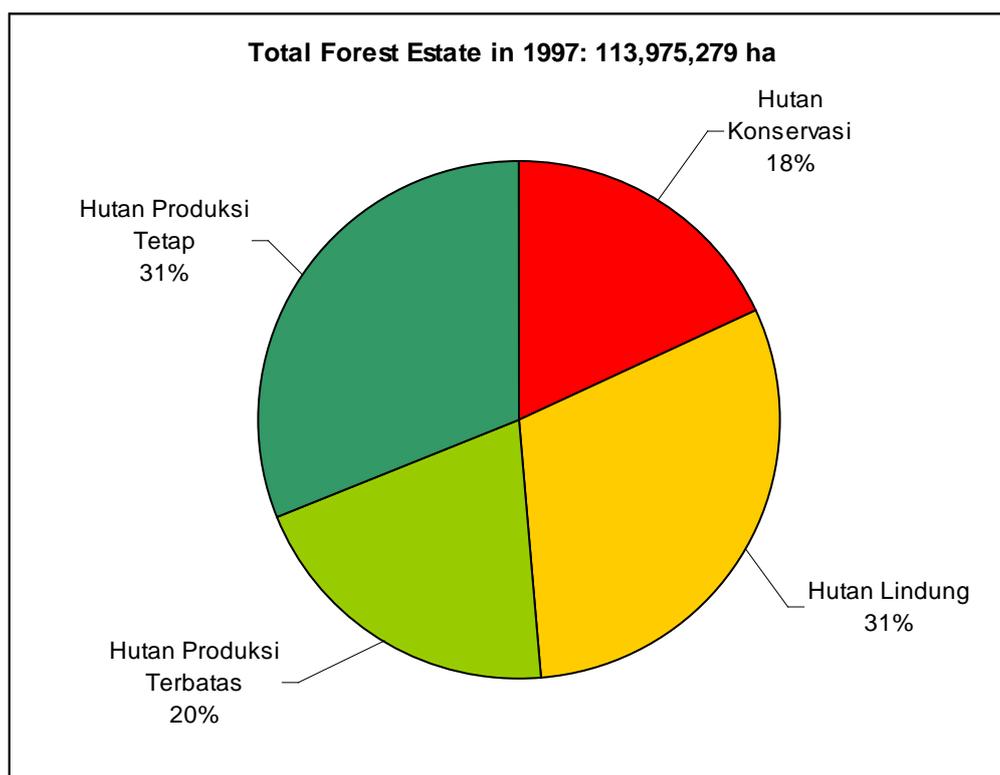
<sup>1</sup> Matthews (2002:7-22) provide an in-depth analysis of different national deforestation rates and discuss the difficulties in compiling reliable data in this regard.

today are situated (i) in Papua on either side of the central mountain range, (ii) in the heart of the island of Borneo, primarily in inland East Kalimantan, and (iii) in central and northern Sumatra.

The Basic Forestry Law of 1967 generalised the land tenure regime prevalent on Java to the rest of Indonesia by creating the Forest Estate (*Kawasan Hutan*), property of the state and managed by the Ministry of Forests. The boundaries of *Kawasan Hutan* have never been demarcated in their totality, which has inevitably led to conflicts, but are constantly adjusted as a result of shrinking forest cover and negotiations between stakeholders. Within *Kawasan Hutan* the following categories of forest can be found:

1. *Hutan Produksi Tetap* (Permanent production forests), destined for production of timber or pulp. In this category of forest there are no restrictions to felling other than those fixed by existing regulations on logging practices, known as TPTI (*Tebang Pilih Tanam Indonesia* or Indonesian Selective Logging and Planting).
2. *Hutan Produksi Terbatas* (Limited production forests), also destined for production of timber but submitted to more stringent regulations (notably a minimum logging diameter of 60 cm rather than 40.5). A scoring system based on criteria such as slope, climate and soil determine the stringency of felling rules in this type of forest.
3. *Hutan Konservasi* (Conservation forests), destined for conservation purposes. This category can be subdivided into a number of different types of protected areas which are listed in greater detail in the section on conservation policies in Indonesia.
4. *Hutan Lindung* (Protection forests) which is destined for protection. Protection forests differ from conservation forests in that they are created to conserve forest functions and services (notably watersheds and erosion prevention) rather than ecosystems or particular species.

In 1997 these categories were found in Indonesia in the proportions listed in Figure I.



**Figure I. — Indonesia's forest estate (*Kawasan Hutan*) according to the four types of forest in 1997 (after Matthews 2002:81).**

As elsewhere in the tropics, the drivers of deforestation are multiple and complex, but an emerging pattern has emerged across the archipelago in recent decades. Production forests tend to be overlogged for timber production, leading to a depletion of the stocks of commercially valuable species. Once the economic value of the forest has been lost, it may legally be converted to a plantation or is often abandoned. These abandoned timber concessions, evaluated at 25.8 million hectares in 2006 (almost 30% of the entire forest estate), are tantamount to open access areas where smallholders often settle to clear the land and plant subsistence and cash crops such as palm oil. Other direct and indirect drivers of deforestation include the state of lawlessness in Indonesia's forests (and thus the lack of prosecution), transmigration, forest fires and agricultural encroachment.

## 2.2. METHODS AND MATERIALS

This study is based on data collected between November 2006 and July 2007 in Indonesia – mainly in Bogor, Jakarta and the three provinces studied in greater detail (Central Java, Riau and Papua). This research was carried out as part of a PhD on a comparison of Brazilian, Cameroonian and Indonesian forest policies at the Institute of Political Studies in Paris and CIRAD in Montpellier, France.

The central question of this thesis is to evaluate the effect of the emergence of an international debate about tropical forests on the national policies of a small number of forested tropical

countries. In this respect, this report provides a mainly descriptive analysis of the change that has occurred over the past three decades or so in the forest policies of a number of case-studies. Data and information provided in this report will eventually be used in the thesis itself.

The angle chosen is political and the theoretical perspective is based on a much-used tool in public policy theory, namely that of policy networks. The concept of policy networks has been defined by Legalès & Thatcher (1995:14) as “the result of more or less stable and non-hierarchical cooperation between organisations that know and recognise each other, negotiate, exchange resources and sometimes share norms and interests”. In order to distinguish policy networks from other types of social networks, one might add to this definition that the organisations in question need to interact over the discussion and attempt to solve specific collective problems.

The notion of policy network is particularly useful in the present study because of the nature of Cameroonian forest policies. First, it adapts well to situations characterised by the fragmentation and multiplication of actors involved in specific policies. Secondly, it emphasises the “fluidity” of resources among different spheres – in this case the local, national and international levels which are generally not as waterproof as they are often portrayed. Finally, the policy network approach is best used to understand the relations between actors and the flow of ideas and interests, which are all crucial elements in this research.

Definitions of what is meant by “forest policies” are very rare in the existing literature, but based on the implicit interpretations of the term, forest policies are generally seen to refer to policies determined by the State that are specifically aimed at forest management of one type or another. Such a definition is subject to two problems.

First, as in any other country or sector, public organisations are no longer the only actors or stakeholders in public policies; Brazilian forest policies have in fact witnessed a sharp rise in the number of different actors involved in forest management. It would therefore be more appropriate to describe public policies as the result of the exchanges between a number of different actors who interact in order to solve collective problems such as that of forest management.

Secondly, policies specifically aimed at forests are not the only public policies that have an impact on forests and forest management. Although the impact of extrasectorial activities on forests is not felt as strongly in Indonesia as they are for instance in Brazil, some sectors still have a real (agriculture and plantations, transport) or potential (mining) effect on forests and their policies. Restricting a study on forest policies to timber production and forest conservation policies would only allow us to focus on one part of the picture. This is why in this study forest policies have been defined as follows:

“Forest-related policies can be defined as public policies which result from interactions among a number of actors involved in forests and that have an impact on forests and their management, whether this impact be intentional or not”.

#### **Box I. — Defining forest-related policies**

The case-studies described here were selected according to three main criteria:

1. **Importance.** The case-studies were chosen according to their importance in two respects: first, the issue of forests has to play a large role in the economy and politics of the case-study, and secondly, the case-study has to be of regional or national importance. For

example, this explains why Riau was selected as this province reflects both types of importance: (i) the issue of forests (whether natural or planted) play an essential role in the province's economy and politics as a major source of income after oil and natural gas production, and (ii) Riau has constituted a trend-setter in terms of the transformations of Indonesia's forest industries – it was one of the first to be intensively logged in the early 1970s, and today it is spearheading the development of pulp and oil palm plantations.

Central Java was also selected according to the criterion of importance – not so much because of the role played by forestry in the province's economy, but rather because it provides an example of the historic precedent set by Java in terms of forest management, well before the concept of forest estate (*Kawasan Hutan*) was ever created.

2. **Diversity.** The case-studies selected need to be as diverse from each other as possible. It was not possible to choose representativeness as a criterion given that in a study like this, each case is unique, characterised by a specific array of issues and actors. However, the criterion of diversity enables this study to illustrate the wide range of different issues and policy networks operating within Indonesian forest policies.

For example, this criterion explains why case-studies were selected from three spheres (local, provincial and national). It also accounts for the selection of Wonogiri / Blora, Tesso Nilo and Asmat as local case-studies, since each of them reflects a different component of forest-related policies (collaborative or community-based forest management, conservation and indigenous / development issues). The choice of the three province also reflects maximum diversity between (i) centuries-old teak forest management (Central Java), (ii) the latest trends in the country's heavy forest industries (Riau) and (iii) forest management in remote locations against a sensitive political backdrop (Papua).

3. **Complementarity.** Scholars and professionals alike have already produced a mass of data on Indonesian forest policies, many of them having focused on specific case-studies. The cases selected in the current research are aimed at providing complementarity to existing research. Rather than focusing on case-studies that have already been looked at several times, cases were selected about which little is known.

The main advantage of this criterion is to increase the potential contribution of this study to the already existing databank on Indonesian forest policies rather than duplicating research that has already been carried out. Carrying out first-hand research (through interviews and participant observation) on issues that have already been studied could arguably be perceived as a waste of time. This explains the author's decision to avoid East Kalimantan, which has been the central focus of forest management studies in Indonesia, and select Riau as an alternative. Likewise, Papua was partly selected as a province which has benefited very little from forestry research so far.

The condition for selecting each case-study was that it had to fulfil at least two of the criteria above. Table II shows the results for the selection process.

Case Studies	Sphere	Criterion 1 Importance	Criterion 2 Diversity	Criterion 3 Complementarity
<b>National Forest Policies (Jakarta)</b>	National	As a national forest policy which interacts with regional and local spheres	Only representative of the national sphere	
<b>Forest policies in Central Java (Jawa Tengah)</b>	Provincial	As the historical basis of national forest policies	Representative of forest policies on Java	
<b>Forest policies in Blora and Wonogiri (Central Java)</b>	<i>Kabupaten</i> / local	The origins of collaborative forest management with local populations in Indonesia	Two examples of collaborative management – one in a public forest (Blora) and the other in a private forest (Wonogiri)	
<b>Forest policies in Riau</b>	Provincial	An illustration of the transformation of forest industries in Indonesia from timber to pulp and paper production	As one of the country's regions with large-scale forest industries	An example of strong forest-based industrialisation less studied than Jambi or East Kalimantan
<b>Tesso Nilo National Park, Riau</b>	Local	One of the most frequently cited and best known national parks in Indonesia	An example of forest conservation policies	
<b>Forest policies in Papua</b>	Provincial		An example of forest policies in a sensitive context of political volatility and special autonomy	An understudied part of Indonesia, especially when compared to its size and potential contribution to forest industries
<b>The Brazza-Eilanden Triangle, Kabupaten Asmat, Papua</b>	Local		An example of application of notions of "primitivism" and "development" in social policies	An area and two ethnic groups studied for the first time

**Table II. — The selection of case-studies according to the three main criteria.**

In order to investigate each of these case-studies, the relevant cities and provinces were visited, where two types of data collection were carried out. First, grey and academic literature, previous studies, correspondence, reports and governmental documents were collected wherever possible, providing a background of information on the case-studies in question and helping orient the researcher towards relevant issues and actors.

Secondly, a large number of interviews were carried out, totalling some 125 for the entire study on Indonesian forest policies. Identification of key actors and interviewees was based both on existing literature and "snowballing", whereby each interviewee is asked which other actors he or she would recommend the researcher meet next. Interviews were carried out in a semi-structured fashion and based on a small number of questions such as (i) how would you describe the organisation you work for and what is its history? (ii) what are your daily activities? Do you have any projects underway or that you have taken part in? (iii) Whom do

you work with most often? And (iv) the interviewee was asked to define a number of concepts (sustainable development, sustainable forest management, participation, conservation and preservation). The data provided by question (iv) will be analysed separately and in comparison with Brazilian and Cameroonian interviewees in a future study.

Data were collected on paper rather than on tape. Although this method of recording may not be as accurate as using a tape, it enabled the researcher to save considerable amounts of time and, more importantly, it allowed interviewees to speak more freely. Recording interviews by tape has been known to prevent interviewees from freely expressing their views on delicate issues such as that of deforestation.

## **2.3. HISTORY OF INDONESIA**

It is somewhat of an anachronism to speak of the history of Indonesia when the very concept of Indonesia was only born in the early twentieth century. This section is therefore devoted to the history of the region now occupied by Indonesia – a term which is used in this section to refer more or less to insular Southeast Asia with the exception of the territories occupied by Malaysia and the Philippines.

Surprisingly few serious sources are available – possibly as a result of the decades of depoliticisation imposed by Suharto which made history a taboo subject. Indonesian children learn about the history of their country through history textbooks approved by the state – such sources are therefore prone to re-interpretation of certain periods of history such as colonialism, the handing over of Dutch New Guinea to Indonesia and the independence of East Timor. As a result, the only authoritative source on Indonesian history is Ricklef's account published in 2001.

### ***2.3.1. Indianisation and Islamisation***

Human occupation of Indonesia is among the most ancient outside Africa, with remains of *Homo erectus* (commonly known as the Java Man) dating back to half a million years ago. The region was also one of the first to witness the settlement of *Homo sapiens* outside Africa with the arrival of the ancestors of modern-day Papuans and Australian Aborigines some 60,000 years ago.

Historians broadly divide pre-colonial Indonesian history into three parts – pre-Indian, Indianisation and Islamisation (see Box II). However, as will be seen below, these phases are a somewhat over-simplistic categorisation of Indonesian history which underestimates both the overlap between these phases and the input of Indonesians themselves in the historical evolution of the region.

Little detail is known of the Indianisation period of Indonesia's history, and even less of the period leading up to it, although it is believed that Austronesians (see section on cultures above) spread to insular Southeast Asia from Taiwan around 2,000 BCE. By the first centuries CE, India was already a powerful source of cultural, political and economic

influence in both continental and insular Southeast Asia. The earliest traces of Indian influence go back to the first century CE with a statue of Ganesha found in Ujung Kulong National Park on Java.

However, it was not until the seventh century or so that “Indianisation” gained pace with the emergence of large Hindu kingdoms. One of the earliest and largest Indianised empires was that of Sri Wijaya (also spelt Srivijaya), centred on southern Sumatra (Jambi) which reached an apex between the 9<sup>th</sup> and 13<sup>th</sup> centuries. Sri Wijaya traded extensively throughout the western half of the archipelago – especially Sumatra, western Java, western Borneo and the Malay Peninsula – but traces of presence of Sri Wijaya are also found as far as Sri Lanka, Sulawesi, Maluku and the Philippines. Such was the power of Sri Wijaya that it is believed that the Khmer Empire might have been one of its tributaries. Sri Wijaya inherited many of its cultural references from the Indian subcontinent, including its own name, which in Sanskrit means “Shining Excellence”. The kingdom was primarily Buddhist and attracted many Buddhist scholars from mainland Asia, including Chinese monks from whom much information about the kingdom was collected.

Other kingdoms also flourished such as Singhasari and Sailendra, but the one which finally replaced the power vacuum left by Sri Wijaya was the kingdom of Majapahit centred on central and east Java. Majapahit was officially founded by Raden Wijaya, a member of the royal family of Singhasari which eventually defeated Sri Wijaya, and thus flourished on the ashes of the fallen empire. Both Hinduism and Buddhism seem to have coexisted as official religions in the kingdom. Majapahit’s golden age was reached in the second half of the fourteenth century under the reign of Hayam Wuruk (“rotten chicken”) and his prime minister Gajah Mada (“raging elephant”).

It was during this period that Majapahit was the major regional power and controlled a large number of vassal states across the entire archipelago, from the Bird’s Head (*Kepala Burung*) of western Papua to the whole of Sumatra and the Malay Peninsula, including Maluku, Nusa Tenggara, Timor, Bali, Java and much of Sulawesi and coastal Borneo. After Hayam Wuruk’s death in 1389 quarrels over succession led to a decline in power of Majapahit which has nevertheless left an extremely rich cultural and linguistic legacy still found across Central and East Java, and to which Bali also owes a lot.

By then, however, the period of Indianisation was drawing to a close in the archipelago. Some evidence suggests that Islam was present in Southeast Asia from a very early period in the spread of the religion, but the tombstone of a sultan found in northern Sumatra dated 1211 CE is witness to the conversion of a head of state in the early thirteenth century. It would be over another century before any evidence of Islam was to be found in Java, where the earliest traces were found at Trawulan with the discovery of Muslim Javanese tombs dated 1368-9 (which suggests that Islam was already present at the height of Majapahit).

The Indonesian archipelago is situated on a key trading route which has played a central role in exchanges between the world’s main civilisations for several thousand years. To this day, insular Southeast Asia – and in particular the Malacca Straits – remain the busiest trading route and the main one between China and Japan on the one hand, and India, the Middle East and Europe on the other (as well as being one the route from India and the Middle East to Australasia and the Americas).

As a result, from a very early period trade has held a crucial role in the development of civilisations in the archipelago. This has been the case especially since Genghis Khan’s Mongolian invasions in Central and West

Asia interrupted the Silk Road which had been the main communication axis between China and the Mediterranean throughout Antiquity. From the 1300s onwards, trade simply took the shortest maritime route, to the benefit of Southeast Asia.

On top of being located on a trading route between many areas outside the region, insular Southeast Asia also traded its own products, most of which were found in forests. They included camphor and sandalwood, but also the spices which made the fame of Indonesia in European eyes, such as pepper in Western Indonesia and clove and nutmeg in the East. The gold of Sumatra and west Borneo was also a major source of attraction.

The legacy of trade in Indonesia is considerable. First, it determined the destiny of the region, as historians like to point out with the division of the historic timeline into three phases according to the region's contact with traders of different origins. These include the period of Indianisation which lasted until the fifteenth century or so; the period of Islamisation which took over and overlapped with the third phase, that of European colonialism. Secondly, trade turned out to be a source of power for many kingdoms, even those which also relied on an inland agrarian society such as Majapahit; for others such as Melaka, trade was simply the sole source of wealth and income. Indonesia is thus often perceived as a "hydraulic" society, which also happens to correspond to the nature of Austronesian societies which have always depended on the sea for their livelihoods.

Some historians, however, have warned against the tendency to explain Indonesian history solely in terms of trade and external influence. Although diffusionist theories account for large parts of the region's history, it must be pointed out that the main civilisations to have flourished, especially on Java, depended heavily on local economies and an agricultural hinterland. In terms of culture, although Indonesian civilisations benefited from considerable external input, they managed not only to blend such outside influences but also developed highly characteristic material cultures which have since become the signature of Indonesia.

**Box II. — The importance of trade in Indonesian history.**

Around 1410 the great Malay state of Malacca (Melaka in Indonesian and Malay) was founded by a prince fleeing the demise of Sri Wijaya, on the west coast of the Malay Peninsula at the narrowest point of the Straits between the Peninsula and Sumatra. These straits were the single most important trading route in the region as they were the shortest maritime route between India and China.

Melaka was thus a compulsory entry point into the region for Muslim traders from India, so it should not come as a surprise that the city-state became the first Muslim stronghold in the archipelago. As Ricklefs (2001:23) explains, "Malacca was probably the puest example of an Indonesian entrepôt state, for it had not significant products of its own; indeed, it had to import food to feed its populace. It quickly became an enormously successful port, for it had a stranglehold on the Straits". Melaka thus quickly rose to become the hub of an extensive trade network reaching westward to India, Persia, Arabia, East Africa and the Mediterranean and eastward and northward to Siam, China, Java and eastern Indonesia. It is primarily through this (peaceful) trading network that Islam spread successfully to central and southern Sumatra, Java, Borneo, Sulawesi and Maluku.

### 2.3.2. *European Rivalry in the Archipelago (1511-1641)*

As in Africa and Brazil, the Portuguese were the first Europeans to establish colonial outposts in Southeast Asia. One of the dreams that the Portuguese Crown had coveted throughout the 15<sup>th</sup> century on the century-long discovery of a maritime route to India via southern Africa was to break the Arab monopoly of the spice trade to Europe. When Vasco da Gama reached Goa in India in 1497, the Portuguese realised the strategic importance of Melaka in the spice trade. As Tomé Pires is believed to have said, “whoever is Lord in Malacca has his hand on the throat of Venice”, referring to the main entry point of spices into Europe.

After a first visit to Melaka in 1510, the Portuguese returned the following year and successfully conquered the city, ushering in a new era of the history of Southeast Asia. From Melaka, it was only a matter of a few years before they had reached eastern Indonesia, particularly Maluku and the kingdoms of Ternate and Tidore which produced the famed spices. The Portuguese handling of trade in Melaka, however, differed widely from that of previous sultans as the Europeans tried to establish monopolies on certain goods. This prompted traders to switch to other ports, largely bypassing the Portuguese monopoly.

The Portuguese were hardly more successful in eastern Indonesia where relations became difficult because of their attempts at Christianisation. It was only *after* the conquest of the Portuguese had been halted in the region that missionary work succeeded in establishing durable Catholic communities among the Indonesian population, particularly in the East – which partly explains the distribution of religions in today’s Indonesia.

The Dutch soon followed suit. Until the mid-16<sup>th</sup> century Holland was ruled by Spain which in the latter part of the century had created a union with Portugal, enabling Dutch traders to join both the Spanish and Portuguese in their endeavours to develop their colonial empires. By the time the Spanish and Portuguese crowns had separated again in 1640, the Dutch were already underway in the construction of their own overseas empire.

In 1595 the first Dutch expedition set out to Indonesia, was marred with incompetent decisions and skirmishes with both the Portuguese and Indonesians. However, it returned with sufficient spices to make a profit, launching a wave of “unregulated voyages” (*wilde vaart*) in a scramble for the spice trade. The lack of organisation of Dutch trips to the area encouraged the competing companies to merge to form the United East India Company or *Vereenigde Oost-Indische Compagnie*, better known as VOC. This company, created in 1602, was in fact one of the many chartered companies which turned out to be the backbone of seventeenth and eighteenth century European colonialism. For two centuries, it sought to establish a monopoly over all trade and political control of the Indonesian archipelago.

In order to manage the affairs of the VOC in Asia the post of Governor-General was created in 1610 and based in Ambon, the then stronghold of Dutch presence in the region. However, Ambon was far from the main trading route between China, India and Europe; furthermore, the newly created British East India Company (founded 1600) had established a tenuous base in Banten, in western Java. Governor-General of the VOC Jan Pieterszoon Coen, renowned for his ruthless treatment of Indonesians, thus decided to establish the VOC at a small port in western Java called Jayakarta, which would both locate the company nearer to the main trade routes and disrupt English presence. In 1619 a Dutch post was established there and called Batavia.

In the meantime, new states were emerging across the archipelago. Along the Straits of Malacca, Aceh had greatly benefited from the decline of Melaka following the Portuguese takeover and gradually developed its political and military power in the 16<sup>th</sup> and 17<sup>th</sup> centuries, dominating the western half of the archipelago in the early 1600s. New Islamic states were also being created on Java such as Demak, centred on *Pasisiran* (the north coast of Java) and especially Mataram, which produced the most powerful and longest lasting Javanese dynasties. In the early 17<sup>th</sup> century the kingdom of Mataram conquered that of Surabaya to the east, thus emerging as the main power on Java. Further east, the Balinese Hindu kingdom of Gelgel witnessed a golden age in the 16<sup>th</sup> century whilst on Sulawesi the Makassarese and the Bugis challenged the Portuguese in eastern Indonesia. All these states would eventually have to struggle for their existence in the face of Dutch expansion.

### ***2.3.3. The Rise and Fall of the VOC (1641-1799)***

The balance between European powers in the archipelago finally tilted in favour of the Dutch when they captured the Portuguese colony of Malacca in 1641. Yet the VOC, with all its peace treaties and military might was not capable of conquering the region, so it adopted a new policy style which meant intervening directly in the internal affairs of non-European kingdoms and sultanates.

In the east, the Dutch successfully played the neighbouring kingdoms of Ternate and Tidore against each other, each of them seeking Dutch support against their enemies. By building alliances with local powers, the Dutch also succeeded in galvanising opposition to its European competitors – first the Portuguese and Spanish in the seventeenth century, then the English in the eighteenth. Yet in the seventeenth century the VOC's main source of opposition came from the South Sulawesi kingdom of Gowa with whom the Dutch had known skirmishes since their arrival in the archipelago. Gowa was eventually crushed when the VOC sent a fleet of 21 ships to overrun Makassar and defeated the local nobility after a three-year campaign, in 1669.

In the west, regional powers were emerging as a result of the demise of Melaka following the Portuguese, then Dutch, takeovers. In Sumatra, Jambi and Palembang competed against each other, Jambi eventually gaining Dutch favour, especially after Palembang continued to trade with the Portuguese despite a treaty of monopoly signed with the VOC. Yet the Dutch by no means controlled southern Sumatra, or at least no more than they did the Malacca Straits where general confusion reigned in the midst of the emergence of three powers – Johor, Riau and Aceh.

In the midst of such confusion on both sides of the archipelago, it was Java that took centre stage in the eyes of the VOC's expansion plans. The company had chosen Batavia as a base at a time when the Muslim kingdom of Mataram was reaching its apex under the rule of Sultan Agung, a fierce opponent to Dutch expansion. However, his successor Amangkurat I initially saw the VOC more as a trading opportunity than a threat, although the conquest by the VOC of Palembang in 1659 and of Gowa ten years later contributed to his changing views on the Dutch. The fate of the kingdom of Mataram reached a decisive turn when a rebellion broke out against Amangkurat I who died in his flight from the fighting, leaving Amangkurat II to depend on the VOC's support if his lineage were to keep the throne.

The interests of the VOC definitely lay in supporting the king and the alliance between the two was confirmed in 1677. Two years later, the rebellion disintegrated and Amangkurat II gradually began to benefit from the allegiance of more and more Javanese. Yet in his tyrannical rule, Amangkurat I had destroyed the consensus of the notables which, according to Ricklefs (2001:100) had been essential to support the dynasty. Further west, the VOC successfully crushed the sultanate of Banten in 1682, leaving the Dutch the most powerful force on Java in the late seventeenth century.

Yet conflicts in Java were far from over. As Amangkurat II ran up increasing debts to the VOC which itself was riddled with internal problems and corruption, so did enmity between the disintegrating empire of Mataram and Indonesian allies on the one hand, and the Dutch on the other. The brewing troubles came to a head in the first Javanese War of Succession when tens of thousands of VOC troops attacked Amangkurat III before successfully exiling him to Ceylon and bringing Pakubuwana I to the throne. The new king, in exchange for Dutch support, had to agree to VOC control of parts of the north coast of Java, including Cirebon and Semarang, as well as the restriction of the sailing of Javanese ships to Lampung, southern Borneo and Lombok. This did not improve the situation for either party, however, as the VOC continued to make minimal profits if not losses, while Mataram continued to decline with opposition between internal factions in the royal court at Kartasura.

The VOC also faced problems in Batavia, a city renowned for its corruption, pestilence and epidemics in the seventeenth and eighteenth centuries, but also its large proportion of Chinese immigrants. At first, the Dutch admired the industry of the Chinese, but as they attempted to impose quotas on Chinese immigration and trade, mutual suspicion grew and the VOC eventually concluded that the Chinese were fomenting an anti-Dutch rebellion. The result was a bloodbath, with some 10,000 Chinese massacred.

Many of them fled to the rest of Java and gained support not only from fellow Chinese but also the kingdoms of Madura and even Mataram. The VOC launched a new successful offensive and managed to gain control of West Madura, Surabaya and Jepara (thus consolidating their control over the north coast of Java) in exchange for keeping Pakubuwana II at the head of Mataram. The Dutch gained control of the entire north coast in 1743 when the area was leased by Kartasura in exchange for an annual rent of 20,000 reals.

This decision to lease the north coast to the VOC did not go unchallenged in Kartasura. In 1746 a rebellion led by Mangkubumi led to the Third Javanese War of Succession which ended in a split of the throne: whilst Pakubuwana III remained in Surakarta which Pakubuwana II had founded, Mangkubumi became sultan of the rebellious headquarters of a new court in Yogyakarta. At a time when the VOC was crippled with the costs of ongoing wars, the Dutch signed a treaty agreeing to hand over a large part of Central Java to Yogyakarta whilst retaining ownership of the north coast.

As Ricklefs (2001:129) explains, this treaty went against the VOC's long-term policy of ruling through existing kingdoms and favoured instead direct rule over conquered territories. This new policy was to become the backbone of further Dutch expansions in the archipelago. The period of endless wars also came to an end as Yogyakarta and Surakarta flourished and the partition of Java between the three powers was confirmed – until a narrowly avoided war between Yogyakarta and Surakarta ended in the former emerging as the main non-European power on Java.

Although the VOC now controlled the north coast of Java – *i.e.*, its most strategic areas from a trade point of view – the VOC saw a general retrenchment of its positions in the rest of the archipelago to outlying posts. The company, riddled with war expenses, competition with other European powers in the global spice trade, and internal corruption and inefficiency, was exhausted. In 1794 and 1795 the French overran Holland, and the following year the Heren XVII – the chamber that had ruled over the VOC since its creation – was replaced with a new committee. The VOC was eventually formally dissolved on 1 January 1800 and its territorial possessions became the property of the Netherlands Government.

#### **2.3.4. Constructing the Dutch Colonial State (1800-1912)**

1808 constituted a major turning point in the history of the Dutch East Indies. Two years after Napoleon had ushered in his brother to the Dutch throne, the French nominated Marshal Daendels as Governor-General in Batavia to build the Dutch colony as a bastion against British expansion. Daendels attempted to “clean up the inefficiency abuses and corruption that pervaded the European administration, but many of his reforms had little effect”. He also considered Dutch sovereignty as extending across the whole of Java and imposed extensive Dutch annexations of territories formerly in the hands of Surakarta and Yogyakarta.

Yet the archipelago soon got caught in the Napoleonic Wars and in 1811 Batavia fell to the hands of the British. Thomas Stamford Raffles was appointed Lieutenant-Governor of Java. In the face of growing hostility on the part of Hamengkubuwana II, Sultan of Yogyakarta, Raffles ordered the invasion of Yogyakarta which ended in looting and pillaging – a event deeply resented by the court and the only of its kind in Javanese history. In 1816 Java and other posts in the archipelago were returned to the Dutch and Raffles to England, but the latter was to come back to the area to found Singapore in 1819.

Although the interlude of French and British intervention in the Dutch colonial adventure in Southeast Asia was brief (1808-16), it had a long-lasting effect as it steered Dutch rule in a new direction. Quoting Ricklefs,

Raffles stands in the annals of colonial history as a great reformer. Basin point particularly to his enunciation of ‘native welfare’ as a concern of government, his introduction of the ‘land rent’ (land tax) system which laid the foundations for the later growth of a money economy, his emphasis on the village as a primary unit of colonial administration and his perseverance in Daendels’ principle of treating Javanese officials as part of the governmental bureaucratic machine. Many of his reforms, like those of Daendels, were never put into effect, but several of his principles were taken up by his successors. The idea that the welfare of Indonesians should be a primary concern of the colonial government, however, was only a theory in Raffles’s time and rarely as much as that thereafter, at least until the later nineteenth century. Daendels and Raffles together are most important for Indonesian history as the originators of a colonial revolution, a new policy which called for European assumption of sovereignty and administrative authority throughout Java and which aimed to use, reform or destroy indigenous institutions at will.

Ricklefs (2001:150)

Yogyakarta and Surakarta were not going to accept Dutch hegemony without a fight. This was the period in which Pangeran Diponegoro, today a folk hero of opposition to the Dutch, emerged as a major historical figure. When Dutch Governor-General Van der Capellen put an end to the private leasing of land in Central Java which many aristocrats had been living off, Diponegoro gained sufficient support to start a rebellion which led to the Java War of 1825 to 1830.

Diponegoro's animosity was turned as much against the Dutch as the court of Yogyakarta which provided support for Dutch defence against the rebellion which soon spread across the whole of Java. By 1828, however, the war had turned in favour of the Dutch who, in a promise to negotiate with Diponegoro, arrested him in 1830 and exiled him to Manado where he died in 1855. The Java War had put an end to the rebellions by the Javanese aristocratic elite and the crowns of Surakarta and Yogyakarta were reduced to ritual establishments under Dutch control.

The road to Dutch colonialism as it shaped itself for the coming century and a half was now open. For the first time since their arrival in 1619, the Dutch enjoyed complete hegemony over Java, but this had come at a price of a number of wars. From then on, the legitimacy of Dutch occupation in Java in the eyes of the Dutch would have to come from an economic reasoning: the colonial adventure had to be profitable – hence the success of Johannes van den Bosch's proposals in 1829 which eventually became known as *Cultuurstelsel* (Cultivation System). The system was based on the idea that each village would have to set aside 20% (later 33%) of its land for the production of cash crops such as coffee, sugar and indigo that would replace land taxes. In theory, therefore, both the Javanese and the Dutch were to benefit from this system which relied on the administrative divisions of villages headed by chiefs (*kepala*) beneath the authority of regencies headed by *bupati*.

In practice, however, yields were underestimated and shady arrangements proliferated, but those who lost out most were the Javanese and Sundanese labour who bore the brunt of initially mitigated results. It was only the steady increase in the island's population from 5 million in the late eighteenth century to 23.6 million in 1890 that underpinned the ultimate success of *Cultuurstelsel*. Yet the system went down in history as a time of extreme hardship for the Javanese, despite its great profitability both for the local elite and of course the Dutch themselves who made a profit of 832 million florins between 1831 and 1877.

It was only in 1877 that the financial surplus from the Dutch East Indies came to an end, by which time opposition to *Cultuurstelsel* among the Dutch had grown considerably (especially following the publication of *Max Havelaar* by Eduard Douwes Dekker, a former colonial official, in 1860). Decisions to liberalise agricultural production on Java were confirmed by the Agrarian Law of 1870 which opened Java to private enterprise by allowing Indonesians to earn land and foreigners to lease land for 75-year periods. By 1885, private exports had outstripped public ones by ten-fold.

Dutch expansionism was by no means limited to Java. Although Van den Bosch believed that the Dutch should restrict their focus to Java, three main reasons may be put forward to explain why the Dutch successfully took over the "Outer Islands".<sup>2</sup> First, the Dutch felt compelled to

---

<sup>2</sup> The term "Outer Islands" (which translates into modern-day Indonesian as *Luar Jawa* or "Outside Java") thus reflects the gradual construction of the Dutch East Indies which focused primarily on Java until the mid-19<sup>th</sup> century before expanding outwards. Today it remains one of the concepts underpinning Javanese domination of Indonesia.

occupy the territories of other regions which might disturb Dutch power in the region in order to ensure regional security. Secondly, as the European scramble for the world's last non-colonised regions gained pace, the Netherlands felt it had to secure its position as dominant European power in the archipelago. Thirdly, the last decades of the century saw such a development in European military technology that independent Indonesian states were increasingly unable to provide sufficient military counterweight.

Madura, off the northeastern coast of Java, was one of the first islands outside Java to be entirely colonised by the early nineteenth century, but the same cannot be said of Java's other neighbour, Bali. Balinese piracy and attempts to abolish slavery – which the Balinese excelled in – brought the Dutch to try a rapprochement with various Balinese kingdoms, but it was not until 1882 that the colonial government decided to interfere directly in Balinese affairs. That year, the Dutch declared Bali and Lombok a single regency and imposed direct control of northern and western Bali, prompting opposition among the remaining kingdoms. The Dutch used this as a pretext to invade the island in 1894 which ended in the horrific scene of a *puputan* – a final suicide battle which sealed the fate of Bali and threw it in the hands of the Dutch in 1906.

The islands of Nusa Tenggara were gradually wrestled away from the Portuguese with the notable exception of East Timor and the enclave of Oecussi. Dutch control of the region was completed by 1908 at the price of having to put down resistance everywhere. In Sulawesi, major campaigns were fought in 1858-60, but again it was only in 1905-6 that the Dutch managed to subdue Bugis and Makassar resistance. Much of Maluku had been controlled by the Dutch from a very early stage of European presence in the region (see above); despite this, a rebellion led by an Ambonese soldier known as Pattimura still took place in the 1810s, seriously threatening Dutch presence in the region. Dutch control of western New Guinea was more a matter of investing sufficiently in venturing to such a remote location rather than overcoming local opposition, and European presence in the territory always remained tenuous up to the 1960s, as is further described in the section below on Papua.

In Borneo, however, the Dutch faced competition with Britain which proved unwilling to see any other European force than itself settle along the north coast of the island which was of great strategic importance on the sailing route to China and Japan. Dutch interest in the island was only kick-started by Englishman James Brooke's adventure in Sarawak which led him to earn the name of *Rajah Putih* or White Rajah. The coal mines of West and Southeast Borneo were another good reason for the Dutch to claim control of the southern half of the island, although their conquest was met with fierce resistance both from the Chinese immigrants who controlled the gold mines near Pontianak, and a major rebellion which broke out in 1859 in Banjarmasin. Resistance only came to an end in 1906.

Despite its crucial strategic position, the conquest of Sumatra proved to be the most difficult of all Outer Islands (with the possible exception of Bali). The island had long been a object of Anglo-Dutch rivalry which was only solved in the 1824 Treaty of London that saw the British port of Bencoolen (Bengkulu), on the southwest coast of Sumatra, be handed over to the Dutch in exchange for Melaka. It was tacitly agreed that from then on the British would stay on the eastern side of the Straits whilst the Dutch would be free to stay in Sumatra.

Whilst Palembang had fallen to direct rule in the 1820s, neighbouring Jambi put up a fight which lasted until 1907. In central-western Sumatra Dutch expansion clashed with the Minangkabau which were the seat of an Islamic revival in the region, strongly influenced by

the puritanical Wahhabites who pruned a conquest of Mecca. An Islamic reform movement rose in power, known as the Padri movement and headed by Imam Bonjol who challenged the Minangkabau royal family in the 1810s. Bonjol and the Padri movement effectively gained control of the Minang country until it was finally overrun by the Dutch in 1837, opening the gateway for treaties in Riau (which ended in complete annexation by 1858). Further north, the Batak launched a war of resistance in 1872 which the Dutch only overcame in 1895.

The Dutch were now on the doorstep of Aceh, a growing commercial and political power which by the 1820s was exporting half of the world's production of pepper. In 1873, the Americans were in discussion with Aceh on a possible US-Aceh Treaty, which prompted the Dutch to attack Banda Aceh, ending in a blockade of the city. Troops were gathered and Banda Aceh was invaded the following year, but the Aceh War proved to be a longer struggle than expected. Conflict only ended in 1912 after the remaining rebellious ulamas were killed in a battle.

By 1912, Dutch control of the current territory of Indonesia was complete except for the more remote parts of the region such as the interior of New Guinea or Borneo. In 1905 the indigenous population of the Dutch East Indies was estimated at 37 million, as opposed to a mere 16,000 Dutch officers and men helped by a further 26,000 "natives" (*Inlander*) fighting along their side.

### **2.3.5. Twentieth Century Colonialism (1912-1942)**

The early twentieth century saw a shift in emphasis in the justification for colonialism in Dutch government discourse from an economic one to an ethical one whereby the Dutch were to ensure the welfare of the inhabitants of the Dutch East Indies. The so-called *Politiek Etiek* (Ethical Policy) which emerged resulted both from growing humanitarian concerns fuelled by debates sparked by *Max Havelaar*, and an economic rationale whereby the colony would be more profitable in a wealthier "indigenous" environment. Ven Deventer, one of the greatest supporters of the Ethical Policy, even talked of *een eereschuld* (a debt of honour).

In the first decades of the century the gap widened between colonial styles in Java and the Outer Islands. In the latter, the Dutch consolidated their hegemony over the Java Sea by developing the Dutch shipping company *Koninklijke Paketvaart Maatschappij* (KPM). Likewise, the discovery of formidable natural resources in the archipelago encouraged industrialisation which focused on the following products:

- (i) Oil, with the fusion of Shell and De Koninklijke to form Royal Dutch Shell in 1907. By 1930 the company controlled about 85% of the colony's production; and
- (ii) Rubber (*Hevea brasiliensis*) which originated from the Amazon, was successfully planted by the British in Malaya, an experience soon reciprocated across the Straits in North Sumatra (notably around Medan). Other plantations included coffee, sugar and palm oil.

Yet as Ricklefs (2001:196) points out, "the shift of economic activity to the outer islands introduced a major complication into government policy, a complication which has persisted ever since. The major fields of investment and the major earners of export revenues were now

the outer islands. The main welfare problems, the main claims upon a ‘debt of honour’, however, were in Java”. The Ethical Policy certainly focused on Java. As the population carried on increasing steadily, a comprehensive rail network was established across the island, enabling easy transport for the first time.

It was also during this period that the Dutch increased their expenditures on public health with immunisation and anti-malarial programmes which only marginally benefited the impoverished population. Governance of the health sector was centred on the village which was further emphasised as a unit of government. Likewise, investments were poured into education of “native populations”, notably with the creation of OSVIAs (*Opleidingscholen voor inlandsche ambtenaren* or training schools for native officials) and STOVIA (*School tot opleiding van inlandsche artsen* or school for training native doctors). Education was even extended to women, albeit of the upper classes only, as illustrated in the famous female figure Raden Ajeng Kartini who has often been called Indonesia’s first feminist. University-level education was introduced to Indonesia in 1920 with the creation of the Technische Hoogeschool in Bandung in 1920.

The Ethical Policy also had a major impact on politics with the foundation of the *Volksraad* (People’s Council) which first met in 1918. From 39%, the proportion of seats earmarked for *Inlander* grew to 50% in 1931. The *Volksraad* was initially heavily criticised and its powers reduced to that of an advisory body; in other words, the chamber never had the powers of a Parliament in a western democracy, but it nevertheless constituted a major gesture towards involving *Inlander* in governing the Dutch East Indies.

The period of Ethical Policy came to a gradual end in the late 1920s for several reasons. The Communist rebellion of 1927 was met with severe repression from the Dutch; a few years later, the Depression had begun, leading to a retrenchment of social policies which had marked the previous few decades.

In many ways, the Ethical Policy greatly contributed to what the Dutch were going to see as a Pandora’s Box: the emergence of the modern concept of Indonesia – a term rooted and associated with national revival in the first decade of the twentieth century. Rapid social and cultural change was operating within Indonesian society which would eventually lead to what Ricklefs called a “new order” (2001:206). Several segments of society emerged as powerful political stakeholders during this period, including:

1. The *Priyayi* of Java – members of the traditional aristocratic class, many of whom were civil servants of the Dutch East Indies and seized the opportunity of “native” education. Journals gradually appeared in the 1900s for a primarily *priyayi* readership such as *Bintang Hindia* and in 1908 students of STOVIA founded a student organisation called Budi Utomo which was to become the main political mouthpiece of this emerging class, although its history was characterised by stagnation.
2. Muslim notables involved in trade, worried by stiff competition with the Chinese, founded *Sarekat Dagang Islam* (Islamic Traders’ Union) which in 1912 became *Sarekat Islam* or SI. By 1919 SI claimed 2 million members.
3. The Islamic Reform movement also saw the light of day during this period. This movement encouraged the association of modern Western technology with a “purified” Islam and benefited from much support among the Minangkabau who came to play a

leading role. The most significant organisation of this movement was Muhammadiyah, founded in 1912, which built schools and hospitals and claimed a membership of 250,000 by 1938.

4. Radical Socialist ideas also took root in the colony with the foundation of the Indies Social-Democratic Organisation (ISDV) in 1914. Socialist fever fuelled by the Russian Revolution and the prospects of a similar revolution in Germany spread across the Indonesian elite and in 1920 ISDV was renamed *Partai Komunis Indonesia* (Indonesian Communist Party or PKI).

SI and PKI soon emerged as the two main Indonesian (*i.e.*, non-Dutch) political forces whilst the stricter Islamic segments split because of disagreements over alliances. This eventually led to the creation of *Nahdlatul Ulama* by orthodox Muslims in 1926, an organisation which grew rapidly in power, thus contributing to the importance of Islam in the construction of the concept of Indonesia. That same year, PKI was also on the brink of implosion over disagreements on whether to include non-proletarian support among their base. A PKI rebellion broke out in December 1926, and by January it had been crushed with some 13,000 arrested.

Following this episode of repression, Indonesia's political parties evolved in a less flamboyant fashion (Ricklefs 2001:227). The late 1920s and 1930s were a critical period in the formation of an Indonesian political elite as these were the years during which the "native" political landscape was crystallised and determined politics of the coming decades. Among the leaders who emerged in the period following the dissolution of PKI was Soekarno, son of a Javanese teacher, who had attended Bandung Technical College in the early 1920s, where he discovered Douwes Dekker.

According to Ricklefs (2001:228) it was during this period that he was impressed by a form of nationalism independent of the two main claims that had fashioned Indonesian politics until then – a specific Islamic commitment, and the theory of class struggle. In 1926 he published several articles in which he advocated the unification of Islam, Marxism and nationalism into a common cause for independence. In 1927 Soekarno founded a party which the following year became *Partai Nasional Indonesia* (Indonesian National Party or PNI).

By then, the idea of a united and pan-Indonesian nationalism was growing in popularity, a concept that benefited from the growing literature and press in Malay as its main vehicle (see Box III below). The Youth Pledge (*Sumpah Pemuda*), made at a Youth Congress in Batavia in October 1928, is a turning point in Indonesian history school books as it officially declares three principles lying behind the concept of Indonesia: one fatherland (*tanah*), one people (*bangsa*) and one language (*bahasa*).

Modern Indonesian (*Bahasa Indonesia*) and Malay (*Bahasa Melayu* or *Bahasa Malaysia*) are two mutually intelligible languages as close as American English is to British English. They are spoken by a majority of Malaysians, Indonesians, Timorese and inhabitants of Brunei Darussalam and are collectively the fifth most spoken language in the world.

Malay, which is very close to both modern Minang and Acehnese, originated in Sumatra (having evolved from Old Malay which was used in Sri Wijaya) and was appropriated by the Sultanate of Melaka which helped the language spread. It was then taken up by those who identified themselves as Malay and the inheritors of the

Sultanate, including Riau (both the continental part and the islands) and Johor, and eventually the rest of the Malay Peninsula.

Already in the sixteenth century Europeans were fully aware of the strategic importance of Malay and the first multilingual dictionaries of Malay were in Spanish and Portuguese. In a bid to develop French activities in the region, Malay was one of the four original languages taught at the Special School of Oriental Languages in Paris in 1795 (today known as the National Institute for Oriental Languages and Civilisations or INALCO). Instead of imposing the use their own language, the Dutch generally used Malay when communicating with “native” populations, and thus contributed to popularising the language across the Dutch East Indies, including Western New Guinea.

In the last decade of the 19<sup>th</sup> and the first half of the 20<sup>th</sup> century written Malay gradually stabilised as it gained popularity as the main language for the “native” press and literature of the Dutch East Indies. Increasing levels of education among the Indonesian elite encouraged the development of written Malay which used the Latin alphabet (despite the fact that education was largely given in Dutch). By 1918 most of the 40 newspapers published in the Indies were in Malay, a figure which grew tenfold in a mere two decades. Likewise, literature flourished during this period, partly thanks to a Dutch initiative known as *Balai Pustaka* (Office for literature) which published novels which toned down their criticism of Dutch rule. A number of independent authors also became popular during that time such as Mas Marco and Abdoel Moeis.

By the 1920s, the use of Malay and ideas of nationalism converged as Indonesian intellectuals began referring to the language as *Bahasa Indonesia* (Indonesian language). This was formalised in the 1928 Youth Pledge (*Sumpah Pemuda*) when Indonesian was adopted as one of the three ideals of national Indonesian unity.

### **Box III. — Malay and Indonesian.**

At the same time, the Dutch community in the East Indies was swerving to the right. The Ethical Policy had clearly come to an end as ideas of cultural convergence were rejected in favour of cultural relativism and racial determinism. Worried by Soekarno’s increasing popularity and open rejection of Dutch rule, the government arrested and imprisoned Soekarno for four years, although he was liberated in 1931 (the same year that PNI was banned). Throughout the 1930s the Dutch government pursued this direction and political meetings were frequently broken up.

With the arrival of the Depression the economy also took a downturn in the 1930s, which had the unexpected effect of tilting the balance of imports away from the Netherlands and in favour of Japan. In 1929-30 Japan accounted for 10% of imports into the Dutch East Indies; but following a devaluation of the yen in 1931 the figure had climbed up to 32.5% in 1934, displacing the Netherlands for the first time.

In 1933 Soekarno was arrested again during a wave of general repression and without a public trial he was exiled to Flores, then to Bengkulu. Likewise, the following year, Hatta and Sjahrir, two other PNI leaders, were sent to the infamous prison camp of Boven Digoel in New Guinea before being moved to Banda. Nationalist sentiments soon spread to members of the *Volksraad* that had previously not displayed any such sympathies, such as Soetardjo who in 1936 submitted a petition to create Indonesian autonomy within a Dutch-Indonesian union in a similar way to the US and the Philippines. Yet even these more cooperative methods of moving towards greater autonomy were rejected.

By the late 1930s war loomed over Europe and Asia. In 1939 demands were reiterated in the form of a request for a full Parliament for Indonesia, but in February 1940 the Netherlands again rejected this proposal. Three months later the Netherlands was occupied by Nazi Germany and whilst the Dutch government sought refuge in London martial law was declared

in the Dutch East Indies which continued to be ruled by the Dutch, but this time from London. As early as September 1940 the Japanese had begun talking about “liberating Indonesia” and the Dutch began setting up an Indonesian militia in preparation of the invasion.

The Dutch East Indies was now in its last days. In December 1941 the Japanese attacked Pearl Harbor; the following month, they began the invasion of Sumatra. Singapore fell on 15 February 1942, and after a rapid debacle the Dutch surrendered in Java on 8 March. The arrival of the Japanese in the colony sparked a wave of euphoria which according to accounts at the time rapidly turned to disgust. Pramoedya Ananta Toer, a famous Indonesian nationalist novelist, recalled the pity he felt for the Dutch as he watched them try to escape from the clutches of the Japanese army in his Javanese home village:

An image: a Dutch family climbing up the riverbank to the road beside our house. The father’s skin is burnt red and he’s dressed not in European clothing but in Javanese traditional dress. They’re all barefoot. All eyes turn towards them and walk beside the family with sympathy – imagine the desperation and fear holding them in a viselike grip! – but no one dares to offer them a place to hide. They walk slowly northward, toward the main road, until they finally disappear from view. And then down that same road comes the Japanese army, a power now as frightening as it is invincible.

Pramoedya Ananta Toer (2000:161)

### ***2.3.6. Japanese Occupation (1942-1945)***

The period 1942 to 1949 constitutes the most crucial turning point in Indonesian history, which saw the Dutch East Indies, an institution over three centuries old, annihilated and replaced with a state of ruthless Japanese occupation before being ravaged by a four year-long war of independence.

The Japanese divided Indonesia into three regions – Sumatra (under the 25<sup>th</sup> Army based in Singapore), Java and Madura (under the 16<sup>th</sup> Army, also located in Singapore), and eastern Indonesia (controlled by the Navy). The new rulers began by interning the entirety of the European community in Indonesia, which totalled some 170,000 including 80,000 civilians, the remainder being military of different Allied nationalities.

Japanese invasion was greeted by a period of confusion where outbreaks of looting and personal violence, as well as anti-Dutch rebellions were swiftly and ruthlessly punished by the new occupiers. As Ricklefs explains, the Indonesian people soon began suffering themselves at the hands of the Japanese army: “mortality rates increased and fertility dropped; the Japanese occupation was the only period in two centuries when population failed to grow significantly, so far as is known. Like other occupied areas, Indonesia became a land of extreme hardship, inflation, shortages, profiteering, corruption, black markets and death” (2001:249).

The new rulers adopted a radically different approach to Indonesian politics – instead of simply banning, they actively mobilised Indonesian society, thus laying the basis for the ensuing war of independence. All cultural references to Europe were banned as was the use of Dutch language, promoting instead Indonesian as the vehicle for Japanese propaganda.

Indonesians were also invited to fill the ranks of the civil service which had been left empty by the Dutch. As early as April 1942 the first mass movement was launched, called the Triple 'A' Movement (*Pergerakan Tiga A*), derived from the image of Japan as leader of Asia, protector of Asia and light of Asia.

More importantly, the Japanese used the pre-war nationalist movement to mobilise Indonesian society and Hatta, Sjahrir and Soekarno, all freed, were encouraged to cooperate. In 1943 after *Pergerakan Tiga A* was abolished and replaced with a new body called *Putera* headed by Soekarno and Hatta, although it retained close ties with the Japanese. The Japanese appeared to be fully aware that their occupation of what they still called the East Indies (*To-Indo* in Japanese) might only be temporary. Although it was obviously felt that Java could not acquire the same status of puppet autonomy as the Japanese had granted Burma and the Philippines, a series of councils was still set up, thus giving an appearance of participation (Ricklefs 2001:254). Soekarno was made chairman of a Central Advisory Board, which nevertheless only remained advisory in character, and was even flown to Tokyo to be decorated by the Emperor in person.

Mobilisation also had its economic component. In 1943, the Japanese set up a recruitment of "volunteer labourers" which became known under the Japanese term *romusha*. Between 200,000 and half a million labourers were thus forcefully sent as far as Burma and Siam; only 70,000 of them returned. Likewise, an Indonesian military force was created called *Peta* (short for *Pembela Tanah Air* or the Defenders of the Fatherland).

Although the Japanese occupied virtually all of the former Dutch East Indies, the southern half of Dutch New Guinea remained outside their reach. It was eastern Indonesia which was to become the theatre of some of World War II's most violent fighting between the Americans and Japanese. As early as September 1944 the US had landed troops in northern Maluku; the same month, the Japanese promised independence to Indonesia and even began financing tours for Soekarno to deliver speeches across the archipelago. In March 1945 they launched the *Badan Penyelidik Usaha Persiapan Kemerdekaan Indonesia* (Committee for Preparatory Work for Indonesian Independence or BPPKI).

This committee was the opportunity for Soekarno to press home his religiously neutral version of nationalism, which the Japanese had been keen on as they viewed Islamic movements as anti-Japanese. In his speech on 1 June he laid out the *Pancasila* or Five Principles (see Box IV below) of the Indonesian state, although he later accepted the obligation for adherents of Islam to carry out Islamic law in a bid to rally support from Islamic nationalists.

Even as late as August 1945 the Japanese were still guiding Indonesian independence. On 11 August, five days after the first atomic bomb had been dropped on Hiroshima, they vetoed the inclusion of Malaya and British Borneo into Indonesia. Four days later, on 15 August, the Japanese surrendered unconditionally, creating a period of hiatus between Japanese occupation and the return of Europeans and their allies in the archipelago. Soekarno seized the opportunity to read a declaration of Independence on 17 August in Batavia, renamed Jakarta, whilst the Red and White flag (*Sang Merah-Putih*) was raised and the new national anthem, *Indonesia Raya*, was sung. The Republic of Indonesia was born, but it would be another four years before the rest of the world recognised it.

Even after half a century of “national awakening”, Indonesia was by no means a “logical” or “natural” political entity, despite Soekarno’s claims that “even a child, if he looks at a map of the world, can show that the Indonesian archipelago forms a whole. One may point the finger at a group of islands between two large oceans, the Pacific and the Indian, and between two continents, Asia and Australia. Even a child can say that the islands of Java, Sumatra, Borneo, the Celebes, Halmahera, the lesser Sunda islands, the Moluccas and the others form an entity” (Soekarno’s speech before BPPKI, quoted in Defert [1996:116]).

Paradoxically, the only element that united all Indonesians had been their occupation by the Dutch. Throughout the planning of Indonesian independence, Soekarno and his colleagues worked on adopting national symbols or regalia which would contribute to legitimising the concept (*Wawasan*) of Indonesia. These were partly based on geographical reasoning such as the names commonly used for Indonesia today such as *Tanah Air* (“the land of water”) and *Nusantara* (“the islands in between” – an expression clarified in Soekarno’s quote above). Legitimation of the concept was also based on historical periods which the authorities of newly independent Indonesia tried to assimilate to precedents of a united Indonesia.

Liberal use was thus made of symbols of Sri Wijaya, Majapahit and Hindu references more generally (*e.g.*, Garuda) which were seen as less offensive to non-Muslim Indonesians than Islamic references. Unlike Islamic nationalism which had little echo in non-Muslim parts of the country, Soekarno’s form of religiously neutral nationalism had the advantage of being applicable “from Sabang to Merauke”. By 1945, the following regalia had been adopted:

- ***Sang Merah Putih*** (Red and White). The national flag was to be two horizontal stripes – one red (on the upper half) and one white (on the lower half), in reference to the flag used by Diponegoro in his struggle against the Dutch in the 1820s.
  - ***Indonesia Raya***, the national anthem, a song written in 1924 and adopted at the 1928 Youth Congress. The first verse reads *Indonesia tanah airku, tanah tumpah darahku* (“Indonesia, my own Land of Water, the land that has spilled from my blood”).
  - ***Pancasila***, a Sanskrit term meaning “Five Principles”, laid the loose philosophical foundation of the Indonesian state. The Five Principles are as follows: (i) ***Ketuhanan Yang Maha Esa*** (Belief in one God). The “identity” of this God was not specified so as to rally Christians, Buddhists (for whom Buddha was assimilated to a deity) and even Hindus, for it was argued that Hinduism tended to be either Shivaist or Vishnuist; ***Kemanusiaan Yang Adil dan Beradab*** (Just and Civilised Humanity), which was a rejection of oppression and therefore colonialism; ***Persatuan Indonesia*** (Unity of Indonesia), the main principle of nationalism; ***Kerakyatan yang Dipimpin oleh Hikmat Kebijaksanaan dalam Permusyawaratan / Perwakilan*** (Democracy guided by the inner wisdom in the unanimity arising out of deliberations amongst representatives), *i.e.*, democracy guided by deliberation rather than negotiation, which was rejected as the Western way; ***Keadilan Sosial bagi Seluruh Rakyat Indonesia*** (Social Justice for the Whole of the People of Indonesia), *i.e.*, the greater interest. Although heavily coloured with references to Hinduism with the use of many Sanskrit terms, Pancasila is clearly also a reference to the Five Pillars of Islam with which it (partly) shares the first principle (belief in one God).
1. ***Garuda Pancasila***, the iconic symbol of the state, is an eagle called Garuda (in reference to Vishnu’s mount and mythical bird) adorned with 17 wing feathers on either wing, 8 tail feathers and 45 body feathers (in reference to the commemorated date of independence, 17.08.45). It also bears a crest depicting five objects, each of which symbolises one of the principles of *Pancasila* (star, chain, banyan tree, head of a wild bull, and paddy and cotton ears for each principle in the order above). Finally, in its claws Garuda holds a banner reading *Binneka Tunggal Ika*, a Sanskrit expression that is usually loosely translated as “Unity in Diversity”, in recognition of the plurality of Indonesian society.

#### Box IV. — Constructing Indonesian regalia.

### **2.3.7. Revolution and Independence (1945-1949)**

No historical period is more greatly shrouded in nation-constructing myth than the four years during which the war of independence, known as the Revolution, unfolded. As Ricklef claims, “the result was not the appearance of a harmonious new nation, but a bitter struggle among contending individuals and social forces” (2001:261).

In August 1945, when Indonesia was still in a state of disorder, lack of unity and broken down communication, the Allies were determined on bringing the colonial regime back to the region. Yet the nationalists led by Soekarno set up a central Republican government in Jakarta, albeit with a nascent army born from individual localised initiatives rather than obtaining the forces armed by the Japanese as heritage of the war. Given the lack of communication, it took well over a month for the news of the declaration of independence to spread to more remote regions of the archipelago. In many cases, local elites or traditional rulers (*raja-raja*) refused central authority and set up their own regimes.

Whilst a number of literate elite members, collectively known as the “Generation of 45” (*Angkatan 45*) got together and published a range of newspapers and journals, many youths joined armed struggle groups (*badan perjuangan*). Throughout the second half of 1945, however, the Allies gradually closed in on Indonesia, beginning with the Americans who had established landing enclaves in the east, and the British, who limited their intervention to accepting Japanese surrender and liberating European prisoners. The remaining Japanese were in a difficult position as they sometimes had to collaborate with the Allies and disarm Republicans whilst arming them in other circumstances such as during the Battle of Surabaya. This decisive battle between Republicans and Indian forces under British control only came to an end when the British convinced Soekarno to declare a ceasefire.

Yet Soekarno was generally seen as a liability by the Allies because of his close collaboration with the Japanese. Instead, they favoured communication with Sjahrir, enabling him to gain popularity among Republicans at the expense of Soekarno himself. The situation on Java was unfavourable to the Republicans who faced both the Allies and discontent in rural areas which led to outbreaks of violence. By January 1946 the Republican government had to move from Jakarta to Yogyakarta to flee from Allied invasion of the city. Yogyakarta proved to be a judicious choice as the symbol of resistance to the Dutch in the 19<sup>th</sup> century and a centre of Javanese culture and intellectualism.

1946 marked a turning point in the balance of power between the Republicans and the Dutch who saw their international support to re-establish the Dutch East Indies gradually wane. Americans had never favoured the colonial option, at least not the European one; but by 1946 the British also started pressing the Dutch to negotiate with the Republicans – after all, India itself was on the verge of independence and the British were in no position to staunchly support similar forms of colonialism elsewhere.

Open negotiations thus began in March 1946 following a secret agreement with Sjahrir that would see Java and Sumatra become independent in exchange for Dutch sovereignty over the rest of the colony. This almost ended in the arrest of Sjahrir by Republican forces who only liberated him upon Soekarno’s orders, thus re-establishing the latter’s dominance over Republican politics. In November the first official agreement between the Dutch and Republicans was reached in which Republicans would be given independence in Java,

Madura and Sumatra as a single state in the “United States of Indonesia” to be symbolically headed by the Queen of the Netherlands. The remaining islands would become a separate state called State of East Indonesia (*Negara Indonesia Timur*).

In a context of deep mistrust between the two parties, however, the agreement was short-lived. Left-wing factions within the Republicans withdrew their support for Sjahrir, demanding nothing less than full independence for Indonesia. This in turn prompted the Dutch to launch a “police action” in 1947 in Java; the violence used against Indonesian civilians during this operation ended in further British and American alienation from the Dutch who finally called for a ceasefire demanded by the United Nations. This did not deter the Dutch who continued to push for a federal solution in the areas they controlled, thus setting up an East Sumatra state in December 1947.

In 1948 yet another actor (re-)entered the political stage: Musso, the PKI leader of the 1920s, flew in from Moscow and encouraged strikes and demonstrations, and eventually opening up a front against Republican forces in Central Java. PKI leaders were eventually arrested in Yogyakarta and the party was dissolved by the Republicans until the 1950s. The Republicans’ defeat of PKI earned them growing sympathy in the United States.

In December, the Dutch unwillingly drove another nail into the coffin of the Dutch East Indies by launching a second “police action” in Java which turned out to be a political catastrophe. Despite military victory and the capture of Soekarno, Hatta and several others, the United States was so angered that it suspended aid funds to the Netherlands. The Dutch had no choice but to accept a UN call for a ceasefire and the release of the Republican cabinet. The United States publicly condemned Dutch policies in Indonesia, by April 1949, the Dutch had come round to accepting the idea of an independent Republic of the United States of Indonesia which was made official at a conference held in July.

In August, a ceasefire was announced; a round-table conference took place from July to November in which Republicans, now Indonesians, had to accept (i) that Western New Guinea would remain Dutch and (ii) responsibility for the Dutch East Indies debt fixed at 4.3 billion florins. On 27 December 1949 sovereignty was officially handed over to Indonesia, but the struggle did not end there.

The federal system which had been set up was still distrusted by many pro-Republicans, primarily because it had arisen as a strategy on which the Dutch had played to divide the country and minimise the extent of the Republican stronghold. When Westerling raised 800 troops to capture Bandung in January 1950, the government saw it as an opportunity to accuse leaders of the state of Pasundan (Sunda Country, where Bandung is located) of plotting to destroy Indonesia. On 17 August 1950, the fifth anniversary of the declaration of independence, the United States of Indonesia was abolished and an unitary state established instead, much to the anger of pro-federal regions such as Sumatra and eastern Indonesia.

### **2.3.8. Soekarno and Guided Democracy (1949-1965)**

The first years of a peaceful, independent Indonesia were characterised by considerable freedom of speech, especially when compared with the decades to come. It was notably during this period that the predominant role of Java and the Javanese was confirmed in

Indonesian politics, with over 60% of the population and more than adequate representation in positions of power, leading to a neglect of the Outer Islands.

The government immediately launched policies in a number of sectors. Education (in Indonesian) was given priority to create the first generation of fully-fledged Indonesians with a sense of their country as a single entity. In the economy, non-Indonesian interests continued to predominate, especially in the more lucrative sectors such as oil and rubber, inter-island shipping (still dominated by KPM) and banking.

The Indonesian army remained another major issue to be solved. In 1950, the number of soldiers stood at some 200,000 after having incorporated Dutch colonial troops, but remained divided as a reflection of its various origins under Dutch, Japanese and Indonesian (Republican) rule. Some generals openly distrusted the new government which was frequently perceived as flirting with the Communist Party (PKI); when the government decided to halve the size of the army and dismiss the central army leadership the latter responded with a show of force by asking the dissolution of Parliament. Yet the coup was aborted as Soekarno successfully appealed for calm.

Likewise, politics was marred with the multiplication of parties, although the landscape was dominated by a mere handful – Sjahrir’s Socialist Party (PSI), Masyumi (an Islamic-leaning party), Soekarno’s PNI, and PKI, which continued to be distrusted by many in military and political ranks alike for having jeopardised the Republican “cause” during the Revolution. In 1951 the government even arrested several PKI leaders in Medan; despite this, the party continued to gain support and by 1954 had increased its membership to 165,000. The 1955 elections showed how much PKI had suddenly grown with a membership that had swollen to one million, the bulk of its base located in Central and East Java. From then until the mid-1960s, PKI could no longer be ignored as a political force as it ranked fourth most popular party in the election after PNI, Masyumi and the Islamic *Nahdlatul Ulama*.

In foreign policy, Indonesia showed greater favours toward the United States than USSR, signing an aid agreement with the former committing it to “defending the free world”. Yet apart from this move, Indonesia successfully led the Non-Aligned Movement – at least for a short period – by holding the 1955 Conference in Bandung, which contributed to turning attention away from domestic problems.

The new Republic’s greatest problems, however, lay with separatist regions such as southern Maluku (*Republik Maluku Selatan* or RMS, a problem eventually solved when over 12,000 people were deported to the Netherlands), and West Java, where an Islamic guerrilla was going on known as Darul Islam. In 1953, following the fusion of Aceh with the province of North Sumatra, the government of Aceh rejected Pancasila and declared itself part of Darul Islam.

The domestic political situation also suddenly took a downward turn with denunciations of corruption within the cabinet, the resignation of Hatta, a much-admired figure among Indonesian, and even a failed coup, all in 1956. In December 1956, events came to a head when army officers in Sumatra took over civil government and announced a takeover of North Sumatra. The following month, councils of officers sprung up in Kalimantan, Sulawesi and Maluku in support of the Sumatran takeover.

Soekarno responded immediately by tightening his grip on internal affairs. Not only did he declare martial law the day his cabinet resigned, but he also launched a new concept of governance better adapted to the country, as he put it, called Guided Democracy (*Demokrasi Terpimpin*). As Ricklefs put it, “it would be based upon a ‘mutual’ cooperation (*gotong royong*) cabinet of the major parties, including PKI, advised by a National Council (*Dewan Nasional*) of functional groups (youth, workers, peasants, religions, regions and so on) rather than political parties” (2001:309).

Guided Democracy was of course mainly guided by Soekarno, who had managed to keep Indonesia one: even the rebellious regions did not want independence but merely questioned the structure of the state of Indonesia. However, two opposed forces remained active and close to the government – PKI on the one hand, and the army on the other. In 1959, Soekarno delivered a speech setting out the ideology of Guided Democracy through *Manipol* or *Manifesto Politik*, to which he added the initials USDEK, standing for the 1945 Constitution, Indonesian Socialism, guided democracy, guided economy and Indonesian identity. Finally, in 1960, his theory was further refined in a return to his original approach, which he called *Nasakom* (for *Nasionalisme, Agama, Komunisme* or Nationalism, Religion, Communism).

In the meantime, the economic situation was showing no signs of improving. This was exacerbated by the rapidly worsening relations with the Netherlands, primarily because of the latter’s refusal to hand over Dutch New Guinea. The Netherlands-Indonesian Union was dissolved unilaterally in 1956 and the remaining debt to the Netherlands (some 85% of the debt agreed upon in 1949) repudiated. In 1957 the UN failed to pass a resolution which called upon the Dutch to resolve the issue of New Guinea, leading to an outburst of anti-Dutch feeling which Soekarno actively encouraged, partly as a digression from domestic affairs.

In December that year he undertook a series of radical measures which included (i) the nationalisation of Dutch-held companies, including KPM (an ill-prepared decision which simply prompted all KPM ships at sea to sail out of Indonesian waters), and (ii) the expulsion of all Dutch citizens who numbered 46,000. The economic effects were disastrous given the role that the Dutch still played in the Indonesian economy. It is at this period that members of the military began playing a growing part in the national economy as they took over companies such as the National Oil Enterprise (Permina).

This time, a truly separatist movement emerged with the formation of a rebel government in Bukittinggi (West Sumatra) in 1958, which supported the two parties which were not represented in the cabinet, namely PSI and Masyumi. This movement became known as the PRRI (*Pemerintah Revolusioner Republik Indonesia* or Revolutionary Government of the Indonesian Republic) and benefited from clandestine US support, worried by the rapprochement between Soekarno and PKI. Yet the movement, which also developed a branch in Sulawesi, did not last long and was eventually overruled by the Indonesian military. However, the episode left a sour taste for the Indonesian government as it realised that PRRI had benefited from the support not only of the United States, which had become glaringly obvious, but also of South Korea, Taiwan, the Philippines and newly independent Malaya (which itself was fighting Communist guerrillas).

The early 1960s were marked by Soekarno’s increasingly aggressive stance in foreign policy. First, he intensified his demands for the “liberation” of Western New Guinea from Dutch control. Soekarno played subtly on US fears and Soviet wishes of seeing Indonesia go Communist. In a mix of threats and negotiations with the Netherlands, the United States and

USSR he was eventually successful at wresting New Guinea out of Dutch hands, as is described in detail in the section below on Papua. The handing over to Indonesia of what became known as Irian Barat took place in 1963 amidst national rejoicing.

Secondly, once the Irian issue was solved, Soekarno turned to *Indonesia Raya's* (Great Indonesia's) claims to territories occupied by the British, notably in Borneo. When Britain, Singapore and Malaya finally worked out a solution to the issue of the ethnic balance of the former British colonies by creating the Federation of Malaysia which included Sarawak and North Borneo, Soekarno decided to strike. Still vexed by Malay and US support for PRRI, he decided instead to line up with China in its worries of seeing another capitalist country emerge on its southern flanks. So started the era of *Konfrontasi* in which Soekarno, buoyed by PKI support (which had played a large role in securing Irian Barat) gathered troops along the Bornean border with Malaysia.

By 1963, PKI was closer than ever to the seat of power, sparking concern on behalf of a number of actors. In the cultural domain, in response to *Lekra* (*Lembaga Kebudayaan Rakyat* or People's Cultural Institute) promoted by PKI, dissenting voices proclaimed a Cultural Manifesto (*Manifes Kebudayaan* or *Manikebu*). PKI was given a voice in administrative affairs in 1964 whilst encouraging "unilateral actions" among its base in Central and East Java. PKI even made inroads in the army, benefiting from the anti-American feeling prevalent because of US involvement in Vietnam.

The situation escalated yet further in early 1965 when 21 newspapers were banned for opposing PKI, whilst Indonesia pulled out of the United Nations in protest as seeing Malaysia gain a non-permanent seat at the Security Council and at the same time sealed an alliance with Beijing. By then, over 27 million Indonesians were claimed to be PKI members. By August, Indonesia had withdrawn from the IMF and the World Bank and Soekarno declared an "anti-imperialist axis" linking Jakarta with Phnom Penh, Hanoi, Beijing and Pyongyang.

Steam was finally released on the night of 30 September to 1 October 1965 when an ill-planned coup failed in Jakarta, later known as *Gerakan 30 September* (Movement of 30 September or *G30S*). The event is still shrouded in mystery as it lay the basis for a new era in Indonesian politics which sought to justify its existence from this event. During that night, two generals were assassinated and others abducted. On the morning of 1 October, General Suharto took control of the army whilst insurgents announced on the radio that their movement had acted merely to safeguard Soekarno against a plotted coup led by the army.

Yet Soekarno never publicly endorsed the coup attempt and although he declared he assumed command of the army his claims were ignored by Suharto who made announcements himself over the radio informing people of the coup. The age of Guided Democracy and Soekarno's rule had both come to an abrupt end.

### ***2.3.9. Suharto and the New Order (1965-1998)***

Suharto's New Order which was born from the suffering of the mid-1960s ushered in a new era characterised by both depoliticisation of Indonesian society and sharp economy growth which lasted until 1998. The impact of the New Order on policies, especially those relating to

forests, was deep and arguably marked the single most important turning point in the history of forest management in Indonesia.

The primary architect of this period was of course Suharto (spelt Soeharto until the spelling reform), who like Soekarno was born and bred Javanese, though of a poor rural family. In his youth he was not exposed to the anticolonial ideals which Soekarno had been part of. However, he enjoyed a circle of close allies – whom many observers refer to as cronies given the level of corruption rife during the New Order that extended across the army (of which he was part) and well beyond.

The collapse of Guided Democracy began by October 1965. On 2 October, Suharto accepted that Soekarno remain in command of the army on condition that he have full authority to restore order and security. By 5 October, the army had begun blaming PKI for the coup which was renamed *Gestapu* (from *Gerakan Septeber Tigapuluh* or Movement of 30 September), obviously not without reference to the Nazi Regime. By December, over 10,000 PKI members and supporters were arrested, among them famous intellectuals such as Pramoedya Ananta Toer. He and tens of thousands of other political prisoners ended up being exiled to the Moluccan island of Buru which is famous today in Indonesian literature.

As physical conflicts with PKI escalated, the following months witnessed the worst massacre ever in Indonesian history. The death toll will never be established as the events continue to be shrouded in mystery and taboo, even a decade after the fall of the New Order, although scholars agree for approximately half a million. Various Muslim movements acted as a key opponent to PKI, as illustrated by Muhammadiyah's proclamation in November 1965 that the extermination of "Gestapu/PKI" constituted Jihad. The army also played a formidable role, notably by encouraging students to support the banning of PKI.

A schoolbook published in 2005, seven years after the fall of the New Order, does not even mention the massacre at all, describing the events between October 1965 and March 1966 as reflecting popular demands for change instead:

After the Movement of 30 September had been successfully crushed, several proofs were collected that pointed towards PKI, which in the end led to the conclusion that PKI was accused of being the mastermind behind this movement. This affair caused anger among the people towards PKI. This popular anger was followed by several demonstrations which increasingly and incessantly called for PKI and mass organisations to be dissolved and their leaders judged.<sup>3</sup>

Muchlis & Syarifudin (2005[3]:120)

In the face of these events which left him distraught and increasingly out of control, Soekarno tried to grip onto power, notably by reshuffling his cabinet in February 1966. However, by then it had become clear that Suharto, whose policies now seem to have encouraged the violence, had gained the upper hand. The duel came to a head in March 1966 when Suharto convinced Soekarno to sign a document giving the former full authority to restore order – a

---

<sup>3</sup> "Setelah Gerakan 30 September 1965 berhasil ditumpas dan berbagai bukti-bukti yang berhasil dikumpulkan mengarah pada PKI, akhirnya ditarik kesimpulan PKI dituding sebagai dalang di belakang gerakan itu. Hal ini menimbulkan kemarahan rakyat pada PKI. Kemarahan rakyat itu diikuti dengan berbagai demonstrasi-demonstrasi yang semakin bertambah gencar menuntut pembubaran PKI beserta organisasi massanya (ormasnya) dan tokoh-tokoh harus diadili."

document nicknamed *Supersemar* (again an abbreviation of *Surat Perintah Sebelas Maret* or Letter of Instruction of 11 March).

The following day, PKI was officially banned and purges now began within bureaucracy and the military. Abrupt changes followed in foreign policy as the relations with Beijing were broken off and those with multilateral institutions and the West re-established. In April and May Indonesia joined the United Nations and the IMF again in a bid to get foreign aid flowing again. Suharto also rapidly undertook reform measures supported by the World Bank and IMF. In June and July, Soekarno was stripped of his title of president for life which he had obtained in 1963 whilst the Provisional People's Consultative Assembly (MPRS), which had been reduced by the arrest of about 180 members, ratified Supersemar. Events in March 1967 dealt the final blow to the Soekarno regime as he was stripped of all his powers and Suharto was named acting president instead, whilst state ideology was reduced to the mere *Pancasila*. Soekarno was placed under house arrest in Bogor where he died in 1970.

The vilification of PKI and the role played by Muslim movements in the events of 1965 and 1966 had the effect of bringing the issue of religion back to centre stage. After 1965, any individual who claimed not to have a religion risked being branded a PKI sympathiser, but as time went on violent incidents broke out between Christians and Muslim, notably in Aceh and Makassar, prompting Suharto to declare that the army would be ready to use force to quash any conflicts. In August 1967 Suharto brought the military closer to his grasp by abolishing the four separate armed forces ministries and placing them all under his direct authority.

Indonesia's economy also witnessed radical changes, with great emphasis placed on economic growth focused on capital intensive and high-technology extractive industries. These included oil first and foremost, which grew between 15% and 20% per annum in the last years of the 1960s, but also timber – described in greater detail in the section on timber policies. By 1969 the battle against inflation which had marred the period of Guided democracy was won and the first five-year development plan (*Repelita*) was launched.

The period 1970 to 1975 saw both the tightening of Indonesian society around Suharto and the questioning of his increasing control over the country. In February 1970 he announced that the entire civil service was to observe exclusive loyalty towards the government and were pressured to join Suharto's party Golkar. Golkar won 63% of the votes in a general election in 1971 and Suharto was re-elected for a five-year term in 1973. That year also saw the forcible fusion of political parties other than Golkar, effectively ruling out any real competition. Yet the ostentatious wealth of Suharto's cronies, among them several Chinese *cukong* (financial backers), caused discontent which erupted in outbursts of anti-Chinese violence and student demonstrations.

The worst episode of such violence took place in January 1974 in student riots known since then as *Malari* (abbreviation of *Malapetaka Januari* or January Disaster). Torching of hundreds of cars and buildings in Jakarta was met with harsh repression and several newspapers were banned.

Despite these isolated episodes of unrest, however, the New Order offered much greater political stability than the Soekarno regime and enabled the economy to flourish. It was further buoyed by the 1973 oil crisis which saw oil shoot up in its percentage of Indonesia's exports from 30% in 1966 to 74% in 1974. Yet the country's largest oil company, Pertamina, was in crisis and unable to pay its debts, prompting the government to nationalise the

company. Suharto thus gradually increased his control over Indonesia's oil industry as he did in the country's other main economic sectors.

The mid-1970s was also characterised by the Timor crisis. At a time when the US was pulling its troops out of Vietnam, marking a significant advance of Socialism in Southeast Asia, the quiet Portuguese enclave of Timor's political awakening was marking the end of Portugal's decaying empire. Among the parties that emerged, left-leaning Fretilin (Frente revolucionária Timor Leste independente or the Revolutionary Front for Independent East Timor) was poised to take over the newly independent country which the Portuguese had left in disarray.

Yet Indonesia, and especially the army, had no intention of letting a Communist enclave emerge on its back doorstep and launched a full-scale invasion of the country on 7 December 1975. The invasion ended in bloodbath and alleged human rights abuses, but it was the killing of 5 Australian journalists which made the headlines. Yet Australia, equally concerned that Timor should become a Communist enclave, and the rest of the West rapidly accepted the *de facto* occupation of Timor by Indonesian forces.

Ricklefs (2001:366) calls the period that followed the peak of the New Order (1976-1988), during which the military took the main strategic decisions and Golkar was the main organisational vehicle for the military and bureaucratic domination of Indonesian society, with Suharto of course at the very top. During this period the economy grew rapidly, averaging 7.7% growth between 1971 and 1981, although much of this rested on oil revenues. This benefited the wider Indonesian society through greater investments in agriculture as part of the Green Revolution (notably in irrigation, new seed strains, fertilisers and pesticides) which saw production shoot up. Likewise, advances in health and education were observed whilst schooling ensured that the proportion of the country's population speaking Indonesian regularly increased. However, development remained very uneven, benefiting the west of the archipelago and leaving the eastern islands lagging behind.

Student demonstrations, however, punctuated this era of stability, and pointed the finger both at repression of human rights as arrests continued, and widespread corruption which was said to absorb almost a third of all incoming foreign aid. Yet Indonesia benefited from considerable Western support as it successfully pictured itself as a development-oriented bastion against both Communism and radical Islamic movements. There is little doubt that this international image allowed it to continue widely abusing human rights and avoiding criticism for its invasion of East Timor, re-baptised *Timor Timur* (an involuntary play on words since the name *Timor* is actually derived from the Malay word for East, *timur*). The only blip in foreign relations came in 1986 when the Australian newspaper *Sydney Morning Herald* published a paper on corruption in the inner circle of friends of Suharto, prompting a brief crisis in the relations between both countries (this sparked a domestic crackdown too with the banning of one of the country's most respected papers, *Sinar Harapan*).

Thus Suharto was free to strengthen his control of Indonesian society in additional ways. For this he increasingly relied on Pancasila ideology, launching special courses on the issue in government departments, schools and other workplaces. Suharto also relied on the ever growing role of the army, known as ABRI (*Angkatan Bersenjata Republik Indonesia* or Armed Forces of the Republic of Indonesia). Taking full advantage of their dual function (*dwifungsi*) as defenders of the nation and overseers of government policy, from 1980 the army implemented a policy called *ABRI masuk desa* (ABRI enters the village). This was a civic

programme to promote village-based development, but it also had the effect of cementing military presence down to the lowest administrative level.

The 1980s saw the re-emergence of Islam in Indonesian politics, which Suharto had sought to reign in following inter-religious conflicts which had marked the early years of the New Order. Yet during this entire period, even Nahdlatul Ulama, the main Islamic party headed by Addurrahman Wahid, presented itself not as part of the political opposition but as an ally of the government, emphasising its agreement with Pancasila. The only significant example of Muslim-inspired opposition to the government was observed in 1984 when ABRI killed 28 in a demonstration by a “mosque-inspired crowd” (Ricklefs 2001:381).

After 1988, however, the New Order entered a period of crisis from which it would not recover. The changing configuration of international politics, especially the end of the Cold War, meant that Indonesia could no longer rely on the support from the West which it had been enjoying. Gradually, an increasing stream of reports of human rights abuses began trickling out of the country – especially after Pope John Paul II’s visit to Timor in 1989 – which galvanised opposition abroad to the Suharto regime. Suharto responded with a policy called *Keterbukaan* (Openness), a barely veiled imitation of Gorbachev’s *Glasnost*, although this had little effect on domestic affairs and particularly in conflict-ridden zones such as East Timor, Aceh and Irian Jaya (Papua).

In politics, it also became increasingly apparent that Islamic parties were growing in importance – at least in the eyes of Suharto who sought to win Muslim support through a variety of measures. These included going on the pilgrimage and being renamed Haji Muhammad Suharto, lifting the ban on headscarves in state schools and promoting his protégé Bacharuddin Yusuf Habibie, himself a devout Muslim.

Yet in the 1990s Indonesia came to be known as one of the most corrupt countries in the world. At a time of increasing environmental concern in international circles, the focus of foreign actors zoomed in on the forest sector which came to be widely seen as a nest of corruption (see section below on timber policies in Indonesia). But corruption could be found throughout the ruling class and especially Suharto’s close circle of cronies, and newspaper reports paid the heavy price in 1994 when the government banned some of the country’s most important publications such as *Detik* and *Tempo*.

In the meantime, the army continued to repress all civil strife, but by the mid-1990s the edges of this artificial social cohesion began fraying. Much of the political unrest which sprouted up in the mid-1990s took the form of ethnic or religious violence, known as SARA (*Suku, agama, ras dan antar-golongan* or Ethnic groups, religion, race and inter-group), which itself was fuelled by a revival of Islamism. Between 1995 and 1997 riots and demonstrations related mainly to religious issues spread in East Timor, Sulawesi and Irian Jaya, but the worst such events took place in 1997 in West Kalimantan when indigenous Dayaks began killing Madurese populations who had settled there with the transmigration programmes (see section on Transmigration).

This did not prevent the Suharto family and their cronies from pursuing the lavish lifestyle which they had come to enjoy. The corruption which they spearheaded only further contributed to the slowing economic growth which Indonesia had come to accept in the 1990s. Eventually the key event that sparked the downfall of the New Order came not from

ethnic or religious tension or even political opposition (although all of these factors played a role), but from the economy itself.

In 1997 the Asian financial crisis which had begun in Thailand hit Indonesia, leading to an unprecedented devaluation of the Rupiah from 2,500 to 17,000 to the US dollar between July 1997 and January 1998. Whilst Malaysia was able to resist an IMF bailout, in October 1997 Indonesia began difficult negotiations with the IMF which resulted in the closure of 16 banks. However, this alone did not secure the expected IMF loan and it was not until Suharto agreed to deep reforms – including the dismantlement of Apkindo (the Indonesian Wood Panel Producers' Association) – that the country finally received the loan in January 1998.

By then, however, the social and economic situation had become irreversible. With cries for *Reformasi* and against KKN (*Kolusi, Korupsi, Nepotisme*) student demonstrations escalated, until four students of the University of Trisakti, one of the best in the country, were killed by the military. This in turn sparked massive riots, notably in Jakarta and Solo where shopping malls were looted and burned, much of the anger taking on an ethnic twist as it turned against ethnic Chinese who were perceived as a pillar of the economy and the regime, and thus responsible for the crisis. Dozens of Chinese were murdered whilst entire “China towns” across Java and elsewhere were pillaged and burned.

On 21 May 1998, a reluctant Suharto announced his resignation in the midst of chaos, whilst his vice-president Yusuf Habibie was sworn in as President – the third since the independence of Indonesia.

### **2.3.10. *Reformasi and Stabilisation (Since 1998)***

Habibie largely inherited a country whose 32 year-old regime which had kept it together was now falling apart: large-scale reforms were needed in this period which from an early stage had been aptly named *Reformasi*. One of the first symptoms and consequences of this was the changes which the army underwent. At a time when its political credibility was at an all-time low, ABRI's *dwinfungsi* policy was abolished and the army, renamed TNI (*Tentara Nasional Indonesia* or National Soldiers of Indonesia), was given the sole task of protection the nation.

This in turn had a major impact on political stability. First, ethnic and religious-based violence continued to flare across the archipelago, mostly in the form of riots between communities such as in Maluku between Christians and Muslims, and Kalimantan between Dayak and transmigrants. In some cases, however, it took on accents of regional separatism, such as in Aceh, East Timor and Irian Jaya.

General elections were held in July 1999 for a renewal of the country's Parliament (DPR). Although PDI-P, the party of Megawati Sukarnoputri (daughter of Soekarno) won the election, DPR eventually voted in favour of Abdurrahman Wahid as President in October (mostly as a result of alliances built with DPR). By then, however, the Timorese crisis had unfolded to its fullest extent.

Throughout the 1990s the Timorese cause for independence had galvanised support across the world, especially after John Paul II's visit but also after José Ramos Horta, figure of the independence movement, was awarded the Nobel Peace Prize in 1996. Indonesia finally

decided to hold a referendum for independence in August 1999 under pressure from the UN, and which resulted in an overwhelming 87.5% in favour of independence. The outcome unleashed a wave of violence by militias linked to the Indonesian army, only further tarnishing the country's image in international circles and causing great embarrassment among the government. On 12 September Habibie agreed to an UN peacekeeping force and independence was finally recognised on 20 May 2002.

The independence of East Timor only added to the government's fears of a breakup of Indonesia, especially as Acehnese and Papuan guerrilla movements for independence were gaining a solid popular base. As a result, Wahid accepted partial devolution of powers to Aceh and Papua, which in the latter took the form of a change of name (from Irian Jaya to Papua) and a special autonomy law described in greater detail in the section on Papua.

Although armed separatist movements remained few and far between, there was considerable pressure on behalf of local governments for a general devolution of power in favour of local levels of administration. Many local elites had been frustrated throughout the New Order by the concentration of power in the hands of the few in Jakarta and with the help of NGOs and international organisations called for a new law. The alliance between local elites and international actors, however, remained loose: whilst local elites saw in decentralisation the opportunity to recover the power which in their eyes had been confiscated from them by the New Order, international actors believed it was a potential solution to the widespread corruption which the centralised system was now associated with.

What came out of the process was a series of laws of which Law (*Undang-Undang*) 22/1999 was the first. This law transferred authority to autonomous regions in "all fields of governance, except authority in the fields of international policies, defence and security, the judiciary, monetary and fiscal matters, and religion" (Art. 7) (McCarthy *et al.* 2006:38). However, rather than transferring the bulk of powers to provinces, the law explicitly transferred it to *kabupaten* level. It is believed that the decision was taken to bypass provinces as these had a greater tendency to reflect ethnic units and thus calls for regional independence than *kabupaten*.

In 2001, Wahid was accused of corruption by groups of students who stormed DPR asking for change, causing Wahid to step down in favour of his vice-President Megawati Soekarnoputri. The new President saw decentralisation as move towards federalism which her father had fought against, and in the face of the mitigated success of the decentralisation laws issued Government Regulation 34/2002 and Law 32/2004 which were both widely seen as an effort to recentralise powers. The move towards decentralisation and recentralisation in the late 1990s and early 2000s is best illustrated in the case of forest-related policies described in greater detail below. In 2004, Indonesia held its first direct and free elections that saw a retired military general, Susilo Bambang Yudhoyono, elected as President for a five-year term.

The last few years have been marked by three phenomena. First, after a period of deep crisis and recession, the Indonesian economy has shown signs of a slow recovery and the Rupiah has been stabilised between 7,000 and 10,000 to the US dollar since the early 2000s. However, both the economy and the international image of Indonesia have been hampered by the two other factors to have characterised the 2000s, namely man-made and natural disasters.

In 2002 several bombs placed in key touristy areas went off in Bali, killing 202 people of which 164 were foreigners. The scene was repeated three years later, albeit to a lesser degree, when a further series of bombs killed twenty people. Both attacks were attributed to the radical Islamist group called Jemaah Islamiah which is known to have connections to Al Qaeda. Three suspects were eventually executed in November 2008.

However, the scale of these attacks pales into insignificance when compared with the plight of natural disasters to have struck the archipelago in the past five years. By far the largest catastrophe was the “Boxing Day Tsunami” which followed one of the strongest earthquakes ever recorded. The tsunami hit the north and west coast of Aceh worst, leaving a trail of utter annihilation in its wake, but was also felt in neighbouring Thailand, Sri Lanka and even East Africa. The final death toll might never be known but estimates vary between 130,000 and 220,000. The tsunami had the unforeseen effect of increasing international pressure to end the decades-long conflict in Aceh and a peace deal was finally brokered between the Government of Indonesia and Achenese armed separatists known as GAM (*Gerakan Aceh Merdeka* or Movement for Independent Aceh) in 2005.

Other disasters linked to Indonesia’s shaky tectonics have also struck the archipelago in various places. In May 2006 an earthquake hit Yogyakarta and the southern half of the province of Central Java (*Jawa Tengah*), killing over 5,000 people, only to be repeated a couple of months later, leaving a further death toll of 668. Also in May 2006, company PT Lapindo Brantas, which was drilling for natural gas in Sidoarjo, East Java (*Jawa Timur*), suddenly saw toxic mud flow out of the ground. This mud has since engulfed a number of villages and to this day shows no signs of stopping.

Natural disasters aside, Indonesia appears to have successfully stabilised both domestic politics and economy and – despite the independence of East Timor – has once again proven to be a cohesive political unit. The international community and local NGOs alike have also hailed the transition to democracy as a success. Yet the spectre of the New Order still looms large in Indonesian society which continues to remain sensitive to debates on that period of national history. The outpour of grief following Suharto’s death in January 2008 and the state military funeral with full honours which was held are a potent reminder that the ills of the past have yet to be debated.

## **2.4. FOREST-RELATED POLICIES IN INDONESIA**

This section describes the evolution of Indonesian forest-related policies sector by sector since approximately the mid-1960s when the New Order was established. The section on timber policies includes elements pertaining to forest legislation as a whole which are also relevant for other sections, notably conservation.

### **2.4.1. Timber Policies**

Unlike Brazil where forests have been influenced by a range of sectors such as infrastructure and agriculture, Indonesia’s forests have been primarily shaped by the timber sector – which

is defined here as the industry for hardwood and fibre (including pulp and paper). In the case of Indonesia, not only has the timber sector had a huge impact on forests themselves, but it has played an important role in constructing the nation in several ways.

First, by ranking among the most productive industries in terms of income throughout the New Order, the hardwood industry strongly contributed to upholding both the country's economic growth and regime in power. Secondly, logging activities in more remote forests of the Outer Islands undoubtedly helped national cohesion by bringing isolated populations in contact with representatives of the state in the form of staff from the Ministry of Forests or the military. These ideas are discussed in greater detail in this section.

#### **2.4.1.1. Timber Production until 1967**

The history of timber policies differs primarily between Java and the rest of the country. Whilst on Java local kingdoms, then the Dutch, implemented a complex set of policies to manage natural forests and teak plantations, timber policies affecting the Outer Islands remained far and few between until the mid-1960s. The history of Javanese forests prior to the 1960s is described in greater detail in the section on forest-related policies in Central Java.

As for the Outer Islands, local kingdoms and sultanates often relied on non-timber forest products for trade such as rattan. Other than that and the dependence of forest-dwelling populations on their natural environment as a source of livelihood, no wide-sweeping policies were ever implemented unlike on Java. The first large-scale change which took place was to be found in North Sumatra, particularly the region around Medan, where the Dutch began growing plantations (especially rubber) in the 1900s and 1910s. The seed of *Hevea brasiliensis*, which Henry Wickham famously brought back from Brazil in the 1870s, had finally been successfully grown in British Malaya. It was only a few years before the Dutch picked up the lucrative trade and grew the species themselves on the other side of the Straits of Melaka, thus helping Medan flourish into a regional centre.

Other than North Sumatra and the island of Java, forest management was largely left in the hands of local populations, despite repeated attempts by Dutch authorities to survey all the forests of the Dutch East Indies. Yet the task was too daunting for the rare nineteenth century foresters who in 1897 only totalled 13 in the entire colony, including Java itself (Durand 1994:231). The only exceptions were local enterprises headed by foreigners, notably Chinese living either locally or in Singapore. In the face of expanding forest activities by the British in Malaya, Sarawak and North Borneo, and the Americans in the Philippines, the Dutch eventually created a post in the Forestry Service specifically for the Outer Islands in 1908. A number of surveys carried out during the same period, however, concluded that it would be virtually impossible to manage all these forests given the absence of both labour and infrastructure.

Even in the first three decades of the twentieth century attempts to create logging concessions in the Outer Islands failed, such as in Banjarmasin in 1915 and Samarinda in 1923. In 1928, Dutch authorities attempted to extend the concept of the public forest domain which they had imposed on Java to the rest of the Dutch East Indies (where forests had remained under *adat*, or customary, jurisdiction until then). However, opposition to the bill was so strong that the idea was eventually dropped. The *Volksraad*, which by then included a large proportion of

non-Europeans, systematically opposed any significant attempt to extend industrial logging to the Outer Islands. In practice, however, a few concessions were set up in the 1920s, notably in Kalimantan, and leased to Japanese and American companies.

At the eve of the Second World War, forest cover for the Dutch East Indies stood at 64% of the colony's surface area, *i.e.*, 123.6 million hectares, with the main pressure on forest cover coming from large-scale plantations and agriculture. Japanese occupation of the colony brought about significant change, although again this was primarily limited to Java and forestry institutions. The Forestry Service (*Boschwezen*) was renamed *Ringyoo Tyoo Zimusyo* and placed under the Ministry of Economy. Timber production intensified during this period, especially on Java at the expense of the welfare of local population (see section on forest-related policies in Java), but also in East Kalimantan where timber was produced for the Japanese naval effort.

The late 1940s witnessed increasing activities in the Outer Islands, notably with the creation of forestry schools by the Dutch in Sampit (Central Kalimantan) and Makassar. The new Republic under Soekarno went in two opposing directions, however. On the one hand, the 1945 Constitution stipulated that the land, water and all "contained" natural resources (*yang terkandung di dalamnya*) were to be controlled by the state, suggesting that forests might be included in this statement. However, in practice, timber production again went back to being dominated by Java.

It was only in 1957, in the middle of the emergency situation that the country was going through, that the first significant attempts to nationalise forests in the Outer Islands succeeded. In December, a Government Regulation was issued stating that forest management was to be transferred to provincial governments, including community forests. Likewise, three types of forest management for timber production were created, namely 20-year concessions, 5-year concessions and rights to log valid for two years. Between 1961 and 1963, five state companies (*Perhutani*) were created – two on Java and three in Kalimantan. Central forestry authorities were dealt a further blow with the 1960 Basic Agrarian Law which recognised *adat* property rights – including in forests – so long as they did not interfere with national interest.

In 1964, the forestry administration was turned into a Ministry in its own right. Yet by then, Soekarno's regime was on its last legs: in 1965 Indonesia exported only 209,000 m<sup>3</sup> of hardwood logs, which accounted for less than 2% of overall timber exports from insular Southeast Asia alone (Barr 2006:22).

The New Order spelt unprecedented change in Indonesian timber production policies, particularly in the Outer Islands. The period was marked by two general trends, namely (i) exponential growth in timber production, and (ii) increasing concentration of capital and power in a few hands. Both these trends and the effects of the Suharto regime on the sector are described in the following two sections for which Barr's (1999) Masters Thesis, but also Dauvergne (2001) and Ross (2001) were valuable sources of information.

#### **2.4.1.2. The Development of the Log Export Industry (1967-1978)**

At the root of Suharto's decision to invest massively in the country's timber sector lay the new president's need to channel funds and capitals to the regime's military and bureaucratic powerholders in order to ensure their loyalty. Suharto took power at a time where international markets were in demand for tropical hardwoods: the Japanese economy was expanding rapidly, yet the Philippines, which had produced much of the world's tropical timber so far, was starting to run out.

In response to the absence of an institutional and legal framework conducive to large-scale exploitation of Indonesia's forests, the New Order's first step was to pass the 1967 Basic Forestry Law (*Undang-Undang Pokok Kehutanan 5/1967*). Although many elements of this law could be found in previous pieces such as the 1957 Government Regulation, the 1967 law marked a turning point as it revolutionised forest management on the ground. The main elements of management that the law introduced were the following:

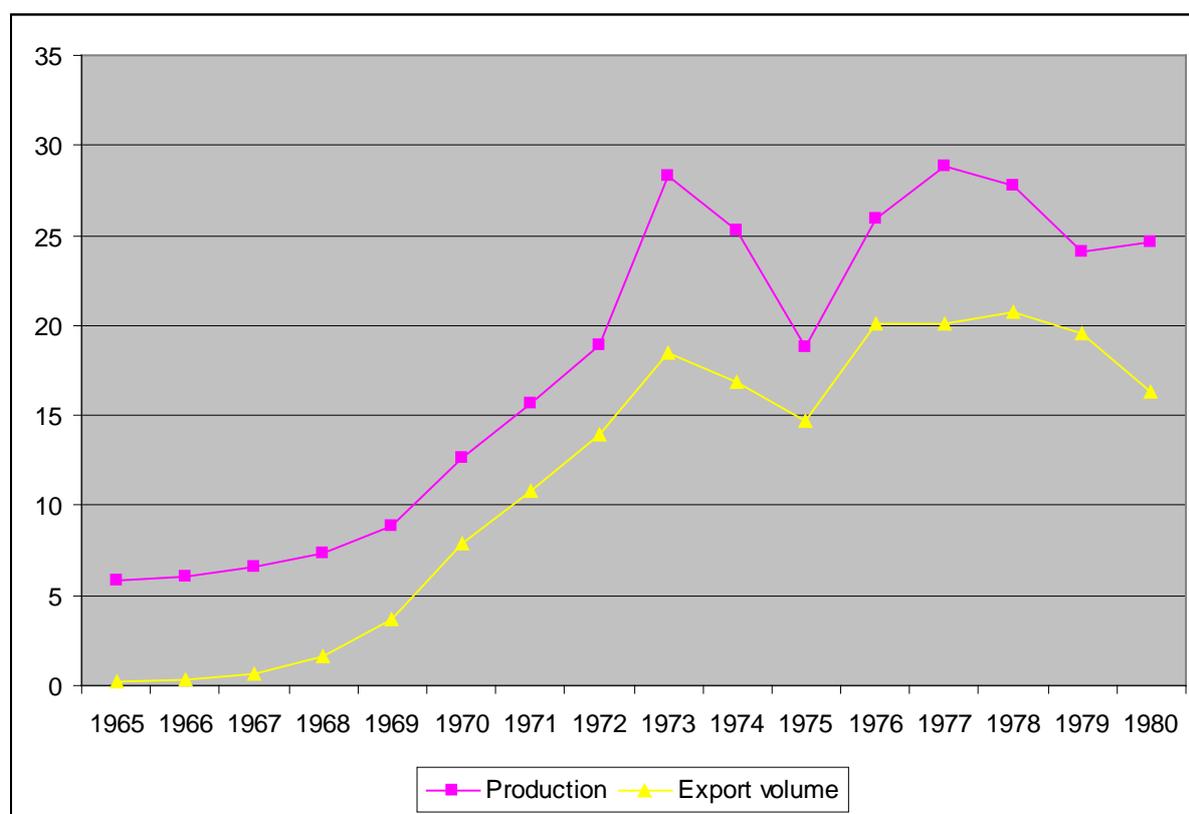
1. Creation of the Forest Estate (*Kawasan Hutan*) to be owned by the state and managed by the Forest Administration. 143 million hectares – *i.e.*, a staggering 74% of the country's surface area – was thus designated as property of the nation, revoking all previous recognition of *adat* or customary rights of local populations to these lands;
2. The Forest Estate was divided into four categories according to their use – protection forests, production forests, nature conservation forests and recreation forests;
3. Production forests were to be logged based on a concession system known as HPH (*Hak Pengusahaan Hutan*, or Right to Utilise the Forest) which could be leased for a period of up to 20 years;
4. A new taxation system was introduced, based on four elements: a HPH license fee (a one-time payment of a fixed sum), a forest product royalty (a varying sum per m<sup>3</sup> produced), a timber export tax (initially set at 10% of FOB value), and a regional development royalty of Rp. 200 for every 100 m<sup>3</sup> harvested; and
5. Concerning timber transformation, there was an obligation to build a sawmill within three years and 60% of timber production was required to be processed domestically by the 7<sup>th</sup> year of operation. However, there also existed a clause stating that this rule could be waived if such requirements were “unfeasible” (Barr 1999:66).

The law had the immediate effect of concentrating the powers within the Directorate General of Forestry and away from both the Directorate General of Agrarian Affairs and local governments. However, provincial, *kabupaten* and *kecamatan* governments responded by rushing to allocate their own timber concessions (which had been created by the 1957 Regulation) to their own networks. This sudden increase in small grants throughout the archipelago came to be known as *banjir kap* or log flood because log markets were suddenly flooded.

Although these logging permits were smaller in size (100 ha for *camat*, 5,000 ha for *bupati* and 10,000 ha for governors), they accounted for a large proportion of timber production (49% in East Kalimantan in 1967) and used most of the available labour, much to the irritation of industrial concession holders. Faced with pressure from larger holders, Suharto eradicated *banjir kap* companies by issuing a decree in 1971 revoking the right of local

governments to distribute any logging rights whatsoever, effectively tightening the central government's grip over the industry.

In the meantime, the large-scale concession industry was flourishing. By the end of 1970, virtually 10 million hectares had already been allocated to mostly foreign companies (see Figure VI). Log exports grew exponentially in the late 1960s and throughout the 1970s, increasing by 470% in the first eight years of the New Order. In 1973, the country's logging industry generated US\$ 562 million, *i.e.*, 18% of Indonesia's total exchange earnings, whilst prices shot up from US\$ 8 per m<sup>3</sup> to US\$ 40 between 1969 and 1973 (Ross 2001:173). By 1978, Indonesia supplied 44% of world hardwood log exports (Barr 1999:91). Studies of the sector during this period suggest that private logging companies secured the vast majority (up to 85% according to some sources) of the returns made from timber production.



**Figure II. — Indonesian log production and export in millions of m<sup>3</sup> (after Barr 1999:92). Note the fall in production and exports in 1975 and again starting 1977-8 announcing the demise of the log export industry.**

One of the reasons for this sharp increase in production was that Suharto had successfully attracted a flood of foreign investment into the country's timber sector. Not only had the 1967 law created a favourable environment for foreign investment and the forest taxes been lowered, but that same year 20 officials were sent to Geneva to publicise the timber sector to some seventy companies. According to Ross (2001:168), by 1978 foreign firms had sunk US\$ 376 million into logging and wood-processing ventures, making timber the third most attractive sector in Indonesia for foreign investment.

Part of such an exponential increase in the sector was due to illegal activities such as logging outside the annual allowable cut or outside the concession itself; high-grading (harvesting only the most valuable species) and underreporting to minimise taxation. Such activities were largely facilitated by several factors including the lack of specific logging guidelines, the absence of specificities in HPH contracts and above all considerable collusion among government officials. Many of those who enjoyed these conditions were companies led by military officials, many of whom allegedly then sub-contracted their activities to foreign companies. The military thus played an instrumental role as a member of the economic elite enjoying unusually favourable circumstances and large profits.

This huge expansion in timber production allowed Suharto some leeway to enforce further restrictions on the sector. In line with the nationalist policy agenda in the period 1973-4, the government declared that HPHs would no longer be attributed to foreign companies. The slump in exports that followed this decision was short-lived and by 1976 exports had picked up again. Likewise, Suharto successfully increased the government's control over timber production by imposing export quotas for each concessionaire, thus strengthening government leverage over international timber prices by regulating supply.

#### **2.4.1.3. From Logs to Plywood (1978-1998): the Rise of Apkindo**

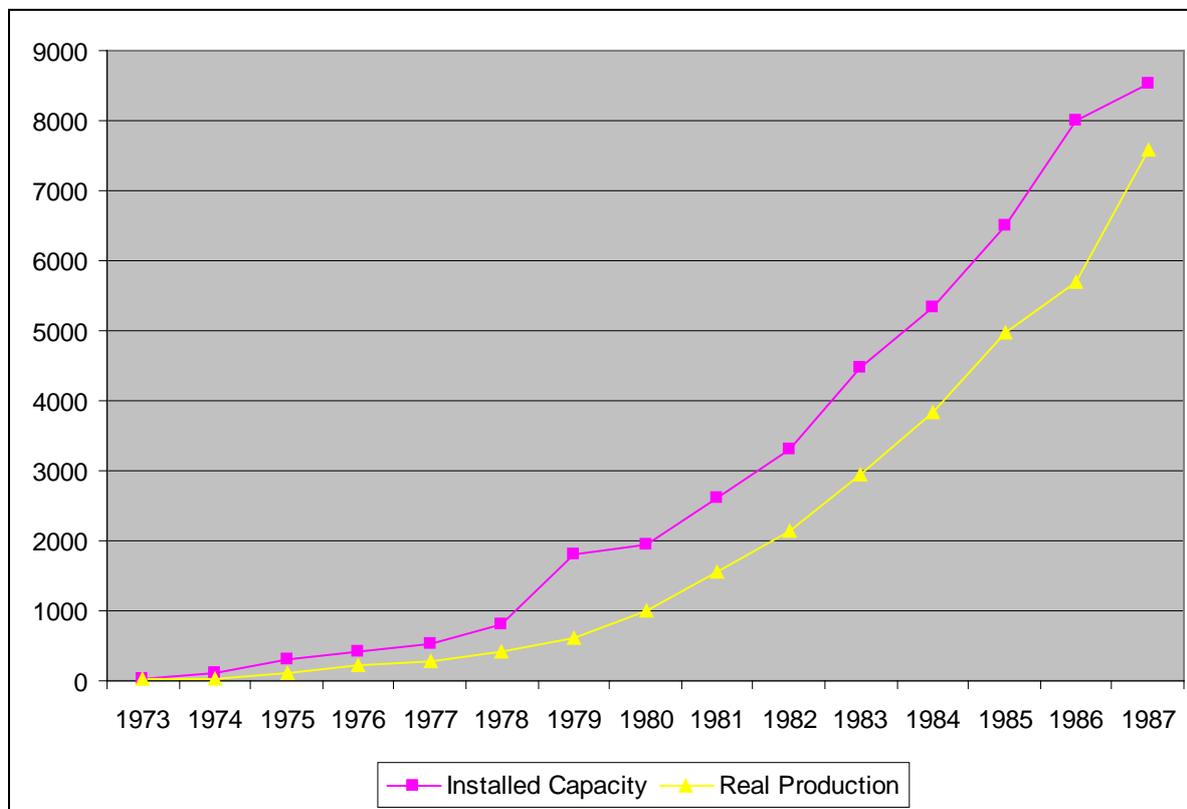
The late 1970s were marked by increasing governmental pressure to get producers to process timber before exporting it. The 1967 law had left a loophole which the vast majority of concessionaires used in order to export raw logs rather than processed timber. Most concessionaires were ill prepared to invest in timber processing, mainly because they faced formidable competition in Taiwan and Japan. However, the fact that the log industry was turned to exports meant that domestic demand for timber, which expected lower prices than the international market, failed to be met with any supply, prompting the Ministries of Industry and Trade to demand a development of a domestic plywood industry.

According to Barr (1999) and Ross (2001), Suharto soon rallied this demand for two reasons: first, his power base was strong enough for him not to have to depend any longer on the military and bureaucratic interests whose loyalty he had initially secured through the log industry. Secondly, the development of a plywood industry would enable him to control the distribution of profits to an even greater extent (Barr 1999:123-4). Thirdly, the 1978-9 oil shock had created such an unexpected windfall to the central government that Suharto seized this opportunity as a safety cushion to go about transforming the country's timber sector (Ross 2001:181).

The government thus gradually introduced regulations to help develop the plywood industry. In 1975, a log export ban on *ramin* species was imposed in West Kalimantan. In May 1980, a Letter of Decision (*Surat Keputusan*) issued by the Ministries of Industry, Trade and Agriculture declared that log exporters would have to register with authorities to sell logs abroad. The following year, a decree stipulated that log export allocations would last a maximum of two years. The final nail in the coffin for the log export industry came the same year when it was declared that a total log export ban would be fully enforced by 1985.

The early 1980s thus saw a drastic increase in plywood production (see Figure III), but at the same time the sector was struck with a deep crisis following the exhaustion of available

timber in easily accessed forest concessions. Those located further inland suffered from the 1982-3 drought which prevented logs from being transported by river. This dire situation meant that the state was in a position to play a decisive role in determining the fate of the plywood industry.



**Figure III. — Indonesia's plywood capacity and production 1973-1987 (in thousands of m<sup>3</sup>) (after Barr 1999:132). Installed capacity consistently exceeded real production by far, which according to many observers only further encouraged increasing production to meet the investment costs.**

The state's power was all the greater as all capital investments in Indonesia required prior approval from BKPM (*Badan Koordinasi Penanaman Modal* or Capital Investment Coordinating Board), which was part of the National Planning Agency (Bappenas). As Barr explains,

It is likely that the BKPM approval process posed relatively greater difficulties for investors without ties to state elites than for their well-connected counterparts. Firms backed by military or politico-bureaucratic powerholders were almost certainly able to have their investment applications expedited and, in some cases, approved with less than the normal degree of scrutiny. By contrast, investors without such ties could find their proposals bogged down for weeks or months, as the BKPM reviewed the details of the project's various components.

Barr (1999:138-9).

By controlling investment in the timber sector, especially during such times of crisis, the government thus increased its leverage power drastically over the industry. By the end of

1985, 101 plywood firms had brought their operations online with a total capacity of 6.5 million m<sup>3</sup>. Over the second half of the decade the industry continued to concentrate in the hands of a handful of companies – in 1990 the country's fifteen largest groups (of which the main ones were P.T. Hutrindo, Barito Pacific, Djajantii and Korindo) accounted for 55% of the industry's capacity.

As the government had planned, the plywood industry grew as the expense of the log industry, as witnessed by the tailing off of demands for new concessions from 1982 onwards (Figure VI). Those companies which had invested in the plywood industry simply verticalised their activities by taking over existing concessions from logging companies (especially in the period 1981-3). This only further contributed to the industry's concentration of capital within a circle of Chinese and Indonesian entrepreneurs who enjoyed close ties with the political elite.

The increasing concentration of the plywood industry did not prevent it from overtaking competitors on the international market. On the contrary: in 1980 Indonesia's plywood industry accounted for a mere 6.2% of that year's world exports, well behind Malaysia (12.1%) and even the Philippines (9.4%) whose forest resource was now rapidly declining. However, by far the world's largest tropical plywood industry was located in Japan which that same year produced over 8 million m<sup>3</sup> of panels annually.

Partly in a bid to minimise competition among Indonesian producers on the international market which by then was undergoing a severe crisis, the government decided to collaborate with the Indonesian Wood Panel Association (*Asosiasi Panel Kayu Indonesia*, better known as Apkindo). This association, which had originally been created in 1976 and was headed by an ethnic Chinese entrepreneur called Bob Hasan (birth name The Kian Seng), was going to play a central role in the plywood industry until the demise of the New Order.

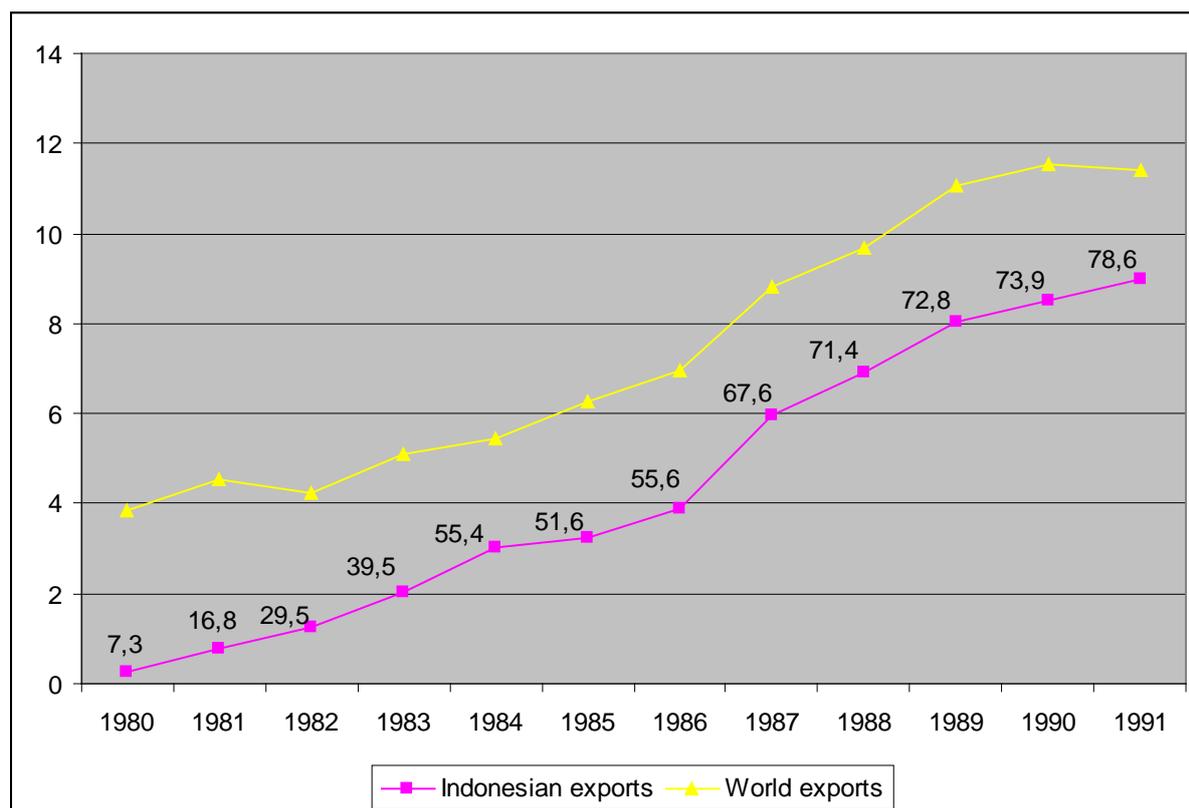
As Barr explains, "the state gave Bob Hasan a broad mandate to transform Apkindo into a collective marketing apparatus with oligopolistic control over the nation's plywood exports" (1999:199). First, a Marketing Commission was set up within Apkindo to set check prices for plywood sales; secondly, from 1986, the Commission was also given the mandate to establish quotas for the volume of panels to be exported. Thirdly, Apkindo's 108 members formed seven Joint Marketing Boards following a 1984 Letter of Decision (*Surat Keputusan*) from the Minister of Trade which were to oversee the implementation of the Marketing Commission's policies.

Fourthly, through a second Letter of Decision the Minister of Trade allowed the Commission to assign marketing quotas to individual producers. Firms that exceeded or failed to meet these quotas were fined US\$ 100 for every cubic meter beneath or above its fixed quota. Fifthly, Apkindo's Board of Directors was dominated by the industry's largest producers who were thus able to ensure that their interests were taken into account.

However, the actor with by far the greatest power within Apkindo remained Bob Hasan who enjoyed close ties with Suharto. Hasan notably oversaw a restructuring of Apkindo's Board of Directors in 1985 which, according to Barr (1999:218), strengthened his position considerably. He also controlled the institutional funds which passed through Apkindo, which included membership dues, overhead fees, and a fee for export promotion and market development which rose from US\$ 7 per m<sup>3</sup> to US\$60 per m<sup>3</sup> produced in the early 1990s.

Hasan also secured deals with his own companies, including giving his Kencana Freight Lines exclusive rights to ship Indonesian wood panels abroad.

Indonesian plywood exports grew almost as impressively as log exports had 15 years before. Between 1982 and 1986 plywood exports shot up from 1.25 million to 3.87 million m<sup>3</sup> and Indonesia's overall share of the world's hardwood plywood exports grew from 29.5 to 55.6% over the same period (see Figure IV). In contrast, Taiwan's share dropped from 19.4 to 7.3% and South Korea from 15.2 to 2.5% (Barr 1999:206).



**Figure IV.** — Indonesia's share of world tropical plywood exports 1980-1991 (in millions of m<sup>3</sup>) (after Barr 1999:207). Percentage of Indonesia's share is located on the graph for each year.

Yet Hasan was not satisfied with the control of Indonesia's plywood producers. During the second half of the 1980s, the association began focusing on securing ties with new markets, notably Japan. Hasan led Apkindo to lead an aggressive stance on Japan's plywood market by exporting cheap panels *en masse* – a move which turned out to be highly successful as Indonesia's share of Japan's plywood imports shot up from 8.6% in 1980 to 95.9% a decade later. The price-fixing that lay behind this strategy incurred heavy losses on Indonesia's plywood producers which only made a profit in Apkindo's other markets around the world.

This did not prevent Hasan from going one step further by getting Apkindo to form a joint-venture called Nippindo with a Japanese company (which owned a mere 5% of the venture). In doing so, Hasan effectively became the sole intermediary between the world's largest plywood producer (Indonesia) and consumer (Japan). Following the success of Nippindo, Hasan went onto creating similar joint ventures with South Korea, China and Taiwan, the Middle East, and Singapore and Europe. As if this was not sufficient, Apkindo then limited

the number of buyers in importing countries whilst preventing prohibiting direct communication between buyers and producers. Apart from providing Hasan with a handsome profit, all these moves removed all marketing power away from producers to lay them in the hands of Apkindo.

The late 1980s and early 1990s saw Apkindo's monopoly over the timber sector increasingly, although not successfully, challenged. According to Dauvergne (2001:69), it was in response to growing international pressure from the emerging forests debate that Suharto got the Ministry of Forests to undertake a series of constraining measures. Indonesia's new Forestry Minister Djamaloedin Soeryohadikoesoemo, appointed in 1993, reduced the area where logging is permitted from 31 to 21 million hectares, whilst stating a reduction of the production target from 33.5 to 22.5 million m<sup>3</sup> in the sixth Five Year Plan (*Rencana Pembangunan Lima Tahun* or Repelita). Likewise, total forest charges increased from Rp 3,520 in 1986 to 53,550 in 1995.

#### **2.4.1.4. The Demise of Apkindo and the Hardwood Industry (Since 1998)**

The seeds of the post-1998 collapse of Indonesia's hardwood industry had already been sown in the 1990s and resulted partly from political changes – notably the fall of the New Order – and partly from the lack of sustainability of the industry itself.

The 1997 Asian Financial Crisis spelt the end of the New Order which could no longer picture itself as the engine of the country's economic development. As opposition coalitions and mass protests began calling for Suharto to resign, Suharto himself had no choice but to turn to the International Monetary Fund for a US\$ 43 billion bailout loan. However, this loan came tied to far-reaching structural reforms which included the removal of state control over the country's economy. In particular, Point 40 of the IMF's Letter of Intent stated that plywood producers should be released from Apkindo's marketing restrictions from 1 February 1998 (Barr 1999:258).

This suggestion was met with fierce resistance in Jakarta. First, a Letter of Decision from the Ministry of Industry and Trade rescinded Apkindo's authority to assign export quotas to its members. Secondly, on 1 February Apkindo imposed an export guarantee deposit on its members, but the following month it was forced to abandon this measure. In March, in a gesture of open defiance Suharto even nominated Bob Hasan as Minister of Industry and Trade, thus placing the latter in a position whereby he could still control plywood exports. Yet Hasan's position in the cabinet was short-lived: on 15 May, Suharto resigned, leaving Yusuf Habibie to replace him. The new president immediately removed Hasan from his ministerial post and stripped Apkindo of its remaining power, putting an end to the regime which had controlled the hardwood industry for almost two decades.

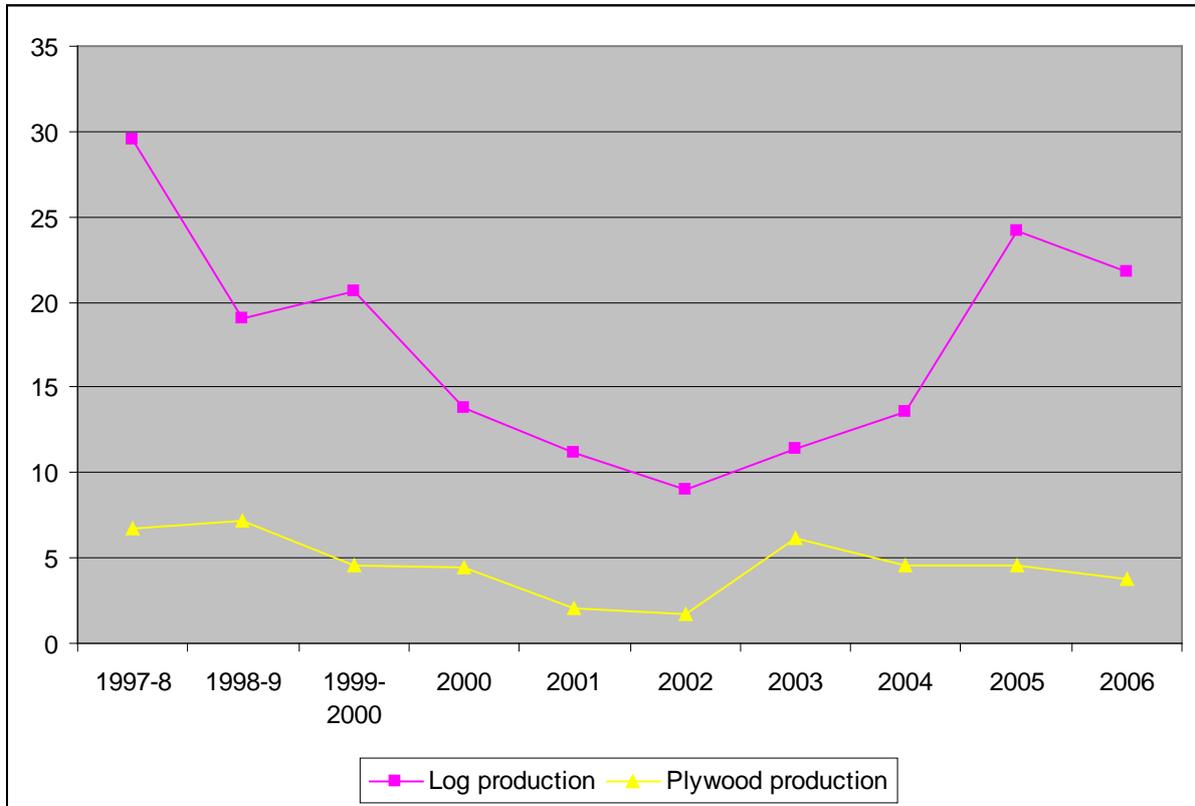
The period that followed saw a near-collapse in Indonesia's hardwood industry, as shown in Figures V and VI. Brown (1999:51) already pointed out a sharp fall in production by 1998, with a decline (i) in the total area of active timber concessions and (ii) of overall production both by about a sixth. This fall carried on throughout the period of *Reformasi*: official log and plywood production figures fell between three and four-fold between 1997-8 and 2002, signalling the worst crisis in the industry since its prodigious expansion in the late 1960s. Since then, production has increased somewhat, although it never recovered the figures that

the industry boasted at the height of its production in the early 1990s. Several reasons may be put forward for this decline:

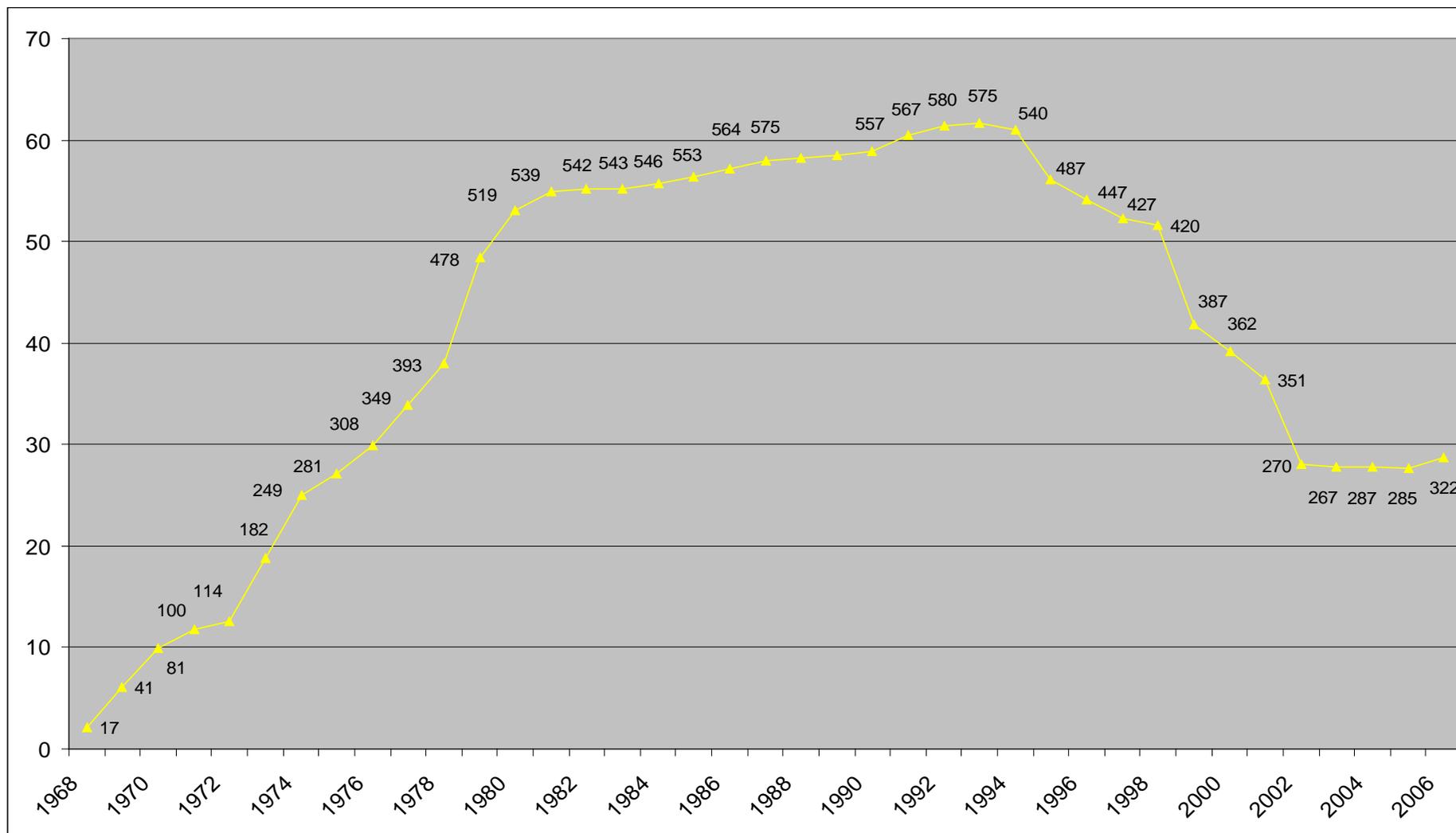
1. *Institutional breakdown.* At the local level, the HPH system had successfully maintained itself despite strong local resentment (following the loss of *adat* rights to land) by calling upon the help of the military to preserve peace and prevent breakouts of anger. After 1998, however, Indonesia's armed forces (ABRI) lost this role as *dwifungsi* was revoked (see section on Indonesian history above). At the same time, movements to revive *adat* concepts and rights of local populations to access the lands they lived on strengthened local movements which could no longer be ignored. In other words, concessionaires needed to take the concerns of local populations into account. In many cases, companies were simply unable to accommodate local requests; in others, local populations successfully drove operators off their concessions, forcing activities to grind to a halt.
2. *Resource exhaustion.* Many observers have suggested that the fall in production figures is due to the fact that the industry is simply running out of timber. Safeguards to ensure sustainability of logging operations had been introduced, including TPI (*Tebang Pilih Indonesia* or Indonesian Selective Logging) – a set of logging rules devised by Indonesian foresters. In the late 1980s the acronym was changed to TPTI (*Tebang Pilih Tanam Indonesia* or Indonesian Selective Logging and Replanting). However, as a popular pun on the acronym showed (*Tebang Pilih Tanam Insy'Allah* or Selective Logging, Replanting Maybe), this method was only rarely implemented to its fullest extent. Acute deforestation figures over the 1990-2005 period provided by FAO seem to confirm this hypothesis: over this 15-year period alone, the country lost almost a quarter of its forest cover (24.08%) (FAO 2005). Likewise, the fact that production figures began falling before the political problems linked to the Asian Financial Crisis also seems to point in this direction. Yet in 1998 the government denied such accusations by suggesting instead that the shortfall in timber was due to the *La Niña* effect (Brown 1999:68). The environmental impact of the timber sector during the New Order is discussed in greater detail in the section on environment and conservation policies.
3. *Illegal logging and police operations.* The fall in the number of concessions (Figure VI) alone does not explain the sharp fall in official production figures illustrated in Figure V. As Brown (1999) explains, much of the fall in the total concession area was cushioned by a sharp rise in illegal logging which fails to appear in official figures and took place as a result of the prevailing situation of lawlessness that characterised the turn of the 21<sup>st</sup> century. The resulting media attention and police operations to curb illegal logging also dealt a blow to the entire hardwood industry, as is described in greater detail in the relevant section below.
4. *Return to stability.* The recent stabilisation, in economic, social and political terms, might explain why the hardwood industry appears to have picked up again during the Yudhoyono presidency, although figures never reached those of the 1990s.

Gellert (2005) argues that the timber sector has succeeded in re-establishing certain elements of an oligarchy in the 2000s that is similar to the one found under the New Order. In particular, an initiative known as IBRA was established in 1999 to cope with debts in the forestry sector, most of which it eventually wrote off, thus giving it considerable financial power over the entire sector. Likewise, in December 2002 an organisation was created called BRIK, charged with issuing export licenses to timber companies. The organisation's stated

aim was to assure consumers in developed countries that the timber they were buying was not illegal, but its powers strongly resembled those once held by Apkindo. Yet as Gellert also recognises, the industry has also been marked by much greater disunity in the Post-Suharto period than was ever observed under the New Order (2005:157).



**Figure V. — Official log and plywood production 1998-2006 in millions of m<sup>3</sup> (After Departemen Kehutanan 2006).**



**Figure VI. — Boom and Bust: the rise and fall of Indonesia's hardwood industry. Total surface area of concessions (HPH) in Indonesia 1968 to 2006 in millions of hectares (vertical axis), with number of concessions indicated on the graph for each year (after Barr 1999:89,161 & Departemen Kehutanan 2001, 2002, 2003, 2004, 2005, 2006) (Data unavailable for 1988 and 1989).**

### 2.4.1.5. Decentralisation and Recentralisation Laws

As we have seen, throughout the New Order the Indonesian timber sector was characterised by ever increasing concentration of power and capital in the hands of a few individuals. The period following the fall of the New Order was marked by exactly the opposite – a series of new laws effectively decentralised forest management, removing power from the centre and distributing it to local governments. In the havoc that ensued, however, attempts were made to recentralise part of the powers which had been handed over to local governments.

In the wake of the fall of the Suharto regime the concentration of power in the timber sector was widely blamed for the unsustainability and predatory behaviour which had characterised the timber sector. After all, the regime had fallen to the cries of *Kolusi*, *Korupsi*, *Nepotisme* (also known as KKN): politicians of the post-Suharto period were going to focus on undoing such practices, at least in appearance.

One of the ways in which KKN could be undone was to distribute power among a greater number of actors. In the eyes of national actors and international donors alike (notably the World Bank), decentralisation could be the solution to the centralisation of power which Suharto had benefited from. This potential solution immediately found allies among local governments and actors who had strongly resented the revocation of “local concessions” in 1970 that Soekarno had legalised in 1957. As McCarthy *et al.* (2006:32) explain, “in many parts of Indonesia the New Order Regime had left a legacy of bitterness towards Jakarta and the Javanese-dominated bureaucracy”.

Likewise, many NGOs also strongly supported sharing power with local authorities: whilst some saw decentralisation as a means of promoting democracy, others saw it as a way of saving what was left of Indonesia’s forests or recognising *adat* rights. Maybe local authorities would manage forests more responsibly than faraway actors concerned with profit rather than local welfare, human rights or conservation. Although the decentralisation laws were to affect all sectors, many agree that they were primarily designed to reform forest management.

However, this also came at a time when provinces far from Jakarta were calling for greater *otonomi daerah* (regional autonomy) and even independence, such as in Aceh, Riau, East Timor and Irian Jaya. Moreover, the spectre of a federal system which Indonesian politicians abhorred because of its instrumentalisation by the Dutch in the 1945-9 revolution also had to be avoided at all costs. Decision-makers thus had to tread carefully between promoting decentralisation and avoiding national disintegration.

Within days of Suharto’s resignation, his successor Habibie thus issued a Letter of Decision (*Surat Keputusan*) creating a team to draft future decentralisation laws (the team was to become known as *Tim Tujuh* or the “Team of Seven” as it included seven people). Despite the fact that Parliament was facing discussions over 40 major bills, Law 22/1999 on Regional Governance was made a priority and passed on 21 April 1999. This fundamental law made the following provisions:

1. Delegation of authority to autonomous regions (*daerah otonom*), namely provinces (*propinsi*), *kabupaten* and cities (*kota*), which were set in a non-hierarchical fashion. However, transfer of authority was much greater to *kabupaten* and *kota* than it was to *propinsi*, allegedly in a bid to avoid handing over power to geographical areas which often

overlapped with ethnic territories. Both *kabupaten* and *kota* lost their subordinate relationship to the central government.

2. The central government, however, retained a certain number of powers such as the ability to dismiss the head of a region (*propinsi*, *kabupaten* or *kota*) and sole authority over certain fields including policies on national planning and development processes and utilisation of natural resources (McCarthy *et al.* 2006:38).

A year later, the first government regulation (25/2000) that implemented this law was enacted. This regulation notably implied that all fields which are not explicitly under the authority of the central government are assigned to local governments. However, it reaffirmed the role of the Ministry of Forests in guiding forestry sector policy and planning.

New pieces of legislation were also issued for forestry specifically. Whilst Government Regulation 62/1998 gave *kabupaten* the authority to oversee the management of privately-owned forests, Government Regulation 6/1999 was groundbreaking in that it allowed *kabupaten* governments to issue small-scale forest product extraction licenses (*Hak Pemungutan Hasil Hutan* or HPHH). More importantly still, Law 41/1999 on Forestry was issued the same year which superseded the 1967 Basic Forestry Law. Yet this law basically reaffirmed the authority of the central government to organise and regulate forest management, thus standing in spirit in strong contrast to Law 22/1999. As McCarthy *et al.* explain, this had consequences on the coherence of Indonesia's forest legislation:

In the period since the two laws were enacted, this legislative dissonance has allowed government policymakers at various levels of the Indonesian state to claim legitimacy for policy positions that are often diametrically opposed to one another. For instance, district [*kabupaten*] governments, on the one hand, have interpreted Law 22/1999 and Regulation 25/2000 to mean that they have primary authority for administering forest resources that fall within their district [*kabupaten*] boundaries. [Ministry of Forests] officials in Jakarta, on the other hand, have argued that Law 41/1999 gives the central government legal authority over most aspects of forest administration, unless the Minister has explicitly delegated these to the districts or provinces. Such competing claims have been symptomatic of the intense political struggles that have framed the decentralisation process in Indonesia's forestry sector over the last several years.

McCarthy *et al.* (2006:45)

Government Regulation 34/2002 on Forest Administration and the Formulation of Plans for Forest Management, Forest Utilisation and the Use of the Forest Estate (*Kawasan Hutan*) confirmed the direction set by Law 22/1999. It was issued during the presidency of Megawati Soekarnoputri's who was widely regarded as being less sympathetic to regional autonomy than Habibie and Wahid had been. The regulation's main provisions are as follows:

1. The Forest Estate (*Kawasan Hutan*) is to be divided into three categories – conservation forests, protection forests and production forests;
2. The Ministry of Forestry has the sole authority to deliver Commercial Timber Utilisation Permits (*Izin Usaha Pemanfaatan Hasil Hutan Kayu* or IUPHHK), which replace HPH that were introduced in the Basic Forestry Law of 1967. IUPHHK have a maximum duration of 55 years in natural forests and 100 years in timber plantations;

3. The Ministry of Forestry's administrative control is extended to the country's wood processing industries as well as the regulation of transport and marketing of forest products in the domestic market; and
4. The regulation explicitly revokes Regulation 6/1999 and thus the allocation of HPHH by local governments, although it states that HPH and HPHH issued prior to the regulation may remain in effect until their terms expire.

Law 32/2004 was Indonesia's last piece of recentralisation legislation. Again, it stands in strong contrast to Law 22/1999 and emphasises instead the promotion of cooperative relations between regional governments and Jakarta. In particular, it provides specifications to the areas where local governments can exercise authority and where they must cooperate with the central government, unlike Law 22/1999 which handed out far-reaching authority to local governments without specifying the nature of this authority. In short, it restricts local government authority to specific areas and gives central government the possibility to supervise and monitor decisions made at the local level – thus reasserting Jakarta's hierarchical superiority over local governments.

Government Regulation 6/2007 issued in January 2007 brought about little change to the existing distribution of power between the Ministry of Forests and local governments. It introduced the concept of KPH (*Kesatuan Pengelolaan Hutan* or Forest Management Units) to all of the Forest Estate, thus generalising this type of administrative division which already existed on Java to the rest of the country. The Regulation also made provisions for "community forestry" which are described in greater detail in the section below on the "Community Dimension".

#### **2.4.1.6. The Explosion of Illegal Logging**

The issue of "illegal logging" has characterised the Post-Suharto timber sector perhaps even to a greater extent than decentralisation has. There is much disagreement on the definition of illegal logging, as the boundary between legal and illegal activities is often blurred (especially in cases of legislative dissonance such as has been observed in the past decade in Indonesia). Discussing the definition of illegal logging is outside the remit of this report which limits its understanding of the expression to the following definition: "any activity associated with timber extraction or processing that contravenes existing forestry regulations" (Obidzinski 2005a:193).

Illegal logging therefore comes in a variety of formats, although it generally falls into the following categories: overcutting (above the legal limit of volume to be extracted), cutting outside authorised blocks (RKT), underreporting of production so as to escape taxation, manipulation of documents, and bribery (Obidzinski 2005b:100). Illegal logging has captured political and media attention more than any other aspect of forest management in the past decade; yet as Obidzinski (2005a) points out, the roots of illegal logging go back much further than the fall of the New Order.

In fact, illegal logging goes back as far as forest legislation itself. In the 1930s, for instance, a widely publicised case-study involved a Japanese company called NRKK logging ironwood in the Bulungan area of East Borneo, exporting the timber straight to Japan without any

documentation or customs. During the Soekarno regime, following the 1957 introduction of small-scale concessions, many operators went into the forests without even bothering to obtain official permits. It was during this period that illegal logging first appeared in Indonesian as *penebangan liar* (literally “wild logging”). Illegal activities in the timber sector carried on throughout the New Order period, as pointed out in Barr (1999:94-5) and summarised in the section above the period 1967-78.

Yet the illegal logging which occurred in the period following Suharto’s fall took place on an unprecedented scale. Several factors may account for such a sudden exponential increase. First, the historical legacy of Indonesia’s forest management practices, particularly under the New Order, had shown that illegal logging practices (such as overcutting and logging outside concessions) could be carried out in all impunity, albeit only by actors with close ties to the existing regime. To a large extent it must therefore be understood as a deeply engrained feature of Indonesian rural life.

Secondly, the 1997 Asian financial crisis and subsequent fall of the New Order spelt a period of deep economic crisis as poverty hit entire communities. Rural populations faced with the prospect of starvation following the country’s economic collapse and devaluation of the Rupiah saw logging as a potential solution. Individuals who undertook to fell timber outside existing regulations thus found plenty of cheap labour locally to work with. In a study of illegal logging in Berau (East Kalimantan) and Kotawaringin Timur (Central Kalimantan), Casson & Obidzinski calculated that

The total labor turnover per annum could be in the vicinity of 12,000 people, out of an approximate population of 100,000 people. In a period of economic crisis, this pool of jobs constitutes an important source of part-time employment for the rural poor.

Casson & Obidzinski (2002:2147)

Thirdly, the years following 1998 were marked by a collapse in the security system surrounding logging operations. In particular, the army which had always threatened to resort to force should unrest threaten any logging operation, was no longer in a position to do so as its *dwifungsi* function had been revoked (this did not stop the army, renamed TNI after the end of the New Order, from being involved itself in illegal logging activities, as recognised by officials [Kurniawan 2003, Wahyudi 2003]).

In fact, the security of logging concessions is supposedly a joint responsibility of the concessionaire and the Forestry Department, yet neither has successfully ensured protection against illegal logging activities (Jepson *et al.* 2001:859). In many cases illegal logging took place in broad daylight, with road-building and mechanised logging taking place in existing concessions. This was observed all the more frequently when concessionaires, discouraged by the drop in timber prices and conflicts with local populations, simply abandoned their concessions which effectively became open-access forests.

Fourthly, the general confusion and political and economic instability that reigned during the immediate post-Suharto period also favoured conditions in which illegal activities could flourish. Within three years, Indonesia had three heads of state, East Timor broke away and Aceh and Irian Jaya experienced the resurgence of large-scale separatist movements. At the same time, the Rupiah fell from 2,000 to 17,000 to the US dollar, unemployment soared and

large manufacturers filed for bankruptcy. According to Smith *et al.* (2003), such conditions encouraged the proliferation of collusive corruption (defined as “corruption in which individual government officials and the private sector collude to rob the government of revenues” [2003:294]):

Government weakness has made it possible for a wide variety of agents to now benefit from illegal activities and the corruption associated with it, ranging from the police and military, local government officials at the district and provincial level, local communities, timber contractors and investors, as well as customs officials and the wood processing industry in Malaysia.

Smith *et al.* (2003:399)

This situation of general confusion was exacerbated in the late 1990s and early 2000s by the proliferation of decentralisation and recentralisation laws which, as we have seen, often led to contradictory legislation. As a result of this legislative dissonance, what was illegal according to one law became legal according to another, thus further blurring the border between legal and illegal logging.

Furthermore, the HPHH (“mini-concessions”) legalised by Government Regulation 6/1999 opened the door to a range of corrupt practices among local governments. Many local governments translated this regulation into local legislation, calling these small, short-term concessions either HPHH (*e.g.*, West and Central Kalimantan) or a range of other names such as IPPK (East Kalimantan), IPKR (Jambi), and HPHHMA and IPKMA (Papua).

A large number of such “mini-concessions” were allocated within a short period, mostly to local elites with ties to *bupati* (heads of *kabupaten*), which only reproduced the patronage system that had characterised the New Order’s HPHs, but this time at the local level. In many instances, mini-concessions overlapped with existing HPHs and IUPHHKs which were allocated by the government because of a lack of coordination between the two levels, thus leading to a legal nightmare. This legal mess further contributed to illegal logging as the holders of mini-concessions were often free to carry out logging activities without the slightest supervision from local government authorities, which led to overcutting, logging outside concessions and even clear-felling.

The central government first responded with Decree 05.1/Kpts-II/2000 which expressly prohibited governors, *bupati* and mayors from issuing any permits in areas already allocated to HPHs. Eventually, Government Regulation 34/2002 revoked the right of local governments to issue any type of logging permits whatsoever, causing protest among local actors. Yet despite this new regulation, several local governments refused to revise their own regulations; several *bupati* continued issuing new licenses for several months following the regulation, whilst others merely renewed existing permits. In Papua, the allocation of IPKMA lasted until March 2005 (Barr *et al.* 2006).

Despite the obvious difficulties in quantifying illegal logging – on top of which an operational definition is often difficult to reach – a number of observers still attempted to estimate the extent of illegal logging. For example, in their study of East and Central Kalimantan, Casson and Obidzinski (2002:2138) suggest that illegal production in East Kalimantan in 2000 equalled 271,000 m<sup>3</sup>, *i.e.*, roughly a quarter of the official figure. Others put forward official

figures, suggesting that as much of 70% of the country's forest products were illegally harvested (Musthofid & Witjaksana 2002).

The explosion of illegal logging had dire consequences on Indonesia's official timber industry which all but collapsed in the early 2000s, as shown in Figure V. Illegal and legal logging activities did not only come in direct competition with each other over the resource. The sharp increase in the supply of illegal timber caused the price of timber to fall and reach rock-bottom in 2000 and 2001, when legal timber producers found it difficult to sell timber at expected prices (Barr *et al.* 2006).

Timber suppliers found it all the more difficult to sell their products to European and North American markets as the news of an increase in illegal logging in Indonesia spread which fuelled boycotts in countries such as the United Kingdom (Witular 2004). Finally, the resulting clampdown and police operations that took place from 2004 onwards also affected legal operations as local and national forestry officials simply refused to renew rights to log (RKT). These police operations are described in greater detail in the following section.

#### **2.4.1.7. Responding to Illegal Logging: Donors, NGOs and the Government**

The first actors to react to the illegal logging crisis were international donors, who picked up on the issue within less than a year following the fall of the Suharto regime, thus largely anticipating (though not preventing) the crisis. In fact, the issue of forest governance already featured fairly high on the agenda of the international forests debate in the latter half of the 1990s. The end of the Cold War had ushered in an era in which the United States and Western Europe no longer needed the support of regimes in developing countries regardless of their level of democracy. As a result, governmental donors were given greater freedom to criticise governments in developing countries and tie foreign aid to political reforms.

In particular, it was increasingly felt that issues related to corruption, transparency and governance more generally (which had remained a taboo subjected until then) were a major barrier to the effectiveness of official development assistance. These issues were first introduced in the forest sector with the World Bank's influence over the 1994 forestry reforms in Cameroon, which were based on increasing transparency in the allocation of concessions. Throughout the remainder of the decade, ideas of forest governance and the fight against corruption and illegal logging spread through donor agendas to a number of countries, including Cambodia where the British Department for International Development (DFID) encouraged the creation of an Independent Observer.

Several donors had already begun working in Indonesia's forest sector from the mid-1980s onwards. Prior to 1990, only a handful of donors invested in the country's forest sector, namely the World Bank, the Asian Development Bank, the Ford Foundation and the Dutch, Canadian, Finnish and French foreign aid agencies. By the mid-1990s, the number of international donors in the sector had grown from 8 to 15 (World Bank *et al.* 2006:A19), yet prior to Suharto's fall projects were carried out in an isolated fashion and concentrated on two major themes – technical projects on improving silvicultural practices, such as CIRAD's STREK project carried out in the early 1990s in East Kalimantan, and the development and management of protected areas. These projects were characterised by the absence of any political dimension and the fact that they remained on a local, rather than national scale (although some of them aimed to be upscaled eventually). Attempts were made to coordinate

donor effort, notably through the creation of the Consultative Group on Indonesia (CGI) in 1992, composed of the Indonesian government and some thirty donors (the CGI was eventually disbanded in 2007).

By 1997, some donors had turned to the more politically sensitive issue of deforestation rates which the government had long avoided because of the implications that their publication might have on the legitimacy of the then forest management system. That year, two of the three surveys that took place were carried out by donors, namely the World Bank (in conjunction with the Government of Indonesia) and the European Union – the third one being carried out by the Department of Forestry itself.

The fall of the Suharto regime brought about major change in the donors' approach to the forest sector. In a country whose regime had been notorious for its level of corruption, these donors – spearheaded by the World Bank and DFID – saw the fall of Suharto and the cries of KKN as a sudden window of opportunity to introduce the theme of governance to the Indonesian forest sector. Within months, “illegal logging” had become such a buzzword in Indonesia that even rural populations became accustomed to the English expression, without bothering to translate it into Indonesian any more. An evaluation of the World Bank's policies in Indonesia published in 2000 further emphasised governance and corruption as two of the four of Indonesia's key structural weaknesses to be addressed in the forest sector as elsewhere (Gautam *et al.* 2000:91-2).

As World Bank *et al.* (2006:A21) note, governance issues became one of the donors' main priorities from 1998 as they began focusing on four major issues – decentralisation, rule of law, equity for communities and press freedom. Faced with initial resistance from local actors, the European Union even set up an Illegal Logging Response Centre to cope with information concerning any illegal activities in the sector. The collection of information on illegal logging gained pace not only with the media's enthusiasm for the subject, but also a proliferation of studies by donors themselves (*e.g.*, Brown 1999) and international research organisations, notably CIFOR (Barr and Obidzinski being the two main authors on these issues).

A number of NGOs also made essential contributions to data collection on forest governance and illegal logging issues. Organisations such as Greenpeace and Friends of the Earth – through their local partner Walhi – gathered substantial amounts of information in the late 1990s and early 2000s concerning illegal logging operations. However, the most famous one was undoubtedly the 2005 undercover investigation carried out by British NGO the Environmental Investigation Agency and its Indonesian partner Telapak. This resulted in a report (Newman & Lawson 2005) and more importantly a documentary aired on British television revealing a complex network of timber laundering involving Papuan logging operations and illegal exports to China through Singapore, Malaysia and the Philippines.

With governance issues rising to the top of the agenda, both donors and the Indonesian government swiftly introduced a number of policies to curb the rapidly expanding phenomenon. The decentralisation laws described above were perceived as one of the means of tackling the governance crisis, but as decentralisation eventually contributed to, rather than solving, the problem, actors increasingly focused on illegal logging. Pressed from all sides and weakened by social unrest and deep economic recession, the Indonesian government embraced the issue.

When the CGI met in Paris in 1999 to discuss the country's forest sector, the Indonesian government had steadfastly refused to discuss the issue. It was only the following year that a breakthrough was achieved when the head of BAPPENAS agreed to discuss forest governance. The European Union seized this opportunity to include Indonesia in a regional conference on Forest Law Enforcement, Governance and Trade (FLEGT) in Asia. However, Indonesia anticipated the invitation and offered to hold it in Bali. The meeting eventually took place on the ill-fated date of 11 September 2001 and did not benefit from the publicity it was hoping to make; however, it largely illustrated the Indonesian government's acceptance of the issue.

The following year, the British government signed a memorandum of understanding with its Indonesian counterpart that clearly established an operational definition of "illegal logging". Since then, Indonesia has been one of the countries in line to sign a Voluntary Partnership Agreement (VPA) with the European Union (along with Ghana and Cameroon) whereby the exporting country agrees to guarantee that any timber sent to the European Union is fully legal.

In recent years – especially during the Susilo Bambang Yudhoyono presidency – the government has acted on its own to reign in illegal logging. Since 2004 a series of widely publicised police operations, raids and clampdowns following long-term investigations have taken place (which mirror Brazilian equivalents such as *Operação Curupira*) in several parts of the country. Among the most famous ones was Operasi Wanalestari carried out in North Sumatra jointly by the provincial police and a number of NGOs (DFID Indonesia 2002:7). Overall, by 2004 the number of illegal logging cases investigated by the police in the first quarter of 2004 had almost doubled compared to the same period in 2003 (Khalik 2004).

These have had a drastic effect in putting an end to the situations of lawlessness that had prevailed in the forest sector since 1998. They also led to a number of high profile arrests such as that of Adelin Lis in 2006, which made the subject of an article in *Tempo* (Arif *et al.* 2006), and more importantly still Bob Hasan himself, convicted in 2001 of having caused an US\$ 244 million to the Indonesian government. He was released on parole in 2004.

It appears that these punitive measures have had greater effect in curbing illegal logging than all of the previous ones combined; however, they would most likely not have taken place had the issue not risen to the top of the government's agenda following the attention that donors and NGOs, among others, had paid the issue. Moreover, as mentioned above, police raids and restrictive measures have also largely affected the legal timber sector which has shrunk to levels not seen since the 1970s.

#### **2.4.1.8. Certification**

Along with the stick, "carrot" instruments have also been implemented by a range of actors to promote better forest governance and reduce illegal logging. As elsewhere in the tropical forest sector, Indonesia has seen the growth of timber certification schemes, although it has taken a different path from those observed in other parts of the world. This is largely due to the fact that FSC – the world's leading certification label – lags behind other schemes in Indonesia, unlike in Cameroon or Brazil.

In fact, Indonesia pioneered certification of forest products when Rainforest Alliance, an international NGO, introduced Smartwood in Indonesia in 1990 to set up a certification programme to assess Perum Perhutani's teak operations in Java. As the popularity of the idea of certification gradually spread (both in Indonesia and in the international sphere), the then Minister for Population and the Environment Emil Salim created a Certification Working Group for the Indonesian Ecolabel Institute (*Kelompok Kerja Sertifikasi Lembaga Ekolabel Indonesia*) in 1993. This happened to coincide with the creation of FSC during its foundation meeting in Toronto the same year (Muhtaman & Prasetyo 2006:35). The *Lembaga Ekolabel Indonesia* (LEI) began working immediately on developing standards and became an accreditation body in its own right in 1998; that year, a Joint Certification Protocol was signed between LEI and FSC to deliver joint certificates.

Despite what appeared to be a promising start ahead of other tropical countries, certification schemes in Indonesia were hampered from an early stage by opposition from a number of NGOs such as Walhi. These organisations refused to endorse and often openly criticised LEI for condoning the HPH system which in their eyes lay at the basis of social injustice in Indonesia's forests. According to them, the problem lay with recognising the concession system itself which they accused of undermining the rights of local populations to access natural resources which traditionally belonged to them.

This problem largely persists to this day: according to Schneider (2007:36), conflicts with local populations continue to be the primary factor preventing forest operations from being certified. For instance, FSC Principles 3 (recognition and respect of indigenous peoples' rights) and 5 (equitable use and sharing of benefits derived from the forest) regularly constitute sticking points as, in the eyes of many, they are undermined by Indonesia's concession system – even today.

Initially, this did not prevent Smartwood from certifying a large amount of Perum Perhutani's managed teak forests on Java; however, when Smartwood became an FSC-accredited company, the amount of certified forests was reduced as many did not fulfil FSC requirements. In 2000, in the midst of social turmoil and widespread conflict between Perum Perhutani and local populations, all FSC certifications on Java were suspended and have never been reintroduced since then. The section on forest-related policies in Central Java describes these events in greater detail.

The other problem hampering certification today in Indonesia is the competition which has emerged between different certification schemes, notably FSC and LEI. Once brought together by a Joint Certification Protocol, FSC and LEI decided to go their own ways in 2005, although reasons for this separation remain unclear. LEI representatives claim that FSC is too "generic" and that LEI is better adapted to Indonesian reality, whereas FSC supporters suggest that LEI principles and criteria are too lax to ensure that LEI-certified operations are deemed sustainable.

Both the competition with LEI and the perceived stringency of FSC contribute to explaining why despite the vast surface area covered by the country's forests, FSC has only certified a modest amount of forests in Indonesia. In April 2008, FSC had certified less than 1 million hectares (903,020 ha) in the whole of Indonesia, *i.e.*, less than in Estonia (1,083,233 ha) and six times less than Brazil (6,184,118 ha) (Forest Stewardship Council 2008:3). In contrast, in 2007 LEI had already overtaken FSC and certified over a million hectares, primarily on Java (see section on Central Java), in Sumatra and Kalimantan.

According to a number of observers, LEI owes its popularity not only to international recognition – it is currently endorsed by PEFC and is officially supported by ITTO – but also to less stringent rules than FSC. In particular, LEI accepts to certify plantations which replace natural forests so long as the area was cleared before 1994 – a useful rule for plantations as most of them grow where natural forests once stood. Pulp and Paper company RAPP was thus able to certify parts of its operations – a move which led to a lively debate given the company’s dismal environmental record.

#### **2.4.2. The Rise of the Pulp and Paper Industry**

The production of pulp – the fibrous material made from timber which is eventually turned into paper – has known a formidable increase since 1985, as has the surface area of timber plantations or HTI (*Hutan Tanaman Industri* or Industrial Planted Forests). This rapid growth is all the more surprising as the Indonesian pulp and paper industry is barely two decades old.

In a bid to reign in the media, Suharto’s New Order regime implemented a variety of rules and restrictions to prevent the multiplication of written publications. One of these consisted in preventing paper from being produced in Indonesia in order to control the written press’s access to this material. All sources of paper had to be imported. Likewise, authorisations to print (*surat izin cetak*) and publish (*surat izin terbit*) were introduced, although the first of these was removed as early as 1978. However, following repeated requests by the plantations industry, Suharto authorised the domestic production of paper in 1985. In the mid-1990s, Durand had already noticed the rapid expansion of the industry:

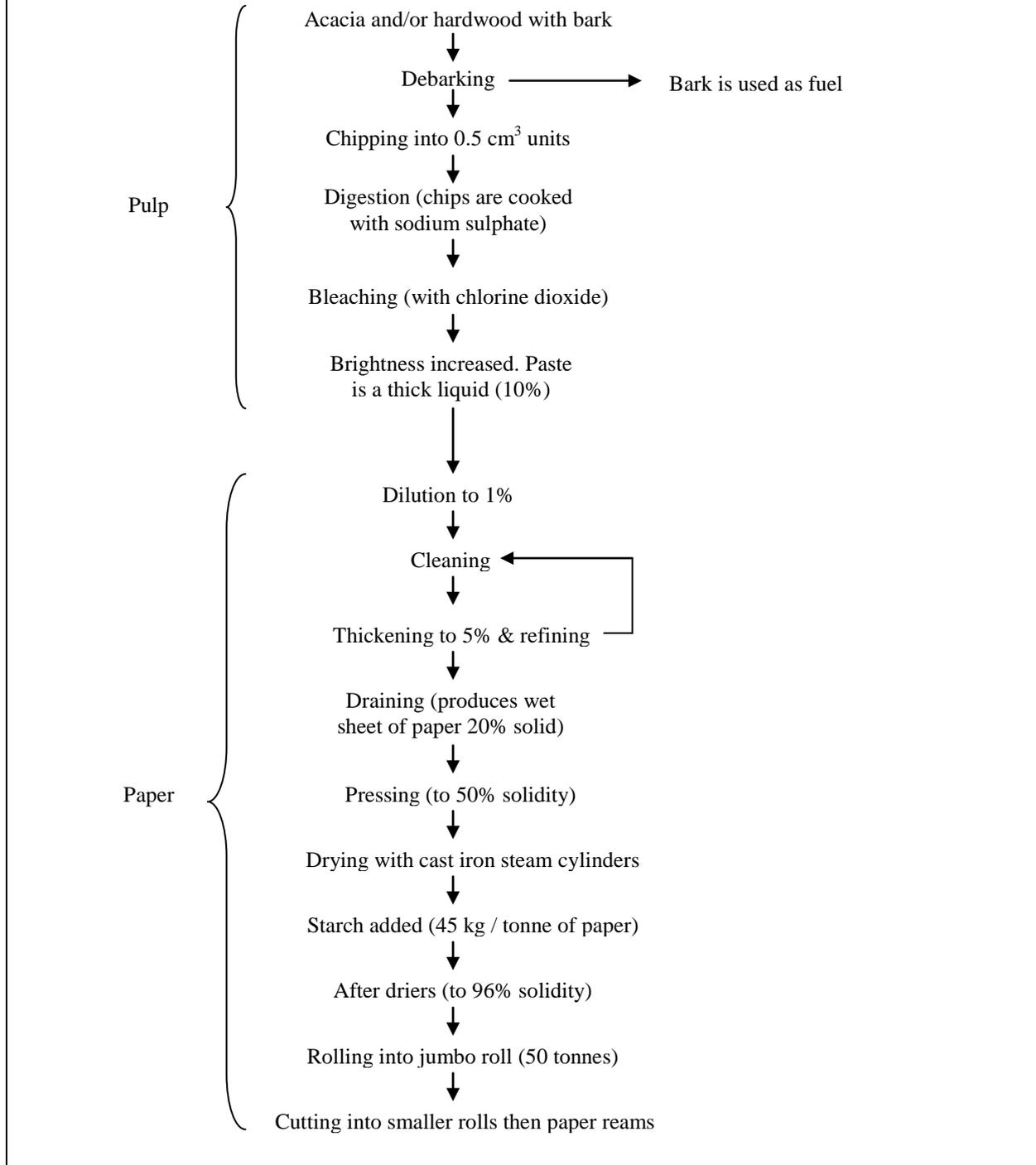
Indonesia’s new priority has now become reforestation, which should notably feed the paper industry which is rapidly developing. According to FAO, in order to satisfy the country’s timber needs, forest plantations should contribute 28% of the total production of timber in 2000, 45% in 2010 and 60% in 2020, which seems to be a particularly ambitious target given the embryonic stage which the sector is currently in. Faced with such close targets, 25 million hectares, *i.e.*, 17% of the land under the Ministry of Forests’ jurisdiction, has been earmarked for such projects.<sup>4</sup>

Durand (1994:304)

RAPP’s paper mill near Pangkalan Kerinci in Riau is said to produce 11,400 tonnes of paper a day. RAPP representatives claim that two different types of paper are made according to the source (acacia plantations or mixed natural hardwood forest), although in practice it is difficult, if not impossible, to say which paper comes from which source. RAPP’s official commitment is to produce over 2 million tonnes a year from 2009 which will come exclusively from *Acacia mangium* plantations.

<sup>4</sup> « La nouvelle priorité de l’Indonésie est d’ailleurs maintenant devenue le reboisement qui devrait notamment permettre d’alimenter l’industrie du papier, actuellement en plein développement. Selon la FAO, pour assurer l’approvisionnement en bois du pays, les plantations forestières devraient contribuer pour 28% à la production totale de bois d’œuvre en l’an 2000, 45% en 2010 et 60 % en 2020, ce qui semble un pari particulièrement ambitieux, compte tenu du stade encore embryonnaire de ces activités en Indonésie. Devant la proximité de ces échéances, 25 millions d’hectares, soit 17% des terres sous la juridiction du ministère des Forêts, ont été réservés pour de tels projets. »

In order to produce a single tonne of paper, the following ingredients are needed: (i) 700 kg of acacia fibre, (ii) 200 kg of calcium carbonate (known as a “filler” as it is 8 times cheaper than wood fibre), (iii) 45 kg of tapioca starch from Thailand, and (iv) long fibre imported from Chile. In a climate such as that found in Indonesia, it only takes 7 years before a plantation can be harvested for pulp purposes. The process of transforming timber into paper is a complex one and follows the steps described in the following figure:



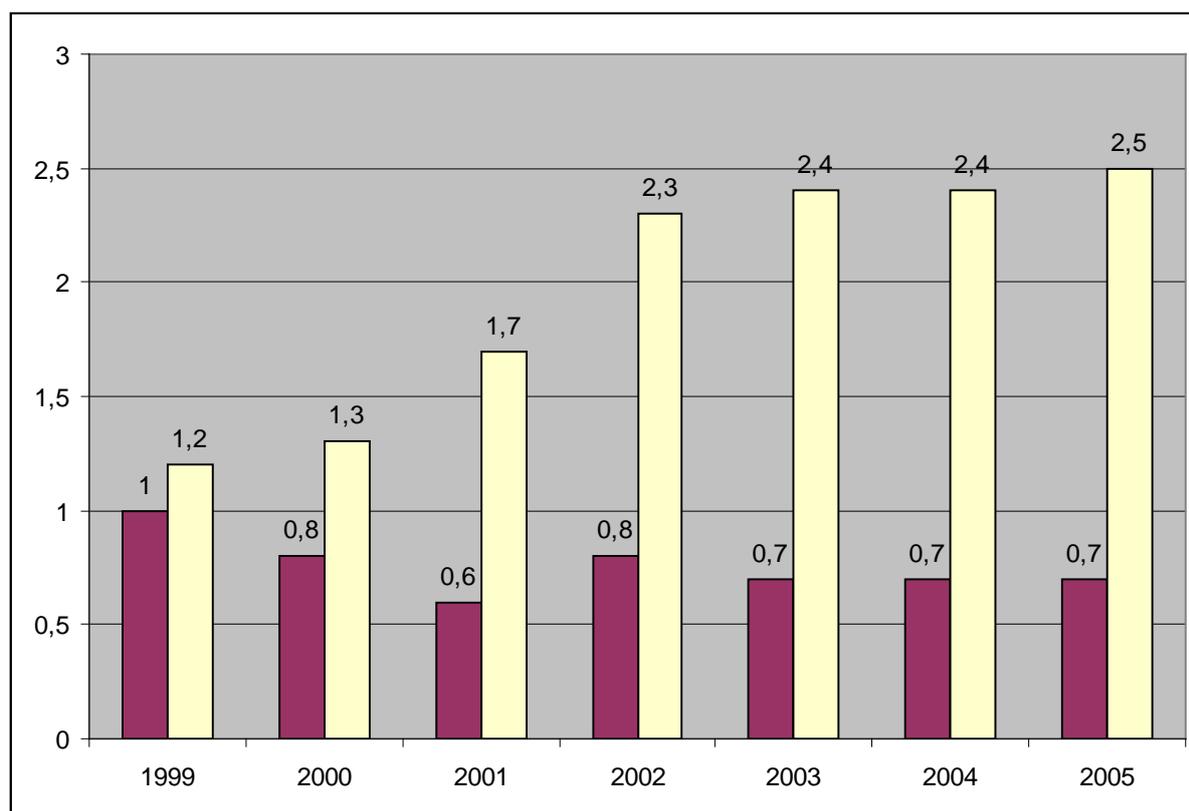
**Box V. — From acacia to paper.**

This trend that Durand had picked up at an early stage was definitely confirmed in the following decade. With hindsight, it appears surprising that even before the plywood industry reached its peak (which took place in the first half of the 1990s) there were already plans to

substitute natural forest with plantation forest production. This decision might be due to the fact that in the 1980s forestry officials and/or companies might have already realised that the existing logging practices could not be sustainable over the long term and that existing (natural) stocks of timber could only be replaced with plantations. Yet it takes at least a generation for quality hardwood to be produced in a plantation; the expansion of plantations has thus favoured an industry with much quicker returns, namely that of pulp and paper.

Whatever the cause for setting such ambitious targets, they may strike today's reader as they strongly resemble current targets. In December 2006, the Indonesian government promised to establish 9 million hectares of plantations for industrial wood by 2016 as part of a broader forest sector revitalisation programme, 40% of which would be large scale plantations, the remainder to be managed by smallholders. This programme would require approximately US\$ 8 billion from public and private sources (Barr 2007:5).

These plans came at a time when the industry had already undergone a decade of vast expansion. Between 1988 and 2000, Indonesia's pulp production capacity grew from 606,000 to 4.9 million tonnes per year (Barr 2001:60). In 1999, paper exports exceeded imports for the first time and domestic production never stopped growing since then at the expense of imports (see Figure VII). By the early 2000s, the industry had entered the country's top ten producers.



**Figure VII. — Imports and exports of paper in Indonesia 1999-2005 (in millions of tonnes) (after Kunaifi 2007:5).**

However, as Barr (2001:60, 2007:7) points out, this meteoric growth proceeded quicker than the ability to secure a sustainable supply of raw material. The proportion of “mixed tropical hardwood” (a euphemism for natural forest) in the source of pulp is key to estimating the

industry's sustainability, because unlike solid timber production, pulp production does not require selective logging. Instead, forests are clear cut and the vast majority of the resulting timber is used to make pulp. According to Barr (2001:60), 90% of the country's pulp was made from clear-cut natural forest between 1988 and 2000 and the resulting loss of natural forest cover to the pulp industry for that period was estimated at 900,000 ha.

In 2007 Indonesia's pulpwood plantations were primarily located in five provinces – Papua (1.63 million ha), East Kalimantan (1.46), Riau (1.18), South Sumatra (970,000) and West Kalimantan (912,000) (Barr 2007:9). Yet Riau remains by far the largest producer in terms of output as it is home to the country's two largest producers, APP (Asia Pulp & Paper) and RAPP (Riau Andalan Pulp & Paper), which have built two of the world's largest paper mills in the province. Together they accounted for three quarters of Indonesia's total pulp capacity in 2007 and despite promises to depend as little as possible on natural forest, it was estimated in 2005 that 70% of pulp was still produced from “mixed tropical hardwoods”.

In Riau as elsewhere, the pulp and paper industry has taken advantage of a piece of legislation which stated that any natural forest with a standing stock below 20 m<sup>3</sup> per hectare could be clear-cut and turned into a timber plantation (HTI). Decades of overlogging in forest rich provinces such as Riau had left many forests in this state, and pulp and paper producers found no difficulty in getting their hands on natural forests. Despite new legislation which lowered this figure to 5 m<sup>3</sup> and a number of police operations which have found pulp producers guilty of using illegally harvested logs, the industry has continued to expand. Many peat forests, notably in Riau, have thus been converted to *Acacia mangium* plantations with drastic effects on the environment. The reader is invited to refer to the section on forest-related policies in Riau for further detail.

Concerns about the sustainability of the industry have also focused on the sector's financial risks. Already in 2001, Barr warned that Indonesia's pulp and paper companies had secured lines of credit that well exceeded the real costs of their investments (2001:84) as well as being characterised by weak due diligence practices and considerable potential costs should their activities be suspended by civil strife. In 2006, in an in-depth study of APP, Pirard & Rokhim also claimed that the company displayed a case of debt entrenchment whereby conglomerates use debts to prioritise the ultimate owners' interests to the detriment of minority shareholders and external creditors.

It remains to be seen whether the pulp and paper industry will continue along the risky path of unsustainability (both from environmental and financial perspectives), which had originally led the timber industry to its downfall, or whether it can adopt a strategy that will allow it to survive the current deforestation crisis.

### **2.4.3. Agriculture and Palm Oil**

A distinction is made in Indonesia between different types of plantations which is not found in the West. In Indonesia the Forest Estate is theoretically home to either natural forest or plantations for pulp (notably *Acacia* sp. and *Eucalyptus* sp.). In other words, other types of plantations, including palm oil, cannot be grown inside the Forest Estate or counted as part of Indonesia's forest cover in the Ministry of Forests' statistics, unlike plantations destined for pulp and paper. This difference is visible in the country's institutional configuration as the

Directorate General of Plantations (*Direktorat Jendral Perkebunan*) was transferred from the Ministry of Forests to that of Agriculture in 2001. This section deals primarily with the policies regarding plantations outside the Forest Estate.

This report presents forest-related policies sector by sector, which to some extent undermines the efforts to coordinate sectors. Several institutions have been set up to cope with planning the economy and policies *across* sectors, including BAPPENAS (*Badan Perencanaan Nasional* or the National Planning Agency). BAPPENAS ensure coordination between the heads of different ministries and the government to establish both 20-year development plans (*Rencana Pembangunan Jangka Panjang* or RPJP) and 5-year plans (*Rencana Pembangunan Jangka Menengah* or RPJM).

In the forest sector in particular, the Ministry of Forests (*Departemen Kehutanan*) has set up a Planning Unit (*Badan Planologi*) which (i) maps and is supposed to mark the boundaries of the Forest Estate (*Kawasan Hutan*), (ii) sets up strategic axes for sector development, and (iii) plans interactions between forestry and other sectors. For this, the unit relies largely on a document established by each province known as the Province-Level Land Use Plans (*Rencana Tata Ruand Wilayah Propinsi* or RTRWP) which are sets of maps that set out land use policies and geographical zoning for each province. Each province is thus entitled to deciding its own planning, albeit in coordination with central ministries.

#### **Box VI. — Intersectorial planning.**

The interaction between agriculture and forestry has traditionally focused on the negative effects of slash-and-burn practices on forest cover. However, recent trends in agriculture which have shown cash crops and plantations to be by far the most dynamic form of agriculture have shown these to have a much greater impact on forests than traditional small-scale subsistence agriculture practiced by local populations. This section thus deals primarily with cash plantations rather than subsistence agriculture.

Indonesia's agricultural sector is highly diverse and although it only contributes to 15% of the country's GDP it has huge social significance as it still employs a majority of the archipelago's population. Ever since the Dutch introduced *Cultuurstelsel* (see section on Indonesian history above) the sector has been dominated by cash crops and plantations. Of these, palm oil was among the first to appear outside Java (after having been grown in Bogor Botanical Gardens), notably in the area of North Sumatra as early as in the 1870s, when the Dutch found this newly conquered territory a prime location given its proximity to the Melaka Straits.

Once the British had found a way of growing rubber trees (*Hevea brasiliensis*) in plantations in Malaya, the species quickly crossed the Straits to be grown as well in North Sumatra at the turn of the twentieth century. The city of Medan rapidly grew into one of the colony's largest cities, and the industry of large-scale plantations in the Outer Islands had begun. Throughout the second half of the twentieth century Indonesia continued to produce large amounts of raw agricultural products found across the tropics, notably rubber, coconut, coffee cocoa and spices such as pepper, cloves and nutmeg.

For a long time, oil palm was overshadowed by most of these other types of plantation: in 1968, Indonesia was home to a mere 120,000 of oil palm plantations, a figure which had nevertheless risen to 250,000 by 1978. In the past three decades, however, oil palm has steadily risen to become by far the country's most cultivated plantation species. In 2006 oil palm ranked first in agricultural exports ahead of rubber, coconut and coffee, and third in

overall exports after oil and textiles. That year, oil palm plantations occupied six million hectares across the country, primarily in Sumatra and Kalimantan, and according to the 2006-2010 Five Year Plan (RJPM) this figure is set to increase by another three million by 2010.

Palm oil is a type of edible vegetable oil with a characteristic reddish colour that disappears with heating. It has now found more than 100 everyday uses from cooking oil to being an ingredient in many processed foods and in toothpaste, soaps and other detergents, as well as being a biofuel. It is believed that palm oil which is extracted from the large kernels that grow on the oil palm tree (*Elaeis guineensis*) has overtaken soy beans as the most widely used vegetable oil in the world. The processing chain that yields refined palm oil from the kernel is a complex one that involves several stages known as “fractionation”, “crystallisation”, “melting”, “degumming” and physical refining which ends with the production of refined bleach deodorized palm oil or RBDPO. This is the final product which is found on markets worldwide.

Oil palm is originally a species endemic to West Africa where local kingdoms (notably the Azande and Dahomey) already used and cultivated the plant intensively. Some rainforests previously thought of as “pristine” of human influence in Central Africa were recently discovered to have been oil palm plantations many centuries ago. By the nineteenth century the British had caught on and imported large quantities of palm oil as lubricant for machines used in the Industrial Revolution. In the 1870s palm oil began being used in soaps, notably in Lever products in Great Britain and Palmolive in the United States. In 1910 the species was grown in British Malaya for the first time – at a similar period to the introduction of rubber trees (*Hevea brasiliensis*). The Dutch quickly latched on and began growing their own oil palm plantations across the Melaka Straits in the region around Medan, now known as North Sumatra.

Source: Wikipedia, accessed 22 December 2007

#### Box VII. — Palm oil.

Several reasons exist that account for the rapid expansion of Indonesia’s palm oil industry. First, although consumption levels have remained stable in Western Europe and North America, they have undergone an exponential increase in emerging countries such as the Middle East, India and China, leading to a vast growth in demand. According to Colchester *et al.* (2006:20), global demand for palm oil is set to double by 2020 due to a predicted annual increase of 4% per year (*i.e.*, twice the rate of soybean oil). Secondly, its multiple uses in many different industries make it unlikely to suffer from dependence on or fluctuations in particular sectors or products. Thirdly, palm oil recently emerged as the single most used plant oil as it accounted for 26% of all plant oils in 2007 – 10% more than it represented in 2002.

Fourthly, the recent growth in demand for biofuels has further encouraged the expansion of oil palm production in Indonesia. As climate change issues and rising oil prices pushed developed countries to turn towards biofuels, the Indonesian government embraced this change and promised to meet this demand, despite the impact that this has had both on agricultural prices in 2007-8 and forest cover. According to Colchester *et al.*, provincial governments had planned to expand oil palm plantations by a staggering 19.8 million hectares for the coming years (2006:26).

Indonesia is well suited to growing oil palms (*Elaeis guineensis*) given its hot, moist climate all year round. Given its unrelentingly increasing demand worldwide and the ease with which the species grows, oil palm has been taken up not only by large companies which manage plantation concessions (known as *Hak Guna Usaha* or HGU), but also by smallholders. In many areas these smallholders have cleared nearby forests to grow small plantations of less

than 25 hectares, ignoring the fact that some of these areas lie inside the Forest Estate. This trend is likely to continue as a number of provincial governments such as that of Riau are promoting oil palm cultivation by smallholders as part of poverty relief programmes so as to provide large populations with limited but regular income (see section on forest-related policies in Riau). Together, Indonesia and Malaysia account for 80% of the world's oil palm exports and Indonesia is believed to be set to overtake Malaysia in the next few years.

According to representatives of the Directorate General of Plantations, smallholders account for up to 85% of agricultural plantations in terms of surface area. Colchester *et al.* (2006:23), however, claim that smallholders represent only a third of oil palm ownership in Indonesia, half of which is managed by the private sector alone. There is therefore a debate as to how much the sector actually contributes to reducing poverty, although there is no doubt that it remains one of the country's most vibrant economic sectors.

This rapid expansion of oil palm plantations, however, has raised serious concerns about their effect on natural forest cover and the fate of forest-dwelling populations. In many cases, large-scale plantations benefit from the conversion of forest into other types of land use and the subsequent shrinking of the Forest Estate which leaves these areas free for other uses than natural forest or pulpwood plantations. More often, however, people are known to settle inside the Forest Estate, taking advantage of the fact that many HPHs have been abandoned and are therefore unsupervised, and clear the forest to grow oil palm. Despite the fact that this is completely illegal, weak law enforcement means that this has become a common phenomenon, notably in areas with a high proportion of transmigrant populations (see next section). This has had a significant effect on forest cover in Indonesia in the past couple of decades and according to Colchester *et al.* (2006) has seriously undermined the rights of "indigenous" populations to access the land they regard as theirs.

Several initiatives have thus been undertaken to ensure that the impact of this sector's increase on forest cover and forest-dwelling populations is minimised. First, in the wake of Suharto's fall and the 1997 forest fires, a number of NGOs got together to form a forum known as Sawit Watch ("sawit" meaning oil palm in Indonesian). By 2001, Sawit Watch had become a fully-fledged NGO and opened an office in Bogor. The organisation which had originally been set up to monitor forest conversion rapidly focused on social issues instead as conflicts between oil palm growers (whether smallholders or large companies) and local populations increased. Since then, Sawit Watch has continued researching the expansion of oil palm production and led a number of campaigns on the issue, including against Cadbury in the UK which led to an article denouncing the company's procurement policy in *The Guardian* in 2004.

Another more conciliatory approach has been to promote the Round Table on Sustainable Palm Oil or RSPO.<sup>5</sup> This initiative was first launched by WWF in 2001 to encourage communication between producers (such as the Malaysian Palm Oil Association), consumers (including Sainsbury's and Unilever) and other stakeholders, *e.g.*, NGOs concerned about the environmental impact of oil palm plantations. Two years later, RSPO issued a non-legally binding statement of intent signed by some 47 organisations supporting the process. Instead of using campaigns as a means of limiting the sector's negative impacts, RSPO promotes an approach based on communication between stakeholders at the international level. This appears all the more necessary as even governmental departments in Indonesia fail to

---

<sup>5</sup> For further information please refer to the RSPO website: [www.rspo.org](http://www.rspo.org).

communicate with one another despite the obvious need to do so: for instance, representatives of the Directorate of Plantations admitted that there was no regular communication with the Ministry of Forests.

However, these initiatives have not succeeded in limiting the impact of oil palm plantations on Indonesia's forest cover. Along with production forestry and pulp and paper, this sector continues to be perceived as one of the greatest drivers of deforestation in the country.

#### **2.4.4. Communities, Adat, Transmigration and Agrarian Reform**

This section deals with the variety of issues connected with the intersection between forest management and social policies, in particular policies directed towards local populations (and especially those residing in or near forests). A historical approach is taken to explaining the different themes which have arisen in Indonesia's social policies concerning forest-dependent populations, notably (i) the concept of *adat*, (ii) transmigration, (iii) access to land and agrarian reform, and (iv) community forestry. These themes are treated in a chronological fashion.

Throughout Indonesian history – and especially since 1949 – centralisation of power (and as a consequence, decentralisation) has been a major ongoing theme of governance in many sectors, including forestry. This issue has created such a polarisation between public authorities (the “top”) and local populations (the “bottom”) that social policies have taken many a violent twist. This polarisation has also contributed to defining local populations as a single, uniform political actor in spite of their great cultural, economic and political differences.

As in many forest-related policies, social policies are marked by a major divide between Java (as well as Bali and Madura) and the Outer Islands. This part deals primarily with policies on the Outer Islands whilst pointing out the main differences with policies on Java. For further information on Java specifically, please refer to the section below on forest-related policies in Central Java.

##### **2.4.4.1. Social Policies in Forested Areas to 1965**

In retrospect, the colonial period of the Dutch East Indies is generally characterised as have a hands-off approach to managing forests and residing populations outside of Java. In comparison to Java during the colonial period and the whole of Indonesia following independence, this is true to a large extent, but such a vision also underestimates the importance of colonial policies in setting the path of those which were to come. Many of the policies towards local populations that have marked the period since 1965 find their roots in the colonial period.

To begin with, the ethnic categorisations that prevail in Indonesia largely result from Dutch constructions of ethnicity. The Dutch differentiated between two main groups – the Europeans on the one hand, and *bumiputera* (literally, “sons of the earth”), autochthonous and *timur asing* (foreign orientals, notably of Arabic, Indian and Chinese descent) on the other. All the people

of the second category, which formed the overwhelming majority of the population, fell under their respective customary, or *adat*, law.

As Moniaga (2007:277) points out, this differentiation can be seen from two contradicting perspectives. First, many perceive it as being the basis for racial discrimination used to maintain the social superiority of Europeans over the remaining populations. Secondly, however, the fact that each population was subject to its own *adat* law illustrate in the eyes of some observers the respect and sensitivity that the Dutch paid to indigenous laws. Whatever the perspective chosen, this had major implications on forest management in the Outer Islands. In contrast to Java where forested lands were nationalised at an early stage (see section on forest-related policies in Central Java), in the Outer Islands the Dutch officially recognised the rights of local populations to their land.

Meanwhile, in the early 1900s, at the height of the “Ethical Policy” (see historical section above), the Dutch authorities decided to alleviate rural “overcrowding” which they had identified as being a problem on Java. Basing themselves once again on the opposition between Java and the Outer Islands, the Dutch launched a *Kolonisatie* programme which encouraged Javanese rural populations to migrate to less populated areas, notably the Province of Lampung on the southern tip of Sumatra (*i.e.*, the closest location to Java on the Outer Islands). The first 155 families were thus relocated as early as in 1905 (Levang 1997:32) and provided with 70 acres of rice paddies and a further 30 acres for gardening.

However, costs were found to be too high and the project was almost abandoned in the late 1920s, despite the fact that by then almost a thousand Javanese people made it to Lampung without official assistance. Finally, it was the Great Depression which pushed the colonial government to pursue *Kolonisatie* following the repatriation of thousands of Javanese workers from the rubber and oil palm plantations, notably from northern Sumatra.

After the periods of Japanese occupation and the war of independence, Soekarno advertised himself as undoing everything which the colonial government had done, but in practice he continued many of the policies which had been hesitantly introduced by the Dutch themselves. Soekarno based much of his ideology on the colonial divide between the *bumiputera* and *orang asing* (foreigners of European or Asian descent). However, the foundation of his ideology lay with the idea that Indonesians were a single, united people which ran against all previous Dutch attempts to break up the country or even set up a federal system.

In order to undermine the legitimacy of Indonesia’s early separatist movements (such as in Maluku), Soekarno thus undermined the notion of customary or *adat* law, claiming that all Indonesians were indigenous (as opposed to foreigners – including those of foreign descent but who had been living in the archipelago for several generations). The only possible exception to this was the Basic Agrarian Law which, as it claimed in Article 5, was officially based on *adat* law. Yet according to Moniaga (2007:279) the law’s foundation in *adat* law was shaky at best, especially as the tenure system proposed by the texts was contradictory to most *adat* practices. Moreover, it would be another 39 years before an implementing regulation on the status of *adat* rights was issued.

As for colonisation programmes, Soekarno reaffirmed the necessity to launch what he called “transmigration” (*Transmigrasi*). However, throughout his time as president, very few

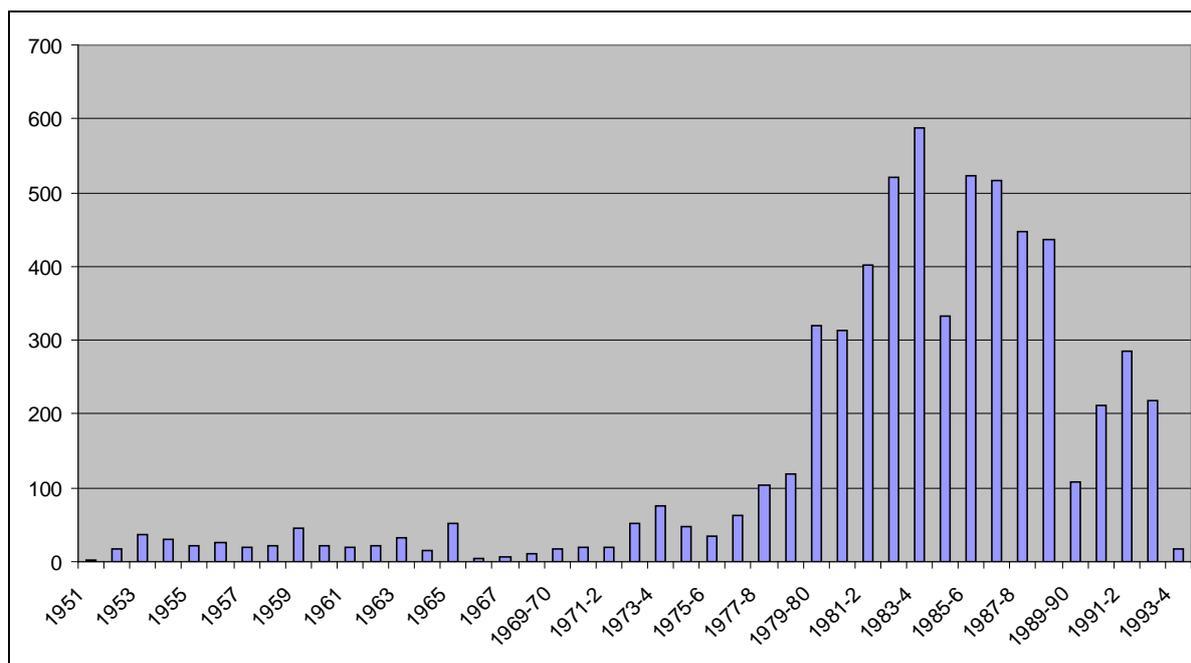
populations left Java under government programmes, averaging less than 50,000 a year, despite ambitious targets of 35 million transmigrants in 15 years (Levang 1997:34).

#### **2.4.4.2. The New Order: Transmigration at the Expense of *Adat***

The creation of the New Order marked a definite break in the history of Indonesia's forest-related policies, and social policies were no exception. However, as in other sectors Suharto merely intensified already existing policies at the expense of others. First, he dealt a final blow to *adat* law in the Outer Islands by issuing the 1967 Basic Forestry Law (see section on timber policies above) which effectively nationalised virtually all of the country's forests. In other words, local populations residing in or near forests lost their official rights to this natural resource overnight. This obviously created strong resentment among local populations and a potential for violent conflict which was only prevented by military presence in forest concessions.

More generally, the New Order sought to reign in all expressions of ethnicity a further bid to unite the country under a cultural umbrella dominated by Java. Indonesian was made the only language to be used in schools and the media, and as the examples of *Operasi Koteka* and *Operasi Task Force* show (see section on forest-related policies in Papua), brute force was often used to ensure that "mainstream" cultural models were accepted by local populations. With the enforcement of all forms of depoliticisation, ethnicity was reduced to a mere display of regional differences in architecture, clothing and cooking. One of the best examples of this depoliticised reduction can still be found on the outskirts of Jakarta: the *Taman Mini Indonesia Indah* ("Park of Beautiful Indonesia in Miniature") is a collection of traditional houses from across the archipelago designed to limit ethnic differences to aesthetics.

Cultural uniformity was one of the key objectives of Suharto's transmigration policies: as Martono, the Minister of Transmigration, put it in 1985, "by way of transmigration, we will try to realise what has been pledged, to integrate all the ethnic groups into one nation, the Indonesian nation (...). The different ethnic groups will in the long run disappear because of integration (...) and (...) there will be one kind of man" (quoted in Colchester 1986b:89).



**Figure VIII. — Number of migrants under Soekarno's and Suharto's transmigration programmes 1951-1994 in thousands (after Levang 1997:373-4). The 1993-4 figure is for migrants up to 4 July 1994 only.**

Under the New Order transmigration policies were to be implemented at a scale never seen before (see Figure VIII). During the Soekarno period transmigration had peaked in 1965 with some 52,000 migrants, but during the years of bloodshed that followed the programmes were temporarily suspended. Suharto put transmigration back on track when he launched the first Five Year Plan (Repelita I) in 1969 that primarily aimed at bringing Indonesian rice production to self-sufficiency. Transmigration was part and parcel of both the Five Year Plan and this particular objective as it aimed to extend the cultivated surface area in the archipelago. The actual displacement of populations was thus accompanied by large-scale agricultural works such as draining and irrigating several thousand hectares of peat and marshes in locations such as Lampung and southern Kalimantan.

From then on, transmigration policies increased their objectives year after year. As transmigration became a national priority and the Ministry of Transmigration benefited from close coordination with a large number of other ministries, the number of official transmigrants shot up to average some 400,000 per annum in the 1980s. Yet each year figures fell far behind official targets which could only be got close to by adding official migrants (*transmigran umum*) with spontaneous migrants (*spontan* or *swakarsa*). Whilst the first category moved to new locations under official programmes, *swakarsa* migrants were assisted when settling down in the Outer Islands, but did not pay for their transport there. As for *spontan* migrants, these included populations who made the same trip and settled in the Outer Islands without any official assistance. In many cases, these consisted of the extended families of those who had already settled through official programmes.

According to Fearnside (1997:564-5) additional, less-well known categories of migrants were included in these programmes. These included penal colonies such as the infamous Buru settlement, described at length in several novels by Premoedya Ananta Toer who was deported there during the New Order. Individuals suspected of having joined rebel groups

such as OPM were also prevented from returning home and placed in special colonies. Likewise, unemployed people, beggars populating city centres and even shanty-town dwellers were occasionally rounded up and deported involuntarily, although numbers in this category remain relatively low (less than 7,000 according to Fearnside 1997:565).

The contribution of transmigration to Indonesia's Green Revolution was also lower than had been hoped. According to estimates, despite all the efforts put into transmigration programmes, these only contributed to 5% of the increase in Indonesia's rice production during the third Five Year Plan (1979-84) (Levang 1997:48). This was primarily due to the fact that agricultural models applied in transmigrant zones originated from South Sulawesi or Java and were ill-adapted to soils of different types such as those in Sumatra and Kalimantan. In the end, many transmigrants ended up adopting local agricultural methods such as slash and burn, much to the dismay of public authorities who had hoped that their "superior" agricultural methods would have trickled down to local populations rather than the opposite (Levang 1997:53).

As time went on, objectives evolved. By the early 1980s, transmigrants were encouraged to work on estate crops such as rubber and oil palm rather than in rice paddies. Likewise, the 1980s were characterised by a strong emphasis on security, defence and national construction as the primary objective of transmigration. International borders were thus "bolstered" with transmigration settlements and provinces with separatist movements suddenly became primary targets for new settlements. This is how transmigration arrived in East Timor, Aceh, and especially Irian Jaya, where areas such as the "Bird's Head" and Merauke became home to greater numbers of transmigrants than "indigenous" people themselves. By carrying out such policies, it was hoped that local feelings of resentment against Jakarta would be "diluted", much in the same way as was described by Martono in the above quote. Colchester (1986a:69) even claims that Western support for Indonesia's transmigration policies was primarily due to the desire of the West to see independence movements quashed to avoid any risk of seeing Communism spreading in the region.

After the 1986-7 fall in international oil prices, the budget allocated to transmigration was cut by three quarters. From then on numbers fell sharply, never to recover the levels observed in the 1980s. Despite this, the Suharto government and the army continued to support transmigration as an essential tool for the construction of the nation, yet with the looming economic stagnation of the 1990s the government was unable to sustain transmigration at their early 1980s levels. The price was simply too high – Levang (1997:37) estimates the cost of a single transmigrant family between US\$ 5,300 and 7,200 according to the type of agriculture practiced. As the same author put it,

Those who promoted the programme found themselves faced with a virtually unsolvable problem. The success of colonies depended on the quality of infrastructure, which entailed a high cost per settled family. Given that the programme budget was limited, the total number of displaced families was inevitably reduced. Yet the programme – as it was conceived – was only of interest if it managed to affect a large number of migrants.<sup>6</sup>

Levang (1997:38)

It is difficult to evaluate with precision how many families were affected by transmigration because official figures vary by over twofold. Whereas 1994 figures from the Ministry of Transmigration (*Departemen Transmigrasi*) used in Figure VIII suggest that a total of 6.4 million people were displaced between 1905 and 1993, another unit in the same Ministry published a figure of 2.9 million. The Ministry of Transmigration later claimed that the difference was due to the higher figure including all spontaneous transmigrants, which corresponds more or less to independent evaluations.

Yet the impact of transmigration policies is not limited to a mere figure. In particular, transmigration was denounced throughout the 1980s and 1990s as having a disastrous effect on the environment and especially forests. It was inevitable that a sudden influx of migrants to previously “underpopulated” areas (in most cases with high forest cover) would lead to deforestation, especially as the official aim of these new populations was to expand the surface area of cultivated land. In fact, government programmes often involved clearing forests ahead of the arrival of transmigrants. According to Fearnside (1997:560), authorities had a clear preference for forested areas as they often fell outside *adat* claims and were therefore less likely to stir discontent among local populations.

The 1991 Tropical Forestry Action Programme estimated that official transmigration alone was responsible for 300,000 hectares of forest clearing a year (quoted in Fearnside 1997:561); an open letter in *The Ecologist* in 1986<sup>7</sup> even claimed that transmigration would cause 3.3 million hectares to be cleared in the fourth Five Year Plan (Repelita IV, 1984-9). Yet it is difficult to know how authorities came to this figure as it is virtually impossible to isolate one particular factor of deforestation from the others. In most cases, as Fearnside points out (1997:561), settlements were created in already degraded areas where timber operators had overlogged the forest. These areas deemed of little economic value were then cleared to make way for transmigrant settlements. This hypothesis illustrates the complexity and the entanglement of different factors in causing deforestation.

The social impacts of transmigration also caused considerable discontent, both among local populations and international actors concerned by the fate of “tribal peoples”. The arrival of people *en masse* in areas home to fairly isolated populations led to rapid social and cultural change among “host populations”. In particular, transmigration programmes severely undermined the right of “host” populations to the lands they used for subsistence. This phenomenon that some called “land grabbing” could still be observed well into the 2000s, when descendants of transmigrant populations were still buying land off “host” populations to

---

<sup>6</sup> « Les promoteurs du programme se trouvent confrontés à un problème quasi insoluble. Le succès des colonies dépend de la qualité des infrastructures. La réalisation d’infrastructures de qualité entraîne un coût élevé par famille installée. Le budget du programme étant limité, le nombre total de familles déplacées en sera forcément réduit. Or, le programme tel qu’il est conçu ne présente d’intérêt, et ne peut donc se maintenir, que s’il touche un nombre élevé de migrants ».

<sup>7</sup> *The Ecologist* 16(2/3):58-60.

grow estate crops such as oil palm (see section on Tesso Nilo National Park for an example of this). The resulting discontent among “host” populations was to have lasting effects, as illustrated by the events which shook Kalimantan after Suharto’s fall (see next section).

The environmental and social impacts of transmigration are primarily what caused the World Bank, which had supported Transmigration programmes between 1972 and 1985, to be subjected to an avalanche of criticisms (*e.g.*, Colchester 1986a, Secrett 1986, Fearnside 1997). In a stinging accusation, Colchester (1986a) compared two versions of a 1985 appraisal report of World Bank funded transmigration programmes written up by a consultant. In the original draft, the programmes are criticised by the consultant as they fall short of World Bank policies on “tribal peoples” (which ensure that no project will be supported that does not safeguard the land of local peoples). Yet as Colchester explained,

[In the revised version] reference to the Bank’s policy has vanished to be replaced with a whitewash résumé of the Indonesian Government’s policy. Gone are the guarantees on respect for land adequate to sustain the tribal people’s traditional economies; gone the special measures to protect the local populations against new diseases; gone the provisions for the maintenance of cultural integrity; gone the forum for the participation of local peoples and the means for the adjudication and redress of their grievances. How are we to account for this shameless piece of backsliding? Only the Bank staff themselves know the answer (...).

Colchester (1986:66)

Although the World Bank stopped funding Transmigration programmes following this scandal, over a decade later authors were still criticising the Bank for its involvement. For instance, referring to Bank policies in the 1980s Fearnside wrote in 1997 that “the case of transmigration illustrates the gulf that still exists between bank policies and project appraisal and implementation in practice” (pp. 566-7).

Indonesia’s transmigration policies have striking similarities with the colonisation programmes which characterised policies in the Brazilian Amazon, particularly in the early 1970s. In both cases, large-scale projects were undertaken to voluntarily displace large amounts of people to areas with high forest cover and low population densities. In both cases, the environmental and social impact of these policies caused an international outcry and caused many to view these policies as an outright failure. It is reasonable to assume that these similarities were mostly due to the ideas of “development” prevalent in the 1970s, whereby developing countries were encouraged to undertake large-scale, government-driven operations with minimal concern for environmental and social consequences. However, beyond these similarities lie important differences between the two experiences.

First, Brazil and Indonesia set out different objectives for their colonisation and transmigration programmes respectively. The Brazilian government had defined colonisation from a geopolitical and strategic perspective from the outset, as illustrated in the slogan *integrar para não entregar*, or “integrate to avoid handing over [the Amazon]”. The expansion of agriculture and solving the problem of landless peasants only came as a second objective. Yet in Indonesia the priorities were inverted, at least chronologically: in the late 1960s *Transmigrasi* was integrated into the first Five Year Plan (Repelita I) as part and parcel of the Green Revolution. It was only in the 1980s, according to Levang (1997:51), that the geopolitical objective of transmigration became the top priority.

Secondly, *Colonização* and *Transmigrasi* differed according to the type of migration and colonisation. In both cases, policies were initially spearheaded by governmental programmes (known as “public” or *público* in Brazil, “official” or *umum* in Indonesia) which had drawn out settlement plans and divided the land among settlers. In

Brazil, public colonisation programmes were completed with private schemes – especially in Mato Grosso – where private companies bought land from the government and sold it off to settlers. In Indonesia, however, there was no such thing. Instead, it was “spontaneous” (*spontan*) migration which completed the official transmigration programmes and led to large numbers of people settling without any assistance from the government.

The most obvious difference lies in the results of transmigration and colonisation programmes. In the Brazilian case, authorities quickly found the first large-scale programmes (such as *Programa Integração Nacional* which had planned for the settlement of the Transamazonian Highway) to be failures. Not only were government targets far from being met, but in many cases migrant populations abandoned their settlements in their thousands to move to the periphery of nearby cities instead, thus further contributing to urban poverty. In the face of such a failure, the Brazilian government quickly turned to other means of “developing” the Amazon such as the large public infrastructure projects (*e.g.*, dams) which characterised the latter half of the 1970s.

It would be mistaken to claim that Indonesia’s transmigration policies were a success; however, in terms of numbers they far exceeded those which the Brazilian government had ever dreamed of. Although these policies did little, if at all, to solve the perceived problem of “overcrowding” on Java, the fact that spontaneous migrants followed official migrants in their millions suggests that demand for transmigration did exist.

In both cases the environmental and social impacts of these policies were profound; yet in the Indonesian case the social conflicts sparked by transmigration were more marked than in the Brazilian case. In Brazil, new populations – especially those originating from the country’s southern states – successfully displaced entire groups, such as in Mato Grosso where “host” populations are now confined to reserves (indigenous territories for indigenous populations, and RESEX for rubber tapper populations). Accounts of massacres are even relatively common. In Indonesia, however, competition (notably over land) created such resentment among “host” populations that the latter sometimes took up arms, especially in the wake of Suharto’s fall, in what were some of the worst ethnic conflicts in the country’s history.

**Box VIII. — Indonesian *Transmigrasi* versus Brazilian *Colonização*.**

#### **2.4.4.3. From Transmigration to *Adat***

The end of the New Order spelled a fundamental change in the country’s social policies regarding populations living in or near forests. Until then, discontent and resentment had been brewing among local populations who had not only lost their rights to forests with the 1967 Basic Forestry Law, but had also seen Javanese, Madurese and Balinese populations settle in large numbers as a result of transmigration policies. Yet any potential conflict was muted by the threat of military intervention in case of any revolt.

After Suharto’s fall, however, this threat had largely disappeared and the central government, severely weakened by widespread social unrest, deep economic crisis and decentralisation, saw local populations express the will for greater empowerment. With transmigration associated with the New Order and the regime’s heavy-handed intervention in social policies, the programmes were wound down in 2000 and the Ministry of Transmigration dissolved. Yet this did not prevent anger from growing among “host” populations. Events reached their peak in Central Kalimantan when some Dayak communities, indigenous to the area, took up arms and massacred some 500 Madurese, descendants of transmigrant populations from the island of Madura near Java (International Crisis Group 2001).

According to some (*e.g.*, Henley & Davidson 2007:11), such events were not disconnected from the revival of the concept of *adat* which had taken root in Indonesian grassroots organisations in the 1990s. During the colonial period, the term *adat* had largely been defined

as customary law; however, although based on similar land claims in the 1990s, it took on an entirely new meaning from then on. 1988 was a turning point when hundreds of Batak Toba in North Sumatra opposed plans to turn a natural forest into a plantation (HTI), marking one of the rare episodes of mobilisation of local populations against development plans supported by the central government during the New Order.

Throughout the 1990s, discreet events took place such as a meeting in 1993 facilitated by environmental NGO WALHI in South Sulawesi that brought together a number of indigenous leaders and some human rights and environmental activists. From this meeting the *Jaringan Pembelaan Hak-Hak Masyarakat Adat* (Adat Peoples' Rights Advocacy Network or JAPHAMA) was born. According to Moniaga (2007:281), it was also during this meeting that a prolonged discussion took place to decide what term was going to be used to refer to this growing movement. Possibilities varied from *orang asli* (literally "original people"), *pribumi* (from the term *bumi* meaning "land"), and *masyarakat hukum adat* ("customary law societies") to *bangsa asal* ("an/the original people").

Eventually, the expression *masyarakat adat* was retained, which Moniaga defines as "peoples who have ancestral origin in a specific geographical territory and a particular system of values, ideology, economy, politics, culture, society and land management" (2007:281-2). The strong similarities between Moniaga's definition of *adat* and the international definitions of the term "indigenous" are not fortuitous as international indigenist movements played an instrumental role in the growth of Indonesia's *adat* movement, as is explained below.

Interviewee	Definition (Indonesian)	Literal translation
Representative of the Papuan Council of Elders	"Sekelompok orang yang mempunyai karakteristik kekhususan yang ada dalam satu wilayah tertentu melaksanakan hukum-hukum adat tertentu, dengan bahasa daerah tertentu, yang tidak dimiliki oleh orang lain"	"A group of people who share special characteristics found inside a specific area and which express themselves as specified customary laws and a specific regional language which is not owned by other people."
AMAN brochure in English		"Indigenous communities are a group of people who have lived on their ancestral land for generations, have sovereignty over the land and natural wealth in their customary bounded territory, where <i>adat</i> law and institutions arrange the social life of the community, and carry out the social-political and economic lives of the community."
Representative of <i>Masyarakat Adat</i> in Riau	"Masyarakat yang masih percaya aturan-aturan dari dahulu walaupun undang-undang Indonesia mencoba menghilangkan mereka"	"A society which still believes in the rules from before, despite the fact that Indonesian laws tried to suppress them".
Representative of <i>Masyarakat adat</i> in Sentani, Papua	"Kelompok-kelompok yang hidup di kampung atau wilayah tertentu. Struktur-strukturnya adat, tatanan adat. Mengatur tentang aturan-aturan dalam masyarakat yang spesifik. Nilai-nilai adat sangat positif untuk kelangsungan masyarakat mereka untuk masa depan"	"Groups who live in a village or a specific area with <i>adat</i> structure and order and which is regulated according to specific rules. The values of <i>adat</i> are extremely positive and ensure the continuation of their society in the future".
Representative	"Kumpulan penduduk pribumi yang"	"A collection of <i>pribumi</i> [original]"

of Papuan independence movement	mengorganisasikan diri sendiri untuk memperjuangkan hak-hak dasar yang berkaitan dengan tanah, hutan dan alam dalam area wilayah mereka”	inhabitants that organise themselves on their own to defend their basic rights related to the land, forest and nature inside their area”
Member of KMAN III	“Masyarakat yang tinggal di satu wilayah jelas dan terbatas. Komunitas sendiri dengan system pemerintahan berdasarkan ketemenggungan”	“A society which lives in a clearly-defined and demarcated area. A community in and of itself with a governance system based on <i>temenggung</i> [title of high-ranking royal official].”
Member of KMAN III	“[Masyarakat yang] punya istiadat. Masyarakat beradab, yang punya bahasa dan aturan komunal dan sudah ada hukum secara otomatis”	“[A society] with tradition. A society with culture/civilisation, which has a language, communal rules and automatically has its own laws”.
Representative of <i>Masyarakat adat</i> in Bengkulu	“Wilayah dan komunitas atau kelompok laki-laki dengan bahasa yang sama, aturan sama, kepercayaan sakral dan garis keturunan, nenek moyang yang sama. Datang dari bawah”	“An area and a community or a group of men sharing a language, [a set of] rules, sacral beliefs, a heritage and ancestors. [Adat] is a bottom-up/grassroots [process] [lit: it comes from beneath]”.
Representative of <i>Masyarakat adat</i> in Sentani, Papua	“Kelompok komunitas sudah beradab di tanah, di satu lokasi, dari nenek moyang, dengan lingkungan hidup, alam, dengan batas-batas tertentu, hak-hak ulayat dan struktur seperti kelembagaan”	“A community group which has been living on a land or a specific location for generations [lit: since their ancestors], with their environment and nature, defined boundaries, traditional rules and a structure, just like an organisation.

**Table III.** — Different definitions of *Masyarakat Adat* collected by the author.

Despite further attempts to define the term, definitions continue to vary widely, as shown in Table III which provides a few definitions collected by the author mainly at KMAN III held in Pontianak in March 2007 (see below). The recurring components of these definitions include (i) a specific group, (ii) a specific geographical area (often with clear boundaries), (iii) specific rules and (iv) specific cultural attributes such as a language and beliefs. However, not only do these definitions not form one coherent whole, but they differ fundamentally from other concepts of indigenism: in Brazil, for example, a person is indigenous if he or she descends from an indigenous community, hence the existence of “Indians” (*Índios*) in cities. In Indonesia, however, most representatives of the *adat* movement agree that if members of a *masyarakat adat* (*adat* society) move to the city, then they are no longer *adat* because they have lost their tie with the land. Whereas blood seems to be the primary factor in Brazil, it is the land which makes a society *adat* in Indonesia. Yet ultimately in both cases self-identification overrules these definitions.

Following the fall of Suharto, the *adat* movement grew exponentially. In March 1999 the first Congress of *Adat Peoples of the Archipelago* (*Kongres Masyarakat Adat Nusantara* or KMAN I) convened in Jakarta, gathering more than two hundred representatives of “indigenous” peoples in Indonesia. This event benefited from considerable media coverage, but faced with demands for recognition of specific rights for *adat* peoples by the state (*e.g.*, ICRAF *et al.* 2003), the government continued to claim what Soekarno had always said when confronted with the issue of indigenism: “Indonesians are all indigenous” (except for those of foreign descent, notably Europeans and Chinese).

In response to this, the *adat* movement refused to recognise the state, hence the name Adat Peoples of the *Archipelago* (*Nusantara*). The main outcome of this congress was the creation

of a national network known as *Aliansi Masyarakat Adat Nusantara* (Alliance of Adat Peoples of the Archipelago, better known as AMAN). The second such congress, or KMAN II, was held in Lombok in September 2003. By then, AMAN had registered 927 communities across the country, 777 of which were verified. The third and latest congress (KMAN III) was held in Pontianak in March 2007. In a display of official support, M.S. Kaban, the Minister of Forests, also attended the congress.

AMAN has also forged linkages with international peoples' organisations, having entered the Asia Indigenous Peoples Pact and the Indigenous Peoples' Caucus during the 2002 World Summit on Sustainable Development held in Johannesburg. In fact, the influence of the international indigenous movement has been considerable. The emergence of the Indonesian *adat* movement comes at a time when the phenomenon of "international indigenism" (Henley & Davidson 2007:6) had already been prevalent in international circles for a decade or more. As Henley & Davidson explain, the rise of international indigenist movements is partly due to that of the international environmental movement, with which it has formed a somewhat uneasy alliance,<sup>8</sup> as well as a "postmodern scepticism toward the very modern institution of territorial sovereignty" (2007:6).

Movements began in developed countries among North American "Indians" and Australian "Aborigenes", and rapidly spread to Latin America during the phase of re-emergence of democracies in the region. Although AMAN owes much to the support of international organisations such as the Forest Peoples Programme, it would be unfair to claim that the *adat* movement solely results from external influences. Instead, the *adat* movement constitutes a specifically Indonesian movement, as illustrated by the uniqueness of the concept of *adat* itself, which ultimately benefited from greater legitimacy through ties with the international indigenist movement.

Despite the fact that it does not play a central role in the *adat* movement, the environmental dimension recurs time and again and has helped bolster the movement by giving it a higher moral ground on the front of nature conservation. From its initial stages of the modern movement, *adat* and environmental themes were intertwined after WALHI, an environmental NGO, supported the Batak Toba in their refusal to see what they regarded as their ancestral lands turned into a timber plantation in 1988. The tie between the environmental and *adat* movements were further bolstered by (i) the essential role of access to land in defining *adat*, and (ii) their common struggle against the New Order regime and a handful of private companies close to Suharto. International indigenism has only helped strengthen the link between the two, as has the international concept of the "ecologically noble savage" (Redford 1991).

Yet this very concept disintegrates whenever projects try to implement it into practice. Li (2007) uses *adat* populations near Lore Lindu National Park in Central Sulawesi to show how *adat* was first appropriated by local populations themselves (known as Katu) in a bid to secure access to land, before it was appropriated by park managers themselves. Although the international NGO The Nature Conservancy noticed that use of the forest by these populations was being carried out for commercial purposes, the national park manager accepted the arguments of the local populations that they should have access to over 1,000 ha of land inside the park. According to Li, the Katu rapidly achieved national fame for their "eco-

---

<sup>8</sup> The report on Brazilian forest-related policies describes at length the difficult co-evolution of indigenist and environmentalist movements in the Amazon in the 1980s and 1990s.

populist model of conservation that recognised indigenous rights and traditional wisdom” (Li 2007:350).

Yet Li explains how the manager was disappointed when Katu leaders announced plans to grow cocoa on these lands: “the exemplary indigenous subjects fell from ecological grace, joining the rush to cocoa, a cultivar he opposed on the grounds of decreased biodiversity and market risk” (Li 2007:350). Eventually, TNC organised a multidisciplinary research programme into the park which concluded that local populations did not fit with the model of indigenous people living in harmonious communities deeply in tune with nature. This argument was based on the observations that there were few social restrictions on forest use, no local cohesion and little “sense of community” (Li 2007:351). The conclusion of the research programme was that the Katu “were not forest people” (2007:352).

Despite the outcome of this particular case, a number of *adat* groups have demanded access to forests on the grounds that they would manage the resource more sustainably than the government or private companies. In recent years AMAN has taken up these demands and has pressured the central government to grant access of local populations to forests which are part of the Forest Estate. The state’s response to such requests is detailed in the following section.

#### 2.4.4.4. Community Forestry

In spite of this, however, the path to state recognition of *adat* is still long. First, many decision-makers fear that the concept of *adat* undermines the unity of the Indonesian people, as illustrated in the national slogan *Tanah, Bangsa dan Bahasa* (One land, one people, one language). Secondly, full recognition of *adat* rights to land would entail the breakup of the Forest Estate (*Kawasan Hutan*) which lies at the basis of the timber sector since the late 1960s, as well as being an essential component of the central government’s control of the Outer Islands.

So far, therefore, only hesitant steps have been observed towards recognising *adat* rights to land and forests, as well as those of local populations more generally to natural resources. In this sense, the *adat* movement has only joined ranks with other grassroots movements to request greater recognition of access to nature resources. The era of decentralisation might have appeared the right time for reforms to be carried out in this way, but to this day steps towards community forestry<sup>9</sup> remain few and far between.

Few would disagree that the majority of forest-related laws issued during the New Order were detrimental to the rights of local populations (*e.g.*, Wrangham 2002:23). However, despite certain claims that community forestry did not exist in Indonesia prior to the fall of the New Order, some collaborative forest management initiatives had already been undertaken, albeit on Java only. Perum Perhutani (the state logging company that manages Java’s teak plantations) first experimented with benefit sharing with local populations as early as 1982 with a system known as PMDH (*Pembangunan Masyarakat Desa Hutan* or Forest Village Community Development). However, throughout the 1980s and 1990s community forestry initiatives undertaken by Perum Perhutani proved unsatisfactory to local populations and furthermore, they were never extended to forests outside Java. The section on forest-related

---

<sup>9</sup> This expression is understood in its inclusive meaning in this report to be any system of forest management that involves and/or benefits local populations.

policies in Central Java provides greater detail of Javanese community forestry during and after the New Order.

Once again, the fall of the New Order marked an essential turning point. In 1998 the Ministry of Forestry issued two major regulations. First, Decree (*Surat Keputusan*) no. 47 – primarily a response to the Krui people in West Lampung – was the first legal recognition of an *adat* forest management system since the 1967 Basic Forestry Law had been introduced, although it fell short of actually recognising the *adat* land tenure system itself. Secondly, Decree no. 677 was issued on community forestry, allowing local populations to manage state forests for up to 35 years with respect to non-timber producing activities such as tourism and non-timber forest product collection (Moniaga 2007:280). In order to harvest timber, however, the decree stipulated that local populations had to form a cooperative which involved considerable amounts of legal paperwork.

Law 41/1999 which was introduced the following year also recognised the right of local populations to access state forest through the creation of the *hutan hak* (“rights forest”) category. The law also created the category *hutan adat* or customary forests, although in both cases these forests continue to be owned by the state, which illustrates the government’s reluctance to see the Forest Estate dismembered. Furthermore, the law gives the central government the task of recognising or revoking the status of a “community” and thus its access to forest resources. That same year, another ministry – that of Agrarian Affairs – issued Ministerial Regulation (*Peraturan Menteri*) 5/1999 that recognised customary rights (*hak ulayat*) over land inside the Forest Estate.

After 1999, little progress was made in terms of community forestry, except on Java where Perum Perhutani set up a new management system in the wake of the unrest following the fall of the New Order, known as PHBM (*Pengelolaan Hutan Bersama Masyarakat* or Forest Management with the People). Outside of Perum Perhutani’s estate, smallholders go together to manage forests on private lands communally in a system called *Hutan Rakyat* (People’s Forests). Both systems are described in greater detail in the section on forest-related policies in Central Java.

In the Outer Islands, however, having traditional rights legalised was a virtually impossible task as many actors, both in local and central administrations, refused to recognise the existence of *adat* populations in particular. Only by identifying “loopholes” in the decentralisation process were a number of local populations able to access natural resources inside the forest estate. Nowhere were such populations more successful than in Papua, especially as this province had enacted legislation allowing “communities” to set up cooperatives, known as *Kopermas* (short for *Koperasi Masyarakat* or People’s Cooperatives) to manage forests. Under Papuan legislation, this could take one of two forms – either Timber Logging Permit for Customary Communities (*Izin Pemanfaatan Kayu Masyarakat Adat* or IPK-MA), or Permits for the Management of Customary Forests (*Izin Hak Pengelolaan Hutan Adat* or IHPHA). Yet as the section on forest-related policies in Papua explains, Papuan *Kopermas* ran into a number of difficulties and once Government Regulation 24/2002 was issued, it was only a matter of time before all these permits were revoked.

One of the main criticisms of the *Kopermas* system was that they were perceived as acting like Trojan horses since once an IPKMA or IHPHA was secured, its management was often passed onto the nearest timber company. More recently, the new category of plantation forest known as People’s Planted Forest (*Hutan Tanaman Rakyat* or HTR) was also accused of

leading to the same problem, especially in the case of Riau where pulp and paper companies such as RAPP committed themselves to managing HTR near their own operations.

When all hopes of renewing community forestry outside Java seemed to have vanished, Government Regulation (*Peraturan Pemerintah* or PP) 6/2007 was issued following heated debates. This regulation created three new types of community forest: (i) *hutan desa* or village forest (articles 84 to 91), in protected or production forests, to be managed by an organisation representative of a village; (ii) *hutan kemasyarakatan*<sup>10</sup> (articles 92 to 98) in protection, conservation or production forests which roughly translates as people's forest, which allows local populations to manage a forest for up to 35 using a specific permit known as *Izin Usaha Pengusahaan Hutan Kemasyarakatan* (Right to Use the People's Forest); and (iii) *kemitraan* or partnership (article 99) between a concession holder and local populations (thus in production forests only). All three include the possibility of carrying out and benefiting from logging operations.

PP6/2007 was actually the culmination of a long debate which saw a large number of actors confront each other with differing perspectives on how community forestry should be implemented. As Campbell put it back in 2002,

Two dominant and competing arguments for reform are ironically encapsulated in the rhetoric of the populist, ex-minister of forestry and estate crops, Muslimin Nasution's slogan: forests for people (*hutan untuk rakyat*). The first is an argument based on people's rights that draws its legitimacy from customary claims, calling for the "rights of customary communities"; the second is an argument based on a people's economy. The first calls for the recognition and return to customary rights over forests, for a redress of the historic misappropriation of these rights, and for a reclassification of the nation's forests as a necessary precondition to reform. The second calls for a redistribution of access to forest resources and income from forests as a means to reorient the economy away from the monopoly control of a small elite, toward a network of small- and medium-scale businesses, organized as cooperatives. An emerging network of customary leaders supported and, to some extent still represented by NGOs and intellectual advocacy groups, is behind the first argument.

Campbell (2002:113)

The period since Campbell wrote this passage definitely shows the two visions of community forestry as specific "strains" – on the one hand the *adat* movement, which he translates as "customary", and on the other the "cooperative" experiments which the state ultimately revoked. The first vision has tended to be more demanding in the extent of control by local populations, some NGOs requesting that complete ownership be handed over, whilst those in favour of the "cooperative" vision mainly request rights to access natural resources. However, this is only true to some extent as many in the *adat* movement only demand rights to access resources rather than complete ownership, especially as the second demand is consistently met with staunch opposition by government representatives desirous to retain the integrity of

<sup>10</sup> According to San Afri Awang (personal communication, 31 January 2007) even the terminology used was hotly debated, NGOs advocating for the use of the expression *Kehutanan Masyarakat* rather than *Hutan Kemasyarakatan*. The difference between the two is merely a grammatical subtlety of the Indonesian language and both would translate into English as "People's Forests" or "People's Forestry", but whilst the expression, favoured by NGOs, emphasises the term *Masyarakat* (people, society), the second, which was ultimately retained following demands by the representatives of the Ministry of Forestry, emphasises the term *Hutan* (forest).

the Forest Estate (*Kawasan Hutan*). The debate on forest ownership is further illustrated in the comparison between PHBM and *Hutan Rakyat* in the section on forest-related policies in Central Java.

Again, international influences in shaping the issue of community forestry in Indonesia have been far from negligible, from the 1978 World Forestry Congress held in Jakarta, which (re)-introduced the concept in the first place, to visits to community forests in India and the Philippines in the early 1990s. However, the importance of the national sphere in shaping the issue should not be underestimated. In particular, international influences do not explain why community forestry issues were tackled on Java several years before they were in Brazil with RESEX and in Cameroon with community forests; neither does it account for the fact that Indonesia today lags behind both Cameroon and Brazil in terms of community forestry.

The crucial importance of the issue of centralisation (and its corollary, resentment by and potential conflict with local populations) that runs through Indonesian forest-related politics is probably key to explaining this paradox. Forestry authorities might have perceived collaborative forms of management as an important tool in minimising the risk of social unrest; but at the same time they have proved surprisingly reluctant to go any further than carrying out short-term experiments or implementing token participation.

#### **2.4.4.5. *Reforma Agraria***

*Adat*, community forestry and agrarian reform issues all overlap in Indonesia. In fact, many observers consider community forestry to be an offshoot of agrarian reform. Indonesians originally borrowed the Spanish and Portuguese expression *Reforma Agraria* in a bid to emphasise similarities between land tenure issues in Indonesia and Latin America. In the 1950s and early, the push for agrarian reform, whether in Brazil or in Indonesia, was strongly associated with the rise in popularity of Communism.

One piece of legislation that sent alarm bells ringing in the ears of many was the 1960 Basic Agrarian Law (*Undang-Undang Pokok Agraria* – note the use of the Iberian term at the time). This law stipulated that all national land law was *adat* (in the sense of customary). Although the law provided no definition of *adat*, making it impossible to implement it at the time, it caused concern among those who wish to see the state take over the management of natural resources as stipulated in the 1945 Constitution.<sup>11</sup> The fateful events of 1965-6 saw Communism become a taboo word and any mention of agrarian reform was buried for fear of being branded a Communist. Unlike in Brazil with the creation of INCRA and the launching of colonisation programmes, *Transmigrasi* was never labelled as a means of solving the issue of agrarian reforms and landless peasants.

It was only after the fall of the New Order that issues related to agrarian reform began resurfacing. These issues were primarily concerned with forested land, most of which became part of the Forest Estate in 1967, but as recent events showed, they also concern agricultural

---

<sup>11</sup> The events that shook Brazil and Indonesia in the early 1960s are surprisingly similar in this regard. In both cases, the “threat” of Communism exacerbated by policies such as Soekarno’s 1960 Basic Agrarian Law and President João Goulart’s 1964 Decree expropriating landowners of more than 100 hectares along main communication axes. Both these decisions, linked to the need for agrarian reform, strongly contributed to galvanising opposition which ultimately led to the downfall of the Republic in Brazil in 1964 and Soekarno in Indonesia in 1966.

land. In Pasusuran (East Java), four farmers were allegedly killed by the military in 2007 because they had claimed traditional ownership to military land which had originally been seized by the Dutch before being transferred to ABRI (the armed forces) in the 1950s. This event caused an outcry and brought protestors to the scene in their hundreds.

Several NGOs have been set up that focus on agrarian reform, such as the Group on Agrarian Reform (*Kelompok Pembaharuan Agraria* – note the partial translation of the expression into Indonesian). Yet despite these NGOs and the existence of a National Land Agency (*Badan Pertanahan Nasional* or BPN) supposed to deal with agrarian reform, the issue continues to be a taboo subject. Although this is primarily a poignant remnant of the weight of New Order ideology on Indonesian history, the government has little interest in allowing the issue to resurface significantly as it does not appear to have any plans to reconsider the status of the current Forest Estate.

#### 2.4.5. Environmental and Conservation Policies

Although Indonesia is home to more species than any other country in the world except Brazil, conservation issues never received the same amount of attention in Indonesia as they did in other forest-rich countries. Indonesia's recent forest-related policies have been particularly marked by political unrest and the dominance of highly lucrative industries such as timber and pulp and paper. Both these factors have undoubtedly contributed to shifting attention away from conservation issues *per se* to focus instead on solving more "urgent" problems such as political instability and the sustainability of large-scale natural resource exploitation. As a result, conservation policies have largely stagnated since the fall of the New Order and the limited number of publications on the subject appears to suggest that it could be a while before the sector moves up the political agenda. In turn, the paucity of Indonesia's conservation policies partly explains the sorry state of the country's forests today.

As Arnscheidt (forthcoming) explains, there have been rules for managing nature and controlling human use of natural resources since pre-colonial times. However, it was during the period of Dutch colonisation (particularly on Java) that "scientific forestry" was first used as a means of managing natural resources. As Peluso (1992) describes at length, scientific forestry became the primary ideology and discourse throughout (and well after) the colonial period upon which forest management was based.

However, the Dutch never elaborated a conservation policy *per se*. Instead, they adopted a mainly *ad hoc* approach to protecting threatened species. The first reserve to be created was Cibodas, on the road between Bogor and Bandung in West Java, in 1889, following studies carried out by the Bogor (then Buitenzorg) Botanical Gardens. A series of reserves were further founded in the first half of the twentieth century, such as Lorentz in 1919 (in southern New Guinea) and Krakatau in 1921 (off the coasts of Java and Sumatra).

Despite the ruthless exploitation of timber in certain parts of the archipelago (particularly Java) by the Japanese during the Second World War, Soekarno did little to elaborate on Indonesia's existing conservation policies which were limited to a loose network of protected areas of different types. During the initial years of the New Order, it appeared as if Suharto was not any more concerned by conservation issues than his predecessor.

Policies in the sector only began to change once environmental issues began appearing in international political circles. The creation of an Indonesian Ministry of the Environment (*Kementerian Lingkungan Hidup*) coincided with the Stockholm Conference on the Human Environment in 1972. Likewise, it was only following the organisation of the World Forestry Congress in Jakarta in 1978 that Suharto decided that Indonesia would hold a national congress in Bali which eventually took place in 1982. It was during this congress that Suharto declared the creation of the country's five first national parks – Ujung Kulon (southwestern Java), Gunung Gede (West Java), Komodo (Nusa Tenggara), Baluran (East Java) and Leuser (Aceh). By 1984, the number of national parks had grown to 17. Although this sudden growth might look impressive, it must be remembered that most of these parks were created on already existing protected areas such as that of Krakatau which was extended and renamed Ujung Kulon.

However, Cribb (2003) notes that far from being totally imposed on Suharto from the outside, environmentalism actually found fertile ground in the ideological terrain that the New Order was constructed on. The dominant conservation discourse was still linked to scientific forestry which encouraged the issue to be debated among experts rather than in politics, which perfectly matched Suharto's endeavour to depoliticise Indonesian society.

Moreover, the dominant perspectives at the time were primarily based on Hardin's 1968 paper, *Tragedy of the Commons*, which suggested that commons would inevitably lead to environmental damage. This equation was rapidly extrapolated to all forms of traditional or local management and local populations widely blamed for encroaching and slash-and-burn practices which impacted on the environment. In other words, the dominant ideology of conservation at the time justified control of natural resources by the state – exactly what the New Order regime had sought to achieve in the forest sector. This vision also happened to be aligned with the New Order's cultural policies: as Cribb explains, "the New Order used environmentalism as a weapon against some elements of traditional culture" (2003:42).

Suharto's conservation policies could only go so far as they rapidly ran into conflicts with some of the New Order's economic and political pillars. In particular, it became increasingly apparent that the timber sector was having a major negative impact on the country's forests. Despite the introduction of specific logging rules (TPI) and their revision in the 1980s (TPTI), environmental requirements were only rarely observed and the logging industry continued destroying forests unabated for decades. Likewise, the New Order's transmigration and agricultural policies each took their toll on the country's forests and other types of ecosystems with only minimal environmental regulation.

Cribb (2003) argues that the late 1980s and 1990s represented a crucial turning point in the country's environmental politics. From being an issue controlled by the state, it gradually became an entry point for criticising the regime itself. Because of its late entry in the political arena, environmentalism and conservation had not been listed as a taboo subject unlike that of ethnicity, which had prevented the *adat* issue from emerging. As a result, growing opposition movements used the environmental sector to criticise the New Order. The country's timber sector as well as transmigration and agricultural policies soon became major foci for political opposition on the basis of their environmental record. The fact that today's *adat* movement was born following WALHI's support of the Batak Toba against a timber plantation in 1988 is a vivid example of such appropriation of environmental issues by grassroots organisations.

By the late 1990s, the number of NGOs – especially environmental ones – had grown considerably and the 1997 forest fires only further galvanised opposition to the regime on the basis of its environmental record. From July to November that year the entire region was struck with a haze that resulted from major forest fires, mainly in Sumatra and Kalimantan. For several months, the smog caused by these fires seriously disrupted air traffic and led to an important health crisis not only in Indonesia, but also in Malaysia, Singapore and Brunei.

These fires, the region's worst ones in living memory, destroyed a total of 9.7 million hectares of land throughout Indonesia, including 3.3 million hectares of lowland forest and 1.5 million of peat and swamp forest. Some 80% of the carbon released originated from burning peat – a habitat where dead wood accumulates over several metres without decomposing because of local acidic conditions. That year, Indonesia alone contributed 22% of the world greenhouse gas emissions. On top of loss of life, the economic costs were equally substantial and were evaluated between US\$ 2.4 and 4.1 billion (Applegate *et al.* 2002:294-6) – mainly due to reduced agricultural production, lost timber and ecosystem services rendered by forests, and lower levels of tourism.

Initially, the government responded by blaming the unusual extent of the fires on several factors, including (i) slash-and-burn agriculturalists who had lost control of the fires which they had set, and (ii) extreme drought due to exceptional climatic variations related to El Niño (Colfer 2002:310). To a large extent, the second element holds true as 1997 was recorded as having a particularly strong El Niño (Applegate *et al.* 2002:300). However, it soon became apparent that other factors had caused Indonesia's forest fires to be particularly virulent that year. A complex web of factors including lack of governance, corruption, insecurity over land tenure and of access to resources as well as social conflict all seem to have contributed:

(...) [A] few possible causal chains are postulated. Historically in East Kalimantan, there has been strong political pressure to convert lands from forest to agriculture (offset by other parts of government). These pressures (particularly from transmigration and plantation agriculture) have resulted in increasing number of new, external actors. The increase in new actors has resulted in insecurity related to continuing access to resources (reinforced in the Kalimantan case by the political will to convert). Such pressures can easily evolve into unfulfilled subsistence needs. The increase in new actors also means a greater diversity of value systems, which can lead to perceptions of inequity and injustice.

The causal chain can go a different way as well. The introduction of new actors can occur spontaneously, with resulting insecurity of access to resources and feelings of injustice or inequity for original inhabitants and eventual unfulfilled subsistence needs. These can result at any step along the way in degradation of the environment (*e.g.*, more fires), prompting a greater political will to convert than existed earlier.

Colfer (2002:319)

In other words, this author points to several defining elements of the New Order – transmigration and the local populations' lack of access to natural resources – as some of the culprits of the 1997 forest fires.<sup>12</sup> One year later, Suharto had stepped down but the fires have picked up again every year since then, although never to the extent witnessed in 1997. However, if anything, the environmental situation worsened after Suharto's fall. Not only did

<sup>12</sup> An international agreement was reached on the transboundary haze issue which is discussed in further detail in the section on foreign environmental policies.

land conversion continue at alarming rates, but the explosion of illegal logging activities only further degraded existing forests whilst encroachment took place unabated.

Paradoxically, once the New Order was gone the environmental issue fell from the political agenda. Several factors might account for this: first, the country was undergoing such a deep economic and political crisis during the *Reformasi* era that conservation issues were simply put on hold as they did not constitute a priority. Secondly, as mentioned above, the environment might have been used as little more than an entry point for criticising the New Order; once the New Order fell, so did apparent environmental concerns. Thirdly, since the return to relative political and economic stability, emerging economic sectors such as pulp and paper and crop estates (notably oil palm) might want to keep environmental issues at the bottom of the political agenda as they could harm their interests. Instead, through a series of high profile police operations, government and media alike have focused on the agonising timber sector as the primary culprit for environmental damage.

As a result, and contrary to expectations, Indonesia's environmental and conservation policies have barely changed since the fall of the New Order. The sector's institutional configuration is subject to a number of inconsistencies. Among many other actors, the sector falls mainly in the hands of two main governmental structures – the Ministry of Forests' Unit for the Protection of Forests and Nature Conservation (*Perlindungan Hutan dan Konservasi Alam* or PHKA) and the Ministry of the Environment (*Departemen Lingkungan Hidup* or LH). Whilst the former is responsible for environmental issues inside the Forest Estate, the latter is in charge of “brown” issues and the environment in the rest of the country – thus creating an artificial divide between environmental issues inside and outside of the Forest Estate. Moreover, as Wiryono explains, the current classification of protected areas – one of the main instruments of any conservation policies – appears to be in urgent need of clarification:

First, each type of protected area has many functions and objectives, which results in overlaps between different categories. For example, although the basic functions of protected forests [*hutan lindung*] are to regulate water cycles and prevent soil erosion, they also protect plants and animals, absorb carbon dioxide and release oxygen and even provide non-wood forest products. Likewise, wildlife refuges [*suaka margasatwa*] do not only protect animals but also produce oxygen, absorb carbon and protect both soil and water (...).

Secondly, the terms used to name the categories and describe their objectives not only overlap in their meaning but also lack clarity. For instance, from both linguistic and ecological viewpoints, what is really the exact meaning of “conservation” [*konservasi*], “sustainability” [*pelestarian*], “preservation” [*pengawetan*], “protection” [*perlindungan*], “reserve” [*cagar*] and “refuge” [*suaka*]?<sup>13</sup>

Wiryono (2003:3)

<sup>13</sup> “Pertama, secara alami setiap kategori kawasan konservasi memiliki banyak fungsi dan tujuan, sehingga pasti ada tumpang tindih fungsi dan tujuan dari beberapa kawasan konservasi. Sebagai contoh, meskipun hutan lindung memiliki fungsi pokok sebagai pengatur tata air dan pemelihara kesuburan tanah, namun bisa juga berfungsi sebagai habitat bagi tumbuhan dan hewan, penyerap karbon dioksida dan penghasil oksigen, dan bahkan sebagai produsen hasil-hasil non kayu. Sebaliknya, suaka margasatwa bukan hanya melindungi satwa di dalamnya tetapi juga menghasilkan oksigen, menyerap karbon dan melindungi tanah dan tata air (...). Penyebab kedua adalah tumpang tindih dan ketidakjelasan pengertian dari istilah-istilah yang digunakan untuk menamakan kategori maupun tujuan dari kategori. Misalnya, dari sudut bahasa dan ekologi, apa sebenarnya arti yang tepat dari ‘konservasi’, ‘pelestarian’, ‘pengawetan’, ‘perlindungan’, ‘cagar’ dan ‘suaka’?”

The example of Tesso Nilo National Park (see section on forest-related policies in Riau) illustrates the difficulties faced by conservation policies based on protected areas. Even in this case where Tesso Nilo enjoys international fame and is home to one of Indonesia's flagship species, the Sumatran elephant, current policies are failing to protect the park's core in the face of large-scale industries and the expansion of oil palm plantations. Because of the failure of protected areas as a means of protecting forests in Indonesia, environmental actors have resorted to other instruments to implement conservation policies. In particular, rather than setting up new institutions, a number of actors have decided to work with existing institutions instead, of which three are described here as examples.

First, a number of NGOs have resorted to collaborating with representatives of large-scale industries themselves. Among these, WWF has gone furthest by recently implementing the HCVF concept – High Conservation Value Forests (WWF 2003a). The NGO argues that instead of calling for all forests to be protected, which in the eyes of its representatives is unrealistic when demand for forest resources is high, conservationists must focus on particular areas of high value according to a series of criteria. An HCVF toolkit has even been elaborated that can be tuned according to national specificities (WWF 2003b) and can be used by forest managers to identify HCVFs according to criteria such as biodiversity, the importance of landscapes, the level of threat of ecosystems and environmental services (WWF 2003c). Yet as some representatives of WWF acknowledge, in some parts of Indonesia HCVFs cover vast surface areas and cannot be reduced to small zones – a pattern which would be more in line with the collaborative approach that the NGO adopts with large-scale industries.

Secondly, a number of actors have attempted to set up conservation districts, a concept based on payments for environmental services. Known in Indonesia as *kabupaten konservasi*, this system is based on the idea that a *kabupaten*-level government may implement conservation measures to protect the environment and in return benefit from a special fiscal package from the central government. These conservation measures would be implemented through a stepwise approach that would help the local government adhere to an established set of criteria and indicators. Pilot projects are currently being set up in a number of locations, including Malinau (East Kalimantan) which involves several CIFOR researchers.

Thirdly, some researchers and NGOs (spearheaded by Conservation International) have suggested introducing “conservation concessions” (*konsesi untuk konservasi* or *Izin usaha konservasi hutan*) to Indonesia (Supriatna & Mangunjaya 2005). According to its proponents, conservation organisations such as NGOs should be encouraged to acquire timber concessions and manage them as protected areas whilst paying the central government the same taxes that any logging company would pay (CIFOR 2003). In other words, this is another form of payment for environmental services. Although similar initiatives have already been implemented in several countries (*e.g.*, Guyana), conservation concessions have yet to be created in Indonesia.

Remaining NGOs that refuse to work with (and therefore recognise) existing institutions are faced with a dilemma. Either they join the ranks of large-scale industries based on these very institutions and establish a cooperative relationship with them to encourage them to set up more sustainable practices – at the risk of being accused of condoning these industries – or they continue to oppose them through campaigns whilst finding themselves in an ever smaller minority. This dilemma is a very genuine one which is currently splitting Indonesia's environmental movement down the middle. On the one hand, NGOs such as WWF have

opted for an approach based on dialogue (part of their global policy), as in the case of Tesso Nilo National Park. Yet WWF has frequently been accused of “sleeping with the tiger” by more radical organisations such as WALHI which continues to oppose all form of concession-based forest management. Whether either approach will turn out to be successful remains to be seen, as most observers agree that Indonesia’s conservation policies give very little room for optimism.

Like in many countries Indonesian legislation stipulates that mining operations take precedence over forestry operations, even inside the Forest Estate (*Kawasan Hutan*) which is usually managed by the Ministry of Forests. According to Forestry Law 41/1999, both underground and open-pit mines are allowed in conversion, production and limited production forest, whilst only underground mines are allowed in protection forest. Representatives of the Ministry itself complain that this places them in a weak position compared to the mining sector, allegedly because mining operations are more strategic to the state than timber production or forest ecosystems. Mining is of crucial importance to the country as oil remains the single most importance source of revenue to Indonesia. However, the importance of mining products other than fossil fuels should not be underestimated. Freeport is a good example of this as witnessed by the attention the government has paid to its mining operations in Papua (see section on forest-related policies in Papua) in particular, especially as this company contributes substantial amounts of the state’s revenue.

In theory, when a mine is opened inside a concession, the concessionaire should receive financial compensation, yet in practice this process is known to be lengthy. The boundary of the Forest Estate does not change as a result of a mining operation, especially as the mining concessionaire is expected to carry out forest rehabilitation after its operations. Only under exceptional circumstances where the mining company is unable to rehabilitate its site can the Forest Estate boundary change as a consequence of such operations.

In practice, however, mines tend to have disastrous consequences on the local environment. Not only do they contribute to forest clearing and road-building – often in remote or isolated areas – but water pollution is frequent, and populations downriver are frequently affected by the industry. In 1995, WALHI helped set up JATAM (*Jaringan Advokasi Tambang* or Mining Advocacy Network), a network of NGOs that organises campaigns on the environmental and social impacts of mining in Indonesia. So far, their campaigns have focused on several high-profile cases such as Freeport (copper mine in Papua), INCO (nickel mine in Central Sulawesi) and ExxonMobil (Aceh). Further information on JATAM’s campaigns can be found on its website in Indonesian (<http://www.jatam.org/>) and in English (<http://www.jatam.org/english/>).

#### **Box IX. — Mining Policies.**

##### **2.4.6. Military Policies**

The Indonesian military has always played a backstage role in the country’s forest-related policies, which makes research difficult on this particular topic. However, backstage does not mean absent: although the Indonesian army has only rarely been in the limelight of the forest sector, its importance must not be underestimated.

The history of the Indonesian military (which is divided into four forces – territorial, navy, air force and, until 2000, the police) – is unique and inextricably linked to the history of the nation itself. The army emerged as a political actor at a troubled time when Republican forces took up arms against the Dutch upon their return in 1945. However, at the time the army was far from united, being split down the middle by two forces – on the one hand those trained by the Dutch prior to 1942 (such as General Nasution), and on the other those who had been trained by the Japanese. The military took on the name of ABRI (*Angkatan Bersenjata Republik Indonesia* or Armed Forces of the Republic of Indonesia).

Following the recognition of Indonesian independence by the Dutch, civilian politicians decided that they should determine military affairs (Ricklefs 2001:292). They faced little organised opposition by ABRI which was more concerned with internal divisions than its potential role in national politics. The tide turned during the 1950s, however, when Soekarno gradually sought a *rapprochement* with left-wing parties, in particular the Communist Party (PKI). This was strongly resented by ABRI which took advantage of its defeat of PRRI and its victories in New Guinea and over Darul Islam in West Java, and above all of the declaration of martial law in 1957 – to strengthen its political role.

ABRI played an instrumental role in the events of 1965-6 and became a central pillar in Suharto's regime (Ricklefs 2001:372). Soon after Suharto came to power, the Second Army seminar was held in August 1966, when the concept of *Dwifungsi* (Dual Function) was coined. According to this new notion, ABRI would not only be in charge of defending the country against foreign threats, but was to take part in social activities "in the field of ideology, politics and the socio-cultural field".

This prominent role given to the military was immediately put into practice as ABRI played a major role in preventing discontent at the creation of the Forest Estate in 1967 from boiling over. Throughout the New Order, ties remained close between ABRI and Suharto who guaranteed military presence both in the legislature and the executive. On the ground and in the forest sector, the military maintained "order" that allowed logging operations to take place on a wide scale without local populations or elites being able to express their bitterness. However, the military did not only ensure "law and order" in the forest sector; several prominent military figures were also involved in logging operations themselves, actively seeking joint-ventures with timber companies in order to reap the benefits of the sector themselves.

In more remote parts of the archipelago such as in Papua, the military and Ministry of Forestry officials (which also worked in paramilitary style with green uniforms, albeit of a different shade) frequently worked together in the field. To populations who otherwise felt little if any influence from Jakarta, the presence of men in both shades of green was a vivid reminder that their land was part of Indonesia.

Despite disagreements between the two throughout the 1990s, ABRI's close association with Suharto led to the latter pulling the military down with him when he resigned in 1998. The military immediately fell from the favour of public opinion as it was branded an ally of the New Order. In the years that followed, ABRI was renamed TNI (*Tentara Negara Indonesia* or the National Army of Indonesia) as the *Dwifungsi* ideology was dropped, and in 2000 the police (*Polri* or *Polisi Republik Indonesia*) was separated from the army.

Its official role in national politics lingered on: as ICG (2001:3) points out, TNI continued to be guaranteed 38 seats in the People's Representative Council (DPR or *Dewan Perwakilan Rakyat*). However, with the 2004 general elections, all of DPR's 550 seats were elected and the military has been absent ever since, although they have found a likely ally in the person of Susilo Bambang Yudhoyono who had a military career before turning to politics.

Neither has the military pulled out of the forest sector. Whilst many blamed the situation of lawlessness that prevailed in forests in the late 1990s and early 2000s on the fact that the army had pulled out, it was soon revealed that army personnel had been involved in illegal logging.

In 2003, TNI even officially confessed that some of its staff had been implicated in such doings and promised to take swift action (Kurniawan 2003). As TNI settles into its new, more restricted role, and as Indonesia's forest sector mutates into new forms, it remains to be seen what the nature of the interaction between military and forest-related policies will be in the years to come.

#### **2.4.7. Foreign Environmental Policies and Avoided Deforestation**

Environmental issues have recently played an increasing part in Indonesia's foreign policies, both as a result of the fall of the New Order and the emergence of an international debate on forests. This section deals primarily with Indonesia's position on the international stage rather than the role of international actors in the country's domestic forest sector. For the latter, the reader is invited to refer to the section on timber policies in Indonesia.

Home to an exceptionally rich archipelago of some 17,000 islands, the world's third largest stretch of tropical rainforest, the world's second largest number of species (as well as a prominent role in international timber markets), it is often thought as logical that Indonesia should be in the limelight of global discussions on environmental issues. However, it has not always been the case: throughout much of the New Order – and in spite of Hidayat *et al.*'s claims (2003), Indonesia only played a minor role in such debates prior to 1998.

The hosting of the 1978 World Forestry Congress in Jakarta introduced a number of international principles into Indonesia's forest-related policies – it was notably following this event that several national parks were created and the first initiatives were implemented to share logging benefits with local populations on Java. Throughout the 1980s and most of the 1990s, however, Indonesia contributed little more to international discussions than through the person of Emil Salim,<sup>14</sup> once Minister for Population and the Environment, who rose to become a prominent figure in international environmental debates.

In the 1980s a directorate in the Indonesian Ministry of Foreign Affairs (*Departemen Luar Negeri* or *Deplu*) was officially made responsible for environmental affairs (among others), thus illustrating the growing importance given to the environment in foreign affairs. However, even the 1992 Rio Summit on Environment and Development brought about little change to Indonesia's environmental policies, whether at home or abroad, although following 1992 the government began feeling increasing pressure from international donors who increasingly expressed a wish to get involved in the forest and environmental sectors. One exception was Indonesia's decision to host the headquarters of the Centre for International Forestry Research (CIFOR) in Bogor in 1993 – a direct consequence of the Rio Summit.

The single most important turning point in foreign environmental policies took place with the fall of Suharto in 1998. Prior to that, Indonesian diplomats had always staunchly defended their country's environmental record as they would have dismissed any criticism of the New Order. However, with the arrival of free speech but also of lawlessness, the sorry state of Indonesia's forests came to be heavily criticised in national and international circles alike.

---

<sup>14</sup> Salim was one of the members of the 1983-7 Brundtland Commission which wrote up the famous report of the same name.

Forest-related events of the late 1990s and early 2000s caught international attention in two respects. First, the transboundary dimension of Indonesia's 1997 forest fires called for the issue to be settled with neighbouring countries, especially those most badly affected by the haze such as Singapore, Malaysia and Brunei. Discussions between delegations of all these countries took place in the late 1990s and early 2000s under the auspices of ASEAN, during which Indonesia claimed that Malaysia (responsible for a minority of the haze) should also take blame.

An agreement was finally reached in 2002 known as the ASEAN Agreement on Transboundary Haze Pollution in which all parties agreed to coordinate on the haze issue and implement relevant reforms in forest-related policies. Eight countries signed and ratified the agreement, namely Malaysia, Singapore, Brunei, Vietnam, Lao DPR, Myanmar, Thailand and Cambodia; yet to this day Indonesia has refused to sign the agreement, allegedly because of disagreements on issues of extradition (interview with a representative of *Deplu*, 8 June 2007).

Secondly, as the problem of illegal logging escalated throughout the late 1990s and early 2000s, so did international pressure to resolve the issue. This came at a time when the European Commission, the World Bank and DFID (British Department for International Development) had worked to bring good governance and the fight against corruption and illegal activities in the forest sector to the forefront of international debates on forest management. It was during this period that Indonesia's foreign environmental policies shifted from a largely passive, reactive position to a more pro-active stance. As a representative of *Deplu* expressed it, "we had a paradigm shift from submission to acceptance. We saw that environmental problems were more and more important and realised that money from donors could become a resource rather than a constraint" (interview dated 8 June 2007).

As a consequence of this "paradigm shift", Indonesia offered to host an Asian summit on FLEGT issues (Forest Law Enforcement, Governance and Trade) in Bali. Because of the summit's date (11 September 2001), the event was overshadowed by more dramatic events on the other side of the world; yet it symbolised a crucial turning point in Indonesia's foreign environmental policies. An international observer and actor in environmental negotiations at the time recalls that

Indonesia not only played good hosts but was a complete convert, as opposed to China which was much more reserved. Initially, Cambodia and Indonesia got the most pressure and Indonesia was on the defensive, but [by the time the summit was held] it had turned to the offensive. Indonesia suggested much stronger language than we hoped, which enabled us to introduce "corruption".

Interview with a former international negotiator, 19 May 2008

Following the success of its new position in international environmental politics, Indonesia offered to host the 2002 World Summit on Sustainable Development (Hidayat 2003:122). The country came close to succeeding as it benefited from support across Asia and the Pacific, but it was finally South Africa, with support from African countries, which won the bid. This did not prevent Indonesia from playing an important role in the 2002 Summit as it hosted the fourth preparatory committee in Bali and made contributions to the Summit itself, notably (once again) through Emil Salim.

Since then, Indonesia has been a staunch supporter of the idea of Avoided Deforestation that arose in the second half of the 2000s. Along with other key countries such as Papua New Guinea and Brazil, the country's delegations have systematically promoted negotiations on Reducing Emissions from Deforestation and Forest Degradation (REDD). It was Indonesia which officially proposed REDD during the 13<sup>th</sup> Conference of Parties (COP13), held in December 2007 in none other than Bali. Along with the recent re-emergence of climate change in international debates which has buoyed REDD, the support of most forest-rich countries is undoubtedly one of the reasons for the success of the issue in international discussions, in spite of its flaws.

The main reason for Indonesia's support for REDD is that it stands to gain considerably from this process and to a greater extent than most other forest-rich countries given its history of deforestation. The idea of REDD is already appealing to forest-rich countries as they can only gain from it and would not have to pay for letting their deforestation rate exceed a fixed baseline. However, Indonesian hopes lie in the fact that if baselines are to be fixed on historical deforestation rates, then the Indonesian baseline is expected to be very high given observed deforestation rates in the past few decades.

The fear of some is that Indonesia will keep its deforestation rate high in the years to come, in which case a REDD baseline would come in handy as it would provide an economic incentive for the government to reduce its rates. However, others have argued that deforestation is subject to a period of transition during which it reaches high rates; once much of the country's forests have been cleared, then rates are reduced – a hypothesis known as the Forest Transition Theory (*e.g.*, Angelsen 2007). If this is the case, then Indonesia is likely to benefit substantially from a hypothetical REDD scheme with a high baseline rate, whatever the policies implemented to reduce deforestation in the archipelago. For the time being, however, an international agreement has yet to be reached.

#### **2.4.8. Who's Who in Education and Research**

Indonesia's forests have probably been researched more than any other country in Southeast Asia. Their extent and international fame have undoubtedly contributed to this, although much still remains to be done, notably (i) on forest monitoring at the national level, and (ii) on actually putting forest-related knowledge to good use.

Indonesia is home to a number of universities which offer specialised courses in forestry. It was the Dutch who sent the first scientific foresters to Java, most of whom had been acquainted with German-style forestry, during the nineteenth century. Since then, forestry as a discipline and a science has spread to become the single most popular form of forest management in the archipelago. Two of the country's top universities compete to dominate teaching and research on the subject:

- (i) Gajah Madah University (*Universitas Gajah Mada*), located in Yogyakarta, was founded in 1946 by the Republican government in exile from Jakarta (Batavia) and has since remained one of the country's best universities in a range of disciplines, including forestry. The university is notably famous for its research in social forestry issues.

- (ii) Bogor Agricultural University (*Institut Pertanian Bogor* or IPB), located in Bogor (West Java) and founded in 1963. The university (from which Susilo Bambang Yudhoyono graduated) offers a number of courses in forestry and includes cutting edge courses in subjects such as forest policy and conservation science.

A growing range of other universities, especially regional ones, offer similar courses, including Universitas Riau in Pekanbaru, Universitas Cenderawasih in Jayapura). Yet the concentration of forestry knowledge and education in the hands of these two universities has strongly contributed to the Indonesian body of foresters becoming a *grand corps* – a professional field characterised by great homogeneity in the way of thinking and acting. The fact that Ministry of Forestry staff are submitted to a near-paramilitary style of governance (including the use of dark green uniforms when in the field) has only contributed to this strong sense of professional unity. The same year IPB was founded in Bogor, the Indonesian Forestry Graduates Association (*Persatuan Sarjana Kehutanan Indonesia* or Persaki) was created. Today, it has around 1,500 members from fresh graduates to top senior officials of the Ministry of Forests.

The Ministry of Forests itself is home to a statistics unit which publishes comprehensive annual data on the state of Indonesia's forests (*e.g.*, Departemen Kehutanan 2006). The reliability of these data has often been disputed, particularly with the explosion of illegal logging following the fall of Suharto, when many publications differentiated between “official data” (*i.e.*, those of the Ministry) and their own. The lack of consistency in some of the data reinforces the lack of confidence in the Ministry of Forests' publications. Moreover, some researchers have complained that the Ministry refuses to give them details on how the data were compiled and the sources of information, yet the data continue to retain sufficient authority for many researchers to rely on them in their studies. The Ministry's data have been used several times in this report.

More recently, Forest Watch Indonesia (FWI, formerly associated with Global Forest Watch) has emerged as an alternative source of statistics on Indonesia's forests. In 2002 it published its *State of the Forest Indonesia* (Matthews 2002) in which it presented a range of national statistics and discussed difficulties involved in compiling reliable data in this regard. *The State of the Forest Indonesia* is currently being revised. The third source of statistics comes from FAO (FAOSTAT 2005) which for all the criticisms it has received continues to constitute authoritative data.

A number of other NGOs have also produced research and investigations such as Telapak and EIA's report on logging practices in Papua (Newman & Lawson 2005). Likewise, larger NGOs and governmental donors – spearheaded by WWF, the World Bank and DFID – have funded research in certain aspects of Indonesia's forests, notably on governance issues (*e.g.*, Barr 2001, Brown 1999).

Since its creation in 1993, the Centre for International Forestry Research (CIFOR) has changed the landscape of forest-related research in Indonesia, particularly on social, economic and political aspects. Following the Rio Summit, Indonesia agreed to host the headquarters of this research organisation with diplomatic status in Bogor, near IPB campus. To this day, CIFOR plays a leading role in the discipline, producing substantial amounts of research and publications, many of which are available on its website (<http://www.cifor.cgiar.org>). Its open criticism of governmental policies in Indonesia's forests have caused friction between Bogor

and Jakarta in the past but its publications have often played a central role in policy reforms, especially since the fall of Suharto.

Outside of Indonesia, research on Indonesian forests is mainly located in the former colonial power, the Netherlands, and in the United States. In the Netherlands, the University of Leiden tends to produce more research on political and legal aspects of Indonesian forests (notably at the Von Vollenhoven Institute) whilst the University of Wageningen specialises mostly in forestry science. In the United States, the University of Cornell runs a Southeast Asia Programme which has produced several studies on Indonesian forests, notably from a political perspective. In France, two public research institutes, CIRAD (the French Agricultural Research Centre for International Development) and IRD (Research Institute for Development), both have a number of researchers specialised in Indonesian forests from political, economic and scientific perspectives.

### 3. FOREST-RELATED POLICIES IN CENTRAL JAVA

The island of Java has played a central role in the social and political construction of both the Dutch East Indies and Indonesia. From the time when the Dutch shifted the centre of colonial activities in Southeast Asia away from Melaka (Malaysia) and Ambon to West Java (Batavia) in the seventeenth century, all political power radiated from Java towards the expanding Dutch conquests in the region. The expression “Outer Islands” to refer to Indonesia outside Java, Madura and Bali (which in Indonesian is only translated as *Luar Jawa* or Outside Java, suggesting that it is originally a foreign expression) strongly illustrates this point. Despite decolonisation, the independent state of Indonesia has inherited and further emphasised Javanese political domination over the rest of the country.

Forest policies are no exception. It is widely recognised that Indonesian forest policies concentrated almost exclusively on Java throughout the period of the Dutch East Indies. Even during Soekarno’s rule, policies outside of Java remained few and far between. It was only with the arrival of Suharto and the launch of the New Order that forest-policies would stretch beyond Java across to the “Outer Islands”.

This section describes forest policies in the province of Central Java at provincial and sub-provincial levels.<sup>15</sup> After a brief geographical and historical background, this part focuses on recent experiences in “collaborative” or “community-based” forest management by analysing two examples – one of public forests in Blora, and one of private forests in Wonogiri. Through this comparison, this section explores the diversity of such policies, their ramifications and their links with other sectors (*stricto sensu*) such as agrarian reform, agriculture, territorial planning and public infrastructure. The national relevance of Javanese forest policies is analysed in the section above on forest policies at the national level.

#### 3.1. GEOGRAPHY

Java constitutes one of the larger Sunda islands of southeast Asia. It lies in an east-west fashion just a few degrees shy of the Equator in the southern hemisphere, bordered by the Java Sea to the north, the Indian Ocean to the south, Sumatra to the west and Bali to the east. Narrow plains lie on the northern and southern coasts, separated by a central backbone of mountain ranges and volcanoes that have made the island’s fame across the centuries.

The volcanic nature of Java’s soil has made it particularly fertile in comparison with the other islands of southeast Asia, and as human population has increased in the last few centuries, so has agriculture, also blessed by the island’s abundant rains (with the exception of the southern coast which is noticeably drier than the rest of the island). The population relies on high yields

---

<sup>15</sup> One must bear in mind that the province here is taken as a geographical unit rather than a political sphere or level. The provincial level has limited relevance in terms of forest policies in Java as the main actors studied in this research do not limit their activities to province boundaries. Much of the policies described here also apply to Yogyakarta and East Java and, to a lesser extent, to western Java which does not always share the same cultural and historical references.

from terraced wet rice paddies which on average produce over five tonnes per hectare per year; other products include maize, peanuts, soybeans and sweet potato.

Given the long history and high density of human occupation of Java, the island's vegetation has been greatly modified over the centuries. It is believed that Java was originally covered with thick primary tropical rainforest like its neighbouring islands until the 20<sup>th</sup> century, yet today its non-agricultural vegetation cover falls into two main categories:

- (i) Remaining natural forest dominated by dipterocarps covers little more than mountain tops (such as Gunung Slamet, Gede and Merapi) and other isolated national parks (*e.g.*, Taman Nasional Ujung Kulong) yet is home to high profile endangered species such as the Javanese silvery gibbon (*Hylobates moloch*) and the Javanese rhinoceros (*Rhinoceros sondaicus*); and
- (ii) Natural or planted forests of teak (*Tectona grandis*; *jati* in Indonesian) which carpet large swathes of the island's lowlands. The largest teak forests are located in the northeast of Central Java and northwest of East Java south of Rembang and north of Madiun, around Blora and Bojonegoro. It is not well understood where the dominance of teak forests comes from, although many believe that the species was brought over from India (where it is known as *Techati* in the region with most historical links with southeast Asia) sometime in the first millennium AD as it is not found anywhere else in the vicinity of Java (Durand 1994:204). The abundance of this species has earned the island its nickname, "Island of Teak".

Java is by far the most populated island in Indonesia as it is home to over 60% of the country's population, making it in fact the most populous island in the world. With 130 million inhabitants on 126 000 km<sup>2</sup>, it is home to an exceptionally high density of 1026 inhabitants/km<sup>2</sup> (compared, for instance, to a figure of 112 for France). The island is administratively divided into four provinces (Banten, West Java, Central Java and East Java) and two special administrative regions (DKI Jakarta and DI Yogyakarta). The province of Central Java roughly occupies the central third of the island, with the notable exception of the region surrounding the city of Yogyakarta, which forms an enclave on the province's southern coast.

Unlike other provinces such as Riau or Papua, the boundaries of Central Java do not reflect a particular geographical, cultural, ethnic or historical unit. Rather, it was originally created as an administrative unit by the Dutch in the 1900s. This province excluded the *Vorstenlanden* (princely states) of Yogyakarta and Surakarta (Solo), although the latter was incorporated in the province of Central Java as recognised by the Republic of Indonesia. Central Java thus shares with Yogyakarta and East Java the same Javanese culture and language, which is distinct from the western part of the island, dominated by Sundanese (West Java, Banten) and Betawi (Jakarta).

## **3.2. HISTORY OF JAVA AND JAVANESE FORESTS TO 1967**

### ***3.2.1. The Growing Power of the VOC: Javanese History to 1799***

Central Java, along with the rest of the island, has a long yet badly documented history prior to the arrival of Europeans in the sixteenth century. Historians generally divide the pre-colonial historical period of Java into two phases, namely Indianisation, marked by the kingdoms of Mataram, Sailendra and Majapahit, and Islamisation, characterised by the sultanates of Demak and Mataram. These phases overlap, however, as the conversion of Java to Islam occurred over several centuries in a gradual and piecemeal fashion.

Sailendra was the first major regional power based on Java that was able to compete with the Sumatran-based Srivijayan Empire and is credited with the construction of temple of Borobudur north of present-day Yogyakarta, among numerous other temples strewn across the island. The kingdom of Majapahit, whose centre was based in East Java, was the closest the region now known as Indonesia ever got to as a united political entity before the Dutch arrived, although political links were primarily based on trade and actual territorial control which remained tenuous. By the late 14<sup>th</sup> century, however, the kingdom was in decline; the arrival of Islam on the northern coast of Central Java and its gradual spread further eroded the power over Majapahit which eventually fell to the rising Muslim kingdom of Demak.

The presence of Indian influence for some ten centuries on Java was marked above all in the artistic, religious and political fields. Javanese arts flourished like they had never before, often at the service of both Hinduism and Buddhism, in the form of temples and sculptures. Both the arts and religion, however, were upheld by a political system directly inherited from Indian tradition, centred on a highly centralised and hierarchical authority. This political tradition might explain certain aspects of Javanese and Indonesian politics today.

Despite major modifications brought about by the spread of Islam in the 16<sup>th</sup> century, this tradition of political centralisation remained in the form of the Muslim Kingdom of Mataram which witnessed a Golden Age in the mid-seventeenth century under the reign of Sultan Agung.

Pre-colonial kingdoms already relied heavily on teak forests, most of whom lay within the Mataram Kingdom by the time the Dutch founded Batavia. Pressure on the forests was already heavy, with local populations clearing land for agricultural purposes and teak being retrieved for the building purposes of the elite. The timber industry relied on one group of people called the Kalang, apparently known for their expertise in what would be labelled today as forestry. “By 1640 Sultan Agung had ordered a number of Kalangs to settle in his royal compound and work for him. So important were the Kalangs as royal woodcutters and woodworkers that when the Mataram Kingdom split [between Solo and Yogyakarta] in 1755, the 6,000 Kalang families were divided between the two new sovereigns”, notes Peluso (1992:32).

The Portuguese were the first Europeans to venture into Southeast Asia. After Melaka on the Malay Peninsula was captured in 1511, the Portuguese mostly bypassed Java on their way eastwards to the spice-rich islands of Maluku. The Dutch, in an attempt to wrestle control of the spice trade, serendipitously set their eyes on the teak forests of Java as early as 1596 during Cornelis Houtman’s expedition. On this same voyage, a treaty was even signed with

the Sultanate of Banten, on the western tip of Java. Following the success of this trip, competing Dutch companies finally agreed to unite in 1602 and set up the Dutch East India Company (*Vereenigde Oostindische Compagnie*, better known as VOC). Conscious of Java's wealth, the VOC selected West Java as the base of its operations in the region and built the fort of Batavia in 1619 on the site of modern-day Jakarta.

Right until the late 18<sup>th</sup> century, the VOC saw Java's teak sources more as material for ship building than as an object of trade. At the time, Jepara – a city on the northern coast of Central Java – enjoyed its position close to the island's richest teak forests and was thus a centre for ship building (to this day, it remains Java's teak furniture capital). From 1622, teak was shipped from Jepara to Batavia, marking the beginning of the growing involvement of the Dutch in teak trade.

For the time being, the VOC found it easier to deal directly with a single, all-powerful authority for teak trade; according to Peluso (1992:37), teak could not be loaded onto Dutch ships without the authorisation of a Javanese prince, which probably explains why the VOC gave military support to the Mataram kingdom to overcome its enemies. Gradually, though, the VOC established its own bases (such as Cirebon, Semarang and Rembang) on the coast of Central Java to which wood was delivered directly from the hinterland, thus bypassing Jepara.

Eventually, as the power of VOC grew at the expense of Javanese rulers, even the latter were bypassed: those who opposed the will of the VOC were replaced; for instance, Susuhunan Adipatih Anom, heir to the Mataram throne in 1704, was substituted by the Dutch with Pangeran Puger, allegedly much more amenable to Dutch demands. By the mid 18<sup>th</sup> century, the VOC also began controlling labour directly by taking over the *pasisiran* (coastal areas) previously under Mataram control. In 1756, such was the power of the VOC that it successfully imposed an island-wide monopoly on ship building, with the exception of ships for personal use which Javanese princes were still granted.

As quotas for teak production increased, so did the area controlled by the VOC as it extended its power further inland, leading to the fall of Mataram in 1755 (Durand 1994:209). In many cases, sultans who handed rights to land over to the VOC expected these rights to apply to teak extraction only; in practice, the VOC gained control not only over the trees but also the land and the local population (Judi Adi *et al.* 2004:10). The compulsory forest labour services were known as *blandongdiensten* and the woodcutters *blandong*. In 1776 the prince of Solo allowed the VOC to cut in the exceptionally rich forests of Blora. The labour intensive hauling of logs from this region to the coast took 10 to 15 days and the effect on local livestock was devastating.

### **3.2.2. The State Takes Over: 1800-1942**

Riddled with corruption, the VOC went bankrupt in the 1790s and its charter, which expired on 31 December 1799, was not renewed. The company's territories, debts *and* monopoly over teak trade were all inherited by the Dutch state itself, although initially not for long as Holland fell under French control during the Napoleonic Wars. From the takeover of Holland by France in 1808 until the British invaded in 1811, Marshal Daendels served as Governor-General of Java. As short as this period was, these three years were crucial in setting the tone for forest management and policies for the rest of Dutch presence in the East Indies: probably

under influence of French political tradition, Daendels gave the state unprecedented power over forest matters. As Peluso (1992:45-6) explains, as soon as Daendels arrived,

“[H]e organised the exploitation of Java’s teak forests, passed edicts on appropriate management, and secured the government’s monopoly on teak, forest labour, and shipbuilding. For the first time in the colony’s history, a quasi-modern government service, the *Dienst van het Boschwezen*, was created, with rights to control land, trees and forest labour (Soepardi 1974a:20). At the time, only teak timber was valued for its profits and shipbuilding; thus the domain of this early forest service was limited to lands where teak grew or could be grown.

“Four elements in Daendel’s system would retain at least philosophical importance through the ensuing two centuries:

- The declaration of all forests as the domain of the state (*Landsdomein*) to be managed for the benefit of the state;
- The assignment of forest management to a branch of the civil service created expressly for that purpose;
- The division of the forest into tracts (*pecelen*) to be logged and planted on a rotating basis;
- The restriction of villagers’ access to teak for commercial purposes, allowing them only to collect deadwood and nontimber forest products freely”.

Much of this work was undone by Sir Stamford Raffles, Governor-General of Java during the British interlude (1811-1816), who was more concerned with costs than the power of the state. Raffles reserved the largest and richest forests for the state, but allowed private companies to log or lease the rest. His longest-lasting mark, however, was the foundation of the Botanic Gardens in Buitenzorg (now Bogor, West Java), a city which to this day remains a world-famous centre of excellence in the natural sciences and forestry.

When the Dutch resumed control of Java in 1816, they reinstated Daendel’s Forest Board briefly before handing over the power to the residents,<sup>16</sup> effectively decentralising the system. In the 1830s, however, timber production was outranked in terms of priorities by agriculture with the introduction of the notorious Cultivation System (*Cultuurstelsel*) by Governor-General Van den Bosch in 1832. With an emphasis placed on the production of cash crops (notably coffee, sugarcane, indigo and tobacco), forests were cleared to make room for fields, whilst timber was used for building tobacco-drying barns and as firewood for sugar refining; accordingly, forestry affairs were taken over by the Agricultural Service (Durand 1994:217).

The appearance of railways also had a doubly negative impact on Javanese forests; not only was timber required in considerable quantities both as building material and fuel, but the growth of the railway network greatly facilitated access to and transport of timber out of the island’s forests. As Peluso expressed it, “the power of other government sectors [notably through *Cultuurstelsel*] and the progression of colonial extraction were such that the forests’ major enemy was the state itself” (1992:50).

The second half of the nineteenth century was marked by a gradual return of the state in direct interventions in forestry, based on the foundations laid by Daendels himself. Perhaps the most

---

<sup>16</sup> During the colonial period, Residents were Dutch officials in charge of a Residency, the ancestor of modern-day *Kabupaten* (districts).

influential aspect of this phenomenon was the construction of the state's legitimacy over forest management through the appearance of scientific forestry.

According to Durand (1994:218), two German foresters first arrived on Java in 1849, bringing with them the seeds of scientific forestry – a discipline that had originated in Germany in the 18<sup>th</sup> century based on maximising timber production through rational and scientifically-based forest management. Peluso defines scientific management as “that which is governed by a systematic adherence to working plans for cutting and replanting the forest (in forest plantations), according to prevailing principles of silviculture developed through experimental trials over time” (1992:52).

By the 1860s, a forest management system was established, dividing teak forests into 13 districts and imposing rotating selective logging to allow forest regeneration. Scientific forestry was first embedded in legislation with the laws of 1865 which also labelled teak forests “State Forests”. This term was further reinforced by the 1870 Agrarian Law (*Domeinverklaring*) which stipulated that any unoccupied land becomes property of the state by default. In parallel, the Colonial Forest Service gradually increased in bureaucratic complexity as it slowly began to undertake new tasks in its newly acquired “property” – training in scientific forestry, mapping, quantifying and drawing up statistics, and policing forests.

In short, a monopoly by the colonial state on the management of Java's forests emerged in the course of the nineteenth century based on three fundamental elements: (i) designation of forest lands as exclusive property of the state; (ii) the creation of a bureaucratic and hierarchical Colonial Forest Service which came to embody the state physically within the sector; and (iii) the legitimation of the state's monopoly through the adoption of scientific forestry as developed in Germany. As the role of the state grew in the sector, it became increasingly polarised with the form of forest management that it attempted to distinguish itself from, namely traditional management by rural populations; as a consequence, their methods of forest management were denigrated as “unscientific” and “irrational”, and their use of the forest was delegitimised.

In practice, local populations saw their use of the forest increasingly limited in the eyes of the law, and “theft” became commonplace, especially as the means of extracting timber were further complicated by the growing bureaucracy. However, two types of advance could be noted during the second half of the nineteenth century. First, *Blandongdiensten* which had been characterised by very poor working conditions, was assimilated to *Cultuurstelsel* and criticised accordingly, especially after Dekker's novel *Max Havelaar* had dealt the system a severe blow by increasing public awareness. The growth of scientific forestry dealt a final blow to *Blandongdiensten* in the 1860s by legitimising a corps of scientifically trained foresters at the expense of any other type of workforce.

Secondly, in 1873 Buurman introduced a practice known in Burma as *taungya* (or *tumpang sari* in Javanese and Indonesian) that was to benefit both local populations and foresters. When an area was clear-cut for replanting, teak seeds were sown on loose, cleared soil. However, in the months before the new seedlings reached a sizeable height, farmers would be allowed to plant certain crop species between the rows, such as maize or tobacco; this would both provide sufficient shade for the seedlings to achieve a certain height, and farmers with temporary income from the crops grown plus a nominal fee. This practice was an immediate

success; by 1912, 61% of reforestation in Java was done by *tumpang sari*, a figure that reached 94% by 1928 (Peluso 1992:64).

Despite these measures local populations were the actors who overall lost out most from the growth of state involvement in the forest sector. As Peluso points out (1992), they could now be assimilated to a rural proletariat, and in keeping to a neo-Marxist analysis, one could suggest that they used a wide repertoire of resistance. Probably the longest-lasting and most influential of these was the Samin Movement which began in 1890 when Surontiko Samin began insisting on the injustice inflicted on the rural villages of Randublatung.

Samin advocated a type of non-violent reaction to “oppression” which translated in their belief that they had unlimited rights of access to the forests. This expressed itself in the refusal to pay taxes and even perform community duties – which often created opposition from village leaders themselves. Saminists were known by foresters as those who refused to speak the higher, more deferential, levels of the Javanese language to them (*krama*), preferring the more familiar, *ngoko* register which many foresters were unused to. Despite the fact that the Dutch exiled many of the movement’s leaders, entire communities followed this movement which never died out according to Peluso (1992:72), as she herself came across members during her research in the 1980s.

The late nineteenth and early twentieth centuries thus saw the takeover of many private activities in forestry in Java and the consolidation of the state monopoly: whilst only 5% of teak was produced by the state in 1902, the figure had grown to 42% in 1911 (Durand 1994:233). Further regulations for the management of the Forest Service were brought about by the 1897 law; and at the same time, state forest management was intensified with the creation of small forest districts called *houtvesterij*. In the early twentieth century, the Forest Service was brought under the Department of the Interior and then shifted over to the Department of Agriculture; the forest police, originally created in 1880, was made part of the Forest Service.

The foundation was laid for the twentieth century. Between 1897 and 1942, state forest lands were gradually increased, as did production of teak. The 1927 Forestry Law was probably the greatest milestone during this period as it engraved into law the concept of state forest lands (in Indonesian *kawasan hutan Negara*) as it still exists today. From the outset, this term was more of a political concept than a biologically-based one, as it defined forested areas or zones that were “supposed” to be covered with forests; in other words, land without any trees could be labelled *kawasan hutan* so long as the intention to plant remained, and likewise, many forests on private land lie outside *kawasan hutan*. Also, the 1927 laws recognised for the first time that forests had other functions than timber production, namely climatological, watershed protection and social welfare functions.

However, the environmental services of forests had already been acknowledged from the late nineteenth century with the creation of the first public natural reserve, for conservation purposes, on the slopes of Gunung Gede (close to Bogor, West Java) in 1889 (Durand 1994:217). This model of natural reserve was gradually applied to many other mountain tops across Java as they contributed greatly to watershed protection – in any case commercial exploitation in such regions would have been physically difficult.

By 1940, the Dutch Colonial Forest Service had brought over three million hectares of Javanese forests under its control (Peluso 1992:76). The system of forest management that the Dutch had established over the centuries was to outlive their stay in Southeast Asia.

### **3.2.3. 1942-1967: The Dutch Leave, the State Remains**

The swift Japanese invasion of the Dutch East Indies, including Java, in late February and early March 1942 suddenly decapitated a colonial system that had built itself up over more than three hundred years. Prior to the Japanese invasion, many Dutch resolved to a scorched earth policy and destroyed many older trees as well as much of the timber production and communications infrastructure. Overnight, those who had controlled Java's forests for decades, if not centuries, were gone, and local populations responded by ransacking what remained of the industry and appropriating riches wherever still available. Only lower-ranking Javanese officials attempted to slow the movement down.

The Japanese were not insensitive to Java's stocks of teak; given the political state of emergency and because they were unaware how long they would remain in the region, their policies focused on short-term maximisation of production rather than long-term sustainability of the source. In June 1942, the Japanese Forest Service of Java (*Ringyo Tyuoo Zimusyō* or RTZ in Japanese) was set up and although some Dutch officials remained as advisors to the Japanese, most Europeans, including large parts of the Forest Service staff, were sent to concentration camps. By late 1943, the RTZ was moved to the Bureau of Shipping because of the shipbuilding industry's needs in teak.

Because of the focus on short-term benefits, the Japanese encouraged migration into the forests to increase the amount of labour available. Whole colonies were established in the forest; yet even the basics of scientific forestry were ignored, let alone replanting itself (Departemen Kehutanan 1986,2:16), partly because of the need to maximise production, but also because many of the Japanese staff gradually brought into the RTZ had had no previous training in forestry.

The Japanese did not leave Java without catalysing the nationalist movement into declaring independence from the Netherlands in August 1945. The British were the first Allies in Jakarta, and because they also occupied Bogor some 30 miles south of the capital, the newly formed Indonesian government moved the RTZ – renamed *Jawatan Kehutanan* – to Yogyakarta, leaving the organisation with a great deal of independence (Peluso 1992:97).

This time, the Forestry Service found itself on the horns of a dilemma: on the one hand, it maintained the objectives of scientific forestry focused on timber production and economic output. On the other, the particular context of the birth of the Indonesian Nation meant that it also had to focus on the welfare of the people and the country rather than prioritising exports, which the Dutch had done. The Forest Service did indeed provide the bulk of the timber produced to local populations – over 80% both in 1946 and 1947.

Yet within a few years *Jawatan Kehutanan* was back into rather familiar patterns. Six German and Australian foresters who had been interned were released and invited to aid the newly formed Indonesian organisation get back on its feet. In 1947, many of the boundaries of the state forests were reaffirmed in a bid to remind those who had moved into the forest that the

state was about to claim ownership back. Some peasants saw their homes burned and crops destroyed, and others were even shot according to some witnesses (Hindley 1967:172, quoted in Peluso 1992:101). In the midst of turmoil, the state-owned company P.N. Perhutani was created in 1961 during a reorganisation of the Forest Service, to oversee management and production of Java's forests.

Violence did not stop, even after the Netherlands recognised independence of Indonesia in 1949. In an analysis of the strife that lasted for most of Soekarno's presidency (1945-1966), Peluso (1992:103) emphasises the importance of Javanese forests as a major stage in national political events and identifies four main political factions:

1. Darul Islam and the Islamic Army of Indonesia, unsatisfied with the proclamation of a secular state by Soekarno, resolved to guerrilla warfare to push for the creation of an Islamic nation. They retreated in the thick forests mainly in the western, Sundanese half of the island of Java where support was greater. They mainly fought against the national army (*Tentara Nasional Indonesia* or TNI) but often also against foresters who were widely distrusted and seen as officials of the Soekarno government. The Islamic guerrilla carried on until 1962 when the movement's leader was captured.
2. The TNI, fully aware that the Islamic guerrillas used forest cover to conceal themselves, never hesitated in clearing vast areas of forests to discover the Islamic Army's hiding places. Moreover, many witnesses claimed that the military used their dominant position to get involved with illicit teak trade.
3. The Indonesian Communist Party (*Partai Komunis Indonesia* or PKI), founded in 1926, often also resorted to violent means to defend what it perceived as the oppressed rural Javanese proletariat, along with affiliated organisations such as the Indonesian Peasants' Front (BTI) and the Union of Forestry Workers (SARBUKSI). At its height in 1962, SARBUKSI claimed over 250,000 members while the BTI boasted it represented 25% of the adult peasant population. Both organisations put considerable pressure on the Forest Service whose behaviour they deplored. In turn, non-communist foresters portrayed the communist movement as a pro-agriculture, anti-environment lobby.
4. The Indonesian Forest Service inherited 3 million hectares of forests, much of which was degraded. In the field, the Service tried to gain hearts and minds by mobilising religious leaders, youth and women's groups to "educate" them on basic forestry rules and growing tree crops. Yet this turned out to be an uphill battle as the ever-growing Javanese population put increasing pressure on the forest. On the whole, however, Peluso notes that foresters never successfully switched from the trade-oriented perspective of forestry to social forestry: "one could almost describe the conservative foresters' activities as retreat and regrouping – seeking strength from activities of the colonial past in familiar organisational surroundings" (1992:113). By 1950, production of sawlogs almost reached 1940 levels, whilst local populations again began receiving very little.

The forest-based conflict reached a climax with the virtual outbreak of an agrarian war by the early 1960s. Despite concessions by the Forest Service in favour of rural populations it considered "squatters" (*penduduk liar*), the PKI and BTI encouraged "unilateral actions" such as occupation of land belonging to large landowners. Moreover, deteriorating conditions in the countryside which resulted in widespread starving galvanised the movement as local populations increasingly came to depend on the forest as a source of livelihood.

As the PKI and BTI grew in strength, occasionally leading to violent conflict with forestry employees, so did Islamic and other non-communist political groups in the Forest Service established a front with other government members. Anti PKI factions held mass trials in which local populations who had been encouraged by the PKI to help themselves in the forest saw their houses burned down and sympathetic forestry staff fired.

This highly polarised atmosphere only came to an abrupt end with the political events of 1965 and the alleged Communist coup known as the 30<sup>th</sup> September Movement (G30S). Following these events, all those believed to sympathise with the PKI or any affiliated organisations were either interned or killed; Islamic groups, youth groups and the army were all mobilised to denounce anybody supporting the opposite movement. Hundreds of thousands were killed in this way, rivers ran red (Peluso 1992:121) and mass graves were opened throughout the forests of Java. To this day, many people refuse to visit places where cadavers were piled up as horrific stories mix with ancient ghost legends.<sup>17</sup>

### 3.3. FOREST-RELATED POLICIES SINCE 1965

Forest policies since the beginning of the New Order are very much the continuation of the preceding decades. Management of state forests by the state-owned company Perum Perhutani has been plagued by both issues that marked the rest of the twentieth century, namely (i) the mediocre quality of forest management and the quantity of timber produced; and (ii) the relationship with local populations.

However, the second issue (the community dimension) reached a new milestone in the late 1990s with the reaction of local populations to the events following the downfall of Suharto. In the next section, an overview is provided of changes in forest-related policies on Java in the past four decades, followed by a more in-depth comparison of community-related issues in two classic case-studies, namely Wonogiri and Blora.

#### 3.3.1. *The Reign of Perum Perhutani*

It took several years for the turmoil of the end of guided democracy (1965-1967) to calm down; one major legacy of this period of terror was that local populations no longer resorted to violence. One of the main reasons for this was the widespread deployment of the military in state forests to prevent any further disturbance and (in theory) any illegal extraction of timber or other products from the forest for the duration of the New Order. The military's *Dwifungsi* ("dual function") policy legitimated both its roles as defender of the nation and a major actor

---

<sup>17</sup> Interestingly, one such place is the headquarters of the Centre for International Forestry Research (CIFOR), located in wooded grounds outside Bogor, West Java. Local people claim that the research centre stands on top of a mass grave from the events of 1965 and that a woman dressed in red is still seen to roam the grounds after dark!

in the nation's development. The involvement of the army in Javanese forests was thus perceived as a "natural" consequence of its roles.<sup>18</sup>

Some important changes took place in the early days of the New Order that led to the institutional configuration as it is more or less known today. In 1969, the Forest Service was brought under the newly created Ministry of Agriculture as a distinct Directorate General. Three years later, the state-owned forest companies of East and Central Java came together to form Perum Perhutani (by virtue of Government Regulation No. 15/1972), a state-owned company with the function of both (i) ensuring sustained forest management and timber production and (ii) improving the welfare and economic well-being of local populations. Since 1978, when it was joined by the West Java Forest Service, Perum Perhutani has been officially responsible for forest management and the welfare of forest-dwelling populations across the whole of Java. Mulyadi Bratamihardja *et al.* describe the company as follows:

The [company]'s total personnel in 1980 [was] 401,293, divided evenly between its three units in Central Java (Unit I), East Java (Unit II) and West Java (Unit III) (...). The [company] recruits the majority of its personnel through its two forestry training centres at Cepu (Central Java) and Madiun (East Java). The teaching staff at these training centres come from within the [company] itself as well as public and private universities, such as the Bogor Agricultural University (Institut Pertanian Bogor/IPB) and Pajajaran University in West Java and Gajah Mada University in Central Java. Since the introduction of participatory approaches to forest management in the 1980s, the curriculum of these training centres has been enriched with courses such as Participatory Rural Appraisal and management concepts such as Social Forestry.

[Perum Perhutani] is governed by a Board of Directors and a President Director. The Board of Directors and the President Director are appointed and dismissed by the Minister of Finance based on the recommendation of the Minister (...) of Forestry.

A management committee was established in 1994 to assist the [company's] Board of Directors with policy matters concerning the implementation and monitoring of the participatory approach to forestry management. Members of the management committee consisted of [company] officials, staff members of universities and NGOs. The management committee ended its task in 1998 with the termination of the financial support of the Ford Foundation.

Mulyadi Bratamihardja *et al.* (2005:10)

As shown in Figure IX, Perum Perhutani has always displayed the hierarchy of a traditional bureaucratic structure. West, Central and East Java are known by Perum Perhutani as Units III, I and II respectively, each headed by a *Direktur*. Each unit has been divided into a number of forest management units (*Kesatuan Pemangkuan Hutan* or KPH; Unit I or Central Java is home to 22 of these), headed by *Administratur*. KPH are further divided into Fractions of Forest Management Units (*Bagian Kesatuan Pemangkuan Hutan* or BKPH, roughly equivalent to the number of villages), each led by an *Asper*. Finally, the *mantri* heads the

---

<sup>18</sup> Javanese forests were far from being the only places where the army was deployed following the arrival to power of Suharto. As a general rule the Indonesian armed forces (*Angkatan Bersenjata Republik Indonesia* or ABRI) played an essential role in maintaining "law and order" throughout the archipelago and for the entire duration of the New Order.

lowest administrative unit known as Forest Management Units (*Resort Pemangkuan Hutan* or RPH).<sup>19</sup>

As Peluso explains, The Forest Service and Perum Perhutani were subjected to a purge from any communists or sympathisers, but the political partisan involvement into these organisations went further as “intensely nationalist ideology” was imposed (1992:129). According to this author, foresters were expected to become members of Suharto’s political party GOLKAR, without which they could not expect any promotion. Any ideology or philosophy linked to outlawed parties such as the PKI would be deemed “anti-Pancasila” and acted against.

On top of this ideological component, some analysts claim that Perum Perhutani is home to a complex system of allegiances that keeps its staff together. The vast majority of the company’s staff graduated either from Universitas Gajah Mada (Gajah Mada University in Yogyakarta) or from Institut Pertanian Bogor (Bogor Agricultural University). Some claim that this factor has strongly contributed to a *grand corps* spirit that pervades the company at all levels. A number of observers, however, suggest that this goes even further as the criteria used in the recruitment process include the use of networks and personal acquaintanceships, thus creating a system of hierarchical allegiance that sometimes goes against more common criteria such as efficiency.

Peluso also analyses Perum Perhutani’s control over forests as threefold:

- (i) Control over land, epitomised by the maintenance of the concept of *kawasan hutan* (state forest land), despite the fact that these lands do not always correspond to forested land. At the turn of the twentieth century, Dr Van Arstson, a Dutch forester, stated that 30% of Java ought to be under forest cover – a figure that Perum Perhutani claims *kawasan hutan* must reach (currently approximately 25% of Java is labelled as *kawasan hutan*), despite the difference between the political concept and actual forested land.

All activities in *kawasan hutan* are controlled, including non-forest activities such as mining, collecting firewood or carrying out research. Perum Perhutani often resorts to the use of Forest Police (*Polisi Hutan*, which is part of the Perum Perhutani structure), the Special Forestry Police (*Polisi Khusus Kehutanan* or PCK) or even police patrols (BRIMOB). Moreover, as one of Peluso’s interviewees explained, “all [Perum Perhutani] troops are expected to play fundamental roles as Security agents capable of detecting political, economic, social, cultural and military troubles among the people” (Peluso 1992:134).

- (ii) Control over species: Perum Perhutani controls all the species grown within *kawasan hutan*, even those that are part of the *tumpang sari* system (such as maize and tobacco). Moreover, the company also delivers permits for the sale and transport of all teak, including from stocks located outside *kawasan hutan*, e.g., on private lands.

- (iii) Formal labour as well as much of the informal labour by Perum Perhutani are subject to policies and regulations, e.g. by granting permits to use the forest (including collecting

---

<sup>19</sup> The designation of *Resort* for the lowest level – a term which usually only applies to police or military stations – denotes the implications of the presence of the Perum Perhutani structure at its most local levels, so much so that Peluso (1992:126) referred to RPHs as *Resort Polisi Hutan*. In any case, Perum Perhutani and forestry officials all wear a paramilitary uniform to this day.

firewood) as well as for *tumpang sari* (in this case even the species to be used are regulated).

The relationship between Perum Perhutani and the Forestry Department (*Departemen Kehutanan*) and its decentralised structures is an ambiguous one. Perum Perhutani officially depends on (and must obey to) the Forestry Department and must fulfil the latter's annual demand of some €30 million a year – a demand easily met given the wealth of Java's forests and in spite of low production figures per hectare (see below). Much of these funds are allocated to a so-called "Reforestation Fund" (*Dana Reboisasi*), which as its name suggests is supposed to subsidise the plantation of new trees. However, during the Suharto era these funds were known to be allocated to some of the President's pet projects such as that of an Indonesian car brand. To this day, *Dana Reboisasi* remains a hot potato as the allocation of its funds remain obscure.

To this day, decentralised Forestry Service structures on the ground at province and Kabupaten levels take a secondary role behind Perum Perhutani. Activities are generally limited to providing local populations with technical support and extension such as training and creation of demonstration plot, as well as materials such as seeds. In the case of the Kabupaten of Blora (described in greater detail below), the Forestry and Land Conservation Service (*Perhutanan dan Konservasi Tanah* or PKT), set up as late as 1994, was responsible only for forestry issues outside the forest estate which remained wholly under Perum Perhutani's control. The Service was renamed as the Forest Office (*Kantor Kehutanan*) in 2001 and saw its powers expand. It now plays a growing consultation role inside and outside of the forestry estate. The creation in 2002 of the Land Rehabilitation and Forest Management Unit (*Rehabilitasi Lahan dan Pengelolaan Hutan* or RLPH) is witness to this trend which has generally seen Perum Perhutani sharing its powers with many other stakeholders over the management of the forestry estate as a result of the events of the late 1990s (see below).<sup>20</sup>

---

<sup>20</sup> Source of information: Interview with Pak Turiman, Vice-Head of Kantor Kehutanan Kabupaten Blora (29 January 2007).

Conservation issues have very much played a secondary role in the history of forest policies in Central Java. The province is home to some 35 conservation units, many of which are situated on the tops of the central mountain range. Probably the most famous of these is Gunung Merapi National Park which Central Java shares with the Province of Yogyakarta. The organisation responsible for conservation issues in Central Java is BKSDA (*Balai Konservasi Sumber Daya Alam* or the Bureau for the Conservation of Natural Resources), a technical executive unit (*Unit Pelaksanaan Teknis*) that belongs to the Directorate General of Forest Protection and Nature Conservation (*Direktur Jenderal Perlindungan Hutan dan Konservasi Alam*) of the Ministry of Forestry (*Departemen Kehutanan*). The organisation thus depends on the central government rather than the regional one. BKSDA is further divided into four sections, each responsible for a specific geographical area: Pati, Surakarta, Cilacap and Pematang (BKSDA Jawa Tengah 2005).

Conservation policies in Java have lacked the dynamism of other forest-related policies such as community forestry, although parallel changes have also taken place in recent history. According to BKSDA staff, the management of conservation units was carried out in a similar way to production forests with regards to the local populations. Army personnel and rangers would ensure that villagers were kept out of conservation units; however, the situation changed in the late 1990s when the army pulled out and in the face of weakened public authorities, local populations entered into national parks and other reserves, notably to extract timber. As a result of this change in the balance of powers, the Forestry Department adopted a more conciliatory position (just as Perum Perhutani did, as explained below) and brought in collaboration programmes such as technical assistance among local populations to set up alternative livelihoods that do not depend on resources within conservation units. Any use of resources within these units remains prohibited.

**Box X. — Conservation Policies in Central Java.**

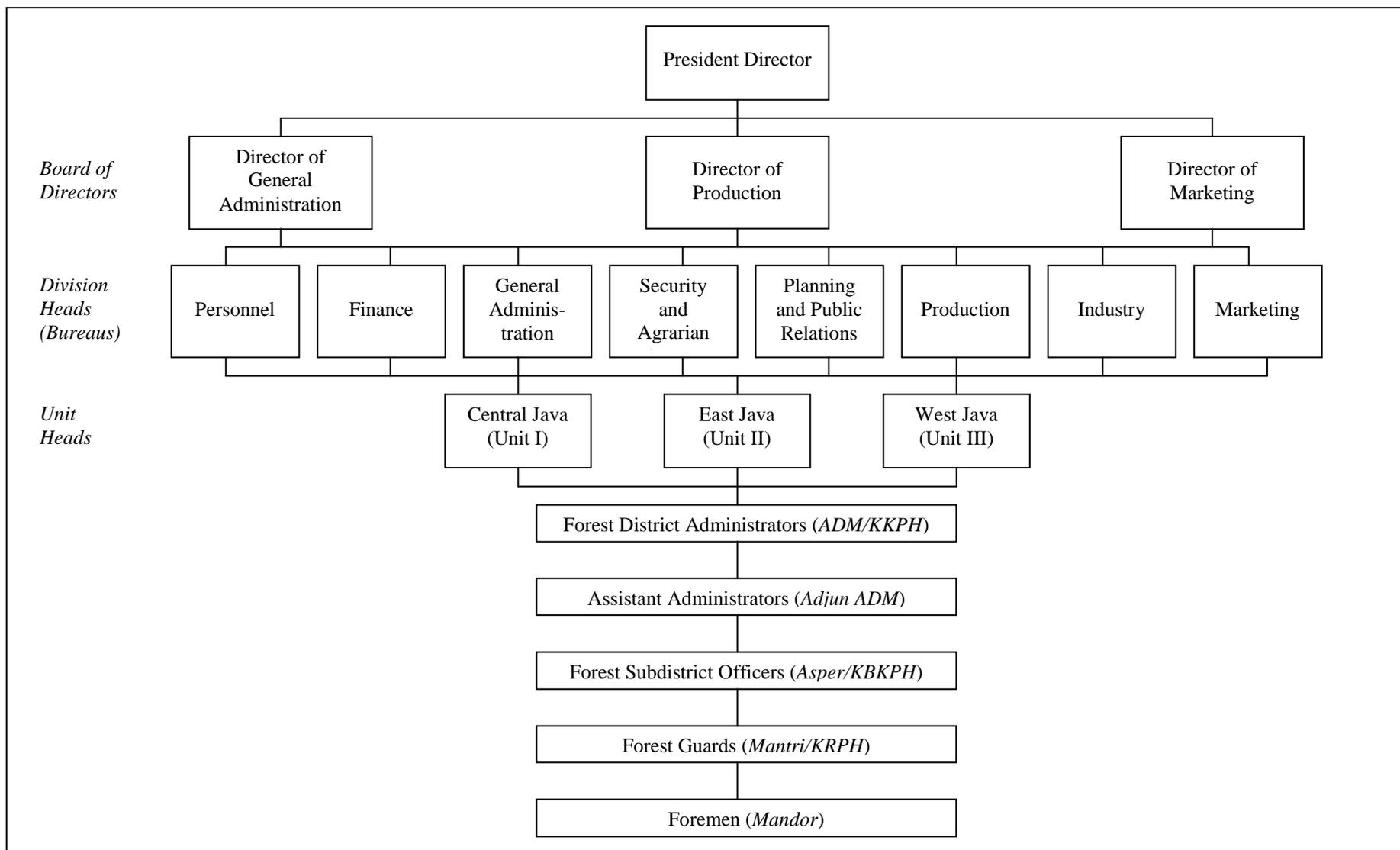


Figure IX. — Structure of Perum Perhutani in the 1990s (after Peluso 1992:127).

### 3.3.2. “Empty Forests”

When I first arrived in Indonesia in the early 1990s, I was very excited to work on Javanese teak plantations which are often hailed as an example of successful forest management. However, during my first trip to the field it did not take me more than a couple of minutes to realise that these forests were empty.

Interview with a foreign forester in December 2006

Since its inception in 1972, the high level of control and the complex bureaucratic structure of Perum Perhutani have contrasted strongly with its low levels of productivity. With some 1 million hectares<sup>21</sup> Java is home to the world’s second largest teak plantations after India, yet by comparison, production figures have been unusually low since the 1970s. “The clearest illustration of the unsustainable nature of the current teak production system is the tremendous skew between the young, non-productive forests and forests in which thinned or clear-cut trees have substantial economic value (...). If no political, social, or natural disasters disturb the current stocks of over a forty-year period, only 19.6 percent, or 59,549 hectares, of the Central Java ‘teak forest’ will produce teak timber by the year 2022. Given the history of conflict in Java’s forests, the probability that the forest will remain undisturbed is virtually nil”, claims Peluso (1992:144-5).

Laburthe & Fauveau (2002:14) corroborate these findings: almost 20 years later, the age distribution of Java’s teak plantations remains highly skewed in favour of trees younger than 40 years of age. Figure X shows that age classes III to V are better represented in 2001 than 1984, leading to a weaker skew of age distribution than in 1984; yet even in 2001 the vast majority of trees remain under 40 years of age. Moreover, the most economically valuable trees (50 years and above) are actually rarer in 2001 than in 1984.

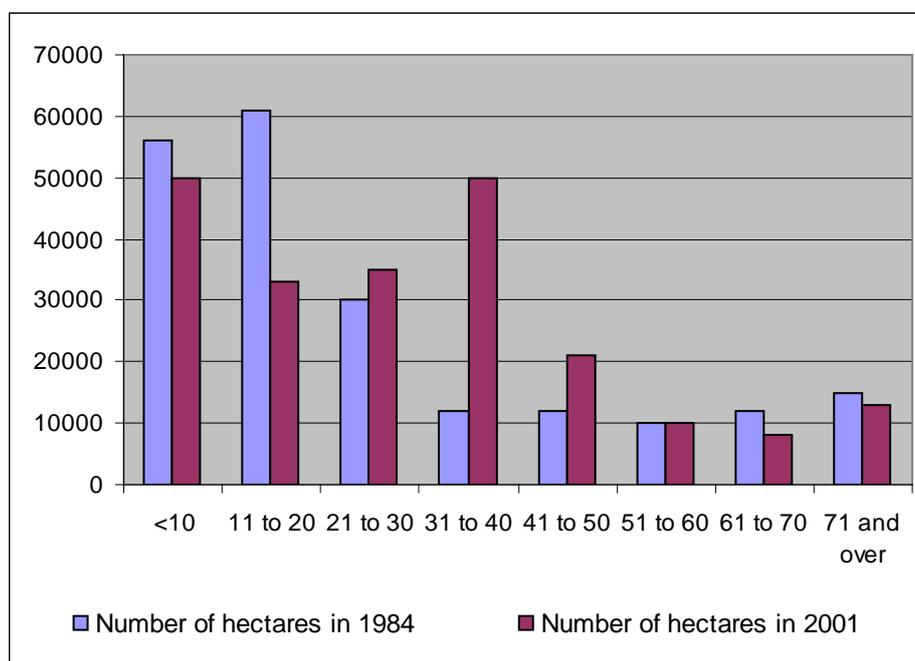
It is notoriously difficult to get access to quantitative data concerning Perum Perhutani and timber production on Java, despite regular statistics released by the Company. First, any research focusing on such issues should be approved by Perum Perhutani in the first place. Secondly, the opacity and the lack of objective data make any calculations virtually impossible. Thirdly, as Laburthe & Fauveau (2002:13) point out, Perum Perhutani holds a near-monopoly on published data. In spite of this, Guizol *et al.* (undated:15) managed to calculate (basing themselves on data released by Perum Perhutani) that the mean annual increment<sup>22</sup> of Javanese forests is approximately 0.6 m<sup>3</sup> per hectare per year – an exceptionally low figure.

By comparison, the authors point out, teak plantations with poorer conditions than Java such as those in the Ivory Coast produce between 6 and 18 m<sup>3</sup> per hectare per year. This left the authors to conclude rather politely that “with more than a million hectares of teak forest, Indonesia should be by far the world’s biggest producer of teak wood and the government and

<sup>21</sup> Figures for production forests vary between 800,000 and 1.1 million ha (Guizol *et al.* undated:3; Laburthe & Fauveau 2002:5; Seymour 1991:3) without any noticeable trend in the past few decades. As Guizol *et al.* point out, official 2002 figures showed a surface area of plantations of 1,084,000 ha, but official figures need to be taken with caution. It is generally considered that Java is home to approximately 3 million hectares of forest equally divided into three categories: natural forest, teak plantations and other plantations such as pine and mahogany (Philippe Guizol, personal communication).

<sup>22</sup> The mean annual increment is a computation of the rate of growth of a forest in terms of timber.

the people of Java should enjoy huge incomes. This relatively low production is surprising” (Guizol *et al.* undated:15). This only confirms the worrying trends that Peluso (1992:143) and Laburthe & Fauveau (2002:14) also concluded to.



**Figure X. — Teak forest age classes 1984 and 2001 (based on a compilation of data provided by Peluso 1992:144 and Laburthe & Fauveau 2001:14).**

As Peluso (1992:143) explains, a range of factors related to the “bad” application of scientific forest management principles account for the mediocre levels of timber production among Java’s teak forests. The author points out that the lack of reforestation efforts, the depletion of older plantation trees without equal replacement, and unrecovered losses due to war damages have all contributed to low productivity. However, all three studies mentioned above also point to “forest crime” as one of the main culprits of such low productivity and lack of sustainability.

Many different terms have been used to describe what has emerged as a means of timber production and marketing that runs parallel to the official chain of custody, including “forest crime” and more recently the all-encompassing, value-laden buzzword “illegal logging”. This category includes logging and marketing methods that range from individuals cutting seedlings for fuelwood, to groups working together in a village, to the organisation of a whole village under formal and informal village leaders, to a larger-scale black market network (Peluso 1992:147).

When interviewed, both main stakeholders accuse each other: villagers and village leaders or representatives point the finger at corrupt officials and Perum Perhutani employees who are said to take part in long-term and widespread timber smuggling operations. In return, Perum Perhutani staff accuse villagers of taking part in crime rings and stealing timber for their own use or even for commercial purposes. Most researchers agree that both stakeholders are right in that they are both involved in this informal sector; in fact, many informal networks tend to

bridge the divide between the two parties as local officials often collude with village leaders in the parallel production of teak.

Data compiled by Peluso (1992:148) and Guizol *et al.* (undated:8) suggest that between 1972 (when Perum Perhutani was created) and 1997, “illegal harvesting” accounted for the disappearance of 64,000 (1984 figure) and 245,000 trees<sup>23</sup> (1982 figure) per year on the whole of Java, without any particular directional trend. This accounted for over half of the production of teak on a national basis. However, in the years following the fall of Suharto, the figures of illegally logged teak shot up to over 800,000 trees a year for more than four years before falling again to pre-1997 figures. The section after the next explains the events surrounding this sudden change.

### 3.4. COMMUNITY FORESTRY ON JAVA

#### 3.4.1. Historical Overview

From the outset, improving the social and economic welfare of forest-dependent populations had been the weaker of the two initial goals of Perum Perhutani (Mulyadi Bratamihardja *et al.* 2005:9), the other one being sustained timber production. In the face of the 1998 riots and ransacking of Java’s forests, the direction of Perum Perhutani – with major input from NGOs and international organisations – decided to put this mission into practice and strengthen the social forestry branch of their activities with the launching of PHBM (*Pengelolaan Hutan Bersama Masyarakat* or Collaborative Forest Management) in 1999. However, it must not be forgotten that by then Perum Perhutani already had over 20 years of community-based activities behind it: a string of projects had already been implemented one after the other, including the Prosperity Programme (1974), PMDH (1982), *Perhutanan Sosial* (1986) and PMDH-T (1995).

##### 3.4.1.1. The New Order

Until the late 1970s, collaboration between forestry officials on the ground and local populations remained limited to two types of activities: (i) *tumpang sari*, which was the only truly institutionalised win-win instrument of cooperation between the two parties;<sup>24</sup> and (ii) other forms of routinised but informal collaboration between villagers and forestry staff which remained at the discretion of the latter. Peluso (1992:149) calls this type of collaboration “ad hoc adaptation” and puts forward three categories: (i) agroforestry on forest lands (*e.g.*, allowing cassava to be planted in the forest although this practice was officially forbidden); (ii) allocation of *tumpang sari* land according to personal preferences; and (iii) reallocation of funds in local budgets, once again to favour certain members or categories of the village.

<sup>23</sup> Figures equivalent to 19,200 m<sup>3</sup> and 73,500 m<sup>3</sup> of teak “stolen” annually (based on calculations provided by Guizol *et al.* undated:8).

<sup>24</sup> Hasanu Simon (1993:64) claims that the decrease in size of *tumpang sari* plots in the course of the twentieth century marks a shift in the role of this system from a source of cheap labour for reforestation towards a mechanism for the alleviation of poverty.

Already in 1974 Perum Perhutani launched the Prosperity Programme, better known as MALU (a contraction of *Mantri*, the local Perum Perhutani administrator, and *Lurah*, the village head – the two main actors in the programme). As Mulyadi Bratamihardja *et al.* (2005:3) explain, the programme had two components, forest-based and non-forest-based activities, including *tumpang sari* and silvicultural experiments to improve it, and developing sericulture or the culture of silk. However, because of the failure to increase financial or human resources in the field, Perum Perhutani never managed to take the initiative beyond a few pilot projects.

The eighth World Forestry Congress held in Jakarta in 1978 brought new ideas on community-based forestry and grassroots movements and created a major turning point in discussions on social forestry issues. Four years later, the direction of Perum Perhutani finally came up with a larger-scale community-oriented initiative to honour their official commitment to local people's welfare: the ongoing Prosperity Programme was renamed PMDH (*Pembangunan Masyarakat Desa Hutan* or Forest Village Community Development) and three innovations were introduced.

First, closer cooperation was encouraged with parties other than the two main actors involved; in particular, the regional government was greatly involved in the system. Secondly, a new subsection was created within Perum Perhutani called the Environmental Development Subdivision (*Bina Lingkungan*) to work solely on social forestry issues. Thirdly, as a consequence of its inclusion into regional development programmes, PMDH was carried out on a much larger scale than the Prosperity Programme ever had been.

Despite these differences, the outcome of PMDH was largely regarded as top-down and paternalistic (Mulyadi Bratamihardja *et al.* 2005:4). As Peluso (1992:152) points out, “both programs [Prosperity and PMDH] worked in much the same way (and) failed to meet the broad and difficult goal of relieving local pressures on the forest by alleviating poverty”. She adds that “the MALU approach has been problematic because it is more a means of controlling forest access than a development mechanism (...). By linking the village leaders to [Perum Perhutani] through a village development program, [Perum Perhutani] hoped to gain more control over forest villagers” (1992:153).

Moreover, “as the class and power alliances grew stronger between bureaucratic elites in different branches of the civil service, the gap between these elites and the peasantry widened (...). [Perum Perhutani] ‘dropped’ seedlings and livestock (goats and chickens) into target development villages, where they were distributed by its new allies, the village leaders – who confounded poverty alleviation goals of the program by distributing them to their kin, clients, or other local elites” (Peluso 1992:154-5).

In 1986, therefore, a new programme known as *Perhutanan Sosial*<sup>25</sup> was introduced which received financial support from the Ford Foundation. This time, the programme benefited from a much larger range of partners, as requested by the Ford Foundation, including

---

<sup>25</sup> *Perhutanan Sosial* is a literal translation of “social forestry”, a concept coined by Westoby in 1968 in the 9<sup>th</sup> Commonwealth Forestry Congress in New Delhi. However, as Mulyadi Bratamihardja *et al.* (2005:5) point out, the two concepts are not entirely interchangeable. According to Perum Perhutani's official definition, *Perhutanan Sosial* is “a forest management system through the participation of forest village communities, which are perceived as partners in forestry activities, such as planting, maintenance, harvesting, production, marketing and forest security”.

universities (UGM, IPB)<sup>26</sup>, NGOs (notably Bina Swadaya, involved in the training of forestry staff) and specially created forest farmer groups. For the first time, Perum Perhutani allowed the cultivation of species inside the forest for the whole duration of the cycle period that would provide benefits for local populations such as fruiting trees (Seymour & Rutherford 1993:33; Mulyadi Bratamihardja *et al.* 2005:6). Projects were also carried out outside the forest to increase local populations' social and economic welfare, such as the construction of terraces for soil and water conservation, and providing subsidies for agricultural products and practices in forest lands (fertilisers, seeds, and tree seedlings).

Although Perum Perhutani considered this programme a success because of the range of benefits that local populations enjoyed as a result, *Perhutanan Sosial* was criticised by many researchers on several accounts. As Seymour (1991:11) claimed, despite the fact that the programme was expanded to cover some 20,000 hectares and 2,300 forest farmer groups in 1990, this area still only represented less than one percent of Java's forested land. Secondly, as a result of rapid programme expansion, "virtually all indicators of program effectiveness (...) declined with each year of expansion following the initial pilot projects" (Seymour 1991:11): not only did the programme's expansion undermine the ability of the staff to provide support to farmers, but community appraisal and sketch-mapping exercises required were often bypassed. Finally, despite the improvement of community relations, it appeared that the poorest households were once again left out.

"Despite the Java Social Forestry Program's success in achieving various secondary goals, including raising participants' income in the short run, increasing the variety of species they are allowed to plant, and establishing a working relationship between a forestry agency and an NGO, it appears to have fallen well short of the primary objective of developing a community forestry management system. The potential of the contract to strengthen farmers' rights and catalyse genuine participation in forest planning and management has not been realised" (Seymour & Rutherford 1993:36).

Nine years after the launching of *Perhutanan Sosial*, these criticisms had been acknowledged by Perum Perhutani whose direction identified the importance of local government involvement as a key element for success in community forestry. As a result, yet another programme was launched in 1995, called PMDH-T (*Pembangunan Masyarakat Desa Hutan Terpadu* or Integrated Forest Village Development Programme) and described as a reconceptualisation of PMDH and *Perhutanan Sosial*. Under this new concept, the coordination function was placed in the hands of the local government whilst Perum Perhutani retained the leading role in planning and implementation (Mulyadi Bratamihardja 2005:7).

PMDH-T can be broken down into two main components: (i) agroforestry, including the creation of buffer zones with multi-purpose tree species, encouraging agroforestry on private land, and looking into timber harvesting opportunities by local communities; and (ii) a non-forest based component which includes the empowerment of village institutions, using participatory rural appraisal methods of data collection, promoting local cooperatives and integrating forest village development into regional development (with local government as the coordinator of all sectors).

This programme was applied only for a few years; it barely had the time to spread beyond pilot projects before the riots of 1998 began, bringing the programme to an abrupt halt. In the

---

<sup>26</sup> Universitas Gajah Mada (Yogyakarta) and Institut Pertanian Bogor (Bogor). See the section on research in national forest-related policies for greater detail.

eyes of many, these riots apparently led by local populations were the proof of the failure of all previous attempts to include villagers in forest management. The tables had turned, local populations appeared stronger in the face of a weakened Perum Perhutani, and future collaborative forest management programmes would have to reflect this change.

Riots aside, probably the greatest indicator of the failure of Perum Perhutani's community forestry programmes was the suspension of its certification programme in 2000. Since November 1990, the company had enjoyed certification by SmartWood of all its operations across more than 50 kabupaten on Java. The reasons given for certification included the innovative and socially oriented aspects of Perum Perhutani's plantation programmes, the excellence of its staff as well as the willingness to accept the certification conditions and corrective action requests demanded by SmartWood. As Donovan (2001) recalls, "in many respects this represented the dawn of the global forest certification movement – new systems, new guidelines and a new process, attempting to assess the quality of forest management on a global scale".

In 1996 SmartWood was accredited by FSC which meant that Perum Perhutani had to be reassessed; the company passed with flying colours and its certification was maintained, albeit with a major difference: the inconsistencies between geographical areas were such that SmartWood decided to certify on a kabupaten-by-kabupaten basis. From then on, only parts of Perum Perhutani's operations were certified. However, by 2000, it had become clear that the company had not responded to SmartWood's corrective action requests; it had also failed to share the benefits of teak production with local populations in any of its community forestry programmes; and finally, it had been unable to prevent theft and robbery, especially in the late 1990s. As a result, SmartWood suspended all of its certification programmes with FSC and has not reinstated them since.

### **3.4.1.2. Reformasi Riots**

By the late twentieth century, the Government of Indonesia recognised some 6,000 "forest villages" on Java, representing over 20 million people who were considered highly dependent on forest resources for food, firewood and building materials (Seymour 1991:3). Despite a rather marginal role in official terms, local populations have turned out to be essential actors at critical junctures such as the late 1990s.

The political riots surrounding the resignation of Suharto in 1998 were echoed throughout the forest in Java. Beginning that year, village revolts erupted and tens of thousands of villagers went into the forest, harvesting as much timber as possible and ransacking all the symbols of Perum Perhutani, including offices, ranger outposts and logging equipment. Between 1998 and 1999, 21 cars and motorcycles were destroyed and 78 buildings, houses and offices belonging to the company were burned down; four members of staff were killed and a further 76 wounded (Mulyadi Bratamihardja *et al.* 2005:12). To many it appeared as if history was repeating itself: just like in 1942, in the short space of time between Dutch retreat and the arrival of the Japanese, local populations took their revenge on anything reminiscent of the Forest Service and extracted as much timber as they could.

Teak extraction figures – both of official activities and illegal harvesting – show this dramatic reversal of fortune: whilst Perum Perhutani production figures slumped due sudden shortage of staff and destruction of equipment, Perum Perhutani's official figures concerning illegal

logging shot up from some 200,000 trees in 1997 to over 2 million in 1998 and 3 million in 1999. 2000 and 2001 saw a stabilisation of illegal harvesting around 2.5 million trees a year (Guizol *et al.* undated:8), before the figures started falling sharply again in the following years.

In many ways the situation in 1998 was analogous to that of 1942, which explains the behaviour of local populations vis-à-vis the predominant form of forest management – except that the return to “order” was much swifter with the Japanese than it was in the hands of Perum Perhutani at the turn of the 21<sup>st</sup> century. For a long period of time, local populations had felt themselves subjected to strict rules of forest management with little more benefit to them than mere *tumpang sari*.

A reading of Peluso’s works provides an excellent insight into Javanese forest management from the perspective of local populations. As she explains, throughout the twentieth century, villagers – despite numbering millions – were successfully kept out of the forest by a body of a few tens of thousands of forestry officials. Law, legitimacy (propped up by the “scientific management” paradigm), control of resources (see above) and even the monopoly of legitimate violence all lay in the hands of forestry officials, aided by the military when necessary. The situation thus looked like a typical Marxist textbook case, whereby an elite minority, by using largely symbolic violence, had managed to maintain the rural masses away from their means of production and retain them in a situation of poverty.

The fall of Suharto (just like the fall of the Dutch in 1942) had shown to these populations that the state – and by extension anything that symbolised it, including forestry officials – could be overcome; and indeed, in the face of such as widespread rebellion in the forest, Perum Perhutani officials were utterly incapable of reigning in what many regarded as a general “uprising”.

Perum Perhutani was further weakened by the waning role of the army. During the Suharto years – and as elsewhere in the archipelago – the military had played a major role in maintaining the status quo. Through police interventions such as BRIMOB, the military would make sure that disturbances were kept to a minimum; Peluso (1992) also claims that some of the permanently based units would also take part in extra-legal timber sales. However, with the fall of Suharto came the end of *Dwifungsi*<sup>27</sup> – which in practice came to an end with Suharto, although the phasing out of the ideology is planned between 2004 and 2009. As a result, the army stopped intervening in the forest, which only further decreased the power that Perum Perhutani had enjoyed as its main ally.

Mulyadi Bratamihardja *et al.* (2005:12) put forward another explanation for these riots by pointing out that during the period of 1997 to 1998, in the early days of the economic crisis, 4.2 million people lost their jobs, but at the same time the agricultural workforce increased by 4.6 million – which would include the growth of the informal timber sector. According to these authors, the destruction of Java’s forests observed at the time was not so much the doing of local populations *per se* but rather of “powerful bands of organised thieves”:

---

<sup>27</sup> *Dwifungsi* refers to the “dual function” of the Indonesian army, under which they undertook a role both as defenders of the country and as a socio-political force in national development. See the section on the military in national forest-related policies for more information.

The forest areas most prone to timber theft are border areas between provinces (*Propinsi*), regencies (*kabupaten*), and forest management areas (*Kesatuan Pemangkuan Hutan/KPH*). These border areas represent grey areas in terms of law enforcement jurisdictions. The fact that a consistent pattern of logging theft occurs in these border areas is suggestive of a professional [network] behind the thefts, possibly conducted by groups which understand the legal enforcement problem in these areas.

(...) A functionary of [Perum Perhutani] Unit I in Central Java stated that the wood-based industry in Central Java requires a total of two million m<sup>3</sup> of timber per year. The wood furniture industry centred in Jepara, Central Java, requires an additional 900,000 m<sup>3</sup> of timber per year. Against this huge appetite for raw material, the total production of [Perum Perhutani's] Central Java Unit is only 600,000 m<sup>3</sup> per year. The large gap between supply and demand is a primary motive behind timber theft.

Mulyadi Bratamihardja *et al.* (2005:13)

There is no doubt that organised theft was a reality in the late 1990s and early 2000s, and still is today; however some actors have used this phenomenon to whitewash the two main stakeholders (Perum Perhutani staff and local populations), despite the fact that both these categories have also been known to be involved in illicit timber extraction, often as part of the these organised networks themselves.

### 3.4.2. PHBM: Collaborative management in public forests

#### 3.4.2.1. An Overview

Between 1998 and 2001, Perum Perhutani reacted to the events but at the same time it was affected itself by the ongoing political changes. Meanwhile, forests were being wrecked at a terrific speed (...). Perum Perhutani reacted at first by trying to reassert its physical presence in the forest again, but it was soon overwhelmed by the people. The balance of power had turned around and Perum Perhutani had to look for another solution (...). Had it not been for these events, we probably would not have PHBM today.

Interview with a villager, Gempol Village, Kabupaten Blora, 27 January 2007

By 1999 it had become clear that the situation was untenable on the long term and that serious measures had to be taken to hem in the destruction of Java's plantations and timber production industry. However, the events showed that the tables had suddenly turned: local populations were *de facto* playing a much larger role in the fate of the forests, at the expense of Perum Perhutani which had seen its staff flee along with the army which refused to intervene any longer on their behalf. At the same time, the end of the Suharto dictatorship had ushered in what many saw as a new, euphoric era of democracy, and many NGOs had been set up, many of which were to side with the rights of local populations in the conflict that was opposing them to Perum Perhutani.

Given the new balance of powers, it should not come as a surprise that Perum Perhutani opted for dialogue rather than conflict with local populations. As early as 1999 talks were already underway to replace PMDH-T with a more substantial programme that would include local populations in the management of Java's forests. PHBM (*Pengelolaan Hutan Bersama*

*Masyarakat* or Forest Management with the People) was finally launched in 2001 with Perum Perhutani Director General's "Decision Letter" (*Surat Keputusan* or SK) no. 136/Kpts/Dir/2001 (Affianto *et al.* 2005:2).

PHBM was thus created in a near state of emergency following the riots of the late 1990s and SmartWood's suspension of all certification programmes in Java's public forests. Based on SmartWood's criticisms and demands from NGOs and local populations, there is one major difference between PHBM and its predecessors: local populations get a share of the income made on timber production in public forests. The percentage was later fixed by the company: 25% of the profits would go back to local populations via their legal representative known as LMDH (*Lembaga Masyarakat Desa Hutan* or the Association of the Inhabitants of Forest Villages). Perum Perhutani would retain the remaining 75%.

The official aims of PHBM are to contribute proportionally to the ecological, economic and social aspects of forest management by increasing the welfare and quality of life of forest villagers, spell out the role of Perum Perhutani, local populations and other stakeholders in forest management, increase productivity and security in the forest, and harmonise forest management with the needs of local populations (Dinas Kehutanan Jawa Tengah 2006:4). However, as Andayani & Sembodo (2004:16) point out, the concept of PHBM differs little from its predecessors as its objectives continue to focus on increasing productivity using scientific technology.

#### 3.4.2.2. The Case of Blora

It has only been six years since PHBM was first introduced but research on the system is already underway and several sites have already become classic case-studies, such as the village of Tanggel in the Central Javanese KPH<sup>28</sup> of Randublatung, in the Kabupaten of Blora. Randublatung is already well advanced in terms of PHBM as 31 of the unit's 34 villages have already set the programme up. In Tanggel, the Act between Perum Perhutani representatives and the local LMDH was notarised on 31 December 2002. The LMDH is made up of 24 representatives elected by the entire village, whose inhabitants are all members of the organisation.

Tanggal is no stranger to Perum Perhutani's attempts to involve local populations in forest management. Villagers recall taking part in the transport of timber from the felling sites to the log yard in the early 1980s as part of the PMDH programme. The programme, however, came to an end when trucks were brought in and the human workforce was no longer needed.

According to its representatives, LMDH focuses on its relationship with Perum Perhutani staff and the implementation of the company's programmes, but it is also responsible for maintaining transparency and writing up reports on a regular basis. LMDH is also the main recipient of the famous 25% of the income made from forest products: 50% of this sum goes to activities focusing on production (*e.g.*, buying extra cattle); 20% is set aside for various communal needs such as road repairs and medical expenses; another 20% goes to the functioning of LMDH (training, organising meetings, etc.) and the remaining 10% act as an "incentive" for LMDH "managers" (interview with Pak Mulyoto, head of LMDH Tanggel, 25 January 2007).

<sup>28</sup> *Kesatuan Pemangkuan Hutan* or Forest Management Unit (see above).

Within the framework of PHBM other organisations have also been set up. FORKOM (*Forum Komunikasi* or Communication Forum) was created in 2003 following suggestions by Perum Perhutani that the relationship between itself and LMDH should be evaluated by an independent body. Four times a year, FORKOM brings together all stakeholders round a table, including village organisations (such as religious or farmers' groups) and local government in meetings to discuss how the relationship between PHBM's two main actors can be improved. In other words, FORKOM acts – or is supposed to act – as a watchdog; FORKOMs exist at several levels, including village, Kecamatan and even Kabupaten.

A village cooperation (*koperasi*) was also set up in Tanggel in February 2006 after much deliberation, with the aim of establishing a system of micro-credit to individual farmers so that they could invest in productive activities. An initial Rp. 15 million (€ 1,250)<sup>29</sup> was collected from LMDH, all of which had been lent out to farmers by January 2007.

Finally, in 2004 several village figures successfully established an association (*Asosiasi*) at a regional level to bring together all the LMDHs and FORKOMs of a single Kecamatan so as to share experiences. The origin of the *Asosiasi* came from the feeling of many that the institutional representation of local populations was fragmented down to the village level, whereas Perum Perhutani's structure extended across the whole of Java. The creation of an *Asosiasi* would allow this imbalance to be somewhat corrected. At the time of writing, however, the *Asosiasi*'s activities were limited to regular meetings with limited outcome.

PHBM in Tanggel – and in Randublatung more generally – is widely regarded as a success, and figures are there to back it up. Since 2002, illegal timber extraction has fallen dramatically thanks to teams composed of villagers who roam the forest and turn in “timber thieves”. Moreover, production is on the rise again after the events of the late 1990s. The most recent figures show a staggering income of Rp. 2.6 billion (€216,700) in 2006 for the whole of KPH Randublatung.

Its administrator (within the Perum Perhutani structure) admits that this KPH is exceptional, however. Randublatung benefits from chalky soils that are particularly beneficial for the growth of teak forests; slightly lower rainfalls and a flat topography also facilitate both the growth and extraction of teak from the area. The chalky soils have also hindered the expansion of agriculture in comparison to other KPHs where it remains a threat to forests; as a result, Randublatung is only home to 34 villages over a 30,000 ha area, as opposed to the KPH Blora, just to the north, which has 48 villages distributed over an area half the size.

As a result, the revenue per inhabitant from timber production via PHBM is considerably higher than in neighbouring regions, and even more so in villages such as Tanggel where the LMDH has ended up using its surplus to subsidise the LMDHs of 17 other villages. The mood of those involved in PHBM's management in Tanggel reflects this success and all actors interviewed noted an obvious improvement in the relationship between villagers and Perum Perhutani staff.

Many outside PHBM supporters have focused on KPH Randublatung and villages such as Tanggel as examples of success; whilst recognising the specific topographic and demographic conditions, they also claim that if PHBM works in these areas then in theory it should work in

---

<sup>29</sup> Conversion based on a rate of €1 = Rp. 12,000

others. The fact that Tanggel's LMDH shares its revenues with neighbouring villages also means that its success is less likely to be unequal and thus covers wider areas. Tanggel – and Randubaltung more generally – thus act as pillars of support for PHBM in other areas of Java.

Other observers, however, remain more cautious, pointing out the areas that still need improving. First, some have pointed out that the relationship between Perum Perhutani and LMDH remains unbalanced in the sharing of roles, responsibilities, rights and benefits. Whilst local populations now receive income from timber production (for the first time in several hundred years), Perum Perhutani has retained complete control over how PHBM's structure and function at the local level. All the details of the programme were set up before the local populations were consulted, including the objectives of the programme and even of the LMDHs. It was also within Perum Perhutani that the decision was taken that the creation of village cooperations (*koperasi*) was to be encouraged. This was strongly felt by some members of Tanggel village:

[Perum Perhutani at KPH level] wanted all the LMDHs in Randubaltung to work properly and in the same way, so they pressured each village into setting up these *koperasi*. I personally never thought it would be possible for the time being – it was still too early and LMDH had hardly been set up, but we were eventually forced (*terpaksa*) to agree. The Department of Trade (*Departemen Perdagangan*) [involved in the registration of each cooperative] expressed their surprise when they found that all these cooperatives were being set up at the same time in Randubaltung (...). Today, the cooperative is not going well: all the money has been lent out to farmers who are failing to pay their debts back.

Interview with a villager of Tanggel, KPH Randubaltung, 28 January 2007

As mentioned above, two organisations exist to keep such problems at bay and prevent Perum Perhutani from assuming a dominant or paternalistic position. One of these is FORKOM (the Communication Forum) whose very objective is to monitor and evaluate the role of each stakeholder in PHBM. With the help of UGM research staff, a meeting was held in Tanggel to establish criteria and indicators that would help in such evaluations, yet to this day FORKOM has never used them to assess the success of PHBM. The other organisation, the *Asosiasi*, was set up on an *ad hoc* basis, in reaction to the fear that the complex and elaborate structure of Perum Perhutani would dwarf individual LMDHs and FORKOMs in terms of bargaining power. However, given its recent creation the *Asosiasi* has not yet produced any concrete results.

Secondly, external observers fear that instead of an equal distribution of rights and responsibilities throughout village communities, they have been captured by a local elite. In theory, the LMDH is meant to represent *all* the villagers and efforts have indeed been made to make PHBM better known among all social strata of village society by organising meetings open to all. Despite such measures, those who are most active in the activities of LMDH and PHBM are generally also the most prominent village members such as village heads, teachers and other officials. Moreover, a short stay in Tanggel was sufficient to show that even those who are heavily involved in forest management (notably forest farmers, known in Javanese as *pesanggem*, many of whom resort to *tumpang sari* as a means of livelihood) still have no idea what PHBM means or stands for.

More tangible proof of capture by a local elite was provided at an LMDH meeting held in Tanggel during the researcher's stay there in January 2007. During the meeting, a motion was passed (with no debate or opposition) that the percentage of funds earmarked for the LMDH "managers" be raised from 10 to 15% of the total funds as a means of maintaining the incentive to manage LMDH "correctly". It is difficult in such a case to decide whether a 50% increase in the "compensation" to otherwise unpaid managers of LMDH is fair or not; what it underlines, however, is that – whatever the legitimacy of this rise in funds – the village elite is indeed benefiting more from the system than the lower "classes" of the village.

The proportion of sharing between Perum Perhutani and the LMDH has also been subject to a heated debate. As mentioned, according to the Perum Perhutani Director's Letter of Decision no. 136/Kpts/Dir/2001, a maximum of 25% of the "income from the forest" ("*hasil hutan*") made from timber production and non-timber forest products collected from public forests should be handed over to the local LMDH. However, several confusions exist over how this "income" is actually calculated.

In the first place, there remains a debate as to whether it refers to the full income or just the profits once the expenses (*e.g.*, paying staff) have been paid. Secondly, the calculation of this figure is said to be based on the basic timber price (which ranges between Rp. 500,000 and 700,000 per m<sup>3</sup> or €42 to 58 approximately), yet the real price can fetch up to Rp. 2 to 3 million for the best quality timber (€ 167 to 250 approximately).<sup>30</sup> Such uncertainties – whether they are due to unclear policy in itself or just insufficient dissemination – create grey zones which actors could take advantage of if given the opportunity, in particular those who retain a dominant position in the PHBM process.

Furthermore, many observers question the very figure of 25%. Is this a fair figure given the needs of each of the actors and their respective participation in the production of timber and non-timber forest products? Whilst any attempt to answer this question lies well beyond the scope of this research, many actors – including regional and national NGOs – have nevertheless focused on this issue as a main source of criticism of PHBM. According to some, a more appropriate ratio would be closer to 35% rather than 25% given the amount of work local populations put into the production effort.

Other, more radical organisations, however, claim that the only respectable figure would be 50%. Such is the case of a Javanese NGO called Arupa (*Aliansi Relawan untuk Penyelamatan Alam* or the Alliance of Volunteers for the Preservation of Nature) based just north of Yogyakarta and created in 1999 by a number of UGM students concerned with the fate of Java's forests. According to Arupa representatives, the collaborative management model embodied in PHBM is based on equal sharing of rights, responsibilities and benefits between Perum Perhutani on the one hand, and LMDH on the other. It is therefore logical that the sharing of the income should also be established on a 50-50 basis.

Arupa has remained a thorn in the side of PHBM, especially in KPH Randublatung where some villages have retained a position of open conflict with Perum Perhutani representatives. Kabupaten Blora was one of the first places where Arupa began operating after its creation, mainly because of the conflict that had arisen there at the time, along with the potential wealth of the kabupaten's forests. It is believed that Arupa worked with three villages in particular, and together they concluded that Perum Perhutani's practical "ownership" of surrounding

---

<sup>30</sup> Data provided by Pak Heri Santoso (Javleg) interviewed on 31 January 2007.

forests should be challenged. As a result, Arupa staff is said to have discouraged villagers from accepting PHBM, despite the unprecedented offer of taking up 25% of the income from the forest. Arupa staff apparently claimed that villagers would be bought up by PHBM and that by accepting the offer, they would be signing away their legitimate rights to the forest.

This opposition between sharing *rights* versus sharing *benefits* remains indeed one of the main criticisms of PHBM. As one villager opposed to PHBM explained, when he goes into the forest he does not steal the timber he needs; instead he used the Javanese word *ngemek* which could be translated as “taking what his rightfully his”. These linguistic subtleties reveal fundamental differences between Perum Perhutani and certain villagers over the legitimacy of forest ownership.

Whether Arupa truly played such a pivotal role in creating the way these three villages perceived PHBM, or whether it merely catalysed already existing ideas remains unclear and subject to disagreement.<sup>31</sup> In any case, if “only” 31 of Randublatung’s 34 villages have taken up PHBM, it is because the three remaining villages – those in which Arupa once operated – have retained an openly hostile relationship with Perum Perhutani staff who claim that they would fear for their lives were they ever to set foot in these villages – even almost a decade after the riots of the late 1990s. The activities and role of Arupa are further discussed in the last section (“Competing Models?”).

Another of the focal points of conflict between Perum Perhutani and these villages is an event that supposedly took place in 2001, when Perum Perhutani staff shot a villager dead for “stealing” timber. Apparently, the staff claimed that he had died of disease rather than bullet wounds, which led to the villagers requesting an autopsy, the results of which have yet to be published. This problem galvanised the conflict between Perum Perhutani and many villagers and has yet to be solved.

In summary, despite its short history, PHBM has already been set up with great enthusiasm across wide areas of Java; it has contributed to the fall in extra-legal timber harvesting and a warming up of the relations between Perum Perhutani and local populations. However, according to the actors questioned, PHBM can either be viewed as a break with the past as local populations can benefit directly from the income from the forest, or perceived as yet another way of buying local people out of their legitimate rights to the forest.

### ***3.4.3. Hutan Rakyat: Community-based forest management on private lands***

Another model of community involvement in forest management on Java, known as *Hutan Rakyat* (literally “People’s forests”) is also on the rise. The primary difference with PHBM and earlier forms of collaborative forest management is that *Hutan Rakyat* applies to forests on communal or private land (generally belonging to rural smallholders) rather than forest estate. After a brief presentation of the basics of *Hutan Rakyat*, this section focuses on the case of Kabupaten Wonogiri (Central Java Province), wedged between the provinces of Yogyakarta and East Java on the southern coast of Java.

---

<sup>31</sup> Some have suggested that it would be interesting to check how these three “Asterix-like” villages positioned themselves in the events of the mid-1960s that opposed Communist sympathisers to non-Communist and Islamist actors.

### 3.4.3.1. An Overview

San Afri Awang *et al.* (2001:37-8) provide three definitions of the term *Hutan Rakyat*:

An area outside state forest that is dominated by trees which as a whole form a single natural, biological and environmental unit (*Departemen Kehutanan's* 1993 definition).<sup>32</sup>

Land owned by the people, communally or traditionally, that is continually used for forestry purposes, including [the management of] timber species, and that may grow either naturally or in plantations (definition found in *Kamus Kehutanan* 1990).<sup>33</sup>

Forests established on private property or a collection of private properties planted with trees managed by the owners themselves or an organisation guided by rules drawn up by the government (Alrasyid 1973).<sup>34</sup>

Nowadays, one generally finds that the use of the term has more of a “communal” aspect to it than these definitions suggest. When asked, most actors interviewed agree that *Hutan Rakyat* differs from mere *Hutan Pribadi* (private forests) in that the management of *Hutan Rakyat* involves some sort of collaboration between landowners, such as cooperation through a farmers’ group (*Kelompok Petani* or *KT*) and the sharing of information, markets and the existence of communal tasks (such as planting and terracing).

As San Afri Awang *et al.* (2001:39) point out, the meaning and connotations of the term has also varied considerably both over time and space. When in Wonogiri and other parts of the drier south coast of Java, *Hutan Rakyat* generally refers to teak plantations (*Tectonia grandifolia*), but in the central highlands such as around Wonosobo, are principally made up of sengon (*Albazia falcataria*).

Also, from the 1930s when the expression first came to be used to the 1960s, *hutan rakyat* was considered part of wider greening programmes such as the first Great Greening Market (*Pekan Raya Penghijauan I*) launched in 1961. Right until the 1970s, especially along the south coast of Java, the government promoted the expansion of *hutan rakyat* with the sole aim of providing “critical land” with some sort of economic use, in a programme known as *Karang Kritis* or “critical areas”. Encouraging small landowners to plant timber species such as teak and mahogany on certain types of land (steep slopes, land with little rainfall or limited fertility) was more perceived as a solution to erosion (and an alternative land use to agriculture) than a poverty-reduction programme, let alone a means of expanding forest cover.<sup>35</sup>

<sup>32</sup> “Suatu lapangan di luar hutan negara yang didominasi oleh pohon-pohonan, sedemikian rupa sehingga secara keseluruhan merupakan persekutuan hidup alam hayati beserta lingkungannya.”

<sup>33</sup> “Lahan milik rakyat atau milik adat atau ulayat yang secara terus menerus diusahakan untuk usaha perhutanan yaitu jenis kayu-kayuan, baik tumbuh secara alami maupun hasil tanaman.”

<sup>34</sup> “Hutan yang dibangun di lahan milik atay gabungan dari lahan milik yang ditanami pohon dengan pembinaan dan pengelolaannya dilakukan oleh pemiliknya atau oleh suatu badan usaha dengan berpedoman pada ketentuan-ketentuan yang telah digariskan pemerintah.”

<sup>35</sup> Heri Santoso (Javleg; personal communication) claims that the origins of *hutan rakyat* follow three distinct models: (i) that of critical land rehabilitation (such as in Gunung Kidul, Wonogiri and Pacitan); (ii) growth of a

In the 1970s, the government stepped up its promotion of *hutan rakyat* by getting villagers to set up farmers' groups (*Kelompok Petani*) which were used as community mouthpieces to whom technical assistance and materials (e.g., seeds and fertiliser) could be provided. It was only then that *hutan rakyat* acquired its "livelihoods" dimension: it was understood that if managed properly, these planted forests would also enhance the social and economic welfare of small land owners.

By the 1990s, when NGOs made their appearance (such as Arupa and Persepsi), they focused on these already existing structures (*hutan rakyat* and *kelompok petani*) as a means of improving the livelihood of rural farmers. By the same token, they promoted *hutan rakyat* as a means of expanding forest cover and the concept entered the debate of community forestry. It is as an alternative model of community-based forest management that *hutan rakyat* has benefited from certification in several parts of Central Java, including Wonogiri, Gunung Kidul (Yogyakarta) and Wonosobo, as is explained below.

In other words, over the decades *hutan rakyat* has been "recycled" politically as (i) a means of combating erosion on "critical" land (1930s to 1970s); (ii) a source of social and economic welfare for small rural landowners (1970s and 1980s), and (iii) a model of community-based forest resource management (since the 1990s).

As the connotation of the concept changed since the 1930s, so was its association strengthened with the concept of "community". As shown in the definitions above, the relationship between the two has often been tenuous (making *hutan rakyat* little more than glorified private forests in some cases), but nowadays the term has more than just a community "vener" to it. Farmers' groups have grown in strength and size since the 1970s when many were still divided according to the traditional rural caste system (see box below), mainly as a result of their use by external actors as a mouthpiece for local communities.

First governmental agencies, then NGOs have used these groups extensively to promote both welfare and conservation issues among local populations. More recently still, the issue of certification has galvanised that of community, especially as one of the three sets of criteria used to certify forests is based on the concept of community itself. What were once small individual plots of land covered in trees that had no more link to each other than physical proximity have now become "community forests" in their own right. Through the changes associated with *hutan rakyat* policies, therefore, the *Rakyat* (people) themselves have gradually been politically constructed as a community.

---

particular species such as sengon (*Albizia* sp.) (e.g., Wonosobo); and (iii) collaboration between local populations and companies (as in Riau and Jambi, on Sumatra).

Based on the type of land owned, traditional rural Javanese society is layered into four levels or castes which regulate social relationships within a village:

1. Members of the *Kuli kenceng* level own *pekarangan\**, *sawah\*\** and *tegal\*\*\**;
2. Members of the *Kuli kendo* level own *pekarangan* and *tegal*;
3. Members of the *Magersari* level own *pekarangan*; and
4. *Mondok emplok* are landless peasants.

Until recently, each of these castes had its own farmers' groups which thus differed according to the wealth of their members. However, this hierarchy differed from the objectives and expectations of a number of external actors, including NGOs and certification bodies which preferred a more egalitarian conception of local communities. As a result, most farmer groups are now united and the difference between castes no longer operates – at least not officially.

\**Pekerangan*: land immediately surrounding the house

\*\**Sawah*: wet rice fields – the villagers' most reliable source of income and subsistence

\*\*\**Tegal*: land that does not immediately surround the house and which is not suitable for wet rice fields. These lands are generally where *hutan rakyat* are found.

#### **Box XI. — Java's traditional rural caste system.**

#### **3.4.3.2. The Case of Wonogiri**

Kabupaten Wonogiri provides an excellent example of the political and policy frameworks in which *Hutan Rakyat* has evolved in the past few decades. This kabupaten belongs to Central Java and is wedged between the provinces of Yogyakarta and East Java on the southern coast of the island. Home to just over a million inhabitants (KPDE Kabupaten Wonogiri 2006), the majority of whom live off the land, Wonogiri ranks as one of the poorest kabupaten in the province. The limited rainfall in the region, the rocky nature of the soil and the rugged relief make this part of the island relatively unsuitable for agriculture.

In spite of this, Wonogiri (which means “wooded mountain” in Javanese) has one of the lowest forest covers in Java with a mere 11% (as opposed to the 30% officially recommended by the Ministry of Forests and Perum Perhutani). The population has thus mostly cleared the forests that once covered the kabupaten several centuries ago, and have planted whatever grows locally. Wet rice paddies are relatively rare; instead, farmers tend to prefer to grow crops more adapted to the conditions, such as cassava and corn.

The surface area of the forest estate has remained stable over the past few decades, hovering between 20,000 and 21,000 ha. However, in the past twenty years, private forests owned by smallholders (known as *Hutan Rakyat*) has expanded dramatically from less than 4,000 ha in 1988 to some 27,000 ha in 2006 (Pak Taryanto, Persepsi, personal communication), thus overtaking the forest estate in recent years.

The headwaters of Java's longest river, Bengawan Solo, are almost entirely located within Wonogiri. The river runs from Wonogiri for some 600 km through the eastern part of Central Java and into the northern half of East Java, where it runs into the sea just north of the city of Surabaya. It thus plays a critical role in the irrigation of vast parts of the island which is the country's largest producer of Indonesia's staple food, rice. The strategic importance of Bengawan Solo is therefore not to be underestimated.

The impact of the mismanagement of Bengawan Solo's watershed was strongly felt in 1966 when the city of Solo (located on the river of the same name) fell victim to one of its worst floods in history, killing thousands of inhabitants. At a time when Suharto and the New Order still had to prove their worth, and in a period when foreign-funded pharaonic works were fashionable in developing countries, it was decided that important measures would need to be taken to prevent such disasters from happening again. In 1969 a Letter of Decision from the Minister of Public Works (SK Menteri DULP n°135/KPTS/1969) established the Development Project for the Solo River Basin, and in 1972 the Japanese Overseas Technical Cooperation Agency, then known as OTCA,<sup>36</sup> carried out a survey and recommended the construction of a large dam in Wonogiri (Departemen Pekerjaan Umum 1988:1). Suddenly, this impoverished, peripheral kabupaten found itself in the limelight of public policy.

During the Dutch and Japanese occupations, Wonogiri had seen the construction of several small-scale dams, but the new dam whose construction was completed in 1982 was one of the largest the country had even seen. As a result, the management of Solo watershed became both a model and a reference for the management of other watersheds across the country. It is also believed that the fact that Suharto himself had spent some of his childhood in Wonogiri also contributed to the approval of the choice of the site. The dam was actually the centrepiece of a larger project which also aimed at stimulating the economy in the area, and it was thus labelled a "multipurpose reservoir dam" (*waduk serbaguna*): not only would it contribute to a better management of the river, but it would also provide electricity, irrigation, a local opportunity to establish freshwater fisheries and even promote tourism through water sports. The UN Food and Agriculture Organisation (FAO) also launched a people's participation programme from 1976 to 1985 in which the improvement of agricultural techniques was encouraged among smallholders.

Before the dam was even completed it became clear that erosion would constitute a major problem for the dam, as the reservoir was situated in a valley surrounded with hills covered in small-scale agriculture established upon a poorly-managed terracing system (Notohadiprawiro *et al.* 1980). According to the building plans of the dam, the silting of the reservoir would not pose a significant problem for another century. However, the threat of erosion was such that the World Bank set up a Forestry Institutions and Conservation Project from 1988 to 1995, of which the Upper Solo (Wonogiri) Watershed Conservation Project was one of the components. Wonogiri had been identified as one of the cases where "population pressure, deforestation and increased cultivation of annual crops on steep slopes" was leading to "problems of soil erosion, loss of productivity of agricultural land, siltation of river basins and dams, floods, and consequence environmental and economic degradation" (Departemen Kehutanan 1992:1).

It was during the implementation of this project that the link between the prevention of erosion and forestry was acknowledged. Local populations living on the slopes surrounding the dam were no foreigners to forestry issues, however. Outside the forest estate managed by the Forest Service and Perum Perhutani after 1972, local farmers had been planting teak trees at least since the 1930s, mainly to mark the border between properties. From the early 1970s, Suharto launched a series of "greening" programmes (*Program Penhijauan*) which encouraged the expansion of *hutan rakyat* through subsidies for seeds and fertilisers. This is when, according to some older farmers in the villages of Genungharjo and Selopuro, the first

---

<sup>36</sup> OTCA is now known as JICA (Japanese International Cooperation Agency).

farmers' groups (*Kelompok Petani*) were set up, and forests on private land grew very gradually.

Externally-funded programmes such as that of the World Food Programme (1972) also contributed locally to the growth of *Hutan Rakyat* by encouraging the planting of trees as a source of income that was better adapted to the local physical conditions. At the time, eucalyptus and acacia had been identified as key species to be planted rather than teak (Hardiyanto 2004:41). All these interventions provided a backdrop against which *Kelompok Petani* appeared and consolidated, although such groups remained largely informal until the World Bank project was set up.

It was therefore in the early 1990s, when the World Bank Project was underway, that these groups were formalised and acquired legal status. Training took place on anti-erosion measures of which forestry was a main component: seeds were provided (mainly teak and mahogany which grow well in drier, rockier soils) as well as training on how to plant and manage forests. Government subsidies for fertilisers which had existed since the early 1980s were also stepped up. Unlike other anti-erosion measures such as terracing, forestry in the form of *Hutan Rakyat* had the advantage of also providing a source of income for local populations<sup>37</sup>. However, despite sporadic projects such as that of the World Food Programme in 1972, *Hutan Rakyat* continued to be understood mainly as a means of preventing erosion rather than a component of rural livelihoods, as witnessed by the government's greening programme as well as the World Bank project.

It was only in the course of the 1990s, with the growth of international debates on deforestation and poverty reduction that *Hutan Rakyat* gradually acquired new meanings. From an anti-erosion measure as it had been perceived until then, it increasingly came to be seen as a means of alleviating poverty and reducing deforestation. This shift in perception is epitomised by the appearance of a new actor, Persepsi.

Founded in 1993, the Javanese NGO Persepsi (also known as the "Association for Economic and Social Studies and Development") is based in Klaten, north of Yogyakarta. Among other objectives, Persepsi aims at educating local populations about sustainable environmental management and securing people's access to and control over natural, political and economic resources (Persepsi 2000:2). Persepsi set up an office in Wonogiri in 1998 at a time when the progress made over the previous decade in terms of *Hutan Rakyat* risked being lost.

The economic crisis that Indonesia underwent starting in 1997 hit impoverished farmers worst. Having found that local cash crops were no longer selling, farmers turned to their newly planted *Hutan Rakyat* as an alternative source of income and logged teak forests in vast quantities. As a result, *Hutan Rakyat* receded extremely rapidly as erosion picked up again at a considerable rate. Persepsi sought to revert the trend by working primarily with *Kelompok Petani* and focusing its activities on community organisation and development. The NGO provided *Kelompok Petani* with a range of training programmes, funds to set up cooperatives, and material assistance such as seeds. It also sought to identify potential markets for products of *Hutan Rakyat* and to set up chains of custody which would facilitate the sale of timber.

---

<sup>37</sup> The World Bank project was deemed a success from the viewpoint of livelihoods (Sudradjat 1997): according to calculations made when the project was wound down, per capita income increased significantly over the duration of the project; that of farmers involved in the forestry projects almost tripled with an increase of 280% between 1988/9 and 1992/3. Unfortunately, this progress had come to a complete halt with the events surrounding the downfall of Suharto.

Beginning in 2000, Persepsi began focusing on a new long-term objective which was to prove to be the culmination (so far) of Wonogiri's *Hutan Rakyat* experience: certification. In collaboration with WWF, Persepsi identified two villages on the eastern side of the reservoir, Selopuro and Sumberejo, as pilot sites, and encouraged the creation of new local organisations, notably KPS (*Kelompok Petani Sertifikasi* or Group of Certified Farmers) and its corresponding FKPS (Forum of KPS). By 2004, both villages had been certified by LEI,<sup>38</sup> making them the first *Hutan Rakyat* ever to be certified. Hardiyanto (2004) describes in great detail the history of these villages and the list of conditions that were met for these villages to enjoy certification. Local villagers also recall having to ban a wide range of practices such as burning piles of leaves inside the forest, whilst enforcing others such as schooling for all children.

It should be noted that the concept of community was greatly influenced by these new measures, as witnessed by the gradual development of *Kelompok Petani*. From a largely informal, fragmented organisation in the early 1970s, it has come to epitomise the very existence of "communities", at least in the eyes of outsiders. These groups are not only perceived as being representatives of entire villages; they also appear to be the living proof of the mutual help that farmers give each other (through cooperatives and communal tasks) – mutual help being one of the central components of a community as it is commonly understood.

The Wonogiri case of *Hutan Rakyat* is deemed a great success for a number of reasons. First, in the midst of a crisis in the management of Wonogiri Dam, *Hutan Rakyat* has emerged as one of the only anti-erosion measures set up in the 1980s to have reached its objectives, since its surface area in the kabupaten has increased almost sevenfold in less than 20 years. In fact, by the early 2000s, the erosion problem had reached such a critical stage that dredging the entire reservoir – an extremely expensive measure which had originally been planned for 2080 – has been seriously envisaged.

A number of workshops has taken place as part of the JICA-funded Study on Countermeasures for Sedimentation in the Wonogiri Multipurpose Dam Reservoir. As a result, a Master Plan has been established that includes a number of costly measures such as building a new reservoir to store additional sediment resulting from erosion, and periodic dredging at several key points of entry to the artificial lake (JICA Study Team 2007:3). It must be emphasised that the decision to undertake such measures amounts to recognising the failure of all previous anti-erosion measures, which the success of *Hutan Rakyat* stands in stark contrast to.

A further difficulty that also acts as a backdrop against which *Hutan Rakyat* stands out is the complex array of organisations that constitutes the institutional framework of Wonogiri dam. In total, six different organisations from three different ministries are directly involved in the management of Wonogiri dam: whilst BBBS is responsible for the dam structure itself, PT PLN (Persero) manages electricity production and Perum Jasa Tirta looks over water management. BPDAS is responsible for non-structural watershed management and works closely with BP<sub>2</sub>TPDAS which carries out the research supposed to guide it. Finally, BSDA works on structural rehabilitation issues within the watershed.

---

<sup>38</sup> LEI stands for *Lembaga Ekolabel Indonesia* or the Indonesian Ecolabel Institute and is the main alternative to FSC in the country. For more information on certification in Indonesia see the section in national forest policies on certification issues.

All these organisations, their ministerial affiliations and their respective roles are listed in Table IV. As might be expected, this extreme institutional fragmentation, worsened by a lack of clear division of responsibilities and a notorious absence of communication between organisations, has only hampered the integrated management of all these components that each contribute to the sedimentation of Wonogiri dam. It should therefore be all the more surprising that *Hutan Rakyat* has emerged unscathed from the institutional entanglement and the failures that have marred other components of Bengawan Solo Upper Watershed management in Wonogiri.

Abbreviation	Full Name	Affiliation	Role
BP <sub>2</sub> TPDAS	Bureau for the Research and Development of Watershed Management ( <i>Balai Penelitian dan Pengembangan Pengelolaan Daerah Airan Sungai</i> )	Ministry of Forests ( <i>Departemen Kehutanan</i> )	Responsible for research on watershed management
BPDAS	Bureau for Land Rehabilitation and Soil Conservation ( <i>Balai Rehabilitasi Lahan dan Konservasi Tanah</i> )	Ministry of Forests ( <i>Departemen Kehutanan</i> )	Responsible for soil quality at watershed level
BSDA	Bureau for Water Resources ( <i>Balai Sumber Daya Air</i> )	Ministry of Public Works ( <i>Departemen Pekerjaan Umum</i> )	Responsible for the structural rehabilitation of the watershed
Jasa Tirta	Water Services Public Company ( <i>Perusahaan Umum Jasa Tirta</i> )	Ministry of Settlement and Territorial Infrastructure ( <i>Departemen Permukiman dan Prasarana Wilayah</i> )	Responsible for the provision of drinking water
BBBS	Solo River Watershed Bureau ( <i>Balai Besar Wilayah Sungai Bengawan Solo</i> )	Ministry of Public Works ( <i>Departemen Pekerjaan Umum</i> )	Responsible for the operation and maintenance of all dams and irrigation infrastructure. Funded by JICA
PT PLN (Persero)	National Electricity Company, Ltd. ( <i>Perusahaan Perseroan PT Perusahaan Listrik Negara</i> )	Private Company since 1994 (formerly part of the Ministry of Energy and Mineral Resources or <i>Departemen Energi dan Sumber Daya Mineral</i> )	Responsible for the production of electricity at Wonogiri Dam

**Table IV. — List of public or national organisations involved in the management of Wonogiri Dam and its surroundings, with their respective affiliation and role.**

The ultimate success of *Hutan Rakyat* in Wonogiri, however, lies in its certification: as one of the farmers in Selopuro villages pointed out, “certification was our main objective. The fact that markets are difficult to find is beyond the point; this is not about markets or money, it’s a

question of *recognition*".<sup>39</sup> The process of certification was such a lengthy and complicated procedure that the fulfilment of all the conditions posed by LEI was perceived as an achievement in itself.

This is felt all the stronger as Wonogiri was a pioneer in this matter, and that other areas of *Hutan Rakyat* such as Gunung Kidul (Yogyakarta) and Wonosobo (Central Java) have only recently followed in its footsteps. As a result, Selopuro and Sumberejo villages have become classic case-studies in certification of *Hutan Rakyat* and have witnessed numerous visits from researchers and NGOs alike. Likewise, several farmers have also been invited to meetings and conferences across the country – a unique opportunity for such individuals given their humble backgrounds. This type of success has reached the point where a major source of income is provided for by donations made by visitors: success seems to pay more than the sale of timber itself.

However, there remains much room for improvement. In particular, one might ask whether this question of certification has led to a blurring of the ends (among others, the marketing of sustainably managed forest products) and the means (certification itself). Indeed, it appears that certification in itself has become the objective, as confirmed in the quote above, and that income from the production of timber is somehow perceived as a mere by-product, despite the fact that one of the main objectives of certification is to facilitate access to markets.

This perception has been strengthened by the fact that these markets for certified timber have still not been identified and the sale of timber from *Hutan Rakyat* remains minimal. Despite the symbolic success of certification, therefore, *Hutan Rakyat* has largely failed to improve the livelihoods of local farmers – at least for the time being (bearing in mind that certification remains at a pilot stage). This has led some researchers to question the very viability of the certification model, especially as the certification procedure is a costly one (Maryudi 2005:31).

One of the reasons for the difficulty in finding markets comes from the mediocre quality of the product itself (Maryudi 2005:33). According to experts, the quality of teak from *Hutan Rakyat* simply does not match that of Perum Perhutani's forests. This should partially be expected as rural farmers do not have the scientific know-how that Perum Perhutani staff – despite all their defaults – have applied in the management of state forests. However, *Hutan Rakyat* is further characterised by an absence of old trees with diameters above 50 cm and which provide the best quality timber. Whilst older teak trees were said to be found outside the forest estate some fifty years ago, the increasing dependence on a regular flow of cash means that farmers fell their trees at younger and younger ages, thus preventing the timber from *Hutan Rakyat* from reaching a decent quality in the eyes of the wood transformation industry (a phenomenon known as "felling in need" or *tebang butuh*).

Finally, *Hutan Rakyat* shares in common with PHBM the risk of capture of the entire process by a local elite within the rural populations. The *Kelompok Petani* and *Kelompok Petani Sertifikasi* have the disadvantage of not necessarily being representative of the entire population. Inevitably, those farmers with larger properties and who are higher in the traditional caste system (see Box XI above) are likely to dominate debates and the management of *Hutan Rakyat* and certification.

---

<sup>39</sup> "Sertifikasi – itu adalah tujuan kami. Pasar-pasar masih sulit didapat, tapi sertifikasi bukan tentang pasar atau uang. Sertifikasi itu tentang pengakuan." Interview with a farmer in Selopuro, Wonogiri, 14 January 2007.

San Afri Awang *et al.* even go so far as to claim that *Kelompok Petani* are characterised by a lack of democracy and behave like “bureaucratic” and “feudal” structures (2001:79-80). Likewise, Maryudi considers that certification issues continue to be hampered by “minimal awareness of forest farmers about certification programmes” (2005:33). Finally, the same author claims that the apparent unity of *Kelompok Petani Sertifikasi* and the uniformity of conditions conceal a considerable diversity in the way farmers have traditionally managed their own chunk of *Hutan Rakyat*.

However, none of these problems are insurmountable. In fact many of them such as limited awareness and the difficulty in accessing markets are at least partly related to the fact that *Hutan Rakyat* and its certification programme are still at a young age. The next couple of decades will likely reveal whether *Hutan Rakyat* is ultimately a form of forestry that provides a sustainable income to rural populations whilst fulfilling ecological functions such as prevention of erosion and maintenance of forest cover.

#### **3.4.4. PHBM and Hutan Rakyat: Competing Models?**

Central Java is a good illustration of the plurality of forms of “collaborative” or “community-based” forest management. When discussed in international circles, the diversity of forms which this type of forest management can take is often overlooked. The cases of PHBM in Blora and *Hutan Rakyat* in Wonogiri show that even in a context of identical cultures, histories and politics, this concept can take very different forms when applied on the ground.

One can observe a very definite convergence between both types of forest management. Three decades ago, it would have been difficult to put the two on a par: on the one hand, social forestry in forests managed by Perum Perhutani was mainly perceived as a concession to appease local populations disgruntled by the fact that they did not have any legal access to the forests surrounding them. On the other hand, *Hutan Rakyat* (in Wonogiri at least) was little more than a means of preventing erosion on the slopes of what was to become the reservoir of one of Java’s largest dams.

However, with the arrival of concepts of community-based natural resource management that appeared in force in the 1980s and 1990s, both forms of forest management took on a new veneer of legitimacy. The question was no longer a mere matter of “efficiency” or “erosion prevention”: both models officially converged towards new objectives of (i) improving the social and economic welfare of local populations; (ii) constructing a sense of community through the establishment of organisations representatives of entire villages (LMDH, *Kelompok Petani*); and (iii) contributing to maintain forest cover and preventing deforestation.

A number of institutions acted as channels without which this convergence would probably not have taken place – and NGOs played a crucial role in this process. The period of the New Order regime up to the late 1980s was a time during which NGOs were hard to come by. One exception to this was Bina Swadaya or the Self Help Development Foundation. Bina Swadaya was originally founded in 1954 under the name *Gerakan Sosial Pancasila* (Pancasila Social Movement) with the aim of empowering communities using the *Pancasila* ideals of the newly formed Republic of Indonesia. At the time, it was associated with mass rallies and was accused of sympathising with the Communist regime. It only survived the events of the mid-

1960s by changing its name to Bina Swadaya and claiming to be a socio-economic development organisation. In the 1980s, this NGO was the only major organisation pushing for the sharing of rights and responsibilities over forest management with local populations.

With a general *détente* of the New Order in the 1990s, however, a number of smaller NGOs sprung up – a figure which increased exponentially after the fall of Suharto, swollen by community-based organisations, NGOs set up by nature lovers (*pecinta alam*) concerned by deforestation and NGOs focusing on the welfare and rights of local populations. Many of these NGOs were based either at the national or even the local level (e.g., Persepsi). Eventually, dialogue was established between this myriad of organisations, first on an informal basis, and in later years using more formal channels.

One such channel is the Java Learning Centre or Javleg, a network of 11 Java-based NGOs. Set up in 1999, this federation of organisations aims at facilitating the study of different forms of community-based natural resource management on Java, raising awareness among stakeholders on such issues and encouraging communities to set up small-scale businesses related to natural resource management.<sup>40</sup> On a more informal basis, BAP (*Belajar antar Petani* or Learning among Farmers) acts as a forum enabling communication between farmers on various issues including community-based forest management. Such networks, whether formal or informal, have allowed dialogue between actors involved in different forms of community-based forest management, thus facilitating the spread of new principles upon which PHBM and *Hutan Rakyat*, among others, appear to have converged.

Obviously, however, essential differences remain, the question of land tenure being the most central one: PHBM is a system set up for public forests, whereas *Hutan Rakyat* by definition can only be found on private forests. Whilst some have underestimated the differences between forms of community-based forest management (as mentioned above), others have not seen the points in common between PHBM and *Hutan Rakyat* by failing to go beyond what is often seen as the only point of comparison, *i.e.*, land tenure. According to them, the differences between the two models are solely due to distinct forms of land tenure, and any further comparison is futile.

Upon closer inspection, however, the relationship between these two models goes well beyond a mere question of land tenure: ever since they came to be seen as two forms of community-based forest management, they have come to compete with each other as distinct models of forest management. At first, it appears absurd to see PHBM and *Hutan Rakyat* as competing models, especially when they are reduced to land tenure specificities: different types of land tenure cannot compete with each other.

Yet a number of elements in the debate on community-based forest management suggest that these two models are frequently – though implicitly – compared within a normative perspective, thus putting them in competition with each other. One such example is the issue of certification. As explained above, all public forests managed by Perum Perhutani were certified in the early 1990s by SmartWood. When SmartWood became an FSC-accredited organisation in 1996, the number of certified forests managed by Perum Perhutani was reduced, and in 2000 Perum Perhutani certification was suspended altogether. In contrast, certification of *Hutan Rakyat* by LEI is on a steady rise since 2004. If one sees certification as a label of sustainable forest management, therefore, private forests appear to have succeeded

---

<sup>40</sup> On the whole, Javleg has adopted a critical stance to PHBM as most of the NGOs that make up the network believe that the 25-75% system of benefit sharing is unfair to local populations.

where public forests have failed. This might also explain why supporters of *Hutan Rakyat* have focused so much on certification as a mark of success.

Secondly, where geographically contiguous, both models of forest management have implicitly been compared. In Wonogiri, several *Hutan Rakyat* stakeholders tend to speak rather disparagingly of PHBM which also operates within the kabupaten. On the eastern side of the dam, PHBM villages physically face the certified *Hutan Rakyat* villages of Selopuro and Sumberejo across a valley. One of the farmers interviewed liked to contrast both sides of the valley: on the other side, he pointed out, the forest had suffered because negotiations over PHBM had come to a halt. According to him, local populations were not happy with the 25% of benefits that had been offered to them and were asking for a greater share on the income. Persepsi staff shared the farmer's view, underlining the fact that illegal logging remained common in public forests, which now contributed to more erosion (and thus sedimentation in the reservoir) than *Hutan Rakyat*.

Likewise, Kabupaten Wonosobo, on the central highlands of Central Java, is also home to both public forests under PHBM and *Hutan Rakyat*. The main external organisation to have worked in this region is Arupa, a Javanese environmental NGO. In a recent report on *Hutan Rakyat* in Wonosobo, the authors again compare the two systems on a normative basis:

People's forests (*Hutan Rakyat*) contribute a significant amount of wood due to [their] high productivity per hectare. In 1999, these areas generated 2.29 m<sup>3</sup>/ha/year of timber, which is three times more than the average annual productivity per hectare in Perhutani-managed state lands. People's forests all around Java contributed 11% to the total supply of the island's wood needs or 895,000 m<sup>3</sup>, more than to production of Perhutani's Unit in East Java, the most productive and most mature stock among the three units (...). In Wonosobo district of Central Java where 60% of local taxes and 40-50% of non-oil exports come from forest products, the yield from community forests greatly contributed to the district government's processed wood export revenue in 1999 of Rp 12 billion (€ 1.2 billion), much greater than the district's expected revenue of Rp 4.6 billion (€460,000) for 1999.

Juni Adi *et al.* 2004:10

Arupa also happens to be the NGO which was active in the three villages of KPH Randublatung (Kabupaten Blora) which refused PHBM and which continue to have a highly conflictual relationship with Perum Perhutani staff. The fact that this NGO has undermined one type of forest management whilst championing the other strongly suggests that some sort of competition is operating between the two models.

The debate on agrarian reform lies at the basis of this. Whereas many consider land tenure on Java to be a fixed issue (meaning that borders between public and private forests are not going to change), the agrarian reform debate poses the issue differently as it questions the legitimacy of public forests in the face of the rights of local populations to access natural resources. Once one questions the legitimacy of one or the other type of land tenure, then the idea that the two may be in competition makes much more sense.

If these two models are indeed in competition, then what are they competing for? It appears that both models of land tenure are struggling for legitimacy. The terms of legitimacy are fixed by the debate on community-based natural resource management: for these types of management to be legitimate, they have to ensure sustainable forest management. In

particular, they have to secure forest cover, improve the relationship between stakeholders and provide local populations with a decent income.

The question of legitimacy is crucial to both forms of community-based natural resource management for two reasons. In the short term, legitimacy is important in securing access to external funds, especially from NGOs and/or donor organisations. As Pimenta (2006) pointed out in a very different yet similar context (indigenist policies in the Brazilian Amazon), the wide range of funds available for sustainable forest management or community-based management projects has created a “market” on which projects compete for such funds. PHBM and *Hutan Rakyat* are no exception.

In the long term, the absence of legitimacy of one model or the other might threaten its very existence. If in the distant future public forests lose all their legitimacy, *i.e.*, if they are unable to maintain forest cover; if relations between Perum Perhutani and other stakeholders breaks down completely; and if the company fails to produce any income; then public forests might be replaced with another form of land tenure with greater legitimacy.

Such a turn in events, however, remains highly unlikely – at least in the coming decades. In fact, the competition that is taking place between PHBM and *Hutan Rakyat* appears to have had a positive effect. By forcing their respective supporters to stay on their toes and strive to improve the systems – as if in a sort of race – both types of forest management remain particularly dynamic and continue to change rapidly. Their improvement on the long run could well push both models to overcome their respective weaknesses whilst retaining their specificities.

## 4. FOREST-RELATED POLICIES IN RIAU

After having been considered a peripheral region for centuries, Riau grew in importance in the second half of the twentieth century as oil reserves were discovered. Under Suharto the province's rich forests were logged, and as the timber sector has waned in recent decades, plantations have taken over, maintaining Riau as the country's wealthiest province but also as the one with the highest deforestation rate.

### 4.1. GEOGRAPHY

The term "Riau" often leads to confusion as it generally designates two separate geographical entities:

- (i) The Indonesian islands (*Kepulauan Riau* or "Riau Archipelago") peppered across the Natuna Sea, both south of Singapore (Batam – a mere 45 minutes by boat from Singapore – Bintan, Karimun and Lingga) and east of peninsular Malaysia (notably Anambas and Natuna); and
- (ii) A large chunk of east-central Sumatra (*Riau Daratan* or "Inland Riau") that faces Melaka (Malaysia), Singapore and Batam, Bintan and Lingga.

In 2002 the administrative divisions came to reflect the distinction between these two areas as the archipelago was separated from the mainland to form a new province, *Kepulauan Riau*, whilst the Sumatran part retained the name *Riau*. It is Sumatran Riau (henceforth referred to as "Riau") which is studied in this section.

Riau lies in a highly strategic location for the entire region, namely on the western side of the narrowest stretch of the Melaka Straits which are the busiest in the world. It is therefore located opposite the historical state of Melaka as well as Singapore, making it the Indonesian province with the easiest access to external markets, both near (Malaysia and Singapore) and far (China, India and continents other than Asia). Melaka (Malaysia) lies a mere 50 km across the Straits from Riau's coastline.

Despite a total surface area of almost 330,000 km<sup>2</sup> (roughly two-thirds the size of France) Riau is only home to 94,500 km<sup>2</sup> of firm land, the remainder being seasonally or permanently flooded land as well as waterlogged peat (*gambut*). Riau lies east of the *Bukit Barisan* mountain and volcano range which runs along Sumatra's western edge facing the Indian Ocean. The very strong seismic activities of Sumatra's western coast (as witnessed by the 2004 Tsunami in nearby Aceh) mean that Riau also enjoys its share of earthquakes, although damages generally do not reach the degree observed in Aceh or West Sumatra.

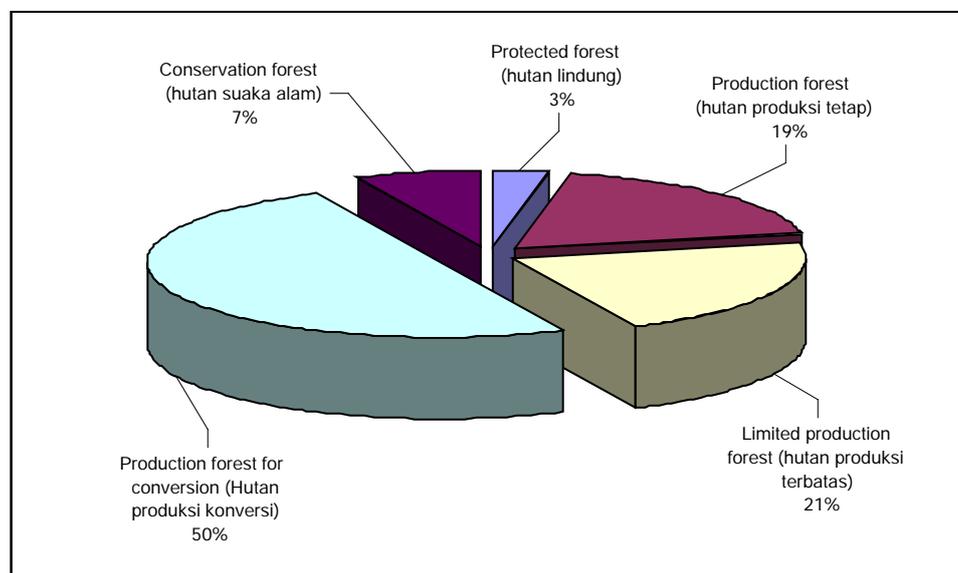
Almost all of Riau is made up of lowland, with the exception of its western border with the Province of West Sumatra (*Sumatra Barat*) whose foothills lie within the province of Riau. Four main rivers run in a west-to-east fashion from these foothills through lowland meanders and dozens of islands to the Straits of Melaka and Natuna Sea, namely (from north to south)

the Rokan, Siak, Kampar and Indragiri. Until the 1980s the vast majority of the land was covered in lowland tropical rainforest, most of which was peat forest, but exceptionally high levels of deforestation in the past three decades have seen the conversion of most natural forest into plantations, notably for the pulp and paper and palm oil industries.

The province's geography and extent of flooded and peat forests mostly explains the low population density (just under 5 million people, *i.e.*, approximately 15 inhabitants per km<sup>2</sup>) and its distribution along the province's main rivers and in river and sea ports. These include Riau's capital Pekanbaru (on the river Siak), Pagkalan Kerinci (on the river Kampar) and Dumai which lies by the Straits of Melaka and is the province's main port.

As Ford (2003:138-9) points out, Riau is one of Indonesia's wealthiest provinces: not only is it home to the third highest GDP per capita in the country after East Kalimantan and Jakarta, but it also ranks third in gross regional GDP outside Java. Other figures make it rank first in the archipelago such as its oil production which accounts for 60% of national oil production as well as being an important source of bauxite and tin. In recent years, Riau has also become Indonesia's largest producer of pulp and paper and a major player in the palm oil industry. However, in contrast with this wealth, the province's population is hardly any better off than anywhere else in the country – factor which has encouraged demands for greater autonomy and even independence (see section below on indigenist policies).

According to the latest statistics, Riau's forest estate (*kawasan hutan*) stands at 8.6 million hectares and is divided among forest estate categories as shown in Figure XI. Approximately 45% of Riau's forests are peat forests (*hutan gambut*); the remainder is divided roughly equally between flooded forests (*hutan rawa*) and *terra firme* forests (*hutan daratan*).



**Figure XI.** — Riau's forest estate broken down into its different categories (data provided by Badan Pusat Statistik Riau 2007; percentages were modified proportionally as they originally did not add up to 100%). Riau's total forest estate stands at 8.6 million ha.

## 4.2. HISTORY

### 4.2.1. Pre-Colonial Riau

Unlike Java, very little research has been carried out on the history of Riau. Two main sources of data have been used for this section, namely (i) a history of Riau (Lufti *et al.* 1977) compiled for the provincial government at a time when such regional research was fashionable in Indonesia, and (ii) a more recent study of the “People’s Struggle of Riau” since 1942, published locally in two volumes (Yusuf *et al.* 2006). Their description of Riau’s history remains sketchy for some periods and sometimes turns the events in favour of Indonesian or Riau nationalism; hence, some details need to be taken with caution.

Riau has little to offer to the tourist nowadays and most travellers go through the province on their way from Malaysia to the more picturesque Minangkabau landscape of nearby West Sumatra, or vice-versa. For many centuries this was very much the case for Riau which played more the role of a secondary trade route than a cultural, economic or political centre.

The province lies along the narrowest stretch of the Melaka Straits which have been the world’s busiest trading route for hundreds of years as they lie on the sea route from China, Japan and the Pacific on the one hand, and India, Africa and Europe on the other. These straits constituted the main entrance for both Arab and European traders and colonisers into the region, and have thus played a pivotal role in Southeast Asian geopolitics to this day. As a result, wealthy sultanates and cities have emerged over the centuries along the Melaka Straits, taking advantage of their strategic position, such as Melaka itself, Aceh, the sultanate of Johor and more recently Singapore.

Yet Riau never took advantage of such a strategic location until the past half century, mainly because of the flooded and peat forests of the myriad islands and meanders that made the coastline inhospitable. Whilst cities and states enjoyed the wealth of trade either further up the Sumatran coast (Medan, Aceh) or across the straits (Penang, Melaka, Singapore), Riau’s coasts mainly acted as a refuge for pirates which have dogged trade in the straits for centuries.

As a result the influence of nearby kingdoms and sultanates was strongly felt. The province was part of the kingdom of Sri Wijaya whose centre is believed to have been located in today’s province of Palembang in South Sumatra, and later had extensive trading links with the Majapahit Empire based in East Java. Given its location on the Melaka Straits, contact with Arab traders and thus Islam was earlier than in Java. Just like Aceh, by the mid-14<sup>th</sup> century Riau’s local leaders had officially been converted (Lufti *et al.* 1977:161-77).

It was barely more than a century and a half before the first Europeans arrived. The entrance of Europeans into Southeast Asia, marked by the capture of Melaka by the Portuguese (1511), seriously disrupted trade in the region to the benefit of other local powers such as Aceh and Johor which grew in importance as trade was diverted away from Melaka (Dinas Kehutanan, forthcoming:23). A century later, the Dutch had arrived and established their base in Batavia, on Java; yet their will to break up the Portuguese attempt to monopolise the spice trade in the region led them to seek local allies in Malaysia and Sumatra against the Portuguese. It was with their help that Melaka was attacked and finally fell to the Dutch in 1641. By the 1670s, the VOC (*Vereenigde Oostindische Compagnie* or Dutch East Indies Company) had set up a trading post in Bengkalis on the coast of Riau, mainly to control tin trade with Melaka.

The main interest for the Dutch as well as Chinese traders in Riau was not local for – as Colombijn (2005) points out – the historical transformations of the central third of Sumatra was marked during this period by the role of transportation. It is probably no coincidence that the term “Riau” is thought to originate from the Portuguese *rio* (river) following their discovery of the multitude of rivers along the western coast of the Melaka Straits.<sup>41</sup>

By the early 16<sup>th</sup> century European explorers were in contact with the wealthy Minangkabau kingdom of Limapuluh Koto (literally “50 cities” in Minang language) nestled in the mountains of West Sumatra. Establishing trade routes with this kingdom, however, was no easy task. There was the choice of carrying goods on the backs of mules through the mountains of West Sumatra and down steep slopes to the Indian Ocean, or sailing them down one of the major eastern rivers, through Riau and into the Melaka Straits. Obviously, the latter option was a much more attractive one, not only because transport was less arduous, but also because the Rokan, Siak, Kampar and Indragiri rivers acted as direct channels to the region’s main trading routes.

Thus as predicted by Colombijn’s (2002) hypothesis, local societies prospered depending on this mode of transport. Each river became home to its own sultanate, namely those of Rokan, Siak, Kampar (Sultanate of Pelalawan) and Indragiri, as local centres of power grew on riverbanks, notably Pekanbaru and Pangkalan Kerinci. These sultanates retained very close ties both with the Minangkabau and peninsular Malaysia; it is believed that the Minangkabau actually used Riau’s rivers as channels to emigrate from the South China sea to West Sumatra, which would explain their cultural affinities both with their neighbour and Malaysia. Many of these sultanates (*kerajaan-kerajaan*), some of which emerged before the arrival of Islam, were maintained nominally throughout the colonial period by the Dutch and the Japanese and only came to an end with the struggle for independence starting in 1945 (Dinas Kehutanan, forthcoming:28).

Likewise, the sultanate of Johor, based on peninsular Malaysia, also played an influential role on the smaller sultanates that made up the province now known as Riau. As a result, the predominant culture of Riau’s inhabitants is known as *Melayu Riau* (literally “Malay Riau”). Accordingly, the local language is considered the purest form of *Melayu Tinggi* (High Malay – essentially the language adopted as the national idiom by both Malaysia and Indonesia under the names *Bahasa Melayu* and *Bahasa Indonesia*) in all of Indonesia.

The 1824 Treaty of London between the Dutch and the British drew a line down the Straits of Malacca. To the east, Malaya would be part of the British Empire, and Melaka was accordingly handed over to Britain; in return the whole island of Sumatra would be “earmarked” for the Dutch, hence the transfer of the British trading post of Bencoolen (Bengkulu) to the Dutch on the southwestern coast of Sumatra. This treaty severed to a large extent the links between Riau and peninsular Malaysia and saw trade diverted towards Singapore, from which Riau was further than Melaka. From then on, Riau turned towards the Minangkabau for trade.

The Minangkabau were later to play a crucial role in the emergence of the concept of Indonesia – only second after Java itself. Given their taste for trade (and thus communication with the rest of the archipelago), for intellectualism and the proximity of their language to

---

<sup>41</sup> The Dutch later renamed the region *Rhiouw* and extended it to the archipelago of the Natuna Sea, thus introducing the final diphthong observable in the Malay version of the word today.

High Malay (*Melayu Tinggi*) which was to become the national language under the name *Bahasa Indonesia* (Indonesian language), the Minangkabau emerged as one of the great unifying powers of Indonesia.

#### 4.2.2. *The Dutch Takeover*

By then, however, the Minangkabau heartland and Riau had gone their own ways despite continuing ties with each other. In the 1870s the Dutch, on their road to expanding their empire to its fullest extent as stipulated by the Treaty of London, progressed further and further north up the island of Sumatra. Treaties were more or less peacefully signed with the Minangkabau and the sultanate of Siak which gave the Dutch the role of “protective force” and the Dutch moved on to tackle the more worrisome Batak and Acehnese of northern Sumatra.

The colonisation of Central Sumatra greatly weakened the trading ties between the Minangkabau and Riau as the Dutch undertook the building of a complex road system to link the Minangkabau heartland to the rest of the world, favouring the emergence of Padang, the main Minangkabau port on the Indian ocean, as the privileged outlet for the region’s trade. For several decades Riau thus went its own way, having lost its role as a regional trading channel. This isolation from its powerful Minangkabau neighbour was reflected in the fact that Riau was now mostly part of the residency of East Sumatra imposed by the Dutch, while its western and southern extremities were integrated into West Sumatra and Jambi respectively (Ford 2003:139).

Riau became a periphery again and underwent little change in the later decades of the Dutch East Indies, with the exception of a spillover effect from North Sumatra into northern Riau. By the turn of the twentieth century Medan (capital of North Sumatra) and its surroundings had become of crucial importance to the Dutch as the heartland of the colony’s plantations. Most of these consisted of rubber (*Hevea brasiliensis*), whose seeds had been stolen by the British in the Brazilian Amazon and grown in Malaya. Medan’s plantation industry took off after 1911, expanding far enough southwards to prop up the economy of Riau for a few decades.<sup>42</sup>

By the late 1930s, following the worldwide economic crisis that had hit Medan badly, Riau was little more than endless swathes of thick forest punctuated with a few quiet towns. The Dutch had divided Riau into three administrative residencies. As everywhere else in the Dutch East Indies, the Second World War brought abrupt change to Riau. The invasion of the Japanese in February 1942 preceded that of Java and was anticipated by an already large population of Japanese traders who played a large role in getting the populations of Riau to side with the Japanese against the Dutch.

When the Japanese entered Pekanbaru, the city was home to barely 3,000 people, many of whom were Dutch tradesmen involved in the management of plantations. With the Dutch quickly turned over to the authorities and interned, the Japanese took over the wealthier homes and many brought their families over. Although Riau was administered by the

---

<sup>42</sup> The Asian rubber boom replaced the Brazilian one and took full advantage of the huge demands in rubber for the growing car industry of Europe and North America.

Japanese authorities in Singapore, they were firmly settled in Riau which they found to be home to essential resources for the war effort: rubber and oil.

Yusuf *et al.* (2006) certainly recognise the terrible hardship that the people of Riau were submitted to during the three and a half years of Japanese occupation, notably in the form of *Romusha* (the Japanese term for forced labour) whereby Indonesians were sent as far as Thailand and Indochina (and many of whom never returned). Yet the authors also emphasise the positive effects of Japanese rule (2002:99-104). Among these, the creation of Riau's economy based on the exploitation of its own resources – which lasts to this day – is without doubt the most important part of Japanese heritage.

From the early days of Japanese occupation oil was exploited and the first pipeline was built from Minas to the previously sleepy port of Dumai which underwent a sudden growth spurt. With the extraction of oil and rubber, Riau came to be one of Japan's most strategic regions in the former Dutch East Indies and Pekanbaru accordingly grew four to fivefold to reach some 15,000 inhabitants by the end of the war. Moreover, the Japanese mobilised the population of Riau, created armed groups (*Hei Ho* in Japanese) and galvanised the will for independence from the Dutch in anticipation of Japanese defeat.

Unlike Riau archipelago which remained isolated from the rest of the world for weeks after the end of the war, Riau heard of Soekarno's proclamation of independence a mere ten days after it had been made in 17<sup>th</sup> August 1945. Yusuf *et al.*'s (2006) emphasis on the role of the people in defending Riau against two invasions of the Dutch during the Indonesian Revolution (1945-9) must be treated with caution, but by 1949 the region had become part of the new Republic of Indonesia. Riau had been made part of a Central Sumatran province with Padang as capital and which stretched from the Indian Ocean across the central strip of Sumatra to the whole of the Riau archipelago.

Unsatisfied with Soekarno's increasingly left-leaning policies, in December 1956 several army officers in Sumatra decided to galvanise local support against Jakarta and in favour of greater regional autonomy in the form of a Revolutionary Government of the Republic of Indonesia (*Pemerintah Revolusioner Republik Indonesia* or PRRI). The regions which appropriated this idea most were (i) those richest in natural resources – namely Riau and Medan – whose elite felt cheated when seeing all the income going straight to Jakarta, and (ii) those regions with the strongest will for independence from Jakarta, most notably Aceh. This near-uprising in turn encouraged other provinces in Indonesia to rebel such as Kalimantan and much of eastern Indonesia, thus pushing Soekarno to declare martial law and ultimately launch the period of Guided Democracy (*Demokrasi Terpimpin*).

### **4.2.3. Riau Province**

Calls for the division of the provinces of Central Sumatra (*Sumatera Tengah*) and North Sumatra (*Sumatera Utara*) into smaller units had been made as early as 1948, but with the impending threat of the fragmentation of Indonesia, Jakarta saw the creation of new provinces by far as the lesser of two evils. Aceh was separated from North Sumatra to form a special entity within the Republic of Indonesia, whilst Central Sumatra was divided into three provinces: West Sumatra (*Sumatera Barat*, capital Padang), Jambi (capital Jambi) and Riau (both the Sumatran part and the archipelago, rolled up into one province with Pekanbaru as its

capital). Yusuf *et al.* (2006) instead presents the creation of the province of Riau as the culmination of the struggle of the people of Riau to reach their own provincehood, following a series of official demands and meetings and congresses emphasising the cultural and economic specificities of Riau.

There undoubtedly was a political movement favourable to the recognition of Riau as a separate administrative entity that grew from the Japanese occupation onwards, and which has now developed into a political movement for the full independence of Riau from Jakarta. Yet it is also obvious that the military rebellion of the late 1950s acted as a window of opportunity during which Soekarno eventually agreed to the very first recognition of Riau as a single political entity in its history.

The creation of new provinces across Sumatra and Kalimantan in the late 1950s proved to be serendipitous in the face of the growing problems with Malaysia and the period of *Konfrontasi* (1962-5). The new provinces enabled public administration to be located nearer to Indonesia's borders with Malaysia both on the peninsula and on Borneo. Yet both Sumatran Riau and especially the archipelago suffered from a sharp drop in trade with the provinces neighbours, leading to a near-stagnation of Riau's economy that only oil production managed to maintain (Suwardi *et al.* 2006:27).

Riau also underwent its fair share of violence in 1965 and 1966 following the so-called "attempted coup" and takeover of power by Suharto. After several years during which PKI members and Communist sympathisers had tried to implement agrarian reform by often violent means, Islamic youth groups were mobilised alongside the military who eliminated all visible traces of Communism in Riau.

The New Order that the Suharto government had ushered in was firmly underway by the late 1960s and even more than elsewhere in Indonesia Riau saw a sharp and sustained economic growth. However, unlike the days of Dutch occupation when rubber had been the main export, Riau now relied on two main natural resources: oil and timber. Caltex had already been drilling for and producing oil in Riau since the end of the Second World War; Suharto's genuine innovation was the launching of a nationwide timber industry based on the selective exploitation of the country's huge expanses of natural forest following the creation of a concession regime with the 1967 Law on forestry.

Following the promulgation of this law two main islands soon came to the forefront of the timber industry. In Kalimantan, the provinces of East, Central and West Kalimantan all became large producers of timber, as did the provinces of Riau and Jambi on Sumatra. Much of Riau was thus divided into forest concessions where half a dozen timber companies extracted large volumes of timber, most of which was exported.

From 1969 to 1999 the social and economic development of Riau was managed through the implementation of six national five-year plans (*Rencana Pembangunan Lima Tahun* or *Repelita*) in 1969, 1974, 1979, 1984, 1989 and 1994 respectively. The growth of Riau's economy was maintained throughout the period with the exception of two blips. First, in 1985 international oil prices fell dramatically, leading to an economic crisis in Indonesia. In the eyes of the Suharto government, keeping full control of the country's oil-rich provinces became a priority. Despite the recent election of a new governor to the province (Ismail Suko) by the local Parliament (DPRD), the so-called democratic process was bypassed. The governor was thus unceremoniously replaced with one who was perceived as better towing

the party line, the army's General Mayor (*Mayjen TNI*) Imam Munandar, in spite of bitter complaints from the province's political elite.

The second interruption in Riau's fast-growing economy was a more sustained one which began with the drop in timber production beginning in the mid-1990s. By then, timber resources were simply running out as exploitation had far exceeded the forests' potential for natural regeneration. This coincided with the deep economic recession that Indonesia underwent starting in 1997 which saw the fall of Suharto. The province's economy quickly picked up again in spite of the devaluation of the Rupiah thanks to continuing oil exports and the replacement of timber production by that of pulp and paper which had exceeded the former by the turn of the new century – a trend further discussed in the next section.

However, the 1997 crisis had much longer-lasting effects on Riau's politics than anything else. Following long-standing claims, in November 2002 the national government agreed to give Riau archipelago its own status as a province: Law no. 25/2002 thus saw the division of Riau into two provinces: Kepulauan Riau and Riau (which includes the Sumatran part of the old province and retains Pekanbaru as its capital).

The late 1990s and early 2000s also saw the rise of a movement which for the first time claimed independence for Riau. Led by Prof. Tabrani Rab of the University of Riau, the political movement claims a history of struggles (against the Dutch and Japanese in the 1940s and for the formation of Riau province in the 1950s) and bases itself on the ethnic distinctiveness of the *Melayu Riau* people as well as the claim that the wealth of Riau's natural resources is siphoned off by the central government at the expense of the welfare of local populations. Riau's claims for independence remain the country's only such unarmed movement, unlike those of Aceh, Papua and East Timor (which succeeded in gaining independence in 1999). These issues are further discussed in the section on indigenism in Riau.

### **4.3. FOREST-RELATED POLICIES IN RIAU**

Riau has hit the headlines repeatedly in the last few years and has the unhappy privilege of having the highest deforestation rate in Indonesia with a staggering 5.6% per annum in 2006 – one of the highest figures (if not *the* highest figure) anywhere in the world. Figure XII shows that within 22 years, forest cover in Riau has fallen from 78% of the province's total surface area to 36%. The collapse of the timber industry and its substitution (both in terms of local economy and land use) with pulp and paper and palm oil production are the primary cause of the exceptionally high deforestation rates that Riau has witnessed in the past few decades.

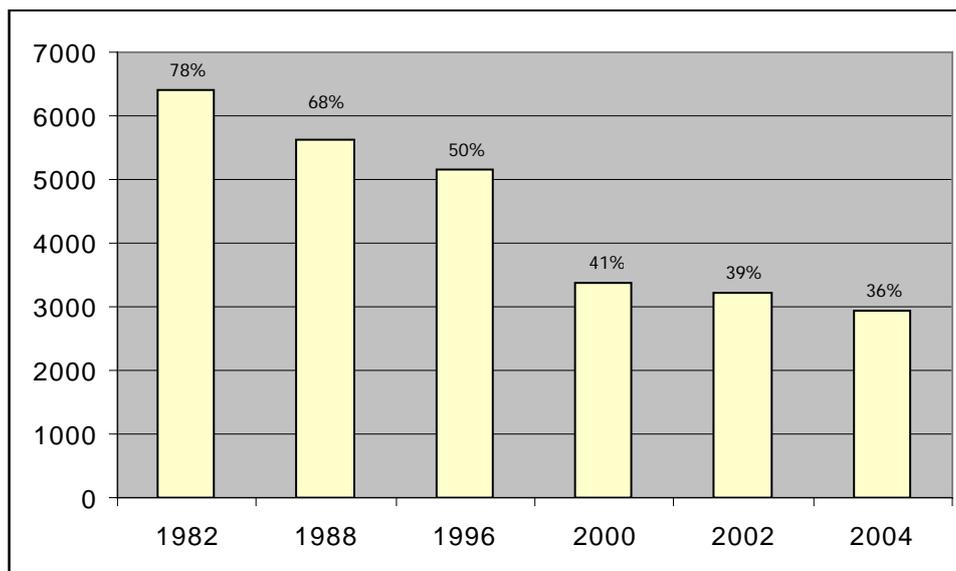


Figure XII. — Changes in forest cover in Riau between 1982 and 2004 (in thousands of hectares on the Y axis and in percentage of total land surface area) (after Jikalahari undated:4).

#### 4.3.1. The Rise and Fall of the Timber Sector

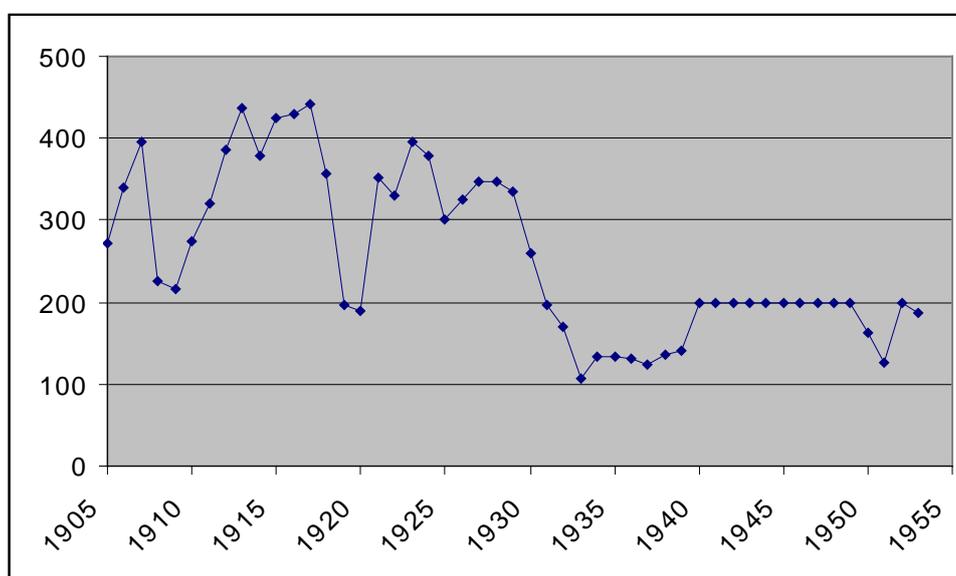
The rise and fall of the timber industry in Riau typifies the sector's evolution on a national scale. From an outsider's perspective Riau has always been overshadowed by East Kalimantan which has been the focus of studies on the Indonesian timber industry. Fewer data are thus available for Riau than for East Kalimantan; yet the great advantage of studying Riau over East Kalimantan is that the former epitomises the crisis that the timber industry has undergone in recent years, whereas despite a fall in production the timber industry in East Kalimantan survives to this day. The main sources of information for this section are provided by a history of forestry in Riau (Dinas Kehutanan, forthcoming) and a number of interviews with the timber sector.

The compilation of data into a history of forestry in Riau by the forestry service itself (Dinas Kehutanan, forthcoming) traces the management of the province's forests back to pre-Islamic days. It is believed that the Sri Wijaya empire based in southern Sumatra already benefited from Riau's forest products, notably timber which was also a source of trade with Indian and Chinese merchants.

At the height of Melaka's power in the region, the city's laws applied to forests on both sides of the straits and already regulated the extension of rice paddies along the East Sumatran coast. The fall of Melaka to the Portuguese created a political vacuum which saw the emergence of local sultanates such as those of Siak, Indragiri and Pelalawan, each of which had its own book of laws (*kitab undang-undang*) concerning forests. The forestry service's "official" history quotes a typically poetic and idealised local Malay *adat* law: "*Rimba dijaga dengan adat, rimba dipelihara dengan lembaga, rimba ditilik dengan undang*" (the forest is guarded with tradition, taken care of by institutions and supervised by laws) (Dinas Kehutanan, forthcoming:33). The book also states that during this period of sultanates local populations were free to use the forest for their own subsistence, including timber, but

whoever felled a tree home to a beehive (*pohon sialang*) had to plant another ten. Riau's forests were thus "sustainably" managed (*dilestarikan*), the book points out.

Despite the gradual takeover by the Dutch from the 1820s to the 1870s, the colonial power insisted on maintaining *adat* law over the majority of the region's forests and the local sultanates retained their power over forests in eastern Sumatra and Aceh. The situation thus differed fundamentally from Java where all the forests and timber plantations had been made part of a public forest estate. Despite this, the Dutch gradually developed a timber industry centred on mills built along the coast (an area known as the "timber mill region" or *wilayah panglong*) and in response to growing demand from Singapore. Provision of timber relied on individual loggers who would bring the timber themselves from surrounding forests, which led to an exhaustion of timber along the coastline in the first half of the twentieth century. Production levels remained constant until the early 1930s when production fell sharply due to the worldwide economic crisis (Figure XIII); production figures from the 1920s were only reached again in the 1960s.



**Figure XIII.** — Timber production (in thousands of m<sup>3</sup>) in wilayah panglong in Riau between 1905 and 1953 (data provided by Dinas Kehutanan, forthcoming:71-2. This source estimated production in the 1940s to have been around 200,000 m<sup>3</sup> per annum but has not supported this claim by any evidence).

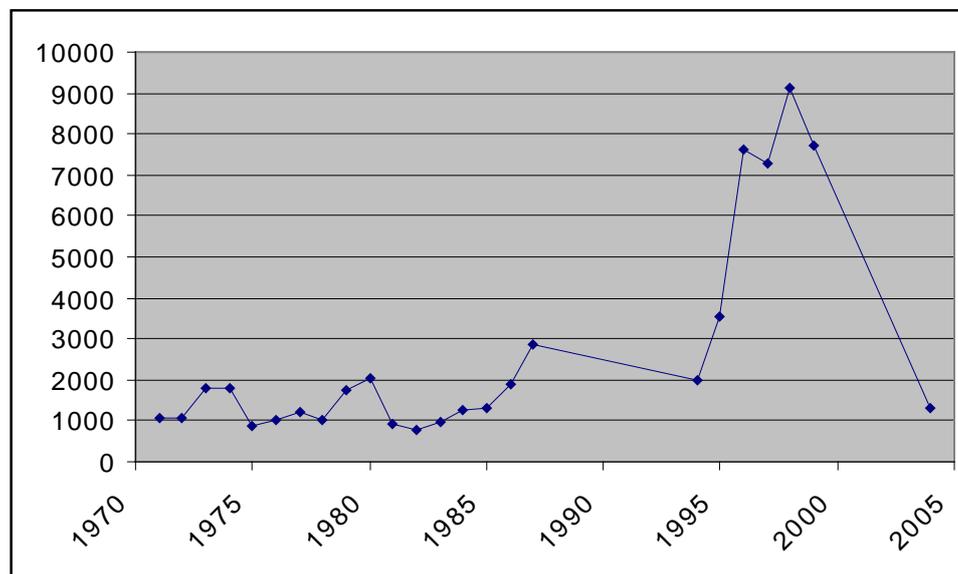
Little information is provided by Dinas Kehutanan (forthcoming) on the period between the early 1950s and the beginning of the New Order. Little is known to have changed although there existed plans ever since the eve of the Japanese invasion to expand the timber industry to the entire province which was still covered in forests. The Dutch, Japanese and forestry service under Soekarno, however, hardly went beyond Bengkalis on the coast and in practice forest management was not wrested from the hands of the Sultanates and resident populations until Suharto came to power.

As elsewhere in the Outer Islands, the launching of the New Order (*Orde Baru*) spelled huge change for Riau's forests. Suharto's promulgation of the national Basic Forestry Law (*Undang-undang pokok-pokok kehutanan*) no. 5/1967 designated 143 million hectares of

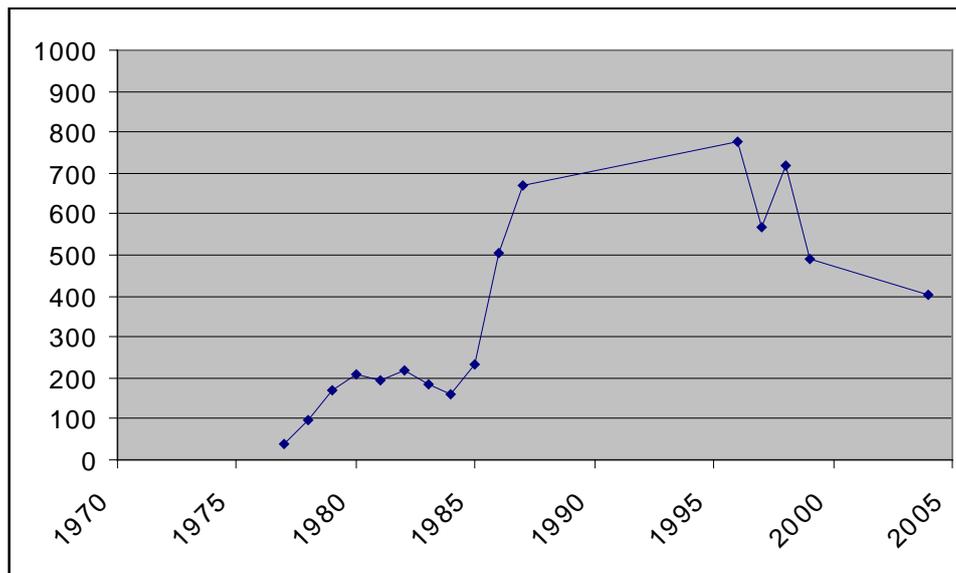
forests in the country as forest estate (*kawasan hutan*), thus applying Java's system of land tenure to the entire archipelago. However, unlike Java where a nationalised company remained in charge of timber production, the law stipulated that production forests would be divided into concessions (*hak pengusaha hutan* or HPH) where private companies could operate.

The management of Riau's forests thus underwent a profound transformation. Their large surface area, their wealth in commercially valuable species (notably of the dipterocarp family, especially meranti [*Shorea* sp.]) and location along navigable rivers with easy access to international markets quickly favoured Riau as one of Indonesia's greatest timber producers, along with Jambi, West, Central and East Kalimantan. By the early 1970s production had shot above a million cubic metres of roundwood a year. The ban on logs imposed by Suharto in 1982 kept figures below 3 million m<sup>3</sup> until the mid-1990s when they finally grew in spite of the ban. At its peak at the very end of the New Order, roundwood production had reached a staggering 9 million m<sup>3</sup> per year according to Dinas Kehutanan (forthcoming:88) (Figure XIV).

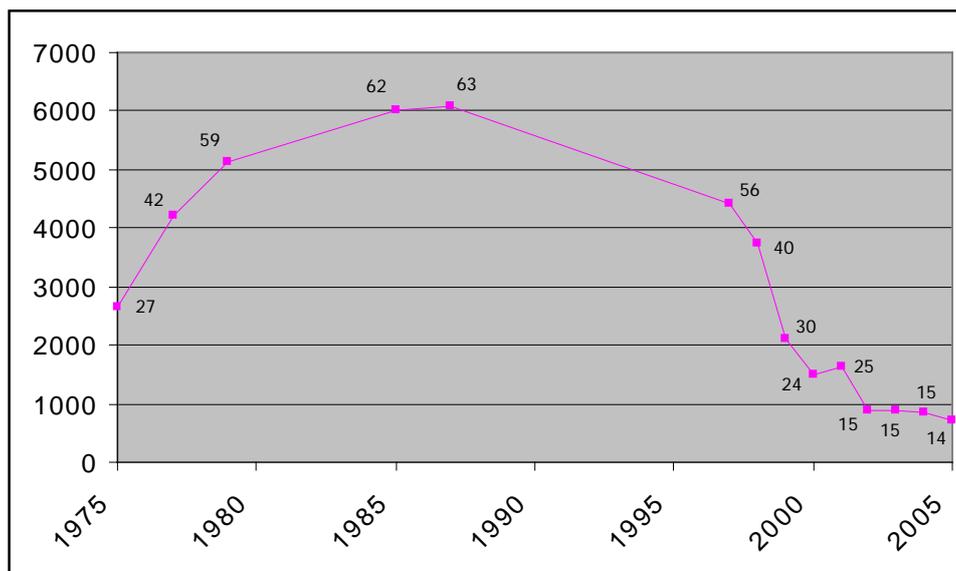
Transformed products such as sawnwood remained relatively low until the mid-1980s when the 1982 log export ban encouraged an increase above 200,000 m<sup>3</sup> per year. As shown in Figure XV sawnwood production peaked around the same time as roundwood production before falling sharply during *Reformasi* for reasons explained below. Finally, Figure XVI shows the corresponding rise and fall of the number and surface area of forest concessions (HPH) which constitute the backbone of forest management dominated by timber production.



**Figure XIV.** — Roundwood production (thousands of m<sup>3</sup>) in natural forests of Riau Province between 1971 and 2004 (after Dinas Kehutanan Riau forthcoming:88).



**Figure XV.** — Sawntwood production (thousands of m<sup>3</sup>) in natural forests of Riau Province between 1977 and 2004 (after Dinas Kehutanan Riau forthcoming:89).



**Figure XVI.** — Total surface area (in thousands of hectares, on Y axis) and number of concessions (HPH) in Riau 1975-2000 (after Dinas Kehutanan, forthcoming:89-90 and Departemen Kehutanan 2002, 2003, 2004, 2005, 2006).

The Riau-based timber industry looks back at the period 1985-1997 as its heyday when production increased year after year and concessions expanded continuously, much in line with the timber industry on a national scale. However, many among local populations recall the period as one of oppression when the labelling of the land they lived on as concessions was imposed on them by logging companies. There is no doubt that during the Suharto regime traditional rights of local populations were overlooked as the concession system officially did not provide any space for the rights of these populations to forest resources.

It is also very likely that numerous human rights abuses took place in cases where revolts by local populations were squashed by the army (ABRI) which almost invariably acted in favour of logging companies, especially as members of the army itself often had vested interests in the timber industry. At that time the media were under tight control and relaying this type of information was strictly forbidden. The only source of data on such events is the collective memory of villagers. One must also remember, however, that in many cases logging companies and local populations reached unofficial agreements about the rights of the latter to forest resources for subsistence only; in most cases this was a practical means for logging companies to prevent physical conflict with local populations.

This period came to an abrupt end in 1998. As shown in Figures XIV, XV and XVI the sharp fall in roundwood and sawnwood production as well as the number of HPHs at the turn of the century epitomises the collapse of the timber industry that has been observed across Indonesia at the turn of the twenty-first century. There are several reasons for this. On the short term, 1998 corresponds to the fall of the Suharto regime to which the concession system had been intricately linked, both in its creation in the late 1960s and in its maintenance, as the distribution of concessions on a discretionary system helped Suharto maintain his family's personal wealth as well as that of his network of *cukong* cronies, among whom Bob Hasan was key in the timber industry.<sup>43</sup> As a consequence of the fall of the regime, therefore, the network of actors controlling the timber industry also collapsed with Bob Hasan seeking refuge in Singapore before being arrested and imprisoned.

However, Suharto's fall also brought about two additional changes of major impact on the timber industry. First, the 1997 economic crisis which had triggered Indonesia's political events in the first place was worsened by the political confusion and violence of the late 1990s, further contributing to the demise of the timber industry as one of the country's main sources of foreign income. Secondly, the legitimacy of the army and in particular its dual function (*diwfunksi*) was put into question.<sup>44</sup>

By the turn of the century the army was no longer intervening in conflicts between logging companies and local populations which had greatly escalated in violence as a consequence. There were several reports of lynching and even murders of company staff in the field as well as villagers themselves. Even staff members of Riau forestry service (*Dinas Kehutanan Riau*) witnessed violence and feared for their safety. In many instances logging activities simply ground to a halt until violence waned, but to this day many logging companies have been unable to resume timber production because of this very problem.

Finally, a longer-term factor makes it improbable that Riau's timber industry will ever pick up again: the accelerated logging that took place over a 15-year period led to a near exhaustion of the source itself well beyond sustainable levels – as a result, the province has simply run out of timber and is unlikely to increase its production again for the next few decades at least.

Since the early 2000s two main sources of timber are found in Riau: (i) selective logging before land clearance or conversion to plantations (known as *tebang habis* or “logging until exhaustion”), although in many cases even commercially valuable timber is used to feed pulp mills for paper production rather than sawmills for sawn wood; and (ii) the remnants of the timber industry which in 2007 were limited to 16 concessions, 15 of which were inactive.

---

<sup>43</sup> For more information on the politics of the timber industry under the Suharto regime, please refer to the section on timber production policies at the national level.

<sup>44</sup> For more information please refer to the section on military policies at the national level.

Only one timber company, Diamond Raya Timber (DRT), has managed to maintain its operations in the face of all the obstacles mentioned above.

Despite an annual allowable cut of 74,000 m<sup>3</sup> in 2007, DRT has only produced around 50,000 m<sup>3</sup> a year since 2005. When it first operated in Riau the company got a permit to operate in a 115,000 ha concession for 20 years from 1979 to 1998, which was renewed for a further 20 years although 42,000 ha of the concession was earmarked for conversion. It also owns a sawmill. Staff have complained of several problems which greatly limit their activities, notably continued conflicts with local populations and thus a number of NGOs among which Hakiki is one of the most active. Also, extra-legal timber production in Riau constitutes a major competitor which has ultimately driven all other companies out of business because of lower prices. Finally, repeated police operations to prevent illegal logging in the province have also affected legal production as their lack of expertise imposes considerable costs on the companies through constant checks:

The police in Rokan Hulu, Kampar and Pelalawan don't know all aspects of environmental law. They get easily confused, and some legal timber ends up getting labelled as illegal and vice-versa. [Diamond Raya Timber] was already examined twice last month by the police who went into the field to see where the logs came from. Before, things were easier when the Forest Department acted and was supported by the police, but now this is the other way round.<sup>45</sup>

Interview with a representative of Diamond Raya Timber, 1 March 2003

Had it not been for DRT's choice to produce FSC certified timber, it is very likely that Riau's last timber company would also have stopped operating. As early as 1996, DRT volunteered for a pilot project with the British Overseas Development Agency (ODA, now known as DFID) which involved participative mapping with local populations and social forestry components. Following the success of this project, the company applied for LEI certification in 1998 and was certified the following year. In 2001, it got double certification (FSC and LEI) which was renewed in 2006 for another five years.

Approximately 90% of timber produced by DRT is exported to foreign markets, especially European ones – a common occurrence for FSC-certified companies given that internal markets in Indonesia are unwilling to pay the extra costs. As a consequence, DRT not only survived the economic crisis of the late 1990s but also managed to get renewals of the rights to their concessions every year by the Forestry Service (*Dinas Kehutanan*) despite the climate of heightened scrutiny to prevent illegal logging. DRT's prospects of expanding remain very limited, however, as very few concessions still have sufficient standing stocks to make logging operations worthwhile.

---

<sup>45</sup> “Polisi di Rokan Hulu, Kampar dan Pelalawan tidak tahu semua aspek peraturan lingkungan. Mereka sering bingung, oleh karena itu ada kayu legal yang jadi ilegal dan terbaliknya. DRT sudah diperiksa dua kali pada bulan yang lalu, polisi mau tahu kayu ini dari mana. Mereka sampai lapangan. Sebelumnya semua lebih gampang karena Dephut yang memeriksa dengan polisi, tapi sekarang itu terbalik”.

### 4.3.2. *The Growth of the Pulp and Paper Industry*

In the past 25 years Riau has witnessed a tremendous boom in a new industry – that of pulp and paper. Its growth has been at the centre of considerable controversy in the last decade, both from an ecological viewpoint as its expansion has taken place at the expense of natural forest, and from an economic viewpoint as the industry's two main companies, APP and April, appear to have adopted highly risky strategies to sustain their rapid expansion.

Until the early 1980s paper production in Indonesia remained low; the government would not have wanted it any other way as it was a useful means of limiting printed media and regulating its content (through the issuance of annual paper allowances). However, the 1982 ban on exporting logs imposed by Suharto, officially as a means of promoting the national timber transformation industry and adding value to timber exports, also had the effect of giving a boost to the country's tiny paper industry. A handful of paper mills soon sprouted up in the main forest-rich provinces and Riau became home to two main companies:

- (i) Asia Pulp and Paper (APP), part of the Sinar Mas Group which started activities in the pulp and paper industry by opening a small paper mill in East Java as early as 1972 (Pirard & Rokhim 2005:14). Sinar Mas is owned by an Indonesian family, Widjaya (but is based in Singapore) and is among the largest companies in the country; and
- (ii) Riau Andalan Pulp and Paper (RAPP or Riaupulp) and Riau Andalan Kertas (Riaupaper), are 98.5% and 99.8% owned by the Singapore-based company APRIL which began large-scale plantation developments in 1993. RAPP now operates the largest mill in the country.<sup>46</sup>

Riau quickly became the focus of this fast-growing industry. Its decaying timber industry meant that vast tracts of forest became available for conversion under the existing legislation that stipulated that any production forest (*Hutan produksi*) which had standing stocks of commercially valuable timber beneath 20 m<sup>3</sup> per hectare was eligible to become production forest for conversion (*Hutan produksi konversi*). By the mid-1990s the timber industry had exhausted much of Riau's forests and many HPHs now fell under this category. Also, Riau's location along the Melaka Straits also meant that access to international markets – especially that of China whose demand in paper was growing exponentially – was little more than a stone's throw away. As Barr (2007) explains, Riau now accounts for a large majority of pulp and paper production in the country although other provinces are currently on the rise (such as in Kalimantan).

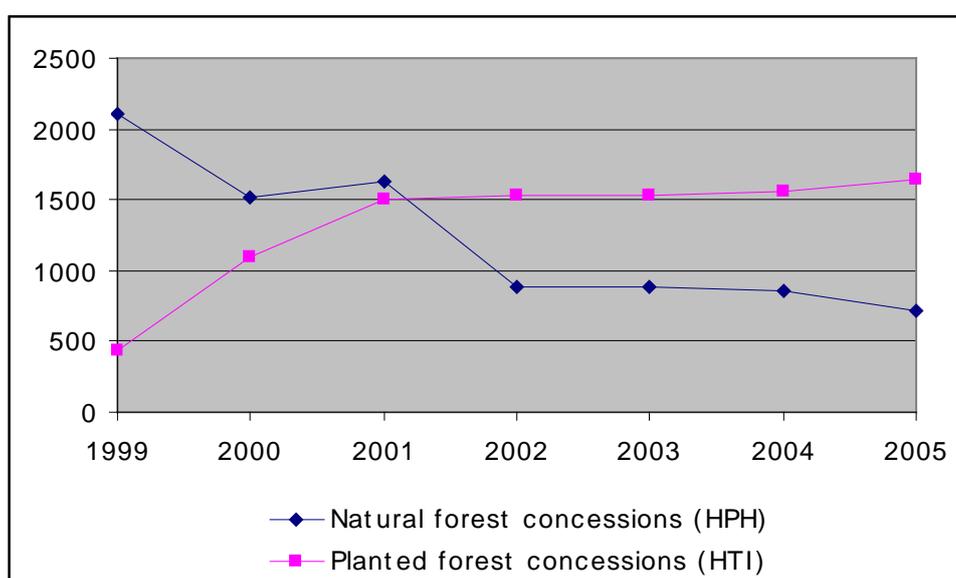
The pulp and paper industry in Riau functions as follows. Its natural resources that act as fodder for its mills are provided for by wood from (i) conversion concessions (*Hutan produksi konversi*) where *all* the timber is used; this type of wood is known as mixed tropical hardwood (*kayu campuran*); and (ii) planted forest concessions (*Hutan tanaman industri* or HTI)<sup>47</sup> where the species *Acacia mangium* is generally planted (*Acacia crassicarpa* and eucalyptus being the main alternatives, although their yield is smaller). This species is known

<sup>46</sup> For more information on APP and RAPP see Barr (2001:72-7).

<sup>47</sup> Although since Regulation 34/2002 they are officially known under a different name (IUPHHK-HT) – just like HPHs are now known as IUPHHK-HA – this document will refer to planted forest concessions as HTI (and likewise natural forest concessions as HPH) for simplicity's sake and to reflect the continued use of the term in common Indonesian language.

to have an extremely high growth rate as they can yield 25 to 30 m<sup>3</sup>/ha/year and can be harvested every seven years. It is uncertain, however, how many harvests the land can undergo and if such high yields can be maintained over more than a few decades.

Figure XVII very much illustrates the expansion of the pulp and paper industry, as witnessed by the growth of HTIs, and the corresponding fall in timber production from natural forests (HPHs). When asked about the inversely proportional relationship between the two industry neither the representatives of the timber nor the pulp and paper sectors acknowledges the link between the two and prefer emphasising that both industries occupy distinct niches as they produce different goods and thus target different markets. Yet there obviously remains a struggle over access to land which constitutes a finite resource, epitomised by the expansion of HTIs and shrinking of HPHs.



**Figure XVII.** — Changes in surface area of natural and planted forest concessions (HPH and HTI) between 1999 and 2005 in Riau, in thousands of hectares (data compiled from Barr 2001:65, Departemen Kehutanan 2002, 2003, 2004, 2005, 2006, Dinas Kehutanan forthcoming:90 and Dinas Kehutanan Riau 2007:2). These figures are to be treated with suspicion as Barr (2007) has suggested an annual growth of HTIs by some 50,000 to 75,000 ha over the first half of this decade, which means that the data provided by the Riau Forestry Service (Dinas Kehutanan Riau) have underestimated the growth in surface area of HTIs in the province.

Today Riau is home to the country's two largest pulp mills, Indah Kiat P&P (which belongs to the Sinar Mas Group) and Riau Andalan P&P (part of APRIL). Back in 2001, CIFOR-based researcher Christopher Barr was already seriously questioning the long-term sustainability of the growth of the pulp and paper industry on two accounts. The author underlined the financial risk by stating that

The high levels of capital investment in large mills means that they incur substantial costs if their operations are, for any reason, disrupted<sup>48</sup> (...). A second factor that magnifies the financial risks of social conflict for pulp and paper producers is their need to secure long-term control over large plantation areas. To establish a sustainable fibre supply for its mill, a pulp producer must not only be able to plant a sufficiently large area on an annual basis, but also to harvest each area planted when the trees mature seven to eight years later.

Barr (2001:95)

In other words, the pulp and paper industry appears to have adopted the same strategy as the timber industry did in the 1980s and 1990s: by building massive pulp and paper mills it ran the risk of overcapacity, which in turn strongly encouraged growth in the amount of wood needed, thus putting pressure on resources. What concerned Barr most was that for example in the case of RAPP “legally available sources of mixed tropical hardwood will be exhausted at RAPP’s concession and site by 2005” (2001:76). Even the companies in question recognised this as Indah Kiat (APP) stated in its annual report that its plantation would supply “substantially all” of the mill’s wood requirements by 2004 (PT Indah Kiat 1999; Barr 2001:73).

Half a decade on, the pulp and paper industry is still expanding at a considerable rate. Two reasons may be provided to explain why Barr’s predictions turned out to be incorrect. First, Indonesia has enjoyed relative political and economic stability for the past few years, which has maintained a certain amount of security for foreign investments that underpin the sector’s growth. This is not to say that the financial risk has disappeared: for example, as Pirard & Rokhim (2005:iv) point out, APP’s growth also rests on a situation of poor law enforcement and the absence of a cross-border insolvency regime in the Asia-Pacific region. The authors add that such conglomerates have used debts to prioritise the owners’ interests rather than those of minority shareholders and external creditors, making the company a case of “debt entrenchment”.

Secondly, although mixed tropical hardwoods are no longer virtually the only source of fibre for the province’s two mills, they still account for some 60% of the total figure, which contradicts Barr’s predictions (2001:76). This is simply due to the fact that instead of focusing solely on the forests – natural and planted – it was in control of in the late 1990s, RAPP and APP have simply expanded their operations to other natural forests in the province to maintain their mills’ high capacity, much to the detriment of natural forests. Today the total surface area of HTIs in Riau stands at a staggering 1.9 million hectares and APRIL has even aimed at increasing its area of operation by 60,000 ha per annum in the coming years (Eliezer Lorenzo, personal communication, 2 March 2007).

This expansion is illustrated in Figure XVII above which is based on official figures that nevertheless seem to underestimate the expansion of HTIs. Faced with complaints about the environmental degradation due to the expansion of the industry, the national government decided to modify the legislation. In 2006, a new rule stipulated that only HPHs with a standing stock of 5m<sup>3</sup>/ha or less of commercially valuable timber could be clear-cut to become HTIs (as opposed to an original figure of 20m<sup>3</sup>). Yet even this new measure does not seem to have had much of an effect on the industry which continues to rely on ever increasing expanses of forest, both natural and planted.

---

<sup>48</sup> Barr (2001) was writing at a time when political violence and instability both in Jakarta and in the field were still rife, thus increasing the risk of any financial investment in Indonesia.

In order to sustain its growth, the pulp and paper industry in Riau is also strongly believed to have erred on the verge of (and according to some well beyond) legality. In order to overcome the new threshold of 5m<sup>3</sup>/ha, for example, some consultants in charge of evaluating the standing stock of remaining HPHs claim that they were repeatedly offered large amounts of money to reduce the amount of standing stock in their report to the Forestry Department (*Departemen Kehutanan*). On other occasions and up until 2007, both APP and RAPP have been accused of buying illegally-logged timber to feed their mills (*The Jakarta Post* 24 February 2007:9); this timber would have had a much higher value if sold as such, but recent police operations to prevent illegal logging have made it virtually impossible to transport or market logs in Riau.

Probably the longest standing claims of illegal activities in the pulp and paper sector have focused on the allocation of small-scale conversion concessions (known as IPPK or *Izin pemungutan dan pemanfaatan kayu*) to RAPP and APP. Unlike HTIs, these permits for areas of up to 100 ha created by Regulation 6/1999 were delivered by forestry services at *kabupaten* level rather than the Forestry Department. In practice, however, local forestry staff were unaware of or simply ignored existing concession maps, which led to considerable overlaps with other areas and ended up in numerous disputes, hence the withdrawal of this category in 2002 with Regulation 34/2002 (Barr *et al.* 2006:51).

Both RAPP and APP took advantage of this temporary measure to expand their areas of operation, and it has been proven that even well after Regulation 34/2002 was introduced at least RAPP carried on receiving additional IPPKs, including some dated 2003. Representatives of the company themselves have recognised this but they claim that the implementation of Regulation 34/2002 took several months to be implemented and that so long as these IPPKs were issued by the local forestry service they remain fully legal (despite being in blatant violation with national legislation). In such a situation, it is difficult to judge whether RAPP was acting legally or not; in any case, however, it is obvious that the company was well aware of the discrepancy between national and local legislation and took full advantage of it.

A more recent controversy over a grey area of legislation has focused on the conversion of peat forests (*hutan gambut*) to HTIs. Most stakeholders agree that rules internal to the Forest Department in Jakarta stipulate that peat forests with a depth of peat above three metres may not be converted to HTI, yet the environmental network of NGOs has repeatedly identified areas where APRIL has planted *Acacia mangium* on top of peat up to 10 metres in depth. When confronted with this accusation, APRIL representatives claim that this rule forbids the conversion of peat forest to plantations on peat deeper than three metres *and* on slopes – a condition that remains unheard of even in the Forest Department itself.

Whether the pulp and paper industry's economic and geographical expansion in Riau has been legal or not, it has undoubtedly had a massively negative impact the province's natural forests and greatly contributed to the exceptionally high deforestation rates Riau has witnessed in the last decade. Most *Acacia* forests have been planted where natural forests once stood, leading to a growing environmental campaign to denounce the environmental disaster of which pulp and paper has been one of the culprits.<sup>49</sup>

---

<sup>49</sup> The ecological impact and environmental mobilisation surrounding the expansion of the pulp and paper industry is described in greater detail in the section below on Riau's conservation policies.

The industry has repeatedly been requested to reduce its percentage of mixed tropical hardwoods and favour plantations for pulp production so as to prevent further damage to natural forests. Back in 2001 industry representatives appeared to be fairly unconcerned by the environmental dimension of their activities, as shown by the following quote:

Of course we are bringing our plantations online. But we're in no rush to switch our mill to *Acacia* if there are still cheap supplies of mixed tropical hardwoods (*kayu campuran*) available. Why should we be? As it stands, we have access to a very low-cost supply of raw materials. Developing good plantations not only involves higher costs, but also a good deal of risk – the trees have to be there for harvest seven years from now. Right now, our HTIs are essentially an insurance policy, and we will cash it in when the [mixed tropical hardwoods] are no longer available.

A financial officer of one of the groups of the pulp and paper industry  
quoted in Barr (2001:68)

Six years on the discourse is very different. In fact, as early as 1999 RAPP/APRIL had already set up an environment department in answer to Finnish timber company UPM Kymmene's demands for benchmarks in environmental and social management prior to establishing a partnership between the two companies. Consulting company SGS also carried out an audit around the same period with three recommendations: (i) establish a department within the company to ensure better environmental performance; (ii) prepare for certification in the near future; and (iii) establish an environmental benchmark in the form of ISO 14000.

The first two recommendations had been implemented by 2000, yet certification was a thornier issue as FSC refused to certify forest plantations that had been established over natural forest after 1994. Unfortunately for RAPP/APRIL, in 1994 the company was still being set up and began its plantation programme only in 1995. The company ultimately benefited from the recent divorce between FSC and LEI<sup>50</sup> since the latter abolished the 1994 cut-off rule and by January 2006 RAPP/APRIL saw part of its production certified. The company has created much publicity over its certification to counterbalance its dismal environmental record but LEI representatives in Riau complain that the company systematically fails to mention the fact that only a mere fraction of its plantations benefit from certification. As an APRIL representative put it in 2007,

We are the only pulp and paper company to have LEI certification. That means very much to us although LEI is not well recognised because powerful NGOs have bombarded Europe with FSC instead (...). In the context of Riau we are the leader in environmentally and socially aware management. We have a competitor [APP] which is at least five years behind us in terms of environmental practices. We used to be very closed but we have since transformed into a company where one of our management practices is transparency. Being in the limelight is not an easy thing; there are advantages and disadvantages, but we look at it in positive terms: it's a risk that has to be taken.<sup>51</sup>

Interview with a representative of APRIL, 22 February 2007

<sup>50</sup> LEI (*Lembaga Ekolabel Indonesia*) is a certification system for forest products specific to Indonesia. For more information please refer to the part on national forest-related policies.

<sup>51</sup> Interview in English.

On the local scale, RAPP/APRIL's environment department has also established dialogue with environmental NGO WWF and has recently attempted to apply the HCVF<sup>52</sup> concept to its forest management. The company has also come up with a new model of forest conservation in Riau in which it very humbly plays a central role. This issue is further discussed in the section below on Riau's conservation policies and the focus on Tesso Nilo National Park.

Despite these advances in environmental terms, which many observers believe are more cosmetic than profound changes, the pulp and paper industry continues to be (somewhat justifiably) perceived as the main villain in the destruction of Riau's forests.

### 4.3.3. Agricultural Policies

The pulp and paper industry is not the sole culprit for large-scale deforestation in Riau. The province's agricultural sector has also been on the rise with a growth of plantations of several key species such as rubber trees, coconut, coffee, sago and above all oil palm. In recent decades the meteoritic growth of oil palm (known as *kelapa sawit* in Indonesian) has also taken its toll on the province's forests.

Since the creation a Forestry Department in and of itself in Indonesia, plantations have been divided between "forestry" and "agriculture". On the one hand, natural and plantation forests for fibre production (timber or pulp) fall within the realm of "forestry" and are thus regulated by the Forestry Department and Services (*Departemen/Dinas Kehutanan*). On the other, other tree plantations such as oil palm, rubber, cocoa, coffee, sago and coconut which are used for other products than fibre fall within the sphere of agriculture and are managed by the Agricultural Department and Services (*Departemen/Dinas Pertanian*) which often have a subsection for "plantations"<sup>53</sup> (*Dirjen Perkebunan* at the national level and *Subdinas Perkebunan* at province and *kabupaten* levels). In Riau, however, plantations occupy such an essential part of the economy that the province is now home to a fully-fledged Plantations Service (*Dinas Perkebunan*).

The institutional divide in Indonesia between forestry and agriculture is also reflected on the ground. In theory, unlike plantations used for their fibre (timber or pulp and paper), oil palm and other "agricultural" trees can only be grown outside the forestry estate (*kawasan hutan*). One would therefore expect the expansion of such industries not to affect forest cover in Riau or anywhere else in the country, yet in practice its impact on forests has been felt all across the province.

The regulation of land allocated to oil palm plantations remains a complex one. For a company to have access to land it must obtain (i) a location permit (*izin lokasi*) from the local Bupati; (ii) a plantation management permit (*izin usaha perkebunan* or IUP) from the Plantations Service (*Dinas Perkebunan*) at *kabupaten* level, and (iii) a plantations concession

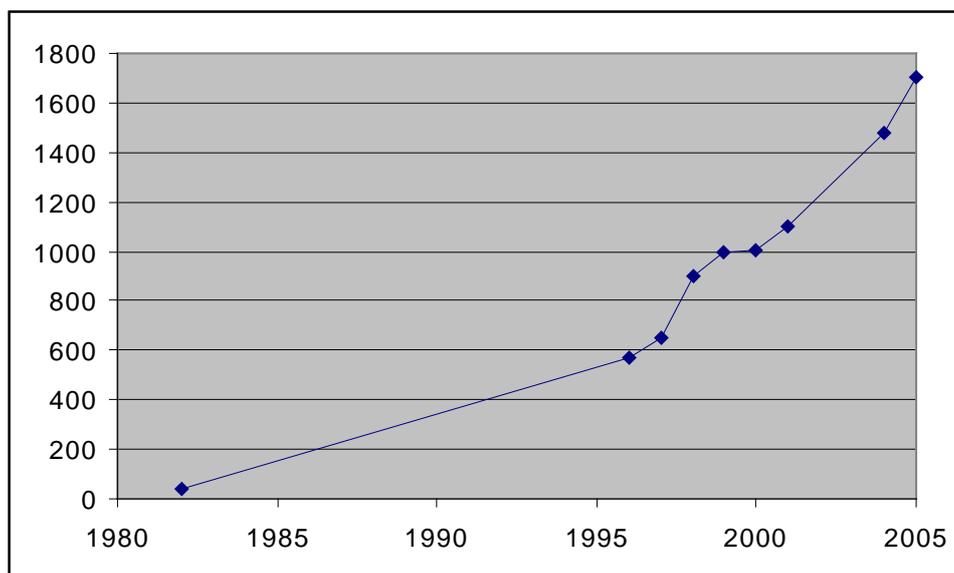
<sup>52</sup> HCVF (High conservation value forests) is an operational concept devised by WWF to integrate conservation priorities with land-use planning, advocacy and purchasing and investment policies. The concept is discussed in greater detail in the section on Riau's conservation policies.

<sup>53</sup> Despite the fact that it also refers in English to the cultivation of non-tree species, the use of the term "plantation" in this study will be the direct translation of the Indonesian term *perkebunan* which refers to the cultivation of tree species for non-fibre products (rubber, palm oil, cocoa, coffee, coconut, etc.).

(*Hak guna usaha* or HGU) delivered by the national, provincial or *kabupaten* level depending on its size. WWF representatives claim that 21% of Riau's large palm oil companies do not have a HGU – which admittedly is difficult to obtain – which means that a large part of the sector is effectively unregulated.

Until the early 1980s, plantations were rare in Riau, apart from a tradition of rubber tree plantations that dates back to the Dutch occupation. In stark contrast, the province's northern neighbour, North Sumatra (*Sumatera Utara*) has been the heartland of Indonesia's plantations industry ever since the Dutch introduced rubber and oil palm there from across the Melaka Straits to emulate the growth of plantations in British Malaya.

However, with transmigration programmes initiated in the 1970s, a large number of migrants (*pendatang*) arrived from the overpopulated areas around Medan (North Sumatra) to underpopulated Riau, bringing with them the tradition of planting oil palm. In the 1980s and 1990s the oil palm industry grew exponentially in Riau, buoyed by the arrival of large companies in search of diversification such as the Surya Dumai Group which originally focused on timber production. From a humble 40,000 ha in 1982, the area devoted to oil palm in Riau gone well over 1.5 million hectares at the end of 2006 (see Figure XVIII) and the endless dark green swathes of neatly lined up palms is now a common sight throughout the province. In 2006 Riau produced four million tonnes of refined palm oil, *i.e.* a staggering 25% of Indonesian production in terms of surface area. It now ranks second in the province's economy after oil (*minyak tanah*) – of the fossil fuel rather than the edible type.



**Figure XVIII.** — Growth of oil palm plantations in thousands of hectares in Riau between 1982 and 2005 (based on data provided by Jikalahari 2006a:6 and personal communications with Dinas Perkebunan Riau representatives on 28 February 2007). Figures for 2004 and 2005 might be slightly overestimated as the Riau Plantations Service (Dinas Perkebunan Riau) claims that oil palm plantations in the province had reached “only” 1.5 million hectares at the end of 2006.

The ease with which oil palm is grown; the presence of migrants from North Sumatra with a long tradition of oil palm cultivation; the province's proximity to the Melaka Straits and thus international markets; and the abundance of sun and rain all contribute to the great suitability of Riau for the palm oil industry. International demand has soared in recent years (thus maintaining palm oil at much higher prices than most other agricultural products),<sup>54</sup> especially as palm oil has been labelled as one of the biofuels whose use could slow down climate change,<sup>55</sup> and foreign investors have poured considerable funds into the industry. Most of Riau's palm oil is exported to Western Europe and North America, although emerging markets in India, Pakistan, the Middle East and China have also appeared.

Yet the focus on the environmental campaign against the spread of oil palm plantations has been on public policies both at national and local levels to encourage the growth of the sector. At the national level, Susilo Bambang Yudhoyono's government has seized the climate change debate as an opportunity to declare an ambitious plan to expand national palm oil production by several million hectares by the end of the decade nationally.

In light of this, the government of Riau has vowed to maintain its leading position in palm oil production in the coming years and taken this promise into account in the most recent territorial mapping exercise. This province-wide mapping project known as RTRWP (*Rencana Tata Ruang Wilayah Propinsi* or Mapping the Use of Land at Provincial Level) is a requirement stipulated in national Law 24/1992 and acts in each province as a pointer for local policies. It is managed by the Regional Agency for Planning and Development (*Badan Perencanaan Pembangunan Daerah* or BAPPEDA) which issued Riau's first RTRWP in 1994.

By 2001, it was revised and was almost passed but a public outcry led to a prolongation of its revision period to include consultations with stakeholders. One of the main bones of contention was the space the new proposed RTRWP gave to the expansion of plantations and especially of oil palm. Six years on, the new RTRWP is still under discussion and an agreement has yet to be reached between the oil palm industry and environmental NGOs. In spite of this, the government of Riau has implemented a national "Plantations Revitalisation Programme" (*Revitalisasi Perkebunan*) – although given its latest figures the plantations sector appears to be full of life enough as it is – which includes a credit programme to encourage investment and a project to increase Riau's oil palm plantations by 300,000 ha in the next five years.<sup>56</sup>

The Governor of Riau has taken the fostering of the oil palm sector one step further. In his election manifesto in 2004 Rusli Zainal promised to launch a "Battle against Poverty and Ignorance and for Infrastructure Development" (*Pemberantasan Kemiskinan dan Kebodohan dan Pembangunan Infrastruktur* or K2I). Although there are several components to this programme, its real *fer-de-lance* has been the promotion of palm oil plantations at the smallholder level with a promised allocation of an additional 50,000 ha for families near or below the poverty line for the next five years.

---

<sup>54</sup> In February 2007 the price of crude palm oil stood at Rp 4,700, *i.e.* just over US\$0.50 per kg (Pak Isjarwadi, personal communication).

<sup>55</sup> The issue of palm oil as biofuel is described in greater detail in the relevant section on national forest-related policies.

<sup>56</sup> The provincial government also plans to expand rubber tree plantations by 100,000 ha, cocoa by 4,000 ha and replant 300,000 ha of coconut trees in the next five years.

Just like rubber, the cultivation of oil palm works very well at the level of smallholders and provides rapid and reliable income to poor families – so long as international palm oil prices remain stable. Smallholders use a pooling system known as “plasma”<sup>57</sup> and sell the kernels off to a company which then processes the kernel to produce crude palm oil. Migrants from North Sumatra have already used this system for many decades and have imported it into Riau; the governor’s aim is now to generalise the system to act as a solution to rural poverty.

Representatives of the sector will never bring the environmental issue up of their own accord. When questioned about it, a representative of the Riau Plantations Service (*Dinas Perkebunan Riau*) replied that

We respect all the existing laws and even brought in specific measures. These include an analysis of the environmental impact [of our operations] and has environmental, social and political components (...). But sometimes law is not applied, which is why we need to do some monitoring. If we find illegal activities, we impose sanctions such as uprooting the palms we find.<sup>58</sup>

Interview with a representative of *Dinas Perkebunan Riau* 28 February 2007

Yet despite these measures the palm oil industry has a dismal environmental record, especially as it has grown as the detriment of Riau’s natural forests. As mentioned, in theory oil palm plantations are not allowed inside the forest estate (*kawasan hutan*) but in the ever growing search for new land the sector has found several ways round this restriction.

First, in the 1990s and early 2000s it greatly benefited from a crumbling timber industry to successfully obtain legal reductions here and there in the size of the forest estate. Such a procedure required an approval (*pembebasan*) from the Forestry Minister himself who would designate certain areas within the forest estate as “areas for the development of the plantations estate” (*Areal pengembangan kawasan perkebunan* or APKP) or “areas for other development” (*Areal pengembangan lain* or APL). In 2002, faced with intense criticism from environmental NGOs, a moratorium was imposed on the issuance of APKPs and APLs which by 2007 had yet to be lifted.

Secondly, most borders of the forest estate have never been demarcated on the ground and thus in practice remain little more than lines on a map. Some environmental NGOs such as WWF claim that the oil palm sector has taken full advantage of this confusion to encroach considerably into the forest estate. Thirdly, it is strongly believed that some *kabupaten* governments support the illegal arrival of migrants deep inside the forest estate and actively promote oil palm cultivation even inside national parks, in flagrant violation of even local legislation. Tesso Nilo National Park, described at greater length below, is a clear illustration of this trend.

Although completely independent of each other, the pulp and paper and the palm oil industries thus have striking similarities regarding the recent (and sometimes aggressive)

<sup>57</sup> As opposed to the *inti* (“nucleus”) system whereby oil palm plantations are directly managed by the company itself.

<sup>58</sup> “Kita menghormati semua undang-undang yang ada, kami mulai aturan-aturan spesifik juga, termasuk analisis dampak pada lingkungan hidup dengan komponen-komponen lingkungan hidup, sosial dan politik (...). Tapi kadang-kadang undang-undang tidak dihormati, oleh karena itu harus *monitoring*. Kalau kita menemukan kegiatan yang ilegal, ada sanksi, kita cabut sawit”.

growth, support from public officials and their negative impact on the natural environment. All the factors of both sectors seem to suggest that their expansion at the expense of Riau's natural forests is unlikely to stop in the coming years and maybe even decades.

#### 4.3.4. Conservation Policies

Faced with the two formidable economic and political forces represented by the pulp and paper and palm oil industries, the growing environmental movement of Riau is facing an uphill battle which some claim to have been lost from the start.

The environmental degradation that Riau has witnessed in the past three decades goes well beyond the worrying deforestation trends shown in Figure XII. First, Riau's forests are home to an unusually high species richness and to a wealth of primates as well as the endangered Sumatran Forest Elephant (*Elephas maximus sumatrensis*) and Sumatran Tiger (*Panthera tigris sumatrae*) which, as their names suggests, are endemic to the ever shrinking forests of Sumatra. Both are listed as endangered on the latest IUCN Redlist and are flagship species that are much used in the campaigns of environmental NGOs to protect the province's forests.

Secondly, as mentioned above almost half of Riau's forests grow on peat – a waterlogged acidic soil which prevents decomposition. As a result, falling branches, twigs and leaves pile up instead of decaying, giving the soil a spongy aspect to it and making it grow ever higher as long as it is covered in vegetation. Because it does not decay, peat constitutes an excellent type of burning fuel and for centuries rural populations have cut it out of the ground in Europe to heat their homes.

Because it is essentially made of the same material as the trees from which it falls, growing peat continuously sequesters carbon without reaching the "maturity" stage where other forests stop acting as carbon sinks. Yet to use land covered in peat for other uses, the forests are generally cleared and canals built to drain the water out of the peat. It thus dries up and once the soil is exposed to direct sunlight without any forest cover, it tends to burn very easily, thus releasing massive amounts of carbon into the atmosphere.

Thus, for the past decade Riau has greatly contributed to the haze that covers Singapore and Malaysia every dry season. Moreover, according to recent research, peat forests (which in Indonesia are concentrated on the eastern coast of Sumatra and of western and southern Kalimantan) have contributed up to 10% of the world's carbon emissions (Kempf 2007) – a figure which is unlikely to go unnoticed in the current world political climate (no puns intended).

The fate of Riau's forests is therefore of major global consequence yet has curiously failed to attract as much international media attention as other yet less affected parts of the world such as the Brazilian Amazon. Admittedly, the environmental movement in Riau has grown in the past decade but its own resources and access to more resourceful actors remain vastly insufficient given the task it is trying to undertake. During the New Order investigations into the activities in timber concessions or plantations was very difficult given the tight control the government and army had on information. In the 1990s NGOs began appearing, first with WALHI in 1990, then WWF in 1995 which focused on the management of Bukit Tigapuluh National Park starting in 1995. With the fall of Suharto Riau followed a nationwide pattern

which saw the emergence of a large number of NGOs (mostly manned by biology students and alumni) but until the early 2000s, they mostly worked independently of each other on specific projects.

In 2002 a group of five NGOs spearheaded by WWF got together to form an environmental NGO network called Jikalahari (an abbreviation of *Jaringan kerja penyelamat hutan Riau* or Working network to save Riau's forests). The network initially benefited from Conservation International's CEPF (Critical Ecosystem Programme Funds) which has kept the network alive at least until the end of 2007 when it is supposed to come to an end. Jikalahari now brings together 29 local NGOs, some of which are branches of national or international NGOs. Together with WWF and WALHI-Riau, both of which are members of Jikalahari, the network runs an English language website full of up-to-date information on the state of Riau's forest called Eyes on the forest.<sup>59</sup> Jikalahari also runs its own website in Indonesian and English. Some of Jikalahari's most prominent members include:

1. WWF-Riau, established in 1995. This local branch of the international conservation-oriented NGO has focused ever since its creation on the management of specific protected areas and their surroundings. WWF has identified eight remaining forest blocks in Riau which should be the focus of conservation efforts (Senepis, Libo, Giam Siak Kecil, Kuala Kampar, Tesso Nilo, Kerumuta, Rimbang Baling and Bukit Tigapuluh).
2. WALHI-Riau, the local branch of the national NGO member of the Friends of the Earth international network was established in Riau 1990 but remained non-operational between 1995 and 2003. Buoyed by its success in the 1988 case of pollution against PT Indorayon in neighbouring Sumatra, WALHI was the first environmental NGO in Riau. As elsewhere in the archipelago WALHI has adopted a more confrontational stance than most other NGOs and could be said to occupy a niche similar to Greenpeace in developed countries.
3. Hakiki (established as a foundation or *yayasan* in 1999) is one of the many local environmental NGOs founded in the late 1990s. The NGO focuses much more than WWF or even WALHI on local populations and their relationship with their environment and is thus a member of a national network called AMAN (*Aliansi Masyarakat Adat Nusantara* or the Alliance of Indigenous Peoples of the Archipelago). The NGO currently works on two sites, the Upper Indragiri river (*Indragiri Hulu*) and the left bank of the Kampar river (*Kampar kiri*).

Despite the move of NGOs in Riau to coordinate their campaigns and activities, each NGOs has a tendency to adopt its own principles and use its own methods to tackle the province's environmental problems, often to the irritation of other members of the Jikalahari network. Criticisms are usually discreet but tend to focus on two main issues. First, the fact that APRIL has succeeded in getting part of its production certified by LEI has annoyed WALHI which on a national level is opposed to certification as it condones the very concept of concession that – according to WALHI – ignores the rights of local populations to the resources of the land they live on. WALHI, Hakiki and a number of NGOs even officially complained to LEI about the issue, claiming that RAPP security personnel had beaten up villagers in May 2006 (Jikalahari 2006b), yet the complaint was ultimately rejected and certification was maintained.

---

<sup>59</sup> <http://eyesontheforest.or.id/>

Secondly, much to the annoyance of most other NGOs, WWF has sought to collaborate with rather than confront companies accused of deforestation in order to solve Riau's environmental problems. In particular, the NGO has sought a *rapprochement* with APP although the latter has been said not to honour its commitments. WWF has also worked with APRIL to implement some HCVF (High Value Conservation Forest) guidelines and struck an agreement with the company over co-management of the Tesso Nilo National Park area, which is described in greater detail below. When asked about the approach WWF has taken, representatives of another NGO exclaimed,

WWF is sleeping with the tiger! This is not our problem but although WWF might want to pull the teeth out of the tiger's mouth, it's still a tiger that destroys the forest and disturbs the people. RAPP would do anything to get HTI. WWF only thinks about conservation, whereas we think about the environment. We want to save the whole of Riau, not just a few places.<sup>60</sup>

Interview with NGO representatives, 15 February 2007

#### 4.3.5. Tesso Nilo National Park: A Case-Study

The case of the policies surrounding Tesso Nilo National Park is not only an illustration of Riau's conservation policies but also its articulation with other sectors, notably those of timber, pulp and paper, and oil palm. The forests in which Tesso Nilo is located have been shrinking continuously over the past three decades in spite of a number of measures taken both by public authorities and non-governmental organisations.

The western part of *kabupaten* Pelalawan in south-central Riau has long been known as a crucial forest for a famous flagship species, the Sumatran elephant (*Elephas maximus sumatrensis*), the smallest subspecies of the Asian elephant found across South and Southeast Asia. As early as 1984, when the forest of western Pelalawan still covered half a million hectares, the Minister of Conservation and Environment declared Tesso Nilo a habitat for the protection of Sumatran elephants whose existence was increasingly threatened by deforestation on the island. By 1992, the forest had shrunk to 300,000 ha when the Riau Office for the Conservation of Natural Resources (*Subbalai Konservasi Sumber Daya Alam Riau*) labelled Tasso Nilo as an "area for the conservation of elephants and other wild fauna" (*kawasan konservasi gajah dan satwa liar lainnya*), although once again this had no legal value.

The following year the international environmental NGO WWF stepped in, having identified Tesso Nilo as a hotspot for the conservation of the Sumatran Elephant. Basing itself therefore on a "species approach", it obtained the gazetting of the Bukit Tigapuluh (literally "Thirty Hills") National Park on the southern edge of Riau, on the border with Jambi Province, in 1995. From then on it had a foothold in Riau and in 1999 started campaigning for the creation of a national park in Tesso Nilo. At the time, Tesso Nilo was made up of a mosaic of timber

---

<sup>60</sup> "WWF sedang tidur dengan harimau! Itu bukan masalah [kami] tapi walaupun WWF mau cabut gigi RAPP itu masih harimau yang merusak hutan dan mengganggu masyarakat. RAPP bisa semua hanya untuk dapat HTI. Pikiran WWF hanya konservasi. Kalau kami, kami pikir tentang lingkungan hidup, kami mau menyelamatkan seluruh Riau, bukan beberapa tempat saja".

concessions (HPH) allocated to different companies which turned out to be strongly reluctant to see their concessions turn into a protected area.

In 2001 WWF held a large workshop promoting Tesso Nilo as a national park, at a time when the area's forest had been further reduced to just over 150,000 ha. In response, the Governor of Riau officially recommended the creation of the park and the following year the Minister of Forestry in Jakarta cancelled the 58,000 ha wide inactive concession held by the state company Inhutani IV at the heart of the Tesso Nilo area. At last, in July 2004, a decree from the Minister of Forests (no. 255/Menhut II/2004) declared the creation of Tesso Nilo National Park with a surface area of 38,576 ha (WWF undated a:1; Eyes on the Forest 2007). Since then a number of organisations have been created to manage the park (see Box XII).

The management of Tesso Nilo National Park is home to a rather entangled institutional arrangement involving a range of organisations. Although WWF was instrumental in the creation of the park, its management is officially in the hands of the Tesso Nilo National Park Foundation (*Yayasan Taman Nasional Tesso Nilo*) created in June 2005. In fact, the Foundation (whose offices are located within the same compound as WWF) is chaired by the Governor of Riau but WWF staff are prominent both in the Foundation's membership and its executive board.

On top of this, the Riau Office for the Conservation of Natural Resources (*Balai Konservasi Sumber Daya Alam Riau* or BKSDA) is in charge of coordinating the management of all of the province's protected areas. Yet in the case of Tesso Nilo (as for other major national parks) a special Office has been created (*Balai Taman Nasional Tesso Nilo*) which started operating late 2006. Officially, the Office is responsible for the management of the park itself (and the creation of a management plan which has yet to be completed) whereas WWF is responsible for activities surrounding the park. Representatives interviewed, however, could not explain what the function of the Foundation was apart from raising funds.

This proliferation of organisations makes it difficult to spell out the roles of each. As research demonstrated, the "division of labour" over the management of Tesso Nilo National Park thus needs to be clarified, if not on paper then at least in the heads of those responsible of the park and its management.

**Box XII. — The institutional configuration of Tesso Nilo National Park.**

The "victory" of WWF was short-lived. To many, including staff at WWF, the size of the national park was vastly insufficient and a project was immediately suggested to expand the park to 100,000 ha in the midst of growing threats to the integrity of the natural habitat. In the meantime, WWF had evolved from a "species approach" whereby it focused on the conservation of particular species – and only as an extension of that worked on the protection of their habitat – to a "landscape approach" which took into account the different uses of the wider geographical area the National Park was located in.

This new approach had three implications on the ground. First, the management of Tesso Nilo has been integrated into the landscape known as "Tesso Nilo – Bukit Tigapuluh" in virtue of the geographical proximity between the two national parks, their similarity in habitats but also in the threats their natural ecosystems are facing. One of the main aims of integrating the national parks to their landscape in this way is to allow the protection of forest corridors between the parks so as to prevent the fragmentation of populations of key species such as elephants and tigers – a fragmentation which threatens the existence of these species in this area.

Secondly, WWF has attempted to integrate local uses of the landscape surrounding Tesso Nilo National Park so as to prevent local populations from adopting land use practices that might endanger the Park itself. Back in 2000, Qomar already identified specific areas in which collaboration would be necessary between conservation organisations (whether public or non-governmental). In 2003 WWF began a “socialisation” programme with populations living in the area and at first met with strong resistance as they advertised their actions as focusing on elephant conservation.

After four years, however, the local WWF staff has succeeded in rallying parts of the population to their cause and have not only set up villagers’ organisations as mouthpieces of the local populations, but also a range of alternative activities that would theoretically prevent villagers from relying on the park’s natural resources for their subsistence. These include a honey production and marketing programme as well as the construction of fishing ponds – although the projects are still currently underway and have yet to produce any income. Likewise, a micro-credit system was recently set up to encourage local villagers to set up businesses.

Despite such measures, many continue to perceive WWF as an organisation bent on protecting elephants which in the eyes of many villagers are their arch-enemy. As their habitat is increasingly fragmented and reduced in size, elephants – who rarely fear humans given their size – have often taken to leaving their habitat and feeding on nearby crops, especially oil palm kernels which they are particularly fond of. Fences erected by villagers appear to be of no use against the animals which led WWF to tackle the issue literally head-on.

In 2004 the NGO launched its first “Flying Squad”, a group of trained elephants headed by a team of (human) WWF staff to rebut wild elephants and push them back into the forest whenever necessary. The Squad patrols forest edges and is often called upon (particularly at night, when the elephants are active) by members of the local population who have been specially equipped with walkie-talkies. On the ground, this has earned WWF staff the esteem of a number of villagers, but one could suggest that this measure has been especially effective as advertising for the NGO. WWF has published a series of documents (*e.g.*, WWF undated b) explaining the organisation and the role of the Flying Squad which have been met with considerable support: not only does the Flying Squad system constitute a peaceful solution to a conflict between humans and their environment, but it is a measure that could be applied in many parts of the world where these large mammals are known to invade the fields of local populations, both in Asia and Africa.

Local populations, however, have maintained semi-conflictual relationships with other local actors as well. Many villagers whose families have been based in the area for decades resent the recent arrival of migrants (*pendatang*), many of whom arrived spontaneously from North Sumatra in the 1980s and 1990s. Many of these migrants bought land off local villagers who claimed the land as their own despite the fact that they officially lived inside the forest estate which in theory is the property of the state. Migrants used these lands in a way that is familiar to them in North Sumatra – they cultivated oil palm and got financial returns from their investment as they sold the product to companies. This only increased resentment among local populations:

They arrived with great pomp supported by government policies and the power of companies. They bought land here and there. We met up, made agreements and transactions over the forests and land was sold. But this only helped the companies to

expand. There is no physical conflict, only a difference in interests between migrants and the people (*masyarakat*). The people do not want to acknowledge or legalise (*sic*) the migrants.<sup>61</sup>

Interview with a villager near Tesso Nilo National Park, 26 February 2007

As time goes on and these two populations intermarry, differences are likely to subside but this issue of migration has undoubtedly increased the wealth divide within the category that outsiders often lump together as “local communities”.

Local people interviewed have likewise expressed discontent at the arrival of other actors in the area. Villagers claim that the cultivation of Acacia began in the mid-1990s and has continuously expanded ever since. RAPP indeed manages a HTI on the northern edge of Tesso Nilo National Park and another further west, and its competitor APP also manages a HTI nearby. Physical violence has been known to have occurred in the area, especially in the late 1990s when such conflicts were frequent throughout Indonesia, but despite continuing resentment such events are infrequent nowadays.

The presence of the pulp and paper industry in the area – especially that of RAPP – triggered the third and most controversial effect of WWF’s landscape approach, namely a *rapprochement* between WWF and RAPP to protect Tesso Nilo National Park against outside threats. At first, it seemed as if RAPP was an unlikely ally in the campaign to protect Tesso Nilo, especially given its environmental record. RAPP has also often been accused of buying logs cut illegally within the park to feed their paper mill. Moreover, a strip of land covering some 3,500 ha on the northern edge of the Park (on the border with RAPP’s HTI) has constituted a discreet bone of contention between WWF and RAPP. Despite the creation of the park in July 2004, three months later RAPP cleared the forest from this strip and planted Acacia, claiming it was part of their HTI as allocated by the Forest Ministry.

All evidence points towards the fact that the strip is part of the park and is officially recognised as such. Yet RAPP refuses to let the strip go and WWF appears to be in no hurry to claim it back. As one member of WWF staff confessed, “maybe Inhutani IV [the beneficiary of the concession turned national park] had promised this strip to RAPP in some agreement between the two companies prior to the creation of the park”. Yet Inhutani IV never was more than the company in charge of timber production in this concession which by definition still belonged to the State – the company therefore never had the right to earmark parts of its concession to third parties.<sup>62</sup>

The fact that this issue has been overlooked may be due to the agreement that WWF and RAPP have struck over the future of Tesso Nilo and its surroundings. From the park’s creation, WWF has been searching for ways of expanding the park to include nearby forests (notably to the west) which are currently part of three inactive timber concessions managed

<sup>61</sup> “Mereka datang ramai-ramai dengan kebijakan pemerintah dan kekuatan perusahaan. Mereka beli tanah di sini, di sana. Kita bertemu, ada kesepakatan, transaksi tentang hutan. Tanah dibeli, tapi begitu perusahaan-perusahaan menjadi lebih besar saja. Konflik fisik tidak ada. Konflik kepentingan sudah mulai, ada, antar pendaang dengan masyarakat. Banyak masyarakat tidak mengakui, tidak mau melegalkan [pendatang]”.

<sup>62</sup> Despite their complete illegality, such agreements are known to be commonplace in Riau where a number of HPHs continue to be held by timber companies despite the fact that they are inactive. It is believed that timber companies hang onto these concessions and continue paying taxes for them in the hope that when these HPHs turn into HTIs they can have a say in the allocation of the land. Deals are thus said to be struck between timber and pulp and paper companies so that the latter can secure extra land for their expansion.

by PT. Siak Raya Timber, PT. Hutani Sola Lestari and PT Nanjak Makmur. Together with RAPP a proposal was submitted to the Forest Ministry in 2005 with a plan to expand to national park to 100,000 over PT Nanjak Makmur's concession notably; RAPP would obtain the other two concessions as HTIs and would renounce to building a road isolating the existing national park from the PT Nanjak Makmur concession.

It is this very proposal that caused an uproar among the environmental movement and which led WALHI representatives for example to claim that WWF was sleeping with the "tiger", as in the quote mentioned above. In response, on 14 February 2007 the Indonesian advocacy-oriented NGO Greenomics published a position paper in which it accused WWF and APRIL of accelerating the destruction of Riau's forests:

What appears at first sight to be a laudable proposal to expand the area of Tesso Nilo National Park to 100,000 hectares – from the existing 38,576 hectares – will in reality have to be paid for by sacrificing 96,436 hectares of Riau's forests, with the greater part of this area being cleared and development as industrial timber plantations. (...) WWF-APRIL claim that their 'sustainable solution' is unique in its ability to protect biological diversity, ecosystems and ecological functions, and support improved wellbeing and welfare in forest communities. The question that arises, however, is whether the expansion of a National Park that envisages the clearance of 96,436 hectares of natural forests can be categorised as an effort to 'protect biological diversity, ecosystems and ecological functions'. The answer is a resounding 'NO'! (...). The only way that the Tesso Nilo National Park can be sustainably expanded is for the three natural forest concessionaires in the area to unconditionally surrender their concessions to the state through the Ministry of Forestry and for this land to then be used for expanding the National Park.

Effendi (2007:1-3)

Yet the very next day after the publication of this paper, an article in *The Jakarta Post* claimed that "Forestry Ministry M.S. Kaban recently accepted the trade" (Sijabat 2007), although this appears to be in contradiction with more recent WWF staff claims and a newspaper article published in October 2007 that mentions that the demand is still pending (Surya 2007).

Despite the difficulties faced by this particular project, APRIL's environment department has constructed a conservation model based on the Tesso Nilo case in which the pulp and paper industry humbly plays a central role. As APRIL staff explain, planting *Acacia mangium* around high value forests may actually contribute to their conservation:

We're currently helping on how to contribute to national parks. The main culprits of deforestation are migrants and illegal loggers in abandoned HPHs which people see as areas without owners. But if we plant Acacia, this stops the encroachment: it marks some sort of ownership.

Interview with APRIL staff, 22 February 2007

APRIL staff also explains that plantation rings around protected areas also isolate the resident elephant populations from surrounding fields (as elephants are known to abhor Acacia plantations), thus preventing conflicts between humans and elephants. The Park's expansion proposal submitted by WWF and APRIL very much embodied this "Acacia buffer model" as

if the proposal were to be retained HTIs would surround the park to the north and west. It must be pointed out, however, that this model would stand in theory if it were not for *Acacia mangium*'s propensity to spread naturally. This has already turned out to be a problem inside the national park as pockets of *Acacia* have already appeared well inside the park at the expense of natural forest.

When asked about the causes of deforestation around Tesso Nilo, APRIL staff accuses (i) local populations of clearing forests without authorisation and (ii) the oil palm industry of encouraging these populations to establish plantations, with the full support of local government (notably at *kabupaten* level). This claim actually echoes that made by local populations themselves, as pointed out in the interview with a villager near Tesso Nilo National Park (quoted above). Yet APRIL staff also fail to point out that the migrant population increased substantially in the area in 2006, a year which coincided with the construction of a road leading to APRIL's HTI and to the edge of the park – a road built by APRIL itself.

WWF and APRIL have been waiting for a reply from the Forest Minister regarding their expansion proposal for almost two years now. Time is running out: field surveys have shown that several thousand hectares both inside the park and on its western edge (between the park and the proposed extension area) have already been cleared by local populations who have planted oil palm. A quick visit indeed led the author to a place which according to the map was within the park; yet on one side of the road lay a field of burned-out tree trunks, and on the other a recently planted field of oil palm.

Despite its recent creation, Tesso Nilo National Park thus remains at threat as it is home to several conflicts between stakeholders. To some extent, its management is the microcosm of the struggle between different political and economic forces over the fate of Riau's forests: a divided environmental movement, a waning timber industry in the face of the growing pulp and paper and oil palm sectors, contradictory levels of government and the oft-ignored local populations.

#### **4.3.6. *The Indigenous Issue***

As elsewhere in Indonesia the voice of local populations has been increasingly heard in the last few years. Yet in Riau province where the wealth of natural resources contrasts with the poverty of local populations, this issue has taken new political dimensions.

The ethnic makeup of Riau province is dominated by a group known as "Riau Malays" (*Melayu Riau*) in recognition of the cultural and linguistic traits it shares with ethnic groups across the Melaka Straits. However, there are also smaller ethnic groups such as the Talang Mama scattered across the province, living in relatively isolated pockets and living mainly off mere means of subsistence. Apart from a few NGOs such as Hakiki which work to promote the traditional rights of these populations, their political representation remains minimal. None of these "traditional societies" has been officially recognised as such – recognition would entail rights of access to their land, a claim rejected by most governments at all levels – despite repeated demands via the national Alliance of Indigenous Peoples of the Archipelago (*Aliansi Masyarakat Adat Nusantara*).

In contrast, for several decades already a cultural elite has celebrated the ethnic distinctiveness of the *Melayu Riau* – after all it is their language which was ultimately retained as the national language under the name *Bahasa Indonesia* (“Indonesian”) (Raillon 2007:95). Yet this movement which led to the creation of the Institute of Riau Malay Tradition (*Lembaga Adat Melayu Riau*)<sup>63</sup> which flourished under the Suharto Regime never took a political dimension and focused on Riau Malay culture that was thus reduced to a language and to visible manifestations such as clothes (Nizami Jamal *et al.* 2004).

It was not until the Suharto regime fell that the *Melayu Riau* took on a clear political dimension. On the ground, the late 1990s were a time of conflict and frequent physical violence between local populations and timber concessionaires (and, as their respective industries developed, pulp and paper and oil palm representatives). Without the backing of an authoritarian regime or the military, timber companies were driven out in large numbers as local people rioted and claimed the land as their own.

In the years following *Reformasi* and as timber production dwindled, these conflicts died down, although they continue sporadically across the province. Among the recent measures brought in to solve this issue, the concept of people’s forests (*Hutan Rakyat*) has been promoted by Law no. 6/2007 and already implemented in plantations as People’s Plantation Forests (*Hutan Tanaman Rakyat* or HTR). In fact, pulp and paper company APRIL has struck a deal with representatives of a HTR to buy their fibre, thus providing the HTR with a market. The success of such an innovation remains to be seen, however, as many have pointed out the inequity of the deal and the fact that prices have been fixed by APRIL (since competition in Riau within the pulp and paper industry is limited to two companies).

It is at a higher political level, however, that the issue of indigenism has distinguished Riau from most other provinces. Following Suharto’s fall, a number of provinces saw the emergence of independence movements, generally on ethnic grounds. Such was the case of Aceh, Irian Jaya (now Papua) and East Timor – which successfully declared independence in 1999 – and Riau. Of these four provinces Riau was the only one whose movement was not armed.

Led by a researcher at the University of Riau (UNRI), Professor Tabrani Rab, the movement for the independence of Riau known as Free Riau (*Riau Merdeka*) went as far as declaring Riau a sovereign state on 15 March 1999. Member of the movement have rejected Jakarta’s power over the province and prefer to conceive of Riau as a political entity within a Pan-Malay country stretching from Sumatra to peninsular Malaysia, the cultures of which are much closer than Java is to Riau (Ford 2003:138).<sup>64</sup>

In its discourse *Riau Merdeka* has accused the central government and all the bodies it regards as its allies – including timber, pulp and paper, oil palm and oil companies – of robbing Riau and its people of the province’s wealth of resources without any return. It is true that the wealth of resources of Riau (see section above on the geography of Riau) contrasts strongly with the poverty of its population. This observation can only be exacerbated with the economic success that Malaysians enjoy just across the Melaka Straits and in spite of their

---

<sup>63</sup> The term *adat* which is notoriously difficult to translate has been translated here as “tradition” mainly because of the absence of a political dimension in this particular context. For more discussion on *adat* please refer to the section on indigenist policies in the part on national forest-related policies.

<sup>64</sup> *Riau Merdeka* lost much of its clout when its new leader Al Azhar accepted a place in the central government’s Regional Autonomy Council (*Dewan Pertimbangan Otonomi Daerah* or DPOD).

relative lack of natural resources. As Tabrani Rab put it, “living in iau is akin to suffering from starvation while sitting on top of a milch cow” (quoted in Ford 2003:139).

In his writings, Tabrani Rab uses both the ethnic distinction of Riau Malays and the environmental damage caused by companies under the benevolent eye of the central government (Rab 2004a, 2004b) as elements justifying the demand for independence from Indonesia. It is not unfair to claim, therefore, that “the hopes of the people of Riau for improved access to economic resources have fuelled both general public support for autonomy and Malay claims to preferential treatment”, as expressed by Michele Ford (2003:132).

This author also attempts to deconstruct the arguments that the independence and autonomy movements use as foundations for their claims. On one level, she argues, the identity of what she calls *Orang Riau* (people of Riau) is defined by a struggle for economic resources, as mentioned above. Yet it also represents a struggle for belonging which turns out to be less the product of atavism (politically motivated ethno-historical claims as suggested by Wee (2002:17) than a tie to the land.

Whilst the discourse of these political movements is undoubtedly imbued with a sense of history of former Malay greatness defined by struggles through the ages (*e.g.*, Yusuf *et al.* 2006, Suwardi *et al.* 2006), the element of “belonging to the land” enables the movements to stretch beyond ethnicity and reach non-*Melayu Riau* populations, including (i) other “indigenous” peoples such as the Talang Mama, and (ii) more or less recent migrants, notably the Minangkabau who live in Riau in large numbers. Members of the *Lembaga Adat Melayu Riau* have attempted to conciliate these two visions by interpreting “Malayness” (*Kemelayuan*) as a process of acculturation among a heterogeneous population over centuries (Ford 2003:140).

The recent political window of opportunity for the independence of Riau appears to have closed again given the weakening of the *Riau Merdeka* movement and the gradual return of a stronger and more stable central government. However, the *Reformasi* era has enabled both autonomy and indigenous issues to be more freely discussed than they were under the New Order.

#### 4.4. CONCLUSION

The case of Riau is symptomatic of the transformations that Indonesia has undergone, not only in terms of political construction and the weight between regional and central governments, but also in terms of the profound changes that forest management has witnessed in the past ten to fifteen years.

The last decade has undoubtedly seen a strengthening of the rules officially aimed at slowing the speed of change from forest management based on timber production to one based on pulp and paper and oil palm industries, often at the expense of forest cover. Yet it seems as if the pulp and paper and palm oil industries are continuing with their gradual takeover of the land unabated. The main reason for such apparent ineffectiveness of policies and legislation lies in their utter confusion. First, one can easily pick up obvious contradictions in policies which

both encourage the expansion of non-timber industries (*e.g.* the *Program K2I*, and promises to expand the pulp and paper and palm oil industries by millions of hectares in the coming years) whilst attempting to restrict deforestation (*e.g.*, reduction of the clear-cutting threshold from a standing stock of 20 to 5 m<sup>3</sup>/ha).

Secondly, contradictory rules overlap with each other both in space (contradictions between regional and national policies such as *kabupaten* governments encouraging oil palm plantations inside the forest estate) and time (*e.g.*, new laws such as the cancellation of small-scale concessions are implemented up to a year late). All this confusion only adds to the “grey areas” which the most opportunistic actors use to manipulate rules to their advantage. As long as the confusion is maintained, forests are likely to continue shrinking in Riau until they are found nowhere else than on hilltops and inside a few isolated national parks.

## 5. FOREST-RELATED POLICIES IN PAPUA

***Foreword.** Papua is without doubt the most challenging place to study and travel around in Indonesia. First, its unique political history has led Indonesian authorities to keep track of foreigners wherever they are, making the accumulation of various permits an unfortunate component of any non-Indonesian's travel within the province. Any research has to be disguised as a "development" project and justified as so in all the police stations that lie on the researcher's route.*

*Secondly, choosing to focus on one of the most salient aspects of Papuan politics – the concepts of "primitivism" and its corollary "development" – led the author to venture into a previously unstudied area of difficult access, the "Brazza-Eilanden Triangle" in the Upper Asmat region. This area presented particularly challenging conditions, not only from a physical viewpoint but also from a mental and moral perspective given its geographical remoteness from the rest of the world. The data presented here, and especially the section devoted to this region, are therefore the first attempt to describe and analyse the human history and politics of the Brazza-Eilanden Triangle.*

*Many names have been used to refer to the western half of the island of New Guinea. Whilst Indonesian authorities have called it Irian Barat and Irian Jaya in the past, Westerners have called it West New Guinea (e.g., Defert) and West Papua (a term also used by sympathisers of Papuan independence and which has been criticised by pro-Indonesian analysts). In this study, the region is referred as "Indonesian Papua" so as to differentiate it from Papua New Guinea whilst reminding the reader that the region remains under Indonesian control.*

\* \* \*

Among all the case-studies selected for this PhD, no other location stirs as much curiosity and controversy as Papua. Believed to be one of the least studied places on earth, Indonesian Papua is still home to some of the world's last truly "isolated" populations and most "pristine" ecosystems (see below). It thus continues to be a fantasy for explorers and adventurers alike.

However, Papua is also home to one of Indonesia's strongest separatist movements which even has an armed wing known as OPM. Whilst this means that the situation on the ground is constantly volatile, Papua also constitutes a taboo in Indonesian politics in the sense that authorities often mistake the study of the region's particularities for a call for independence. Forest management, as a crucial economic resource (both nationally and for local populations) but also as a means of controlling land use and tenure, is part and parcel of the debate on the political status of the region. This paper thus develops the political situation not only as a backdrop for discussing forest-related policies, but also as one of the most important factors to have shaped these policies in the past few decades.

To most outsiders the island of New Guinea conjures up images of "remoteness", "wilderness" and "primitiveness". Believed to be the world's last frontier, Papua (the Indonesian half of the island) continues to make the headlines. No later than in February 2006 was a "previously unexplored" valley discovered in the Foja Mountains; the news quickly

went round the world as biologists celebrated the discovery of a “spectacularly beautiful Garden of Eden”.<sup>65</sup>

It is the dream of anthropologists, biologists and tourists alike in the search for the ultimate “lost world”. However, it is also one of Indonesia’s provinces of greatest political complexity, dominated by a history chequered with alleged human rights abuses and calls for independence. As a result of both these visions, Papua’s forest-related policies have taken on a unique dimension in Indonesia, at the crossroads between political turmoil and diverging visions of “development”.

## 5.1. GEOGRAPHY

Just like Riau, the term “Papua” often leads to confusion. The Indonesian province of Papua is located in the western half of the island of New Guinea which lies north of Australia and at the eastern end of the string of islands that forms Indonesia. Geographically, biologically and ethnically, New Guinea is said to lie outside of Asia and is generally classified as “Melanesian”, “Australasian” or “Pacific”, in virtue of its many similarities with eastern and southern neighbours.

Papua differs on virtually all accounts from the rest of Indonesia. The Indonesian part of New Guinea is the country’s largest region with a surface area of some 420,000 km<sup>2</sup>, *i.e.*, over three times the size of Java. The island’s unusual shape has led to its western extremity being called the “Bird’s Head” (*Vogelkop* in Dutch, *Kepala Burung* in Indonesian). The northern coast is home to several islands (notably Biak and Serui) and a narrow coastal strip backed by two parallel mountain ranges, Foja (or Gauthier) to the north, and Jayawijaya to the south. The latter is home to the island’s *and* country’s highest peak, Puncak Jaya (4,884 to 5,030 metres high according to different sources)<sup>66</sup> and a large plateau of highlands. To the south of this mountain range lie vast swathes of forest, most of which are permanently flooded (*rawa*), including the natural flooded eucalyptus forests of Wasur National Park on the southern tip of the province.

Despite the region’s size, its population does not exceed 2,650,000 inhabitants, *i.e.*, a density of 6.3 inhabitants per km<sup>2</sup> – which again contrasts strongly with Java that is home to a density nearing 1,000 inhabitants per km<sup>2</sup> (979 to be precise). The physical and social makeup of Papua’s population is also very distinct from the rest of Indonesia. Unlike the vast majority of Indonesians who are of Austronesian “stock” (believed to be of the Mongoloid family), “native” Papuans belong to the Melanesian family which stretches across to Papua New Guinea, the Solomon Islands and other Pacific island nations such as Fiji, Vanuatu and the Kanak of New Caledonia.<sup>67</sup>

<sup>65</sup> Bruce Beehler, ornithologist at Conservation International (quoted in Nakashima 2006).

<sup>66</sup> 4,884 metres according to Wikipedia ([http://en.wikipedia.org/wiki/Puncak\\_Jaya](http://en.wikipedia.org/wiki/Puncak_Jaya), accessed 31 December 2007) and 5,030 metres according to Indonesian sources such as maps edited by PT Fitriatama Sempana and CV Indo Prima Sarana, as well as Koentjaraningrat (1994:13).

<sup>67</sup> The terms “Mongoloid” and “Melanesian” must be treated with caution as they refer to broad families and typical physical traits rather than reflecting a clear-cut categorisation of external human features.

The people of Papua also differ socially from the rest of Indonesia. Partly because Papuans traditionally live in small ethnic groups, their societies are characterised by an “absence of formalised political leadership” (Defert 1996:41) where leaders tend to emerge temporarily as a result of certain personal qualities (notably at war). In this sense, Papuan societies share the political fluidity of other smaller societies in the world (such as “Pygmy” populations of Central Africa and “Indians” of the Amazon), differing fundamentally from the conspicuously organised kingdoms and sultanates of the rest of pre-colonial Indonesia.

Again, unlike the rest of the country the majority of the population is Christian (51% Protestant and 25% Catholic), leaving Muslims in a minority (23%). Animism is still very much alive, especially in more remote parts of the province. Approximately 80% of the “native” population lives in the mountainous area and particularly the Jayawijaya highlands where sweet potato (*ubi*) is cultivated in abundance and forms the population’s staple diet. In the lowland forests, however, where *ubi* does not grow as well, sago (*sagu*) is king.<sup>68</sup> In all areas, however, pig (cultivated in the highlands) and wild boar (in the lowland forests) are a choice source of protein.

However, in social terms Papua is changing rapidly. Organised and spontaneous migration from the rest of Indonesia has increased the percentage of “non-native” Papuans to almost 50%; this relatively new population which tends not to mix with “native” Papuans brings with it its own social characteristics. It forms a majority in many of the province’s towns, especially in the Jayapura-Abepura-Sentani agglomeration where all the facilities of a typical Indonesian city can be expected: cheap and crowded public transport, a proliferation of *warnet* (internet cafés) and ubiquitous *nasi goreng* (fried rice).

Papua is also quite distinct biologically from the rest of Indonesia. In geological terms, New Guinea is believed to have formed a single continent with Australia known as Sahul until the end of the last glacial period ending around 10,000 B.P. As a result, New Guinea shares much more of its biology in common with its larger southern neighbour than it does with Java, Borneo or Sumatra which are said to have been part of the continent of Sunda that stretched across Asia (Defert 1996:23).

Biologists reflect these distinctions by tracing what the Wallace Line (after British nineteenth century biologist Alfred Russel Wallace) between Sulawesi and Kalimantan and through Lombok in Nusa Tenggara. Papua, located well to the east of the line, does not even share the few species that are found on either side of the line. There are no non-human primates or even any placental mammals apart from the pig and boar, introduced by humans; instead, the land-based fauna is dominated by marsupials such as tree kangaroos, wallabies, cuscuses and possums. Likewise, Papua’s emblem bird species are the cassowary (*kasuari*) and of course the legendary bird of paradise (*cenderawasih*). Forests dominated by Dipterocarps, common to all of Indonesia, are gradually replaced as one goes southwards in Papua by crocodile-infested eucalyptus forests – a feature once again shared with Australia.

In February 2003, the province of Papua (formerly known as Irian Jaya) was split into two, the bird’s “head” and “neck” forming the new province of Irian Jaya Barat (now Papua Barat

---

<sup>68</sup> Sago is a species of palm which grows naturally in flooded forests of New Guinea and nearby islands, although it can also be cultivated. To prepare it, the tree is felled and its tender pith beaten into a pulp. Water is run through it, collected in a recipient at the bottom of which a fine pinkish-white powder settles. This product, known as sago starch or flour, can be cooked in a variety of fashions, from crusts baked over the fire (southern Papua) to a sort of gooey, translucent dough (Sentani) or even dry cakes to be dipped in tea (Maluku).

or West Papua).<sup>69</sup> Officially, therefore, “Papua” now only refers to the province occupying the rest of the Indonesian part of the island, namely the region stretching from Cenderawasih Bay (*Teluk Cenderawasih*) to Jayapura and Merauke. This is the province that is studied in this section.

Papua is by far the most isolated part of the country in geographical terms. Regular flights take over six hours to get from Jakarta to Jayapura, the province’s capital. Apart from a few roads around towns, transport around Papua is limited to air travel, either by plane or helicopter.

## 5.2. HISTORY: THE EDGE OF EMPIRES

The literature on the history of Papua is highly polarised. Works by Indonesian scholars are often politically charged, partly in an attempt to justify the region as part of Indonesia (*e.g.*, Bachtiar 1994). As a consequence the history presented in Indonesian schoolbooks (*e.g.*, Badrika 2002:58-62) is of little value to the researcher, although it would make for an interesting discourse analysis. An exception to this is the banned political pamphlets of the independence movement published at its peak in the early 2000s (Aditjondro 2000, Raweyai 2002).

Outside of Indonesia monographs on the history of region are few and far between (*e.g.*, Defert 1996, Fernandes 2007, King 2004) and tend to focus on the independence movement, taking a barely concealed anti-Indonesian stance in reaction to Indonesia’s dominating discourse. Of these sources Gabriel Defert (a pseudonym adopted by a French researcher) has carried out a remarkable compilation of data and has probably written the most complete account of Papuan history and politics to be found. Despite its age (it was first published in 1996, prior to the political changes of the early 2000s) and a rather anti-Indonesian position, it remains the most used source in this section.

### 5.2.1. Explorations

Papua has always constituted a frontier in the eyes of outsiders. Whilst anthropologists widely recognise the fact that human populations have been living in Papua for at least 50,000 years (*i.e.*, when Neanderthals still roamed the plains of Europe), the history of Papua has always been described and characterised by and from the outside. A range of artefacts recovered from the coastal areas of the Bird’s Head (*Vogelkop*) show that contacts had already been established between Papua and Asian traders several centuries B.C. Oral history on Biak also suggest that contacts were frequent between the island, Maluku and Sulawesi. Likewise, slave raids were frequently carried out in the 15<sup>th</sup> century on the coast of Papua by Tidore (Maluku) whilst establishing trading ports in Cenderawasih Bay. Early nineteenth century European explorers had already noted that some local languages had included Malay vocabulary. In 1850, the port of Dorei was even predominantly Muslim and its inhabitants often resorted to

---

<sup>69</sup> Anonymous (2007).

slave raids on the “heathen” populations of the interior (Defert 1996:62). Yet beyond the Bird’s Head, western influence remained minimal.

Early outside influence on Papua is already subject to a certain amount of controversy as Indonesian nationalists – in the search for historical justifications for Indonesian nationhood which includes western Papua – have often overestimated the cultural unity of the region with the rest of Indonesia. However, it is now known that the Hindu-Buddhist realm never spread east of Sulawesi into Maluku, let alone Papua, and the spread of Islam to the island was superficial at best, limiting itself to a small number of tiny coastal settlements. As Defert puts it,

Approaching New Guinea via the history of its rare contacts with Southeast Asia is equivalent to deducing from the observation of an epiphyte that the tree on which it grows is identical to it. The relationships of marginal dependence of a few coastal ports excessively picture Papuan populations as being passive, submissive and marginal. This in turn is not without consequences on the position that is given to them in the contemporary world. From a people ‘with no history’ to one ‘with no future’ there is but one step which is easily bridged given the island’s proximity to countries with proven ‘historical roots’ and ‘elaborate’ trade networks.<sup>70</sup>

Defert (1996:66)

The first European to sail in the region was probably Portuguese explorer Jorge de Meneses who in 1526 named Waigeo (an island off the Bird’s Head) *Ilha dos Papuas* after the Moluccan name of the place. A couple of years later, Spanish Alvaro de Saavedra visited Cenderawasih Bay, calling the coastline *Isla del Oro*, before his co-national Ynigos Ortiz de Retes claimed to have discovered the island on the way back to Mexico from the Philippines in 1545, naming it Nueva Guinea in virtue of the African-looking population.

In the seventeenth century, a series of explorations by Dutch expeditions – many of which were attacked by Papuans – left the VOC unwilling to invest in anything more than nominal control of the island. It mainly ensured this by forcing the Sultanate of Tidore (in Maluku) “and its Papuan dependencies” under Dutch control. Throughout the seventeenth, eighteenth and nineteenth centuries, reports of “savagery” and “cannibalism” among Papuans were sufficient to delay Dutch occupation of the island until the first port was established in 1828 south of the Bird’s Head, only to be abandoned seven years later.

### **5.2.2. Dutch New Guinea**

It was only following the 1884-5 Berlin Conference that the British, Dutch and Germans finally carved up the island, Britain getting the southeastern quarter closest to Australia,

---

<sup>70</sup> « Approcher la Nouvelle-Guinée par le biais de l’histoire de ses rares contacts avec l’Asie du sud-est, reviendrait ainsi, en se risquant à une métaphore, à déduire de l’observation d’un épiphyte que l’arbre sur lequel il pousse lui ressemble à l’identique. Les liens de dépendances marginaux de quelques comptoirs côtiers mettent abusivement en lumière une image passive, soumise et marginale des populations papoues, qui n’est naturellement pas sans conséquences sur la place qui leur est accordée dans le monde contemporain. De peuple ‘sans histoire’ à peuple ‘sans avenir’, il n’y a en effet qu’un pas, que la proximité de pays aux ‘racines historiques’ avérées et aux circuits commerciaux ‘élaborés’, aide à franchir facilement ».

Germany the northeastern quarter and the Netherlands the western half. However, unlike the European rush to conquer Africa, in the 1890s the only permanent “European” settlement was a tiny Australian one at Port Moresby. Until then, Papua remained a blank spot on the map, allowing adventurers to return with the most extravagant tales of exploration. Whilst some claimed that they had come across mountains taller than Everest and tigers and monkeys larger than their Asian counterparts, others had clearly located El Dorado on the island.

By the turn of the century the Dutch had decided to take control of their half of the island. In 1898, posts were established in Fak-Fak and Manokwari, on either side of the Bird’s Head. Four years later, the Dutch fixed the southern boundary with British New Guinea east of their settlement at Merauke founded the same year. However, today’s Papuans remember the religious occupation better than the political one with the arrival of the first Protestant missionaries in Cenderawasih Bay in 1855, although results were mitigated and only few “natives” were converted. Half a century later, though, the missionary rush to *Nederlands Nieuw Guinee* prompted Dutch authorities to split the territory into two: Catholics would get the southern half whilst Protestants could spread along the northern coast. The effects of the division of missionary activity are still visible today.

On the other side of the island, the First World War caused territories to be swapped around. By 1906, in a bid to offload its overstretched empire to its dominions, Britain had transferred sovereignty of British New Guinea to Australia which had renamed it Papua. Eight years later, German forces rapidly surrendered to Australia, handing over their territory to the Commonwealth. From then to 1962, the only colonial authorities to control the island would be Australia and the Netherlands.

Throughout the first three decades of the century, the Dutch launched expeditions relentlessly. The highest peaks had been “discovered” by 1909. In 1936, an employee of the Dutch New Guinea Petroleum Company “found” Lake Paniai, opening the way for the discovery of the Papuan populations of the central plateaus. His black and white films of the discovery of an entire “civilisation”, with Papuans adorning themselves with pieces of cornflakes boxes and other Western goods have since been beamed across the world.

However, exploration did not amount to colonisation. In 1921, only eight Europeans lived in Dutch New Guinea, all located in Manokwari which only had yearly contacts with the Dutch administration in Ambon. When the Second World War broke out, there were still only 15 Europeans in the entire “colony”. The only lasting mark of Dutch presence on the island was the infamous penal colony of Tanah Merah, also known as Boven Digoel, located far up the Digoel River of southern Papua in dense flooded forest (*rawa*). The place, which can still be visited today, has haunted Indonesian literature and history with the accounts of political prisoners of daily life in what they considered the edge of the world (*e.g.*, Kartodikromo 2002).

The Second World War set the stage for two major events. The first was the spread of Pan-Papuan religious syncretisms which became a means of expressing national identity in the face of the occupant. Among them, Koreri – a movement born in Cenderawasih Bay but which spread rapidly, announcing the arrival of a prophet and the beginning of a golden age – was probably the most popular. However, these syncretisms soon spilled over into the political realm when one such self-professed prophet (*Konoor*) known as Angganitha Menufaur mobilised the whole of Biak island against Dutch administration. This *konoor* was the one who created the blue, red and white flag for her movement which is still used today as

an independence flag for Indonesian Papua. It is known as *Bintang Kejora* (the morning star) because of the unique white star that adorns the flag.

The second major event was the Japanese invasion of West New Guinea which – as in the rest of Indonesia – showed local populations that the Dutch were not invincible. In practice, the Japanese merely occupied the northern coastline: the Australia's relief the Japanese never ventured south and “only” dropped a few bombs on Merauke. However, they were firmly implanted in Cenderawasih Bay where they imported Javanese slave labour in their thousands, who soon came to be hated by the indigenous population because of their deference towards the Japanese and their disdain of the “natives” (Defert 1996:102).

In 1943 and 1944, Cenderawasih Bay became the spectacle for one of World War II's greatest battles of the Pacific. Beginning with American bombing of Japanese strongholds such as Manokwari, it reached an apex with the Battle of Biak in May and June 1944 when American troops invaded and conquered the island which had served as a crucial Japanese airbase. Meanwhile, 140,000 American soldiers had landed at Hollandia (now Jayapura) under General MacArthur, giving hope across western New Guinea for future independence and a renewal of syncretic and cargo cults.

### 5.2.3. *Netherlands versus Indonesia*

Unlike the rest of the Dutch East Indies, the Second World War did not constitute a major turning point in the territory's history. Further west, the Japanese had galvanised the Indonesian independence movement and contributed significantly to the rise to power of Indonesian nationalists to prevent Europeans from controlling the region again.

The construction of the concept of an Indonesian nation had been the subject of many a debate among indigenous elites in the Dutch East Indies which had only ever been united by the colonial administration. By the 1940s, some nationalists such as Soekarno saw themselves as the inheritors of the entire Dutch colony, whilst others including Hatta (who would become Indonesia's first vice-president) excluded Western New Guinea from a hypothetically independent Indonesia even as late as 1945. Hatta based his argument on the fact that “Melanesian populations” had no role to play in a Malay and Javanese dominated country and that New Guinea should have the right to its own independence. Faced with this anthropological reasoning, Soekarno tried to justify a greater Indonesia which included West New Guinea as geographically self-evident:

Even a child can see from looking at a map that the Indonesian archipelago forms a whole. One may show with a finger the set of islands between two great oceans – Pacific and Indian – and between two great continents – Asia and Australia. Even a child can tell that the islands of Java, Sumatra, Borneo, the Celebes, Halmahera, the small islands of Sunda, Molucca and the other islands form a single unit.<sup>71</sup>

<sup>71</sup> Speech by Soekarno before BPPKI on 1st June 1945, translated from the French version quoted by Defert (1996:116): « Même un enfant, s'il regarde une carte du monde peut montrer que l'archipel indonésien forme un tout. On peut désigner du doigt un ensemble d'îles entre deux grands océans : l'Océan Pacifique et l'Océan Indien, et entre deux continents, l'Asie et l'Australie. Même un enfant peut dire que les îles de Java, Sumatra, Bornéo, Célèbes, Halmahera, les Petites Iles de la Sonde, les Moluques et les autres petites îles forment une unité. »

In later years, Soekarno expanded his concept of a greater Indonesia to Portuguese Timor, Malaysia and even the Philippines, but for the time being his vision of the country was what fuelled the “Concept of the Indonesian Nation” (*Wawasan Negara Indonesia*) which stretched “from Sabang to Merauke”.<sup>72</sup> On 11 July 1945 at a BPPKI meeting, a clear majority (39 delegates out of 64) voted in favour of an Indonesia that included Portuguese Timor and British Malaya and Borneo (leaving the status of Australian Papua unclear), whilst 19 voted for keeping to the boundaries of the Dutch East Indies. Only six voted for Hatta’s proposal which excluded New Guinea but included Malaya and North Borneo that would be submitted to a referendum.

In 1945, the concept of a united, independent Indonesia had fairly little support among the indigenous population of the Dutch East Indies, but as the war of independence (1945-9) moved on, Indonesian elites increasingly rejected Dutch proposals for alternatives. The Netherlands’ repeatedly violent reprisals and police raids during the period slowly drove much of the archipelago’s population to reject anything that was vaguely supported by the Dutch, which included (i) various forms of union with the Netherlands, and (ii) a federal system which many perceived as leaving a backdoor open for Dutch interference. In particular, the Dutch had rallied much sympathy in the eastern half of the archipelago, especially in Maluku. Accepting a federal system to gave power to local elites was thus viewed as a threat to the integrity of the embryonic nation and rejected outright.

However, from an early stage of debates between Dutch colonial authorities and Indonesian nationalists, the future status of Dutch New Guinea had disappeared off the negotiating table, the Dutch claiming that Papuans were as yet unable to determine their status through democratic means. Despite nationalists claiming the opposite and using the tenuous historical links between New Guinea and its western neighbours, the Dutch teams remained adamant that western New Guinea would not be part of an autonomous or independent Indonesia. In the 1949 Treaty of Independence signed by the Netherlands, the Kingdom stated that the future status of New Guinea would be established through negotiations between itself and the United States of Indonesia, as the newborn country was known initially. The Dutch thus clung onto western New Guinea for another few years, described by one nostalgic Dutchman as “the last emerald of the emerald belt” (quoted in Defert 1996:136).

In Dutch New Guinea, political debates went a different way. Since 1919 when a “mixed race” society (of individuals of Dutch and indigenous descent) was founded (the *Indo-Europeesch Verbond*), New Guinea had been perceived as a land to be colonised. In a country increasingly polarised along colonial lines, this society established a group known as the Union for the Colonisation of New Guinea (*Vereniging Kolonisatie Nieuw Guinea*) with the aim of establishing the territory as a safe haven. At the same time, the Dutch Nazi Party of the 1930s also envisaged New Guinea as a land to be colonised through mass immigration in the same way as Britain had done with Australia. However, despite projects to bring over 100,000 to 150,000 people from Indonesia and the Netherlands, the plan never came to fruition, although following Indonesian independence the European population of West New Guinea shot up from 1,000 in 1949 to 16,000 a decade later.

---

<sup>72</sup> Sabang is the main town of the island of Weh located north of Aceh. “Dari Sabang sampai ke Merauke”, a phrase coined by author Sutan Takdir Alisjahbana in 1937 (see Alisjahbana 1966), can broadly be translated as “from one tip of the country to the other”.

On the other side of the political spectrum on this question was a pro-Indonesian lobby which mostly had the support of inhabitants of the territory who had immigrated from neighbouring Maluku (especially the nearest islands including Seram, Kai and Tanimbar. During the first half of the century the Dutch had ruled western New Guinea much like the rest of Indonesia and had encouraged non Papuans (called *Amberi*) to immigrate to work as civil servants in schools, hospital and the police force. Likewise, it was the Dutch who introduced Malay as the territory's *lingua franca* (which had been their policy across the Dutch East Indies, thus contributing to the spread of what was to become *Bahasa Indonesia*). Although the *Amberi* were simply at the service of the colonial occupant (whether it be Dutch or Japanese), Defert notes that they were considered by local populations as the true oppressors (1996:146).

In 1946, the first pro-Indonesian political party was formed (probably encouraged by Sam Ratulangi) and was called the Party for the Freedom of Indonesian Irian (*Partai Kemerdekaan Indonesia Irian* or PKII). However, PKII never benefited from much support, despite later claims by Indonesian historians that it had been the driving force of Papuan politics.

In the meantime, a small indigenous elite was being formed to a European rather than Indonesian lifestyle. Missionaries had ensured that Christianity remained predominant among local populations rather than Islam, although once again the main vernacular language was Malay rather than Dutch. As a result of the *rapprochement* between the indigenous elite with the Dutch occupant rather than the Indonesian neighbour, the vast majority of the territory's political movements were pro-Dutch.

In economic terms, however, Dutch New Guinea remained clearly undeveloped. The territory was home to several natural resources such as lead, zinc, copper and coal, but mining these resources remained economically unviable. Only oil production flourished, reaching an apex in 1954 (much of which was exported to Australia and Japan). As for the territory's agricultural potential, it was almost negligible and hardly went beyond exploitation of forest products such as dammar resin (from the endemic species of tree amboina pine or *Agathis alba*), feathers and crocodile skins. Timber production remained minimal and destined primarily for domestic consumption. In other words, the Dutch colony cost more to the Netherlands than it brought to it: according to Defert (1996:161), from the mid-1950s onwards New Guinea cost the Dutch state more than US\$ 30 million annually.

Dutch public opinion was very much in favour of Dutch control over New Guinea which would eventually lead to independence. Much of the population had been opposed to Indonesian independence and the fact that the pro-Dutch Republic of South Maluku (*Republika Maluku Selatan* or RMS) had been crushed by Indonesia in 1950 had only further galvanised Dutch public opinion against Indonesia. From the 1950s, therefore, the fate of the people of Western New Guinea came to the forefront of the debate. In Australia, strategic reflections had led to the government rejecting the idea of Indonesian Papua on the grounds that this would weaken their position in Eastern New Guinea which many Australians regarded as the prolongation of their own country. Australia thus vetoed any debate on the future of Western New Guinea at the UN General Assembly, which only further encouraged the Netherlands to steer the territory towards independence rather than handing it over to Indonesia.

The Dutch thus favoured the creation of pro-independence parties such as PARNA (*Partei Nasional*) which favoured a Pan-Melanesian union, and the *Demokratische Volkspartij* (DVP), as well as encouraging an "indigenisation" of the civil service. Queen Juliana's address to the New Guinea Council on its creation was a clear encouragement towards

independence and the Council soon agreed on a national flag (*Bintang Kejora*) and anthem (*Hai tanahku Papua*).

In the face of such a trend, the newly created state of Indonesia did not give up its claims on Dutch New Guinea. On the first anniversary of independence, Soekarno pointed out that “part of our country is still under colonial rule” (quoted in Defert 1996:177) and galvanised support for *Irian Barat* (West Irian, the name given by Indonesia to Dutch New Guinea) to become part of Indonesia. As Chauvel and Bhakti (2004:8) explain, according to Soekarno “what was important in nation building was not common ethnic stock but rather a shared history, suffering, and fight against a common adversary”. The term “fight” is well chosen by these authors as Soekarno was evidently not looking for a diplomatic solution which would have appeared less glorious for national pride than a military intervention.

Yet in the 1950s a military solution could only be envisaged with difficulty by Indonesian whose army was already stretched with domestic armed movements opposed to a centralised government, from Aceh to Ambon via West Java. In 1956, however, negotiations between Jakarta and the Hague broke down. A mere week after the Suez Crisis the Indonesian government decided to break Agreement no. 27 of the Round Table Treaty of Indonesian independence and refused to pay its debts to the Netherlands (approximately 3.7 billion guilders).

As for the fate of Western New Guinea, Indonesia had gradually gathered international support for the unification of the territory to its western neighbour, beginning with Indian Prime Minister Nehru in 1950; yet despite the Conference of Non-Aligned Countries held in Bandung in 1956 and the arrival of potential allies into the UN, Indonesia never gather the two-third majority for a resolution to be voted at the United Nations.

President Soekarno thus began threatening the Netherlands with unilateral decisions, including a series of anti-Dutch measures which banned the use of Dutch language whilst stopping all KLM flights from entering Indonesian air space. Likewise, it suddenly nationalised Dutch companies in Indonesia and warned that any Dutch citizen with no stable employment would have to leave the country. Although this measure was aimed at 9,000 people only, it caused the departure of most of the 50,000 Dutch citizens still living in Indonesia. In 1960, Indonesia banned all Dutch ships from its waters and broke off diplomatic relations with the kingdom. In the eyes of Jakarta, the problem of Dutch New Guinea clearly constituted a serendipitous opportunity to complete decolonisation.

Although it had appeared that the Dutch would remain uncompromising on the issue, Indonesia eventually gained the upper hand by playing on East-West relations. Soekarno was famous for having a frosty relationship with the United States, but in 1958 he made it clear to the US that their support for Indonesian Papua would greatly benefit the relationship between the two countries. At a time when the “threat” of Communism had reached Southeast Asia in Vietnam and even Malaysia, the US clearly saw Indonesia as a potential capitalist stronghold that would halt the advance of Communism in the region. The situation was all the more urgent that Soekarno had always flirted with the Indonesian Communist Party (PKI) and had become the second largest recipient of Soviet aid outside the Warsaw Pact bloc after China.

In response, the Dutch government speeded up the process of Papuan independence, despite the fact that in no way had the Netherlands supported the independence of any other colonised country, not least Algeria where the French benefited from Dutch diplomatic support. Yet

domestic opinion was gradually turning away from the colonial adventure as it had become clear in Europe that colonialism was now a thing of the past; self-determination had now gained much support back in Holland.

When faced with the prospect of Papuan independence, Indonesia threatened the Netherlands with military intervention. In December 1961, Soekarno addressed the Indonesian nation with a “Triple Commandment to the People” (*Tri Komando Rakyat*, which was to become known as TRIKORA), in which he called for Indonesians to defend their “Papuan brothers” against colonial rule. The following year, troops were mobilised in eastern Indonesia to supposedly prepare an attack on western New Guinea, although it was obvious that Indonesian forces would have difficulty mounting a successful invasion on the territory. Jakarta had already tried to infiltrate New Guinea and dropped troops near Fak-Fak and Merauke in 1962, but none of these operations had been particularly successful.

The United States was particularly reluctant to intervene on behalf of the Netherlands in an armed conflict between the two countries as it did not want to give an image of going against decolonisation. When the Dutch compared their own responsibility towards Papuans to that of the Americans towards West Berlin, Kennedy was quoted as replying that this was “an entirely different matter (...). (In West Berlin) there are some two and a quarter million inhabitants (...). Those Papuans of yours are some 700,000 and living in the Stone Age” (quoted in Colchester 1986a:69).

The Kennedy administration thus began showing support for Indonesia when it prevented Dutch army planes from landing on its bases en route to New Guinea. Next, Australia rallied the Indonesian cause as it wanted to avoid at all costs a war so close to home. In the meantime, Dutch public opinion was increasingly voicing opposition to a military conflict with Indonesia.

With all its allies lost, the Netherlands bowed to American pressure to get the US to negotiate between the two parties which favoured the handing over of Dutch New Guinea to Indonesia without surprise. The “Bunker Agreement” (named after US diplomat Ellsworth Bunker) stipulated that Indonesia would be given a mandate to manage the territory after UN transition, thus avoiding utter humiliation for the Dutch, but Indonesia would have to hold a referendum for independence. It was clear that holding this referendum *after* having handed the territory over to Indonesian administration was a merely cosmetic gesture and that independence was an unlikely outcome. Despite the fact that no large-scale military intervention had taken place, Indonesia’s military expenses for 1962 cost a third of the national budget. With Dutch New Guinea part of Indonesia, Soekarno was free to transfer Indonesian expansionism elsewhere which now turned to Malaysia.

Divided between the right to self determination and the threats of separatism to nationhood, the UN had finally supported the latter. As Defert, a staunch defender of Papuan nationalism, put it,

Despite the UN’s humanist professions of faith, it is obvious that by literally sticking to border inherited from colonisation, the organisation tended to give greater

importance to the flukes of a history marked by power relationships than by aspirations expressed by human communities.<sup>73</sup>

Defert (1996:236)

#### 5.2.4. *From Irian Barat to Irian Jaya*

Interestingly, the Papuan Council was only consulted *after* the agreement had been signed: only 12 of the 28 delegates had expressed support for it. On 1<sup>st</sup> October 1962, the Netherlands transferred authority of Western New Guinea to the United Nations which administered the territory under UNTEA (United National Temporary Executive Authority) until 1<sup>st</sup> May 1963. Before the territory was even handed over to Indonesia, UNTEA was overwhelmingly Indonesian (whose nationals occupied three quarters of the seats in the organisation).

As soon as Western New Guinea was finally handed over to Indonesia, Jakarta banned the right to create new political parties or express political views in written form whilst all indigenous political groups were abolished. *Irian Barat* (West Irian) thus became Indonesia's 17<sup>th</sup> province. Place names were changed to fit Indonesian nationalist ideology, and the island's highest peak, Carstsenz Peak, was named to *Puncak Soekarno* (Soekarno Peak).

Irian Barat joined Indonesia at a critical period of the latter's history. Inflation was so high that the Indonesian and New Guinean rupiah (indexed on the guilder) only united in 1971, whilst Soekarno's reign of Guided Democracy (*Demokrasi terpimpin*) was on its last legs. In a last move of defiance to the international community, Indonesia pulled out of the UN in 1965 and claimed that a self-determination referendum would never take place in Irian Barat.

Suharto's New Order, however, brought little change to Jakarta's policies towards Irian Barat. By 1965, an armed movement for independence had been formed, the Organisation for a Free Papua (*Organisasi Papua Merdeka*, commonly known as OPM). From its creation, OPM launched attacks on Manokwari which it even managed to control temporarily before the city bombed out by the Indonesian army was taken over again by Jakarta. In 1969, the operation was repeated in the territory's uplands where the town of Enarotali came under OPM administration for several days before the revolt eventually fell.

Meanwhile, in the face of mounting Irianese discontent, Suharto's first foreign minister, Adam Malik, issued a "Call of National Obligation", arguing that Irian Barat should be made into a special national project in a bid to revive the TRIKORA spirit (Chauvel & Bhakti 2004:18). Suharto thus decided to hold a referendum after all to satisfy the Papuan elite and confirmed his intention during his Independence speech in 1968. Yet it was obvious that the Indonesian could contemplate only one possible outcome for the referendum that was to be called the Act of Free Choice, and the climate of oppression imposed by Indonesian forces was in no way conducive to an unbiased referendum.

The Act of Free Choice was finally held in July 1969 but instead of universal suffrage, the Indonesian administration decided to get 1,025 traditional leaders "representative of Irianese

---

<sup>73</sup> « Malgré les professions de foi humanistes des Nations Unies, il est clair qu'en respectant à la lettre les frontières héritées de la colonisation, l'Organisation Internationale tend à accorder beaucoup plus d'importance aux hasards d'une histoire marquée par les rapports de force, qu'aux aspirations exprimées par les communautés humaines ».

population” to vote. In a decision known as *Penentuan Pendapat Rakyat*<sup>74</sup> or PEPERA, not a single leader voted against unification with Indonesia and to this day, the event remains shrouded with taboo, as illustrated by the Indonesian government’s refusal to have it re-examined in 2000 (Chauvel & Bhakti 2004:21). One elder interviewed during the author’s fieldwork recalls that his father was selected for PEPERA. He was isolated from his family for six months and refused to mention what had happened when he was eventually returned to his family. In short, the New Order only confirmed Indonesia’s Irianese policy that had been laid out by Soekarno.

Despite the fact that PEPERA fooled nobody in the International Community, Indonesia had gained sufficient legitimacy to control Irian Barat more effectively. Throughout the 1970s to the late 1990s, Suharto’s New Order launched a four-pronged approach to integrate Irian Barat into Indonesia. The first of these was referred to as a cultural and social programme of “Indonesianisation” which consisted in undermining all the cultural elements specific to Papuan societies and replacing them with Indonesian ways of thinking and behaving. This policy which reached an apex in the 1970s has since been denounced as being based on racist ideology and is described in greater detail in the section on indigenist policies in Papua.

The second element of the New Order’s integration policy was economic. As Defert (1996) explains, the Indonesian army has played an essential role in controlling the territory since the handing over in 1962. The United Nations Fund for the Development of West Irian (FUNDWI) played exactly the role its name suggested – a mere fund which was used extensively by the local civilian administration to undertake constructions of strategic military importance, such as the roads from Jayapura to Wamena and along the border with Papua New Guinea. The aim of these roads was to cut right through the heartland of growing opposition to Indonesian rule, galvanised by the rise of OPM (*Organisasi Papua Merdeka* or Organisation for Free Papua).

The main engine of economic development in Papua was the creation of mining poles, which began with a few oil concessions in the early 1970s. Yet oil production in Papua remained on a small scale compared to its neighbouring islands, and in fame and economic output it has widely been eclipsed by Freeport. Mining and infrastructure policies during the Suharto period are discussed in greater detail in the relevant sections below.

Thirdly, the New Order regime undertook a vast colonisation programme as part of its nationwide transmigration (*transmigrasi*) policies. The idea of turning Papua into a colony for settlement goes back to the Dutch period when Eurasian communities had suggested turning the territory into a safe haven with political troubles in the rest of the Dutch East Indies. After the handing over of Nieuw Guinea to Indonesia, the Indonesian civil servants who had replaced the Dutch ones remained pretty much the only non-Papuans in Irian Barat. After the 1969 Act of Free Choice, settlers began trickling in from Maluku and in 1977 Irian Jaya officially became a land of settlement.

The task was considerable given that few Javanese, Balinese or Sumatranese were ready to settle in a place which was (and still is) overwhelmingly regarded as the end of the world. Official transmigration policies turned out to be extremely costly as they were estimated to be between US\$ 9,000 and 12,000 per migrant household between 1977 and 1985 (Defert

---

<sup>74</sup> *Penentuan Pendapat Rakyat* literally translates as “Decision of Determination by the People”.

1996:336). Eventually the number of immigrants did increase but was mainly due to spontaneous movements responding to labour demand.

By the fall of the Suharto regime, roughly half of Irian Jaya's population was made of non-Papuan Indonesians, with concentrations in Sorong, Manokwari, Jayapura and Merauke. Whilst the first two settlements largely reflect geographical proximity and historical links with the rest of Indonesia, the decision to settle transmigrants in Jayapura and Merauke is more strategic than anything else, as both are border cities with Papua New Guinea. Merauke, the furthest town from Jakarta in the whole of Indonesia, is actually composed of two-thirds non-Papuans, the remaining third being mainly of Marind descent (the local indigenous group).

One of the aims of transmigration was to integrate outlying islands into the Indonesian cultural realm (the underlying rationale being that local populations would emulate migrants). This also included technological transfer in sectors such as agriculture, yet little attention was paid to the fact that transmigrants oftend came from the poorest levels of Javanese society and knew little in the way of efficient agricultural techniques. Transmigration thus definitely contains a political dimension in that it probably also aimed at diluting ethnic (and therefore separatist) identities.

The fourth and most striking of the components of Indonesian policies towards Papua during the New Order was the reaction to calls for Papuan independence. Throughout the Suharto regime, Papuans were excluded and discriminated against in the civil service, causing an ethnic marginalisation in favour of Non-Papuan Indonesians. As a result of the widely discriminatory policies carried out by Jakarta, most of the Westernised Papuan elite that had flourished during Dutch rule had fled to Australia or the Australian territory of Papua New Guinea by the early 1970s. The most vociferous individuals remaining had been imprisoned.

In the face of such policies, the most famous separatist movement, OPM (*Organisasi Papua Merdeka* or Organisation to Free Papua) was created in the mid-1960s. By the 1970s OPM was headed by the charismatic Seth Rumkorem who had defected from the Indonesian army. Initially, OPM's international ties were occasionally Marxist and also linked in with French-speaking African intellectual movements centred on *négritude*. By the 1980s, guerrilla-style operations had multiplied across Irian Jaya, although the number of fighters rarely exceeded 1,000 (who benefited from considerable support among local populations).

Over the decades, however, it became apparent that there was not one separatist movement but several. A number of demonstrations took place in Jayapura, all repressed with violence, but only few of which displayed allegiance to OPM. The University of Cenderawasih in Jayapura, the highlands of Wamena and the Tembagapura/Timika region have all been loci of resistance to Indonesian rule.

Expressions of separatism were allegedly met with violent repression under the New Order. Defert (1996) has compiled a list of horrific accounts of mass murders, including the following extract from the Dutch newspaper *De Telegraf* of events having taken place in Biak in 1974:

Villagers had been home for two days, when soldiers returned and circled the *kampungs*. The men, who numbered 25 from Wusdori and 30 from Kridori, were forced to dig a large hole (...). This hole became their grave. They were all shot dead under the gaze of the women and children.

The day following this mass execution, the soldiers came back with thirty Papuans, probably from neighbouring villages. The village women of Wusdori and Kridori did not know them. The soldiers forced the Papuans to get onto the boats of the villagers they had killed the day before. Stones were tied to their necks and close to the coast, they were pushed overboard and sank.

*De Telegraf*, 11, 12 and 19 October 1974 (translated from Defert 1996:374).

### **5.2.5. Papua since Suharto: Autonomy and Partition**

Papua has undergone rapid change in the past decade since the end of the New Order. The Habibie presidency (May 1998 to October 1999) was the first window of opportunity in a long time for the separatist movements to express their wishes. East Timor had been a traumatic experience for the government in power which feared a break-up of the entire country. It was therefore determined to give more flexibility to the separatist wishes of the breakaway provinces at either end of the archipelago, Aceh and Irian Jaya. Yet Habibie was so taken aback by the demand of 100 Papuan leaders for independence in February 1999 that the government did not even make a statement to the declaration.

Habibie's successor Abdurrahman Wahid took a number of symbolic steps to accommodate the separatist movement. In December 1999 the separatist flag (*Bintang Kejora* or Morning Star) was raised in the centre of Jayapura with no intervention from authorities. A month later, Wahid proclaimed that the new name of Irian Jaya would be Papua, a clear reference to the separatist movements which had used that name all along. The central government also funded the *Musyawahar Besar Papua 2000* ("MuBes" or Mass Consultation for Papua 2000) which created a Presidium dominated by the independence movement. Yet Wahid's policies caused much discontent in Jakarta (Chauvel & Bhakti 2004:28) and in August 2000 the MPR (*Majelis Permusyawaratan Rakyat* or People's Consultative Assembly) requested that the Presidium be removed. In October, the forceful removal of *Bintang Kejora* flags in Wamena caused riots which led to the death of 30 people.

The idea was to reign in all manifestations of independence and put forward instead a form of partial devolution of power whilst enabling Jakarta to retain the bulk of the authority within a centralised system. In October 2001, three months after Megawati Soekarnoputri had been sworn into power, the DPR (*Dewan Perwakilan Rakyat* or People's Representative Assembly) passed the Special Autonomy Law (*Undang-Undang Otonomi Khusus*, better known as Otsus). This law theoretically enabled a significant reallocation of revenue and devolution of decision making powers to Jayapura (Chauvel & Bhakti 2004:32) and rallied much support among Papua's elite.

The diffusion of Otsus across the territory was made difficult, however, by a wave of violence of the period 2000-2002 that culminated with the assassination of Papuan separatist Theys Eluay in November 2001. Although the culprits were found and judged, light was never shed on who had commanded his assassination. In August 2002, three teachers – two Americans and one non-Papuan Indonesian – were killed in Timika in an attack on Freeport. Since stakeholders continue to disagree on the means of implementing Otsus, to this day Papuan autonomy remains more theory than reality, although it has effectively caused a sudden increase in the revenue of local governments.

The other main political trend to have marked the Reformasi era is that of partition (*pemekaran*). Habibie had already suggested the idea of partitioning the province into three new provinces in 1999 in response to demands for independence. In January 2002, a report was even issued entitled “The Partition of Irian Jaya is a Solution to the Threat of National Disintegration” in which it was explained that partition would marginalise “irresponsible and opportunistic groups” who claim to speak in the name of the people of Papua (quoted in Chauvel & Bhakti 2004:38).

A new province thus saw the light of day in February 2003, following a Presidential Instruction recommending the creation of three provinces in Papua. To the dismay of pro-independence movements, the new province took on the old, New Order name Irian Jaya Barat (Western Irian Jaya) rather than keeping the name Papua, although in February 2007 the province was renamed Papua Barat. Irian Jaya Barat, with a population of 800,000, occupied the Bird’s Head and “neck”. In the meantime, the remaining part of the former province of Irian Jaya kept its name (Papua), but the provincial government, which had not even been consulted on the issue of partitioning, refused to recognise the new province.

A court ruling in 2004 even stated that the creation of Irian Jaya Barat had been unlawful, but the decision was maintained, allegedly because the provincial government was already up and running. In the meantime, discussions were underway to create a third province, although it could not be decided whether to create a Papua Tengah (Central Papua) or Papua Selatan (South Papua), made up of the former *kabupaten* of Merauke. The provincial government in Jayapura eventually recognised the existence of Papua Barat in 2007, at a time when President Susilo Bambang Yudhoyono promised that to dismiss any proposal for the creation of a third province.

Further, less controversial, partitioning, has nevertheless taken place. In particular, the former *kabupaten-kabupaten* of Jayawijaya (covering the whole of the central highlands) and Merauke (covering an area larger than East Java in the southern cone of the territory) were split into several *kabupaten* each. This led to the multiplication of local governments whose effects are briefly discussed below in the case-study on Asmat.

Whilst Otsus is undoubtedly a move towards greater autonomy – at least on paper – partition has widely been interpreted as a strategic move to undermine any prospect of independence by preventing nationalistic lines from coinciding with existing administrative boundaries. Over the years, both enthusiasm about one and anger about the other have waned as Otsus has yet to be implemented and any further partitioning has been suspended *sine die*.

## **5.3. FOREST-RELATED POLICIES IN PAPUA**

### **5.3.1. Timber Policies**

Papua’s timber industry has remained underdeveloped throughout the twentieth century in relation to the size of its forests – the largest in the country, with 31 million hectares (10 million of which are production forests). Yet what the territory has not made up for in terms of quantity, it has certainly done in terms of controversy.

According to Sumule (2007:10), the forestry sector is Papua's second largest source of revenue at 5.24% of total export values. If one excludes Freeport operations from the count, this figure stands at 59.43%.

### 5.3.1.1. Timber Production during the New Order

Despite the territory's large size, its geographical isolation prevented forests from being logged for timber. Defert (1996:307) notes that in the late 1940s, log production in Nieuw Guinea was merely for domestic consumption and fluctuated between 8,000 and 15,000 m<sup>3</sup>. The Dutch mainly focused on non-timber forest products such as rattan, lawang and other essential oils.

A United Nations report dating from 1968 suggests that timber exports rose in the early 1960s to reach 35,404 m<sup>3</sup> in 1963, the year following the handing over. However, the economic crisis that followed the event probably explains the sharp fall in timber exports which by 1965 did not reach 2,000 m<sup>3</sup> (UNDP & FUNDWI 1968:65). The report also pointed out the severe lack of infrastructure, technique and expertise to tap into the vast timber sources in the territory and predicted that it would take at least 20 years before any fully-fledged timber industry could be up and running (1968:73).

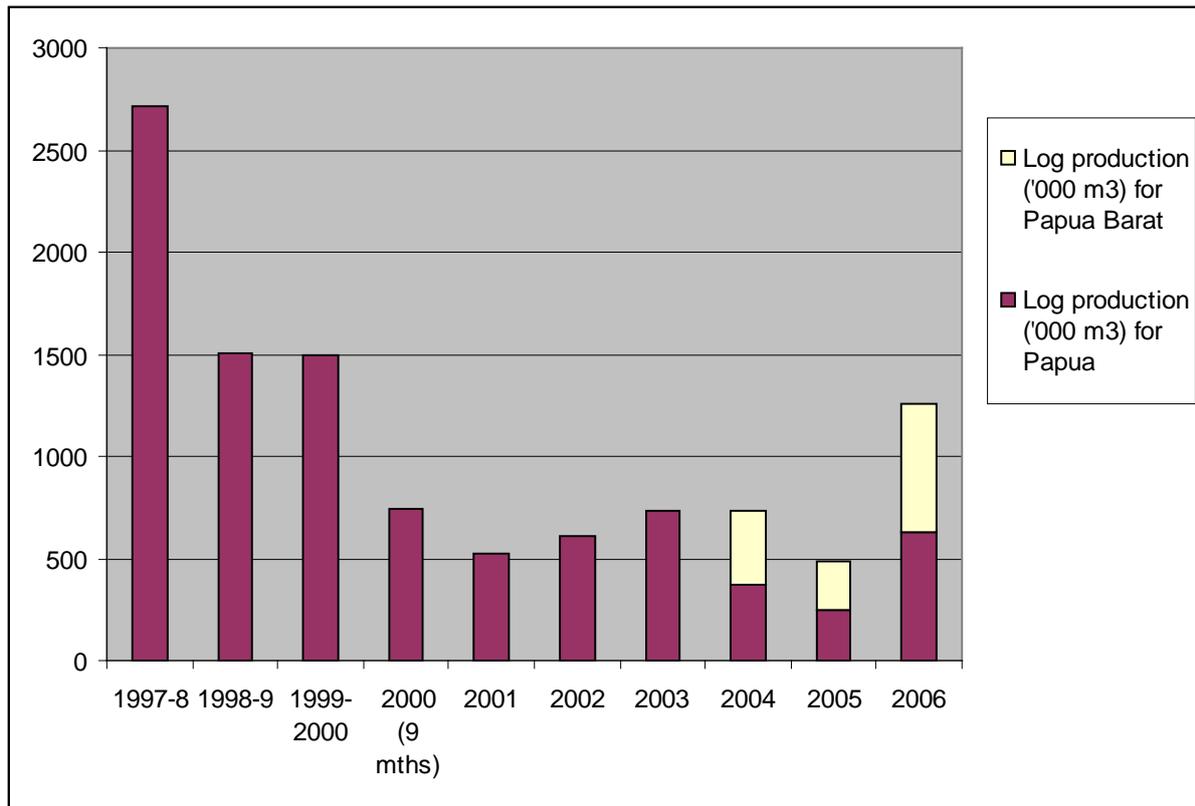
Whilst timber production shot up in other parts of the archipelago, it remained embryonic in Papua throughout the 1970s and well into the 1980s. During this period most of the production was carried out by a national Indonesian company called *Perusahaan Kayu Negara* or PKN. However, as Defert notes (1996:308), this did not prevent logging companies from recruiting Papuan labour by force – a claim supported by accounts that Indonesian company *Artika Optima Inti* paid local authorities to force the Asmat to work for the company near the Sirets estuary.

HPHs, which had been the main tool of forest management in the rest of Indonesia, only made their appearance in significant numbers in the 1980s in Papua. Prior to that, only a few coastal forests, predominantly along Teluk Cenderawasih and in the Bird's Head, had been logged for timber. Observers claim that a peak in HPHs was reached in the mid-1990s, following which the steady decline began which resulted in today's situation of near-decay.

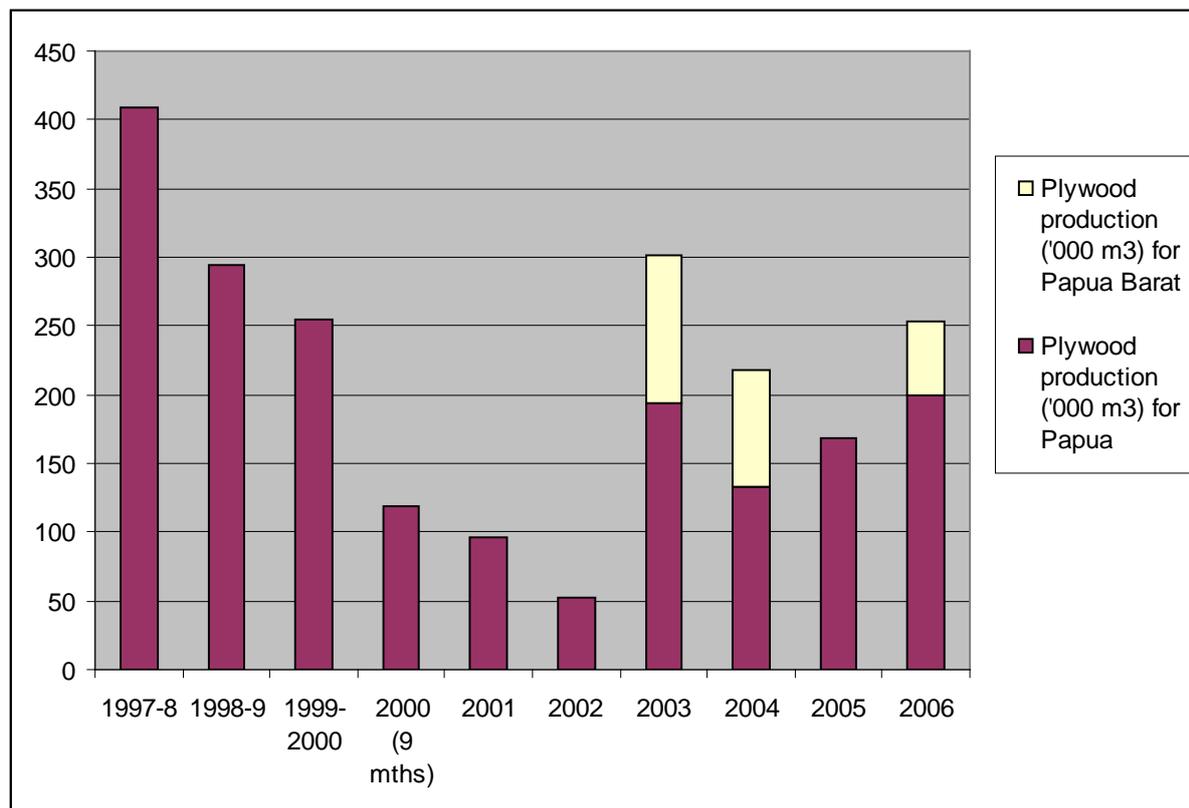
However, even then many HPHs remained either unallocated or inactive, mostly as a result of the costs of transport machines to the site and evacuating the timber. Overall, the province produced large amounts of timber, ranking between 3<sup>rd</sup> and 5<sup>th</sup> place in terms of log producers in the country in the late 1990s (Departemen Kehutanan 2001). However, for those same years it lags far behind the main timber-rich provinces in terms of transformed products such as plywood, ranking 7<sup>th</sup> and 8<sup>th</sup> between 1997 and 2000. More importantly, given the province's size, its output in relation to the vastness of its forest remained poor in comparison with most other forest-rich provinces in the archipelago.

### 5.3.1.2. The Ups and Downs of Reformasi

The fall of the New Order spelt a severe crisis in the Papuan timber sector from which it has yet to recover. The physical violence, and threats thereof, which had characterised the timber sector in Irian Jaya during the New Order were no longer permissible as the province suddenly opened up to foreigners and journalists. Like elsewhere in the archipelago, logging companies could no longer rely on the army to enforce their official rights on forest resources at the expense of local populations, and by the early 2000s, the entire timber industry was in a near state of collapse, as illustrated in Figures XIX and XX.



**Figure XIX.** — Log production in Papua (including Papua Barat) per annum between 1997 and 2006 in thousands of cubic metres (after figures compiled from Departemen Kehutanan 2001, 2006).



**Figure XX.** — Plywood production in Papua (including Papua Barat) per annum between 1997 and 2006 in thousands of cubic metres (after figures compiled from Departemen Kehutanan 2001, 2006).

As both figures show, the industry has gradually picked up again after a dip in 2002. Today, the surface area of production forests continues to hover around 10 million hectares and the number of concessions has stayed stable throughout the crisis, having varied between 46 and 50 for Papua and Papua Barat since the late 1990s. Yet in 2007, out of the 35 HPHs that are officially operational in Papua (excluding Papua Barat), only 16 are classified as active, the remaining being in a state of stagnation since the early 2000s (Dinas Kehutanan Papua 2007a). Forestry Service staff claim that this figure is actually lower – around 12 according to one source, most active HPHs being located in *Kabupaten Sarmi* on the north coast west of Jayapura.

Despite being on the increase, Papuan timber production stills lags far behind a number of smaller provinces with a lower percentage of forest cover. In 2006, the province ranked 9<sup>th</sup> for log, sawn timber and plywood production separately, falling behind provinces such as South Sulawesi for transformed products. One of the reasons for this is that much of the timber produced in Papua is transformed in other provinces, notably in Maluku, before being exported.

In short, most of the conclusions drawn in the UNDP report of 1968 still hold true today for the forest sector: despite its potential, timber production remains minimal, especially when compared with the output of other Indonesian provinces. Two reasons may be put forward to account for this observation. First, the growing importance of the “community” dimension in forest-related policies has somewhat shifted the focus away from timber production. Secondly, the recent rise and fall of illegal logging practices has shaken the very foundations of Papua’s timber sector.

### 5.3.1.3. The Community Dimension

The profound changes that the Papuan forest sector has undergone since the fall of Suharto have been called nothing less than a paradigm change in forest management (Tokede *et al.* 2005:2). The *Reformasi* era saw a rapid growth in community-based and indigenous issues applied to natural resource management. With the introduction of Otsus in October 2001, Papua quickly became a focus and a fertile territory for community and indigenous issues concerning forest management.

Following Otsus, a number of decrees and ministerial decisions created new ways in which local populations could access benefits from timber production activities. First, the provincial government established a policy according to which logging companies operating HPHs should pay local “communities” compensation to be negotiated. Secondly, a new title delivered by provincial government was created called *Ijin Pemungutan Kayu oleh Masyarakat Adat* (Timber Logging Permit for Customary Communities, better known as IPK-MA). This title enabled local populations to carry out forest management themselves in small concessions (250 to 1,000 ha) for one year through a community-based cooperative called *Koperasi Masyarakat* or Kopermas.

Thirdly, in some districts of neighbouring Irian Jaya Barat, such as Manokwari, the government established a larger version of IPK-MA called *Ijin Hak Pengelolaan Hutan Adat*, Permit to Manage Customary Forests or IHPHA) whereby concessions of up to 2,000 ha could be allocated to a Kopermas for up to 20 years. Both IPK-MA and IHPHA permits were revolutionary in that (i) they were issued by local and provincial governments rather than Jakarta, and (ii) they allocated state forest management to local populations for the first time. Similar initiatives were introduced elsewhere, collectively known as “mini-concessions”, but in Papua they had a particular resonance as they were introduced against a backdrop of calls for independence and increased provincial autonomy.

Initial euphoria over these changes was short lived, however, as implementation problems soon cropped up. As Tokede *et al.* explain,

Central government policies on customary communities’ rights to harvest forest products are contradictory. Whilst the Ministerial Decree refers only to non-commercial harvesting activities, its implementing decree (Director General’s Decree) refers to commercial harvesting of forest products. This decree states that customary communities are permitted to harvest forest products commercially for an unlimited period on an unlimited area of forest land. As a further example of legal uncertainty, the Ministerial Decree states that the District Head has the authority to issue permits for forest utilization by the community; but the implementation decree allocates this responsibility to the Head of the District Forestry Office, who must obtain approval from the Provincial Governor.

Tokede *et al.* (2005:7)

The second difficulty came from the lack of training and capacity among local populations in managing forests. As a result, Kopermas-style structures were often unable to carry out forest management on their own and relied on partnerships with timber operators. In many cases, these operators were none other than those who managed HPHs in the vicinity. Other problems classic to “community-based” forest management found in Papua as elsewhere in

the world include problems of representativity and capture by the elite (Sumule 2007:15). To quote Tokede *et al.* again,

It was hoped that Kopermas cooperatives would provide communities with a legal means to realize community aspirations for their traditional forest lands. In reality the cooperatives have been hijacked by HPH (Large-scale Commercial Forest Concession) concessionaires and non-HPH investors as a simple but cheap legal prerequisite for exploiting timber on traditionally owned land. The main factors behind the failure to empower customary communities are low levels of information about government policy and their rights; low capacity, facilities and skills for commercial forest management; and lack of capital for investment.

Tokede *et al.* (2005:29).

In his study of “indigenous forest management” in Rendani Forest (also near Manokwari), Alhamid was even more scathing about the perversion of Kopermas, likening them to Trojan horses made up of profit-oriented logging dressed up as community-based initiatives:

(...) I would prefer to use the metaphor of the Trojan Horse to describe forest utilization by the *Kopermas* approach. Even though, by definition, *Kopermas* is a community institution, in reality the initiative for *Kopermas* does not come naturally from the local community themselves but through persuasion of various kinds by investors from outside.

The basic problem surely does not lie in the question of whether the forest can or cannot be logged to produce “quick cash”, but rather on the substance of whether the logging can increase the welfare of the community or not. And it is clear that there will be no positive long-term benefit if the *Kopermas* system persists; the forest will be exploited but poverty will still characterize *adat* communities. If this happens, *adat* communities will not only be stripped of their forest but also of their culture and heritage. However, under the prevailing political situation, to halt a *Kopermas* would be to declare war with local people.

Alhamid (2004:262-3).

As it so happened, IPKMA and IHPHA licences were revoked in 2005 following a nationwide ruling that only the Ministry of Forests (*Departemen Kehutanan*) in Jakarta could have a say in the allocation of state forest management permits. IPKMA had also been included in an illegal logging scandal described in the section below. Despite the fact that local populations are no longer able to manage forests using this tool, the euphoria of the early 2000s catalysed the formation of a network of Papuan militants in favour of the devolution of natural resource management rights to local populations. This movement, primarily composed of NGOs, community-based organisations and members of tribal councils (*Dewan Persekutuan Masyarakat Adat* or DPMA), is still very active, as witnessed by the number of seminars held on local forest management. This movement is in turn inextricably linked with the wider network of organisations and individuals sympathetic with causes such as human rights, *adat* and Papuan autonomy.

As mentioned briefly above, another development of the “community” dimension of forest management focused on benefit sharing with local populations in HPHs. Weakened by the collapse of the sector nationwide, this decision dealt another severe blow to the large-scale

timber industry in Papua. As elsewhere, this spelt a tip in the balance of power in favour of local populations who suddenly found themselves greater bargaining power. In many cases, the demands for compensation by local elites were so high or led to such open conflict with timber companies that many of those simply folded their operations and left, as in the case of *Artika Optima Inti* in Sawa Erma, *Kabupaten Asmat*. This partly explains why such a large number of HPHs are currently inactive.

#### 5.3.1.4. The Illegal Logging Crisis

The legality of logging operations in Papua has always straddled the boundary between legality and illegality. During the New Order, abuse of the rights of workers and local populations meant that logging companies infringed Indonesian law on a regular basis. However, their isolation from the rest of the country meant that such abuses mostly went unreported.

Following the fall of the New Order, the timber sector ran out of control. In the late 1990s and early 2000s, against a backdrop of calls for greater local autonomy, the legitimacy of the police and military was increasingly questioned. Secondly, at the same time, timber resources had begun running out on other islands in Indonesia, prompting timber prospectors to turn to the last sizeable reserves in the country, especially Papua.

The third and most important factor was reform: the Otsus law and provincial and district-level decrees creating additional titles such as IPKMA and IHPHA only further contributed to general confusion, especially as they appeared contradictory to national legislation which stated that only the Ministry of Forests in Jakarta could issue logging permits. The final blow to the coherence of the forestry legal structure was dealt when the central government placed a ban on log exports, prompting the governor of Papua to issue his own decree allowing Papuan logs to be exported (Newman & Lawson 2005:8).

A number of opportunistic individuals and companies took advantage of the confusion and the proliferation of legal loopholes to extract as much timber as possible. Many operations focused almost exclusively on Merbau species (notably *Intsia bijuga*, *Intsia palembanica* and *Intsia retusa*, a type of Asian hardwood renowned for its resistance and used for high-class construction and furniture. Although a number of researchers had already begun working on illegal logging issues in Indonesia (see relevant section in national forest-related policies for more information), few –if any – had looked as far as Papua. The claim made by two NGOs in 2005 that Papua provided up to 70% of the country's illegal timber (Newman & Lawson 2005:9) thus came as a bombshell.

In 2005, the Environmental Investigation Agency or EIA, a British NGO, and Telapak, an Indonesian NGO, released a report and a documentary aired on British television. Both releases were based on the same material which, after having been compiled, revealed a complex international network of timber smuggling starting in Papua and ending in China via Jakarta, Malaysia, Singapore and the Philippines. The degree of detail and the sheer quantities of illegal timber estimated in the report came as a shock to many in the timber sector and beyond. This EIA/Telapak investigation (Newman & Lawson 2005) notably showed how the recently created community logging rights (notably IPKMA) were being subverted through the intervention of “middlemen”:

The usual method is for middlemen, nicknamed ‘foster fathers’ (*bapak angkat*) to make contact with members of a community with substantial amounts of merbau on its land. Often the middleman is a military officer or other official. The community member will be invited to the nearest town, entertained and persuaded to sign a cooperation agreement. This agreement commonly involves a set price for the timber, plus a promise of gifts for the community – commonly a new church, generators or speedboat engines. Soon after a logging gang arrives in the community’s lands, the merbau is felled and loaded onto barges or ships and a derisory payment made. These activities lead to conflict within communities, who often feel powerless to resist the middlemen.

Newman & Lawson 2005:9

According to the report, these middlemen were far from acting alone as they relied on a number of officials in the military, police or local government who accepted bribes in exchange for letting the operations run their course. In some cases, the army allegedly intimidated local populations into accepting the deals between logging companies, middlemen and the Kopermas which was supposed to represent them (2005:10). The report went onto describing the complex chain of custody of “illegal Papuan logs” following their departure from Papuan ports, notably those located in Teluk Cenderawasih and the Bird’s Head.

In the course of the transport of this timber to ports outside the country, additional illegal activities would take place to allow customs to turn a blind eye, including bribery, fake documents, underdeclaring and declaring the timber as coming from neighbouring Papua New Guinea. Using several examples as case-studies, the authors identified key individuals inside and outside the country who ensured that the timber eventually reached foreign ports – notably ones in China which had become the biggest consumer of illegal timber from Indonesia.

The EIA/Telapak report had its desired effect. Surfing on the already existing wave of concern about forest law enforcement (the Bali Conference on “Asian FLEG had only been held four years before), it catalysed media and political attention on the fate of “the last frontier forests of the Asia-Pacific”. Newspapers in Indonesia and abroad soon confirmed allegations of rampant illegal activities in Papua whilst international donors such as DFID and the World Bank strongly encouraged the Indonesian government to take effective action.

The Indonesian government responded in two ways. First, many of the decrees passed by provincial and *Kabupaten* governments concerning the regulation of logging activities were revoked by the central government in a nationwide “cleanup” of forest sector legislation. Titles such as IHPHA and IPKMA disappeared and any existing ones were declared void, as their equivalents in other provinces had been, whilst Kopermas were dismantled across the territory.

The rationale for these decisions was that despite resting on existing national legislation – notably Otsus – allowing *kabupaten* and provincial governments to issue titles went against Law 41/1999 which confirmed the sole authority of the Ministry of Forests in these matter. The governor of Papua’s decree allowing the export of Papuan timber was also revoked on the basis that it was in contradiction with national legislation. In so doing, the Ministry of Forestry in Jakarta had effectively taken control again of Papua’s forest resource management.

Secondly, the police launched a vast clampdown on logging operations and timber trade known as *Operasi Hutan Lestari* (“Operation Sustainable Forests”). Again, this operation which took place in three phases overall swept the entire nation (in a dozen provinces according to Kustiani 2005), but its focus and origin remained Papua. Vast amounts of timber were found to lack legal documents such as transport permits (SKSHH) and were thus seized across Papua. Key individuals were also arrested in the private sector, including the CEOs of companies PT Trisaksi and PT Hanurata (Anonymous 2005), and in the public sector, such as the head of the Provincial Forestry Service (*Dinas Kehutanan Propinsi*) in Jayapura and the *Bupati* of Sorong (Sinar Harapan 2005).

These high-profile arrests left bitter memories among those members of staff in Jayapura Provincial Forestry Service who stayed on. Several of those interviewed claimed that Papuan officials were not the ones to blame as the Papuan timber mentioned in the EIA/Telapak report had merely been sent to other Indonesian ports who were guilty for having then exported the logs to China without transforming them.

The longest-lasting effect of *Operasi Hutan Lestari* has been felt in the figures of the timber sector. Many staff members in the Provincial Forestry Service, who are responsible for delivering annual logging permits (*Rancangan kerja tahunan* or RKT), are simply too afraid of being arrested should they issue them without double-checking. As a result, the entire timber industry has slowed down in Papua and almost experienced a complete shutdown in 2006, even for companies which want to act in all legality. The aftermath of *Operasi Hutan Lestari* thus also contributes to explaining why so many HPHs are currently inactive.

As for illegal logging itself, according to most observers rates have fallen dramatically since the annulment of smaller logging titles and *Operasi Hutan Lestari*. However, a number of NGOs continues to scrutinize merbau trade in Indonesia and particularly in Papua. Such is the case of Greenpeace and Dutch NGO Milieudedefensie (an affiliate of Friends of the Earth) who released a report in December 2007 claiming that

Nearly all [illegal] merbau [produced in Indonesia] comes from Papua. Less logging took place there, due to stricter governmental monitoring. At least some of the 400,000 cubic metres confiscated in 2005, has nevertheless landed on the international market via smuggling in the Surabaya harbour.<sup>49</sup> Due to the bans on export of logs and rough sawn wood, the merbau logs and perhaps most of the sawn merbau exported from Indonesia during 2006 would have been illegal. Because land rights and boundaries are not officially determined, the status of 80 to 90 per cent of the logging concessions in Indonesia do[es] not comply with legislation.

Roundwood production is much higher than the amount of logging annually permitted.<sup>51</sup> According to official figures illegal logging was estimated to supply 76 per cent of Indonesia’s timber consumption in 2004. This figure, however, did not account for logs being illegally smuggled abroad to China, Malaysia and elsewhere which increases the figure up to 80 per cent.

Van Oijen (2007:16).

Whilst most observers recognise that illegal logging remains a problem in Papua (although not on the same scale as before 2005), many have attempted to draw attention to a much more worrying trend in natural resource management, namely the expansion of acacia, eucalyptus and oil palm plantations.

### 5.3.2. “Fastwood” and Oil Palm Plantations

Little information is available on the plantations sector in Papua, whether they be for fibre (notably acacia and eucalyptus) or for oil palm. This is partly due to the fact that until today, plantations remain few and far between in the province as a result of its relative geographical isolation. Despite their short history, plantations had already been subject to controversy by the mid-1990s when Defert wrote that

In order to compensate the fall in forest cover, monocultural plantations of fast-growing species is now being considered. In 1990, US company Scott Paper, in association with Indonesian company PT Astra International, intended to plant 800,000 hectares of eucalyptus in the vicinity of Merauke. The project would have covered the lands of some 50 villages or so and would have cleared forests and fields without distinction. Following a particularly active environmental campaign, Scott pulled out of the project in 1991. Astra was not able to take the project up despite support from public company PT Inhutani II. However, the invitation for bids to exploit the given area has been maintained.<sup>75</sup>

Defert (1996:310)

An investigation into the activities of PT Texmaco Group in *Kabupaten* Merauke released in 1998 mentions conflicts with local Marind populations over access to lands (Team Jaringan Monitoring Hutan Irian Jaya 1998). Likewise, a survey carried out in 2003 by WWF Papua of PT Korindo’s operations in HPH, HTI and oil palm plantations also mentions frequent conflicts with local populations over access to “indigenous land” (*tanah adat*). The report warns that

In terms of culture, indigenous societies have lost their traditional lands, forests and sacred places. These traditional lands have been handed over to the company. If this affair is not managed with care then it can lead to latent conflict in the long term because indigenous lands are a genuine part of indigenous societies in Papua generally, so not owning land any more is tantamount to not having any more identity.<sup>76</sup>

(Bowe *et al.* 2003:37)

From these few sources of information on plantations in Papua, the situation appears to have evolved relatively little despite *Reformasi*. According to interviews at the Provincial Forestry

---

<sup>75</sup> « Pour compenser le recul du couvert naturel, on envisage désormais la plantation en monoculture d’espèces à croissance rapide. En 1990, la compagnie américaine Scott Paper, en association avec l’entreprise indonésienne PT Astra International, devait ainsi planter 800.000 hectares d’eucalyptus aux alentours de Merauke. Le projet aurait concerné les terres d’une cinquantaine de villages, rasant forêts et cultures sans discernement. A la suite d’une campagne écologiste internationale particulièrement active, Scott s’est retiré du projet en 1991. Astra n’a pas été en mesure de le reprendre malgré l’aide de la compagnie publique PT Inhutani II. L’appel d’offre pour l’exploitation de la zone a cependant été maintenu. »

<sup>76</sup> “Secara budaya, masyarakat adat telah kehilangan tanah-tanah adat, hutan adat dan wilayah-wilayah sakral mereka. Tanah-tanah adat telah beralih ke perusahaan. Bila hal ini tak dikaji dengan baik maka kondisi ini merupakan potensi konflik laten yang akan terbawa sepanjang masa karena tanah adat merupakan JATI DIRI bagi masyarakat adat Papua pada umumnya, sehingga bila tidak memiliki tanah lagi maka mereka tidak beridentitas lagi.”

Service in Jayapura, in 2007 the Governor of Papua declared that 1 million hectares would be earmarked for oil palm plantations in *Kabupaten* Merauke and Boven Digul, in the south. Likewise, PT Korindo also received a permit for a fibre plantation (*Ijin usaha hutan tanaman* or IUHT) the same year. Permits to recuperate timber in land destined for conversion totalled 10,308 ha for 2006 and the first half of 2007, 70% of which was located in *Kabupaten* Boven Digul (Dinas Kehutanan Papua 2007b). Staff at the WWF branch in Merauke claim that there are already 15,000 ha of oil palm plantations in Boven Digul and that a further 4,000 have been planned for the near future.

In short, most plantations are located in the southern part of Papua, especially in the *Kabupaten* of Merauke and Boven Digul. The fact that these areas are lowlands and the relatively easy access to Boven Digul by road from Merauke port have certainly contributed to these areas being prime locations for plantations. However, the natural forests of the southern tip of Papua strongly resemble those of Australia in that they are primarily composed of eucalypt species. This has prompted some to claim greater legitimacy of fibre plantations in these areas where converting a natural eucalypt forest to a eucalyptus plantation is not as “bad” as converting a natural dipterocarp-dominated rainforest.

The main concern is about the future of the plantations industry. The governor’s declarations mentioned above are only the tip of the iceberg in a shift from natural forest management to large-scale plantations that could sweep Papua in the near future. Vast swathes of natural forest have already been earmarked as HPK (*Hutan produksi yang dapat dikonversi* or “production forests that may be converted”), especially in the southern half of Papua but also along the north coast. The *Wall Street Journal* claims that in a bid to exploit the rising global demand for alternative energy, China National Offshore Oil Corp. said that it was ready to invest US\$ 5.5 billion in plantations and biofuel factories in Kalimantan and Papua (Wright 2007:2). Similar rumours abound and depict a picture of rapid growth in the years to come, which has recently pushed CIFOR researchers to investigate the potential effects of such changes on local populations and forest cover.

### **5.3.3. Mining and Infrastructure**

Although the mining and public infrastructure sectors have a deeper history than that of plantations, their outlook for the future is similar. As Defert (1996:295) notes, the army has always played an important role in promoting both sectors which were of strategic importance to Indonesian control and interests in Papua: “given the volume of goods exchanged across the territory, the cost of extending the road network was not justifiable. It was therefore primarily for military and strategic reasons that large-scale constructions were undertaken”, he notes (1996:295).

In particular, the 1980s witnessed the construction of roads from Jayapura to Merauke and to Wamena that cut through the highlands and heartland of OPM. In practice, however, both roads are only passable along certain stretches. The only way to get from Jayapura to Merauke or Wamena remains by plane. In 2007, the road network remained minimal, partly because of the central mountain range, thus further contributing to the isolation of Papua’s hinterlands. Only in the Bird’s Head and in the areas around Jayapura, Wamena and Merauke are road networks of any significant use.

The mining sector goes back further in history, beginning with the discovery of offshore oil near Sorong in 1941. Royal Dutch Shell was responsible for most oil drilling and extraction during Dutch rule and the oil sector almost ground to a halt following the handing over of the territory to Indonesia in 1963. It was only in 1972 that drilling began again in earnest near Sorong whilst Conoco and Mobil began investing in the province only in the early 1990s. By Indonesian standards, however, oil production in Papua remains low, with “only” 27,000 barrels a day in 1988 compared to 877,000 in Sumatra and 216,000 in Kalimantan.

Undoubtedly the most famous mining operation in Papua is that of Freeport, near Timika on the south coast, an American joint venture with the Indonesian government which operates one of the world’s largest copper mines. Although copper was initially discovered in the region in 1936 and a contract to exploit the mine was signed in 1960, it was not until the New Order that activities took off, when Suharto granted Freeport Sulphur (now Freeport McMoRan) a number of favourable conditions including tax exemptions. The opening of the mine Mount Ertsberg (also known in Indonesian as Gunung Bijih) in 1973 was sufficient in the eyes of Suharto to call for a change in the name of the province from “Irian Barat” to “Irian Jaya” (“Glorious Irian”), a name which the province kept until 2001. Production of copper and gold by Freeport has grown considerably since the 1970s and remains by far the most profitable venture in Papua.

The fame of Freeport, however, comes from its dismal environmental and human rights record. According to ICG (2002:18), tensions began in the 1970s with local populations when they expressed resentment at the loss of land which they had considered theirs. Local protests led Freeport to build schools and clinics, although this programme was very limited in scope. From allegedly a few hundred inhabitants in the 1960s, the area surrounding Freeport operations grew to 90,000 in the mid-1970s, having attracted swathes of migrants in search of a job.

Yet from that period onwards, social unrest grew in the vicinity of the mine and military brutality, as elsewhere in Papua, became an ongoing problem. Allegations of environmental damage and corruption multiplied throughout the 1980s and 1990s, although many of them remain unproven. In October 1994, a Papuan employee of Freeport was shot dead; upon Freeport’s request for military assistance, the army retaliated violently, killing 37 Papuans, and according to certain reports, carrying out executions, torture and other abuses. Eighteen months later, violence flared up again as riots broke out, which only led Freeport to contribute financially to existing military garrisons rather than seeking a more cooperative solution to existing problems.

Whilst the company enjoyed close ties with the New Order regime, ICG (2002:20) also suggests that it has benefited from considerable diplomatic support from the United States. This claim is supported by the fact that the US ambassador to Indonesia from 1995 to 1999 also happened to be a board member of Freeport.

The fall of Suharto, however, has arguably enabled the situation to improve considerably. Increased access to information concerning the region have encouraged Freeport to act in a more transparent way and sign agreements in 2000 and 2001 to contribute to the welfare of two local societies, the Amungme and Kamoro. Yet controversy remains over Freeport’s environmental and social policies, as pointed out by WALHI which led a campaign following river pollution which had caused the death of four people in 2000. Tension remains, as illustrated by the notorious killing of Freeport teachers in 2002.

The name “Freeport” continues to galvanise opposition, especially among movements that support Papuan independence, because of its ties with Jakarta and the fact that its operations constitute a major economic rationale for Indonesia to hold onto the territory. Likewise, it is one of the best-known and most studied case-studies of human rights abuses in developing countries, and is likely to remain so for the years to come, whether the situation continues to improve or not.

### **Box XIII. — Freeport.**

The most famous case in the mining sector in Papua is undoubtedly Freeport (see box XIII). Its controversial history of operations and dismal human rights record have made Papua world famous for human rights abuses and has only further fuelled calls for Papuan independence.

Although very limited in their geographical extent, mining and public infrastructure in Papua are beginning to be of some concern to a number of observers. Otsus has not only increased the power of local governments (albeit at a theoretical level only for the time being), but it has also increased local government revenue which in a bout of euphoria has begun making promises for sweeping development in Papua in the coming years.

Just like in the case of plantations, the provincial government has declared a vast expansion of the province's road network and promising to pull Papua into an age of modern communication. The government launched a programme in 2007 promising the construction of 190 km of "highways" by 2011 – a term as yet unheard of in Papua. This prompted a recent paper to make a collage of the governor's face next to a picture of a motorway spaghetti signposted "Jayapura" and "Wamena". Although the reality of today's Papua is still a far cry from such a scenario, such visions are reminiscent of the Brazilian Amazon in the 1960s, on the eve of the "pharaonic constructions" that the military government was about to undertake.

#### 5.3.4. Conservation

Until these wide-ranging development plans are implemented, Papua will remain a conservationist's paradise, in the image of the birds of the same name which are often used to depict the island as a "lost paradise". The territory's geographical isolation and its location at the margins of Western civilisation are undoubtedly the most important factors behind Papua's status in the eyes of conservationists. One might also add the ecological uniqueness of the island, located on a biogeographical cline between Asia and Australasia (Sahul), making it home to a variety of rare and endemic species. Where dipterocarps and placental mammals dominate Asian rainforests, southern Papua is the realm of eucalypts and marsupials, just like across the Torres Straits.

In 2006 an expedition organised by US NGO Conservation International visited a remote part of the Foja Mountains (also known as Gauthier) in the north of the island, east of Teluk Cenderawasih. The report of this expedition made headlines round the world. In an article entitled "A lost world in Indonesia yields riches for scientists", *The Washington Post* had this to say:

A team of scientists has discovered a lost world of rare plants, giant flowers and bizarre animals (...). Flown by helicopter to a mountain preserve virtually untouched by humans, the scientists found more than 40 species new to science (...). "It has a fairyland quality", said Bruce Beehler, an ornithologist with Conservation International in Washinton and the expedition's co-leader. "It's a spectacularly beautiful Garden of Eden".

Nakashima (2006).

The images of "paradise lost", "lost world" and "Garden of Eden" were repeated throughout the press, illustrating both the fascination for the unknown and the image of Papua as the last

“untouched” place on Earth. This enthusiasm was not a one-off event, however, as conservationists use superlatives time and again to describe Papua. These images are described in greater detail below in the section entitled “Primitivism, Indigenism and Development”.

Papua’s history of conservation policies actually go back a relatively long way, starting with the creation of Lorentz Nature Monument in 1919. The status of protected area was revoked in 1956 following conflicts with local populations before the Indonesian government created a nature reserve (*Cagar alam*) on the same site in 1978 in the wake of the World Forestry Congress held in Jakarta. Lorentz was made a national park in 1997 and listed as a UNESCO World Heritage Site in 1999. It is the largest protected area in Southeast Asia.

Today there is a total of 67 protected areas across Papua, totalling 10,619,090 ha, *i.e.*, a quarter of the combined surface area of Papua and Papua Barat. Beside Lorentz National Park; Papua is also home to other large protected areas such as Memberamo Foja in the north, Wasur National Park in the southern tip of the territory, the Arfak mountains in the Bird’s Head and Teluk Cenderawasih Marine National Park which was recently found to contain the richest biodiversity ever discovered in a marine ecosystem (Cohen 2006).

The main reason for the vast size of areas allocated to conservation is the territory’s geographical isolation which means that threats to ecosystems is minimal in a number of areas. As a result, there is no need to enforce protection measures such as recruiting guards and creating elaborated management plans: Papua is primarily the land of “hands off” conservation.

A range of local NGOs and community-based organisations such as PPMA and FOKER work on community conservation issues, trying to integrate local development with environmental conservation. Papua’s provincial government also has a unit responsible for conservation issues, but the best endowed organisations in this field are international NGOs such as Conservation International and especially WWF.

WWF first set foot in Irian Jaya in 1979 and now has offices in Biak, Yapen, Manokwari, Sorong, Fak-Fak, Wamena, Merauke and Timika, each of them responsible for nearby protected areas which they manage in cooperation with local authorities. The head office of WWF Sahul Region (part of WWF Indonesia) is located in Abepura, close to Jayapura. In southern Papua, WWF has even launched a programme known as Trans Fly which spans across southern New Guinea and includes Wasur National Park in Indonesia and Tonda National Park in Papua New Guinea. Both parks are twinned to Kakadu National Park located only a couple of hundred kilometres south in Australia.

In line with recent political developments, WWF has been developing work with local populations as a means of implementing Otsus. In the near future, however, the NGO’s activities might be focusing increasingly on growing threats such as plans to expand plantations in southern Papua. The Merauke office staff has already begun capacity building projects among local populations in a bid to help them negotiate with logging and plantation companies willing to buy timber and land.

## 5.4. “PRIMITIVE” VERSUS “DEVELOPED”: A CASE-STUDY

What makes Papua unique in the world, at least in the eyes of outsiders (including the rest of Indonesia) is its notion of “primitivism” and associated images, both positive and negative. The vision of Papuans as naked cannibalistic savages with bones through their noses living in the jungle or on mountain tops remains a vivid image in contemporary Western and non-Papuan Indonesian societies alike. This vision is pervasive in all sectors and dimensions of Papuan policies, whether they be social, environmental or infrastructural, in discourse, instruments and organisation alike. This section attempts to delve into this descriptive narrative of Papua to pinpoint what is so unique about Papua’s forest-related policies.

### 5.4.1. *Semantics of Primitivism and Development*

Delving into the definitions of terms used by outsiders to describe Papuans sheds light on the ideational associations and the constructions most frequently employed. In turn, this helps build a “mental map” that helps us understand how policies are established.

The most frequent analogies used by interviewees to describe the fate of Papuans were as follows:

1. **Backwardness** in time, as suggested in the term *terbelakang* (Table V). The literature also often uses terms such as “primitive” and “relics of the Stone Age” (which refers specifically to the fact that metal was introduced by outsiders). Altogether, this image relies on the vision that Papuans live similar lifestyles to the ancestors of today’s Westerners, and therefore that Westerners are more advanced on a hypothetical scale of societal development. This perception was used as one of the main justifications of colonialism, hence the French expression *mission civilisatrice*, referring to the supposed mission that the French had to civilise other peoples by colonising them, and is still pervasive today throughout the West and Indonesia.
2. **Blindness**. A number of interviewees described Papuans as having their eyes closed (*mata tertutup*) and that the role of government was to open them (*harus dibuka*). One governmental interviewee explained that if they could enter isolated areas, “we would become a beacon for the surroundings, so that we can light up the areas which still live in darkness, so that they might enjoy it and watch this beacon”<sup>77</sup> (interview in Agats, 13 April 2007). The open/closed dichotomy was also frequently used as a geographical metaphor, notably that access and roads had to be “opened” to enable Papuans to “see” modern civilisation.
3. **Animality**. The “least politically correct” analogy (everything is relative) was openly used in the past: Defert recorded a speech in which the Minister of Foreign Affairs under Soekarno claimed that Papuans should be helped down “from their trees” (Defert 1996:266) – a reference to populations of southern Papua who live in tree houses. Today non-Papuan Indonesians, even among the most educated classes, commonly refer to

---

<sup>77</sup> “Kita menjadi lampu untuk sekitarnya, supaya bisa menyelah wilayahnya yang masih gelap, supaya mereka bisa menikmati, lihat lapu ini”.

Papuans as animals, illustrating their analogy by pointing out that they are naked. The image of Papuans as animals reflects similar perspectives of indigenous populations of Central Africa and Brazil. In Africa, “Pygmy” populations are still commonly referred to as *sauvages*, a French term which translates both as “savage” and “wild”. Likewise, when indigenous populations in Brazil have been “pacified” (*pacificado*), they are said to be *manso*, a term that usually translates as “domesticated”.

Table V describes the most common adjectives used in Indonesian to refer to “isolated” populations in Papua. These terms are opposed to a complex lexicon of development polished by decades of developmentalist discourse in Indonesia and of which a few terms are described in Table VI below.

Indonesian term	Explanation
Primitiv	Import of the word <i>primitiv</i> from the Dutch language.
Terasing	<i>Asing</i> translates as “foreign”. The prefix <i>ter-</i> adds both a notion of superlative (“very foreign” or “the most foreign”) and an idea that it is accidental (Sneddon 1996:180) and therefore not their fault.
Terbelakang	Roughly translates as “backward” (“belakang” means “behind”). The same prefix <i>ter-</i> is applied, as described above.
Terisolasi	“Very isolated”. The root is taken from the English whilst the same prefix <i>ter-</i> is applied, as described above.
Terpencil	<i>Pencil</i> translates as isolated, secluded, desolate, remote (Echols & Shadily 1989:418). The same prefix <i>ter-</i> is applied, as described above. <i>Terpencil</i> was defined by one interviewee as “societies which do not have access to the outside world”.
Tertinggal	<i>Tertinggal</i> translates as “left behind”: Echols & Shadily (1989:578) translate <i>daerah tertinggal</i> as an area “left behind by progress”. Note the use of the prefix <i>ter-</i> to emphasise the passive state of the populations concerned.

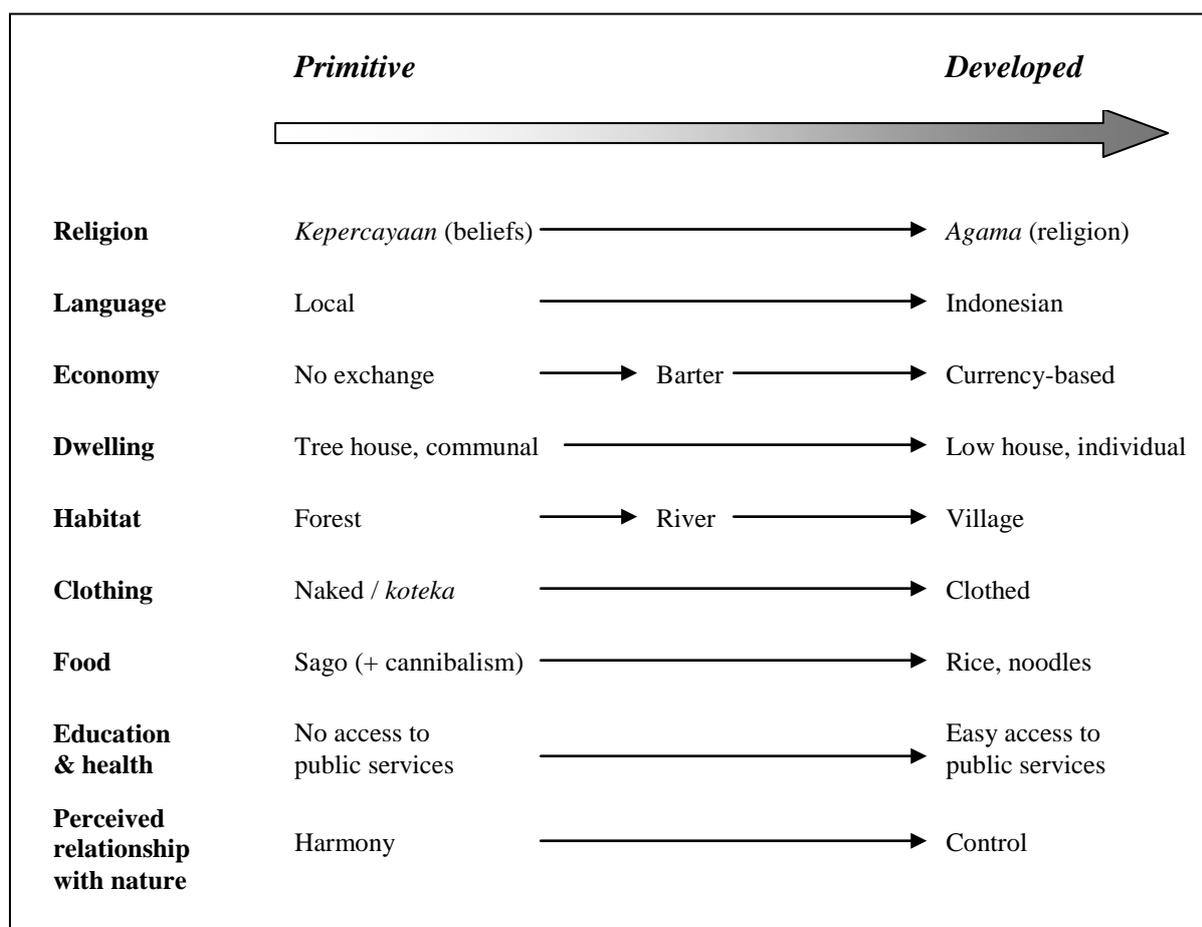
**Table V. — Indonesian terms frequently used by interviewees and the existing literature to describe isolated inhabitants of Papua, with approximate translations and explanations (B. Singer).**

Indonesian term	Explanation
Maju	<i>Maju</i> translates as “ripe” (as in fruit), but can also be applied in the expression <i>Negara maju</i> (developed country).
Makmur	A term used in the Indonesian Pancasila (the five principles at the basis of the Indonesian state). Although <i>makmur</i> translates as “wealthy”, it is mostly used as part of the development lexicon and when applied to social policies in Papua denotes integration into the principles of the Indonesian state.
Pembangunan	Usually translates as development (as a process). The term is based on the root <i>bangun</i> which means “to build”,

	thus emphasising the importance of physical infrastructure in development.
Perkembangan / Pengembangan	Also translates as development as a process. Both terms are built on the root <i>kembang</i> which means “flower” (thus “blooming”).
Sejahtera	Another term used in the Indonesian Pancasila. <i>Sejahtera</i> translates as “prosperous” and “safe” ( <i>kesejahteraan</i> means “well-being”).

**Table VI. — Main terms in Indonesian used by interviewees and the existing literature to denote development as opposed to primitivism, with approximate translations and explanations (B. Singer).**

It must be noted the term “isolated” here is not necessarily equivalent to its use in the Amazon. In Brazil as elsewhere in Latin America, isolated peoples are a specific category which has not yet had official contact with the government. In Indonesia this distinction is not applied: in this paper the term “isolated” reflects this perspective and is applied to populations who have minimal exchange of resources and people with Indonesian society. Given the vagueness of the concept of isolation in the Papuan context, interviewees often refer to an implicit “scale” of primitivism to describe the degree of isolation of such and such a society, as depicted in Figure XXI.



**Figure XXI. — The unilinear scale from “primitive” to “developed” based on the criteria most frequently used by interviewees in Asmat and the Brazza-Eilanden Triangle.**

### 5.4.2. History of development policies in Papua

As early as in the 1860s British naturalist Alfred Russel Wallace, on his decade-long tour of the Malay Archipelago, described New Guinea in the following terms:

The north-western peninsula and a few islands grouped around it [...] have produced (with a very partial exploration) no less than two hundred and fifty species of land birds, almost all unknown elsewhere, and comprising some of the most curious and most beautiful of the feathered tribes. It is needless to say how much interest attaches to the far larger unknown portion of this great island, the greatest *terra incognita* that still remains for the naturalist to explore, and the only region where altogether new and unimagined forms of life may perhaps be found.

Wallace (2007[1869]:440).

Much of this still holds true today, although again only in the eyes and imagination of outsiders; and since Papua has been administered by outsiders since the late 19<sup>th</sup> century, this vision has transpired through public policies, especially in the past four decades. Throughout the post-war period, one of Soekarno's main arguments for the handing over of Dutch New Guinea to Indonesia was based on the observation that the Netherlands had done nothing to "develop" Papuans who still lived in the "Stone Age".

#### 5.4.2.1. Governmental Policies

Following the handing over by the Dutch in 1963, the Indonesian Minister of Foreign Affairs was quoted as saying that one of the main objectives of his government was to "get Papuans down from their trees" (quoted in Defert 1996:266). Over two decades later, this type of discourse was still fashionable among politicians, as illustrated by Irian Jaya's vice-governor's statement that "one must not be surprised that when observers speak of [the Irianese] they classify them as backward humans who have not yet been touched by a normal and harmonious culture" (quoted in Defert 1996:267). Although politicians no longer speak in such terms, this type of discourse remains the norm among non-Papuan Indonesians, as observed by the author even among university circles in Bogor and Jakarta.

In terms of cultural policies, the beginning of the New Order was marked by two operations launched in 1969 and 1970 called *Task Force* and *Koteka*<sup>78</sup> respectively. Both operations were created through presidential decrees which stated their objectives as follows:

1. Comb, wash and dress highland Papuans with decent clothes
2. Bring Papuans to the same level as their brothers in other parts of Indonesia (Defert 1996:268).

This focalisation on clothes is a typical example of the criteria of development as displayed in Figure XXI. In many parts of Papua, the simple introduction of clothes would have sufficed

---

<sup>78</sup> *Koteka* is a generic Indonesian terms for the penis sheath worn by Papuan men in the central highlands. It has become a much-used symbol to denote Papuan difference and even identity. The question of clothing is all the more important that non-Papuan Indonesians are primarily Muslim.

for people to wear them, but in the central highlands, populations such as the Dani resisted to abandoning their traditional attire, prompting the army to rely on forceful means to implement these policies. As US journalist Wyn Sargent observed,

Soldiers tied the hands of the Dani and cut their hair off. They threw it in the river and forced them to remove the grease which they had spent hours covering their bodies with. Then they got them to put pants on (...). When the Dani resisted these efforts by the government to “civilise” them, they were often shot dead.

Quoted in Defert (1996:272).

In some cases, this type of treatment led to revolts among highland populations. In 1973 two traditional leaders were arrested and detained by the Indonesian military, and when a villager was shot that same year, the general insurrection that followed across the highlands required massive intervention from the Indonesian army. The second component of *Task Force* and *Koteka* operations were no more successful. It consisted in giving out 6,000 parcels containing shorts, writing material, a portrait of President Suharto and a national flag.

In the late 1980s, Governor of Irian Jaya Barnabas Suebu was one of the only politicians at the time to have suggested that Papuans should follow their own cultural path towards development. This pluralistic concept of development has struck a chord, however, following the fall of the New Order and the elaboration of the Special Autonomy laws (Otsus). Today, operations *Task Force* and *Koteka* are widely considered a regrettable policy and a failure. It is generally agreed – among decision-makers in Papua at least – that development policies must be culture-sensitive and take into account regional specifics in policy-making, although in practice such principles are difficult to implement on a systematic basis.

Yet this shift from a single path to development to a pluralistic concept is not a paradigm shift in the Kuhnian sense of the term. In Brazil, governmental policies towards indigenous populations now recognise the will of some populations to remain isolated from the rest of Brazilian society, as illustrated by the creation of “ethno-environmental areas” where the country’s last uncontacted populations are believed to reside. Only one interviewee in Papua suggested that populations should not forcefully be put on the path towards “development” if they proved unwilling; the remaining interviewees all claimed that “development” could only be a positive process.

#### **5.4.2.2. The Role of Missionaries**

The Indonesian government was never alone in shaping cultural policies in Papua. As in Brazil and Central Africa religious missions have always played a fundamental role in establishing contact with isolated populations. Unlike much of the rest of Indonesia, Islam never went beyond a few small coastal settlements in the Bird’s Head. During Dutch rule the territory was thus opened to Christian proselytism, although the colonial authorities set the rule that Protestant missionaries should work in the northern half and Catholics in the southern half.

In both parts of Dutch New Guinea – apart from the first unfortunate experiences of German missionaries in Teluk Cenderawasih in the 1850s – missionaries landed on the mainland after

having established a base on nearby islands. And in both cases European and American missionaries heavily relied on local populations on these islands to spread the “good word” among mainland Papuans. In the north, Biak islanders have played a crucial role in evangelising mainland populations, whereas in the south it was Kei islanders who collaborated closely with white missionaries. Two terms are used in Indonesian to this day to describe missionaries: *misionaris* refers to white missionaries, whilst *penginjil* (from the word *Injil* meaning “Gospel”) refers to their Papuan equivalents. This pattern of conversion is still very visible today with a primarily Protestant north and Catholic south, although there has been a recent blend and Evangelists notably no longer take account of this colonial division.

Missions have often spearheaded the “exploration” of Papua. In the highlands, the first mission was set up as early as 1948, spreading into the Baliem Valley in 1954. By the late 1980s, there were literally thousands of missions across the territory, often entering in implicit competition with each other for the control of such and such a valley. At that time there were no fewer than 1,500 outposts of The Mission Fellowship or TMF based in Jayapura, whilst transport to remote locations was only done by MAF (Mission Aviation Fellowship). The bulk of Protestant missionaries are American-run and funded, whilst Catholic missions have a greater diversity of nationalities, ranging from American to Dutch to Philippine in terms of missionaries interviewed.

In terms of cultural policies, religious conversion aside, missionaries vary widely from one denomination to the other.<sup>79</sup> Catholic missionaries have often been very sensitive to local traditions, using an approach known as “inculturation”. A Catholic missionary interviewed defined the concept as “religious development based on a dialectic between scripture and local culture which gives birth to a new form of Christianity” (Interview in Jayapura, 30 May 2007).

This movement, which is believed to have peaked in the early 1990s, was not unconnected to Liberation Theology (see report on Forest-Related Policies in Brazil) whose popularity was at its highest in Latin America, although both approaches were never officially affiliated to each other. The same Catholic missionary interviewed recalls that his mission was in open conflict with the Indonesian government’s attempts at “Indonesianisation” of Papuan populations. According to him, the mission was almost ousted in 1978 by the then Minister of Religion.

At the other “extreme” lay a number of Protestant missions, many of which considered that any form of animism are inspired by the devil and must therefore be fought against, according to Defert (1996:279). Such cultural policies among Protestant missionaries are most obvious in their fight against religious syncretisms which have sprouted across the central highlands. Yet as Defert points out,

---

<sup>79</sup> De Hontheim (2008) recently published her PhD thesis on a comparison of Catholic and Protestant approaches to working with Asmat populations in southern Papua.

Adrian van der Bijl, reverend of CAMA (Christian and Missionary Alliance) admitted that he did nothing to discourage cargo-cult like tendencies of indigenous populations so long as the latter were encouraged to finish building the church and landing strip destined for missionary planes.<sup>80</sup>

Defert (1996:281)

More generally, Defert (1996:282) claims that none of the religious denominations were willing to dissociate material wealth from religious conversion as the link between the two always appeared to encourage conversion to Christianity.

The relations between missionaries and the Indonesian government have always been two-faced. On the one hand, the government often regards missionaries as an extension of government in that they have the resources and the will to reach out to isolated populations to bring them out of their “primitive” state. The process of contacting isolated populations often beings with an expedition on foot by one or more missionaries to establish first contact and ensure that the situation is safe before sending Papuan missionaries (*penginjil*) to set up a local mission. This base then enables more regular communication and an airstrip is built to enable Cessna planes to land. Many missionaries have never returned from “first contact” expeditions. Such processes by missionaries have often been welcomed by the Indonesian government which often follows on their footsteps to set up a military base or a police station.

On the other hand, the government has increasingly been treating with suspicion the fact that non-Muslims – and white ones at that – should take such keen interest in Papua’s most isolated populations. Friction between the government and missionaries arises wherever concepts of “development” differ. The example of the conflict mentioned above between a Catholic mission and the Ministry of Religion in Jakarta is a classic illustration of this (interview in Jayapura, 30 May 2007).

#### 5.4.2.3. The Influence of Documentaries and Tourism

As any remote part of the world, much of what Westerners know of Papua today comes from TV documentaries made by self-proclaimed “explorers” and other intrepid travellers. Virtually all of these inevitably overemphasise Papua’s exoticism by pointing out the differences in lifestyle between Papuans and Westerners. The result is an inversion of the “primitive-developed” scale in that although the criteria are maintained, the value associated to either extreme is inverted. The more “primitive” Papuans are, the more “exotic” and therefore the better it is.

In recent years a plethora of documentaries have been made on the Asmat region and its hinterland in southern Papua. Although the Asmat wear clothes nowadays and Agats, the main town in the region, has regular flights to Merauke, their exceptional wood sculpting skills and reputation as head hunters continues to capture the imagination of Westerners. The Asmat hinterland has been of even greater interest recently as “one of the last unexplored

---

<sup>80</sup> « Adriaan van der Bijl, révérend de la CAMA (*Christian and Missionary Alliance*) admettait pour sa part qu’il se gardait bien de décourager les tendances ‘cargoisistes’ des indigènes, pourvu qu’elles les encouragent à achever plus vite la construction de l’église et de la piste d’atterrissage destinée aux avions de mission ».

regions of the world” populated with societies living in tree houses such as the Korowai and the Koombai, only to name the most famous ones.

In 2002, France’s first TV channel aired an episode of *Ushuaia*, a highly popular documentary on explorations to remote places made by a famous French figure called Nicolas Hulot. This particular episode, entitled *Les évadés du temps* (“Those who escaped time”), was partly set in the Asmat region of Papua and opened with a full-scale traditional welcome by the Asmat only dressed in natural fibres. The second part of the documentary brought the viewer further inland to visit the Korowai allegedly known as “one of the last uncontacted peoples on earth” who “still live in the Stone Age”. Great emphasis was placed on the material culture of the Asmat and Korowai (especially sculptures and tree houses) but no mention was made of today’s changing lifestyles.

This prompted another French programme on a public channel, *Arrêt sur Image*, which sheds a critical eye on national television, to criticise heavily Nicolas Hulot’s episode which allegedly depicted the Asmat and Korowai as being stuck in some time warp. The programme notably criticised Hulot for claiming that the Korowai used no metal tools despite the fact that some of the pictures in the documentary showed men using metal machetes. In other words, Hulot played heavily on the “backwardness” image described above, merely recycling colonialist discourse on Papuans (albeit with an inversion of value judgments).

Since then, several other programmes have been made on societies in the region, notably an episode of Bruce Parry’s *Tribe* documentary series by the BBC on the Koombai (2004). Parry’s documentary, however, could arguably be credited for playing much less on colonial stereotypes than Hulot, focusing instead on cultural exoticism and the threats faced by this society in contemporary Papua. More recently still, a crew visited the Korowai to produce a series of documentaries for a French-speaking TV channel. In an interview with the author, one of the crew members explained why they had chosen to work with the Korowai:

We want to show that there is still something beautiful in this world and that we can live in harmony with nature. But [the Korowai] don’t live like they used to. They all wear dirty t-shirts with holes and only the older ones still wear *bungkus*.<sup>81</sup> So to make pretty pictures I got the older ones to take their t-shirts off. Nobody wants to see dirty t-shirts on TV, it’s not pretty (...). I also wanted pictures of stone axes – it makes them look more primitive – so I bought a stone axe and gave it to them, then I filmed them (...). They are really primitive. When they light a fire they jump around and shout, “Wah, Wah” like animals.<sup>82</sup>

Interview dated 4 April 2007

With so many documentaries in such a short space of time, the Korowai/Koombai/Asmat region has become famous in the tourism industry. A Bali-based tour operator run by an

<sup>81</sup> A common practice among the peoples of southern Papua including the Korowai and the Koombai is to wrap the foreskin up in a leaf. The wrap thus made is known in Indonesian as a *bungkus* (“packet”).

<sup>82</sup> « C’est pour montrer qu’il y a encore quelque chose de beau dans le monde et qu’on peut vivre en harmonie avec la nature. Mais [les Korowai] ne vivent plus comme avant. Ils mettent tous des t-shirts sales et troués, il n’y a que des vieux qui portent des *bungkus*. Alors pour faire de belles images j’ai fait enlever aux vieux leurs t-shirts. Personne ne veut voir des t-shirts sales à la télé, ce n’est pas joli (...). Pareil, je voulais des images de hache en pierre, ça fait plus primitif donc j’ai acheté une hache de pierre pour donner aux gens pour filmer (...). Ils sont vraiment primitifs. Quand ils font du feu ils se mettent à sauter et font tous ‘ouah, ouah’ comme des animaux. »

American expatriate has even begun organising so-called “first contact expeditions”: the operator’s website notably states that

According to anthropologists the best place and highest probability to make a “*First Contact*” is indeed Papua, in fact there are unexplored areas which harbour truly “*stone age*” tribes. People who have never experienced anything from our modern world, who have never seen or used metals. This is a humanity totally emmersed [*sic*] in the forces of pure nature. Whose tools come from what their environment has given them, from wood, stone and bone.

This “*first contact*” trek is not just another adventure travel tour, but a full-on exploratory expedition. In this “*first contact*” expedition we will be exploring one of the most beautiful and pristine rainforests in the world. We will be traveling into area[s] where there are no roads, air-fields or helicopter landing pads. Where the challenges and treasures of total nature are experienced. In this manner, there is no describing what can [be] felt and realized on an expedition such as this. This “*first contact*” expedition requires extreme sensitivity and thus the exploratory party will be limited to only four people.

Woolford (2006).

In a BBC documentary entitled “First Contact?”, Mark Anstice went on one such expedition organised by this tour operator. The documentary offered the opportunity for a range of anthropologists and indigenist activists (notably from the NGO Survival) to denounce such practices as highly unethical. Anstice also made a commendable attempt at deconstructing the concept of “isolated tribes” based on the idea of the total absence of contact with the “outside world”. In a discourse which is now common in Brazil but still virtually unheard of in Indonesia, interviewees in the documentary make two points about this concept:

1. “Isolation” is a relative notion and most officially uncontacted societies (*i.e.*, those which have yet to establish an official contact with representatives of a national government) have already witnessed some form of communication with the “outside world”, notably through trade of manufactured goods. This point is illustrated in the case-study described below.
2. “Isolated” or “uncontacted” tribes are often perceived as synonyms of societies which do not have a peaceful relationship with “outsiders”. As anthropologist Roger Sandall points out in Anstice’s documentary, if a group has not yet been contacted, “they don’t want to be contacted (...). They don’t you to push into their territory, push their door open, walk into their house and point a camera at them. The point is that they don’t want you on their turf”.

These claims by different actors on the “primitivism” of Papuan societies is further analysed in the following case-study on the Brazza-Eilanden Triangle.

### **5.4.3. The Brazza-Eilanden Triangle**

On a map of Papua in a copy of a book by “explorer” Julie Campbell (1991) found in the public library at Ambon (Maluku), somebody pencilled in all the main villages of the forests

upstream of Agats in the Asmat region. Further upstream, however, in the triangle formed by the Eilanden and Brazza rivers, the same person wrote “Kanibal” in large letters and circled the region, presumably as a no-go area.

This section is the first account ever, to the author’s knowledge, of the history and policies of this extremely remote corner of *Kabupaten* Asmat. It also provides the opportunity to discover the discourse of local populations *vis-à-vis* the recent social changes that they themselves have undergone. In other words, this part briefly attempts at describing the understanding of “primitivism” and “development” by those on the “receiving end” of these policies and discourses.

This section is based on data collected during two months (April and May 2007) in *Kabupaten* Asmat, including a one-month stay with Bese and Dajup communities in the Upper Eilanden Triangle. This study remains a first attempt at studying these peoples and the data quality is limited by the difficulties of fieldwork in a previously unstudied and isolated area, as well as the linguistic barrier: one month was insufficient to learn either language to a sufficient level for research, and Bese and Dajup individuals who spoke Indonesian were few and far between, and usually vocabulary limited to objects rather than concepts.

#### **5.4.3.1. *Kabupaten* Asmat**

Today, much of this remote region is located in *Kabupaten* Asmat, in southern Papua, a hundred or so kilometres shy of the territory’s highest peaks of Puncak Jaya and Puncak Trikora. Unlike the region to the north, the Asmat region is a place of lowland rainforest and swamps like much of southern Papua. It is crossed by a series of parallel rivers running from the foothills of the central mountains range and flowing into the Arafura Sea renowned for its rough waters and its voracious crocodiles. The main river and communication axis going inland is the Sirets, also known as the Eilanden – the confusion over names being a clear indication that this region was unchartered territory until recently. Above all, the Asmat are famous for being head-hunters and the populations inland for being tree-dwelling warriors.

It should not come as a surprise, therefore, that the Asmat region was one of the last coastal areas of Papua to be contacted by Dutch authorities (Zubrinich 1997:62). The Asmat coastline was visited as early as 1606 by Torres but only in 1938 was a European settlement established in response to complaints of raids in Mimika by the Asmat. The settlement was abandoned due to Japanese threats during the Second World War, so it was not until 1953 that the coast was settled for good when the first Catholic missionaries (known as Croisiers) under the leadership of Fr. G. Zegwaard set foot on the swampy beach that was to become Agats. In the absence of firm land, the settlement was built on stilts and a series of elevated wooden walkways was set up to get around.<sup>83</sup>

Yet the Asmat population remained wary of these new settlers and carried out raids on the settlement, of which the largest one killed 28 people in 1956. Gradually, however, the settlement of Agats grew as the mission established schools and built churches inland. By the 1970s, the Indonesian government had brought in local representatives and logging

---

<sup>83</sup> For a more complete history of the Asmat see the PhD theses written by Zubrinich (1997) on history and cosmology among the Asmat and De Hontheim (2008) on the relationship between the Asmat and Catholic and Protestant missions.

companies had established operations in the region, notably in Sawa Erma, north of Agats. Agats only became connected to the rest of Papua once a metal airstrip was built on an artificial mound on firm land north of Agats and electricity was set up in the early 1990s.

Until the early 2000s, the Catholic Mission remained the main political actor in the Asmat region with a network of churches, schools and health posts. In 1973, in line with the Croisiers' approach of "inculturation" (see above), the mission created a museum in Agats to promote the artistic expression of Asmat culture.<sup>84</sup> Asmat sculptures had already become world famous after Michael C. Rockefeller, the son of the then Governor of New York State, had brought back a large collection to New York City's Metropolitan Museum of Art. In 1961, at the age of 22, Michael Rockefeller disappeared off the coast of Agats in what remains a mystery to this day.

Agats was eventually brought out of its torpor in 2003 when, in a province-wide policy of increasing the number of administrative divisions, Asmat broke off from Merauke and became a *kabupaten* in its own right.<sup>85</sup> This triggered frenzy in Agats as money was poured into creating a new local government with its different services, staff, offices and housing. Since then, the village has doubled in size with the arrival of dozens of new staff with their families from all over Indonesia (although notably from neighbouring Maluku). Plush air-conditioned offices have been sprouting up above the swamps, although their staff have yet to get used to regular working hours, leaving most offices empty or closed for much of the day, and regular power cuts mean that the buildings quickly become furnaces.

The expansion of Agats from a mission to a fast-growing multiethnic frontier town has clearly reached its limits. The entire region has run out of ironwood, the timber species used to build and maintain the town's walkways, and governmental staff complain that getting around is a time-consuming affair as any form of transport other than one's own feet is all but impossible. With further funds coming in from Jayapura thanks to Otsus, the Asmat government now has plans to move the capital of the *kabupaten* further north to a location on firm land where cars can be used and the town can grow at minimal public expense.

#### 5.4.3.2. "Opening the Hinterland"

Well before the creation of *Kabupaten Asmat*, adventurers, missionaries and prospectors had begun venturing inland. Until the late 1960s, the whole of the inland region of Asmat was unchartered territory – with the exception of the banks of the Eilanden – until a Protestant mission was established by the *Gereja Persekutuan Kristen Alkitab Indonesia* Church in 1973. The same year, an airstrip was cleared and by 1974, a deal had been struck with an oil company prospecting in the vicinity. Senggo gradually grew with the construction of a hospital and the extension of the airstrip, both funded by the oil company. In the 1970s Senggo was still deep inside unknown territory and surrounded by hostile populations. As one Papuan missionary residing in Senggo recalls,

<sup>84</sup> The museum was opened in the days of Operations *Task Force* and *Koteka* mentioned above. Although neither operation was destined specifically for the Asmat region, missionaries interviewed recall seeing non-Papuan Indonesians travel upstream and burn traditional Asmat longhouses, forcing populations to build individual huts instead. The museum was thus created in clear defiance of such policies.

<sup>85</sup> Until 2003 *Kabupaten Merauke* covered the whole of Papua to the foothills of the central highlands, occupying an area larger than the whole of the province of East Java. The *Pemekaran* ("separation") policies of 2003 resulted in the division of Merauke into four *kabupaten*: Merauke, Boven Digul, Mappi and Asmat.

The situation was exceptional: we were scared. We prayed that we would be safe. We gave [local populations] tapes in their own language about religion. Local populations were very interested in this. They liked to hear about everything there is in the world. We gave food and they always said “[this] meat is really tasty, not like human meat”!<sup>86</sup>

Interview dated 14 April 2007

Soon after its foundation, the Senggo mission saw the arrival of logging companies which took advantage of established contacts with local populations to trade timber for manufactured products. Throughout the 1980s and 1990s, local populations residing near rivers were encouraged to log ironwood in particular and let it float downstream where it was collected by different companies. In the 1990s, one company (PT Damai) even set up a village known as Wowi on the Eilanden some 30 km downstream from Senggo where it built a school and a health post. However, several companies ran into trouble with local populations who realised the commercial value of timber compared to what they had been receiving, causing a number of companies to fold. Remaining companies such as PT Damai eventually disappeared from the region following a clampdown on illegal logging in the mid-2000s; by then, much of the region’s ironwood had gone.

#### 5.4.3.3. The Brazza-Eilanden Triangle Comes of Age

From then on money was to be made in a different industry: *gaharu* (see Box XIV). In the mid-1990s, news suddenly spread that the Asmat hinterland was a region rich in agarwood (known in Indonesian as *gaharu*) and that quick money could easily be made. Observers in Agats and Senggo alike recall a sudden influx of single men in a trend similar to a gold rush as outsiders poured into the region, travelling up every river to collect the precious material.

Known in English as agarwood and in French as *calambac*, *bois d’agar*, *bois d’aloès* or *bois de gélose*, *gaharu* is found in the resinous core of *Aquilaria* trees (*Aquilaria* sp.) which were once distributed across Southeast Asia. The resin is only produced in trees which are infected with a specific fungus, the highly volatile organic compounds of the resin forming a means of slowing the growth of the fungus and thus acting as a defence mechanism.

When distilled, the resinous pieces of wood release fragrant oil with a note of jasmine which has been highly appreciated for centuries first in China and nowadays mostly in the Arab world where it is commonly used to perfume baths during Ramadan. Yves Saint-Laurent has also been known to use agarwood in his perfumes. According to some agarwood can also act as a treatment for nausea and asthma.

The Dutch East Indies and later Indonesia had always seen a trickle of exports of agarwood to the Middle East, but in 1972 with the depletion of sources in Malaysia and the discovery of abundant sources in Sumatra, exploitation of *Aquilaria* trees began in Riau before spreading to Aceh, Padang and Nias. The depletion of agarwood sources closely followed the timber boom and bust witnessed by different islands of Indonesia in the 1980s and 1990s. During those decades the fever of agarwood spread to Kalimantan, Sulawesi and Maluku and

<sup>86</sup> “Situasi luar biasa: kami takut. Kami sambahyang, mungkin kami akan selamat. Kami kasih kaset tentang agama di bahasa mereka. Masyarakat lokal ditarik sekali oleh itu. Mereka senang dengar tentang semua yang ada di dunia. Kami kasih makanan, mereka selalu bicara ‘daging bagus sekali, tidak seperti daging manusia’!”

soon a number of *Aquilaria* species entered the IUCN Red List species because of rampant illegal exploitation even inside protected areas (PHPA & WWF 1995). By the late 1990s the frenzied search for agarwood had reached Papua.

Agarwood can fetch extremely high prices depending on the quality of the wood (notably its oil content). Between 30 and 90 kg of wood are required to produce 1 litre of agarwood oil which averaged some US\$ 7,000 to 7,500 in price in the early 2000s. This corresponds to some US\$ 350 to 375 for every kg of agarwood collected from the wild.

In similar ways to gold rushes in the United States or the Brazilian Amazon, the rush for agarwood has introduced a range of problems to Papua. Where hoards of single men in search of quick money go, prostitution and sexually transmitted diseases usually follow, in particular HIV/AIDS. HIV has thus spread even to the most remote parts of Papua where it was a completely unknown disease, and of course no treatment is available. Likewise, malaria has been introduced to isolated populations through agarwood prospectors, leading to an extremely high mortality rate upon contact (along with the impact of other common diseases).

#### Box XIV. — Gaharu.

The upper Eilanden had been travelled for over a decade and certain Korowai populations had been encouraged to leave the forest and set up camp along the river to remain in contact with Senggo and Agats. However, the region north of the upper Eilanden and east of the Brazza remained completely off limits and were mainly impassable swampy forests reputedly home to violent, war faring populations. As “explorer” Julie Campbell described one of the societies residing in this triangle, “we flew in a MAF Cessna to Dekai [on the upper reaches of the Brazza] in search of the Momina, the most primitive of the nomadic tribes who live deep in the rainforests” (1991:72). She was unsuccessful in finding them.

In the mid-1990s the first intrepid *gaharu* prospectors began venturing up the Kolff river which runs parallel to the Brazza to the east. As the son of a missionary turned *gaharu* prospector called Sam explained, many of the first wave of prospectors never came back. As he pointed out, *gaharu* prospecting had become an art in establishing contact with populations initially hostile to all intruders. Those living along the river Kolff and its parallel tributary the Modera, found to be speaking a single language, were labelled “Merai” whilst those further upstream were called “Dajup”. (According to a missionary based in Tokuni, a settlement on the upper Modera in the heart of the Dajup area, however, the populations living on the lower parts of the Modera and the Kolff are known as “Bese”, which is the term used in this paper). As Sam put it,

The first one to travel up the Kolff was my father in 1988 in search of crocodiles. In 1998, I started entering the area looking for *gaharu*. Upon entering with our Johnson people came out of the forest. We gave them rice and noodles. First they didn't like rice, they thought they were ant larvae and tried to eat them raw, then they tried baking it, and finally they learned to boil it. We got naked people to find *gaharu* for us and when they gave it to us, we gave them clothes.<sup>87</sup>

Interview dated 17 April 2007

<sup>87</sup> “Yang pertama masuk di sungai Kolff adalah ayah saya pada tahun 1998 untuk mencari buaya. Tahun 1998, saya mulai masuk hutan mencari gaharu. Ketika masuk dengan Johnson, orang-orang keluar dari dalam hutan. Kami memberi mereka beras dan supermie. Pertamanya mereka tidak suka beras, dikiranya itu adalah larva semut dan mereka makan berasnya mentah-mentah, kemudian coba dibakar sampai akhirnya mereka belajar merebus beras. Kami minta orang-orang yang telanjang untuk mencari gaharu dan kami tukar gaharunya dengan baju.”

For most prospectors, however, collecting *gaharu* in the area was extremely difficult because of ongoing skirmishes between the Bese and Dajup on one side, and the Momona (or Momina, located along the river Brazza) on the other. Along with several prospectors, Sam claimed that he managed to get Dajup, Bese and Momona representatives to strike a deal on the banks of the river Kolff in order to pursue *gaharu* trading peacefully (a claim later confirmed by other actors, notably the Tokuni Mission).

At the same time, from the north a Protestant mission based in Wamena had begun surveying the area and after a recognition expedition sent a 20 year-old Yali<sup>88</sup> missionary to found a base called Tokuni on the upper Kolff, in Dajup territory. When a Canadian missionary built a house there the following year, a helicopter landing pad had been cleared and the first Dajup houses had been built. The Canadian missionary and Sam, the *gaharu* prospector, eventually struck a “deal” whereby prospectors would refrain from venturing beyond Bese territory, thereby effectively splitting the area into two zones of “control” – one under the “management” of *gaharu* prospectors and the other under the influence of the mission.

#### 5.4.3.4. Bese versus Dajup

Thus the “development” paths of the Bese and Dajup began to diverge. On the one hand, the main contact of the Bese with the “outside world” has been through agarwood prospectors, mostly of Indonesian origin, who travelled up the Modera from Binam. On the other hand, the Dajup have primarily been in touch with missionaries – mainly Papuan (Yali) with occasional visits from a Canadian missionary – who travel to Tokuni by helicopter. Contact of the Bese with the missionaries has been limited to visits to Tokuni from Bese territory (which requires two to three day’s walk), whilst the Dajup have only very rarely seen agarwood prospectors venture into their territory.

The outlook of each society is very different on the social changes they are currently undergoing. At first sight, both the Dajup and Bese seem to have gone down similar paths. Both societies which were allies in the days of the conflict with the Momona lived in isolated tree houses whose architecture was identical – a single house separated into two rooms (one for men and the other for women) sitting some 10 to 15 metres above the ground in a tree whose crown had been removed to make place for the house. The isolation (both geographically and in height) is believed to be a defence strategy, for the Momona would often carry out raids to steal women and food.

Today, however, it appears that the Bese and Dajup both live in villages located on riverbanks: Kolff, Arakar and Auban for the Bese, and Tokuni for the Dajup. Yet upon closer inspection, these villages are mere façades: both the Bese and Dajup continue to live a largely nomadic lifestyle deep in the forest, leaving the vast majority of the huts in each village empty. One may thus wonder why these villages were ever built. In both cases, it seems that they were set up on the request of “outsiders”, namely the missionaries and agarwood prospectors, in a bid to control (or at least have access) to the populations more easily.

In the case of Auban, agarwood prospectors allegedly asked the Bese in the surrounding forest to build a village which was completed in 2006 and even named a chief, who has since come

---

<sup>88</sup> The Yali are one of the better-known societies of the southern highlands of central Papua.

to be known as “Desi” (a corruption of *Kepala Desa* or “village chief”). It appears that these prospectors, fully aware that they represented the “outside world” to the Bese, claimed to speak for the “Government”. As explained by Desi himself,

Now I am in charge of building Auban. Auban was built last year – it is very new. The Javanese<sup>89</sup> told us the Government doesn’t allow us to live in the forest. If we build a village we can have a school here (...). At first they wanted me to be the leader because they said, “you speak Indonesian, you be the leader”. But Sepi is also a village chief because he’s a war chief. He has killed many people.<sup>90</sup>

Interview with Desi, 23 April 2007

Yet to this day, Auban remains depressingly empty. When asked why the “villagers” prefer living in the forest, they claim that the forest is where food is – around Auban all the cassowaries and wild boars (a much prized game) disappeared long ago. Desi’s words above also suggest the changing political balance within the Bese micro-society surrounding Auban village. Like Pimenta (2006) noted with the Ashaninka of the Brazilian Amazon, outside influence seems to have placed emphasis on the ability to speak Indonesian as the main quality for a chief, whereas the author’s personal fieldwork points towards hunting and war-faring abilities instead as qualities of a “traditional” chief. Which model of chieftdom will eventually prevail could be due to each one’s ability to produce resources, notably food (either manufactured goods or wild game).

Perhaps unsurprisingly therefore, Desi justifies the changes that his society is undergoing. In fact, he appears to have been a first contact whom Sam (the agarwood prospector quoted above) used to establish contact with other isolated Bese communities in the forest. In doing so Desi seems to have fully interiorised the prospectors’ discourse relative to their social change:

When I arrived for *gaharu* with Sam there were high houses deep in the forest, very far from the rivers. Some people died of diseases and very constantly ill, [16 people] died.<sup>91</sup> During the “first season” there were diseases. There was no medicine or hospital, many people died. Everyone stayed with me. They feared to leave because of diseases. In the “first time”<sup>92</sup> we were friends and made war against the Keke [or Momona] to take their wives. But I said, “we can’t be enemies any longer. Let us be friends.”

We brought clothes, smokes and spoons. We ate rice – they tried it but thought it was ants. Our rice and noodles, they didn’t like at first. But we brought more and they got used to it. Even salt they didn’t like! But Sam said he had bought it in a shop, so it had to be good. Women didn’t like canned fish, they feared it (...). As for washing with soap, if you don’t wash you smell and that’s not good, you need to bathe! If you

<sup>89</sup> To the Bese and the Dajup anybody who looks like they are from outside Papua is called “Javanese” (*Orang Jawa*), whether they be from Maluku, Java or Europe.

<sup>90</sup> “Sekarang saya tugas di sini untuk bangun Auban. Auban dibangun pada tahun yang lalu, sangat baru. Orang Jawa bicara pemerintah bilang tidak boleh tinggal di hutan. Kalau bangun kampung bisa dapat sekolah (...). Di awal, mereka mau saya jadi desa karena mereka bilang, kamu bisa Bahasa, kamu jadi desa. Tapi Sepi dia juga desa karena dia kepala perang. Dia sudah bunuh banyak orang.”

<sup>91</sup> Today Auban is made up of some 20 people, which suggests that mortality rates were extremely high during the initial period of contact.

<sup>92</sup> It seems that by the expressions “first season” (*musim pertama*) and “first time” (*waktu pertama*) Desi might be referring to the era prior to contact with agarwood prospectors.

don't bathe, it's dirty and not healthy. Now they all bathe. Before, we wrapped fish in a leaf and cooked it on a stone, but we said it was not tasty, so they had to change it!

In the "first time" men wore a leaf on the genitals called *nāā* and women wore a skirt of sago leaves, but now we are not allowed to any more. They can't wear those clothes any more. The Korowai are still naked because they are afraid, they don't like clothes, noodles or rice.<sup>93</sup>

Interview with Desi, 23 April 2007

Yet this view was not necessarily shared by all. During this interview which other people occasionally took part in, Daku – another Bese man renowned for his hunting skills – made this contribution:

We used to live in tree houses but we're not allowed to any more. So now we live down on the ground. Living in tree houses was good but now we don't do it anymore. Before, we spoke no Indonesian.<sup>94</sup>

Interview with Daku, 23 April 2007

It is not certain where this belief comes from that all things "traditional" (such as wearing natural fibres and living in tree houses) are banned, but such a perspective is strongly reminiscent of the *Koteka* and *Task Force Operations* of the New Order when highlanders in particular were forced to wear clothes *manu militari*. It is likely therefore that agarwood prospectors might have carried a *Operasi Koteka*-like discourse deep into the forest.

Another element illustrating this point is the tales of the Kuyak people (*Orang Kuyak*) which fill the people of Auban with fear. On several occasions the issue of a neighbouring group known as the Kuyak was raised. This group was vilified as being very "primitive": they were believed by the Bese not to speak any Indonesian, to be constantly at war with all their neighbours, to be naked and to live in tree houses. One night they were even believed to have got close to Desi and Daku's forest settlement, allegedly to steal their wives. When asked about whether anybody had actually met the Kuyak, replies remained vague, some claiming that they often came to parties where food was served: they would come for the food, then leave. It is not clear, therefore, whether the Kuyak truly are an isolated group that has refused to take on features of "modernity", or whether they are a legend that has taken on the function of an allegory of primitivism in this context of social change.

<sup>93</sup> "Waktu saya datang dengan Sam ada rumah tinggi dalam hutan-hutan, jauh sekali dari sungai. Ada yang meninggal dengan penyakit. Sakit-sakit terus, [16 orang] meninggal. Musim pertama penyakit, tidak ada obat, tidak ada rumah sakit, banyak yang meninggal. Semua tinggal dengan saya. Mereka takut keluar karena penyakit. Waktu pertama kami teman-teman, berperang-perang dengan Orang Keke untuk ambil ibu. Tapi saya bilang, tidak bisa musuh lagi, ayo kita berteman. Kami bawa pakaian, rokok, sendok. Kami makan beras – mereka coba tapi mereka piker itu semut. Beras dan supermie, mereka tidak suka dulu. Tapi kami bawa banyak, mereka suka. Garam, dulu mereka tidak suka juga! Tapi Sam bilang, kami beli itu di toko, itu bagus. Ibu-ibu tidak suka ikan karang, takut (...) Kalau mandi dengan sabu, kalau tidak mandi jadi berbau, tidak baik, harus mandi! Kalau tidak mandi, itu kotor, tidak sehat. Sekarang semua mandi. Dulu, kami baker ikan di bungkus, tapi kami bilang, tidak enak, jadi mereka ubah. Waktu pertama laki-laki pakai bungkus, namanya *nāā*, ibu-ibu pakai rok daun sagu. Sekarang tidak boleh lagi. Tidak bisa pakai itu. Orang Korowai masih telanjang karena mereka takut, tidak suka pakain, supermie, beras."

<sup>94</sup> "Dulu kita tinggal di rumah tinggi tapi tidak boleh lagi. Sekarang kita tinggal di bawa. Hidup di rumah tinggi itu bagus tapi sekarang kita tidak hidup begitu lagi. Dulu kita tidak bisa Bahasa."

Although Desi obviously felt invested with this daunting task of getting his fellow Bese to adopt these social changes, he still lives “in the forest” some 6 hours away from the Modera river, in a hut on the ground shared with a dozen men and women, many of whom stayed only a few days before moving onto another settlement. With the exhaustion of agarwood in nearby forests, prospectors no longer venture up the Modera and the “inhabitants” of Auban have had to return to a forest-dwelling lifestyle where they rely on forest products such as game and sago.

Some features of modern life have remained, including the use of clothes, the removal of facial jewellery (notably a 2 to 3-inch spike of bone poking out of each side of the nose, leaving the nose with symmetrical scars) and even some dietary restrictions such as not eating any pork. The latter – which is a major impediment in Papua as wild boar is a much celebrated source of protein – is a clear reminder that notions of “development” have clearly taken on an Indonesian, and therefore Muslim, flavour. However, it is difficult to establish to what extent these elements were a conscious effort to merely display “modernity” in the author’s presence.

In stark contrast, the Dajup have taken on a very different path to “development”. A number of Dajup have also opted for a sedentary lifestyle in Tokuni and rely on the Yali missionary giving out food rather than going into the forest. Yet these appear to be a small minority, a large number of Dajup – if not the majority – having no accommodation in Tokuni and continuing to reside in the forest. Like the Bese, the decision to remain in the forest might also be a practical one as they are more likely to find food there, but some elements of the Dajup lifestyle also point towards a partial rejection of social change.

For instance, unlike the Bese, some Dajup groups still wear natural fibres including the *bungkus* (penile leaf wrap). Some tree houses were also located by the author in the forests near Tokuni, unlike among the Bese who all appear to live in houses on the ground today. Clothes worn in Tokuni obviously came from the missionaries as they were either Canadian or had religious slogans or symbols on them. When asked about the issue of clothes, the Canadian missionary exclaimed, “it bothers us that they wear clothes – it’s expensive” (Interview in Wamena, 21 May 2007). The Yali missionary regretted that he had been unable to convert anybody, although the first four baptisms were planned for June 2007. The Canadian missionary described Dajup society in the following terms:

People are still much steeped in their traditions. You still get baby killings – the first baby born to a mother is thrown away. Some are 4 or 5 [years old] when they get married, and they consummate marriage at puberty onset. While you were out there I heard there was an incident in which witchcraft was involved: they killed a woman in Inup [a settlement with a tree house] based on a dream that a man had had that his first wife had tried to kill him. He tied her up and killed her in the forest. Unless it’s immoral or ungodly we don’t ask them to change. Hopefully the Gospel will bring Christian ethics to dominate, so that they will respect one another, love each other, not kill and respect women.

Interview with a missionary in Wamena, 21 May 2007

When asked about the mission's policies regarding contacting isolated populations, the missionary took the example of Arukot, a group living east of Tokuni which continues to be hostile to contact with non-Dajup visitors:

Our Church wants to visit Arukot. It is far better to live in peace and not in fear, not to kill one's wives or neighbours. Certain sections of the population want to remain isolated but they are the dominant ones. Ask the women and kids what they think.

Interview with a missionary in Wamena, 21 May 2007

Two hypotheses could explain the difference in the “development” paths taken by the Bese and the Dajup, namely that the Bese appear to regard elements of outside influence with much greater interest, as objects of desire, than the Dajup. First, this divergence could be due to the nature of their influence with the outside world: those in contact with agarwood prospectors (who themselves are keen on material goods as that is precisely what brought them to visit the Bese in the first place) appear to have come to display much greater interest – and dependence – on manufactured goods. The Dajup, whose contact with the “outside world” has been limited to the missionaries (who, as one interviewee put it, do not encourage change unless “ungodly or immoral”) appear to be much less keen on incorporating external elements into their material culture.

The second hypothesis is a culturalist one: regardless of the nature of their contact with the “outside world”, the difference between the paths chosen by the Bese and the Dajup could be simply due to different cultural outlooks on other societies. Whilst Bese culture *per se* could be much more prone to change, Dajup culture could be more resistant to any outside influence. From the short amount of time spent in the field it is difficult to test these hypotheses, but it is possible that both put together might explain why the Bese and Dajup have gone down different paths.

These different perspectives on outside material culture could have a determining effect on internal political structure. If a group gives greater value to manufactured goods, then new forms of leadership are more likely to appear where chiefs will emerge as those able to secure goods from outside (*e.g.*, Desi). If, on the other hand, a group displays little interest in external material goods, then “traditional” forms of leadership are more likely to persist, based on war-faring or hunting abilities (*e.g.*, Sepi, Daku).

#### 5.4.3.5. Future Prospects

The separation between Dajup and Bese has been strengthened by the fact that the Dajup area around Tokuni (upper Modera) now falls within *Kabupaten* Yahukimo (formerly part of *Kabupaten* Jayawijaya) whilst the Bese area (lower Modera) remains in *Kabupaten* Asmat. This means not only that the mission in Tokuni is not allowed to visit the Bese as they fall within the reach of the mission in Binam (on the Eilanden), but also that future “development” plans from each *kabupaten* are likely to affect the Dajup and Bese very differently in the years to come.

For the time being, the role of government is non-existent. In the total absence of any governmental actor in the Brazza-Eilanden Triangle, both the Bese and the Dajup would be

considered as “isolated” or “non-contacted indigenous populations” by South American standards where “isolated Indians” are defined by the absence of contact with government specifically. Certainly, none of the Bese or Dajup encountered was aware of an island known as “Papua”, let alone a country called “Indonesia” (although Desi appeared to master the concept of “government” [*pemerintah*]).

However, with special autonomy (Otsus), the recent creation of new *kabupaten* (namely Asmat and Yahukimo) and the sudden influx of funds to local governments, major development plans are underway on both sides of the “border”. Whilst in *Kabupaten* Asmat, development is debating whether to move the capital from Agats to a location closer to the mountains, in *Kabupaten* Yahukimo infrastructure development is very real.

The capital of *Kabupaten* Yahukimo, Dekai, was described by Julie Campbell (who visited the place in 1989) in the following terms:

Before the mid-eighties the villagers had little contact with the outside world, until RBMI (Regions Beyond Missions International) sent an Irianese missionary to Dekai, a village below the Jayawijaya mountains. Now, at least once a week MAF [Mission Aviation Fellowship] flies to the village (...). On our approach the villagers streamed onto the landing strip and when we stepped out of the plane they pushed and pulled in their haste to see us. Swishing grass skirts covered the slender hips yet distended bellies of high-breasted young women. The older women stood apart, their heads bowed low under their weight of their net carrying-bags. Silent and curious, they watched and waited.

Campbell (1991:72).

By 2007, Dekai had grown into an electrified town with wide parallel and perpendicular streets and even a mobile phone network. Its population, no longer of the skirt-swishing type, was now dominated by recent Javanese immigrants in search of jobs in the building sector who had replaced the inhabitants’ sago and pork diet with one of *nasi goreng* and *gado-gado*. Yet Dekai remained an eerily empty grid of streets with no centre other than a makeshift market, although large mansions and grand buildings were already under construction. Large straight roads leaving from the four corners of town burrowed deep into the neighbouring forest before stopping, all within a few miles of town, machinery and temporary workers’ shelters marking the spot where the roads had stopped.

The strange emptiness of Dekai should not fool the visitor as the government of Yahukimo has agreed on large-scale infrastructural developments for the years to come and has secured considerable amounts of funding. Of particular interest to the Brazza-Eilanden Triangle is a road that should connect Dekai to Oksibil along the foothills of the Triangle’s northern edge. Dekai is due West of Tokuni, some three to four days’ walk through thick forest; yet by the beginning of the next decade, it is likely that Tokuni will be connected by road to Dekai, bringing it abruptly out of its current isolation.

Plans do not stop there for the Brazza-Eilanden Triangle. On all maps by both the Papua Forestry Service in Jayapura and the Ministry of Forestry in Jakarta, the entire area has been earmarked as a single large swathe of *Hutan Produksi Konversi* (“Production Forest to be converted”). The area has been labelled as such for over a decade now and had been preserved

by its isolation, but the construction of the Dekai-Oksibil road (which had already begun in 2007) could well accelerate the implementation of such plans.

Both the Bese and Dajup could find themselves sooner than expected surrounded by an oil palm plantation. As of 2007, there were no governmental or non-governmental plans to accompany either ethnic group to anticipate the possibly life-threatening changes they could be undergoing in the coming years. From the author's observations of the inhabitants' dependence on the forest as a livelihood, the very survival of both micro-societies could very well be at stake. Precedents in Papua and the Brazilian Amazon alike do not leave much room for an optimistic view of the future of the Bese or the Dajup.

#### 5.4.4. Conclusion

The above description provides only a very superficial attempt at understanding the concepts of primitivism, development and social change which the inhabitants of the Brazza-Eilanden Triangle are currently undergoing. Due to the limited amount of time spent in the field, this study looks primarily at material components of change – which makes it guilty of the same criticism of superficiality addressed to the *Koteka* and *Task Force* Operations themselves. It has hardly scratched beyond the surface of the non-material social changes which might be operating among the Dajup and the Bese. Only a longer period of fieldwork could provide a deeper insight into this issue, and the current development plans by *Kabupaten* Yahukimo make such a study all the more urgent.

In many ways, the Brazza-Eilanden case-study encompasses the main issues that Papuan forest-related policies are facing today. For decades, policies have been characterised by the gap between the perceived remoteness and “primitivism” of the current state and the vast economic potentials of the territory. The new era of special autonomy (Otsus) has been greeted with considerable euphoria at the prospect of seeing Papuan “development” begin to lift off, but such rapid change should also be seen as a serious threat to the livelihoods of the several hundred thousand Papuans who still depend on natural resources, notably in the forest. The large-scale development policies of the Brazilian Amazon of the 1970s and 1980s should be seen as a stark warning that the plans being drawn up in every *kabupaten* in Papua could have equally devastating effects on both forests and their inhabitants.

## BIBLIOGRAPHY

- Aditjondro, G.J. (2000). *Cahaya Bintang Kejora: Papua Barat dalam Kajian Sejarah, Budaya, Ekonomi dan Hak Asasi Manusia*. Jakarta: Lembaga Studi dan Advokasi Masyarakat (ELSAM), 318 pp.
- Affianto, A., Djatmiko, W.A., Riyanto, S. & Hermawan, T.T. (2005). *Analisis Biaya dan Pendapatan dalam Pengelolaan PHBM: Sebuah Panduan Perhitungan Bagi-Hasil*. Bogor (West Java): Penerbit Pustaka Latin, 85 pp.
- Alhamid, H. (2004). *Forests for the People? Indigenous Forest Management under Decentralisation: A Case Study of the Rendani Protection Forest, Papua, Indonesia*. PhD Thesis at the Australian National University in Canberra, 303 pp.
- Alisjahbana, S.T. (1966). *Layar Terkembang* (First edition 1937). Jakarta: Zaman Baru, 167 pp.
- Andayani, W. & Sembodo, L.P. (2004). Analisis sistem bagi hasil pola pengusahaan hutan program PHBM di KPH Pernalang. *Jurnal Hutan Rakyat* VI(1):13-26.
- Angelsen, A. (2007). Forest cover change in space and time: combining the von Thünen and Forest Transition theories. *World Bank Policy Research Working Paper* 4117, 43 pp. Document available on the Internet: [http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2007/01/22/000016406\\_20070122115011/Rendered/PDF/wps4117.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2007/01/22/000016406_20070122115011/Rendered/PDF/wps4117.pdf) (Retrieved 29 December 2008).
- Anonymous (2005). Tim Operasi Hutan Lestari II tiba di Jayapura. *InfoPapua.com*, 29 March. Article available on the Internet: <http://www.infopapua.com/modules.php?op=modload&name=News&file=article&sid=2495> (Retrieved 21 October 2008).
- Anonymous (2007). Papuan province changes name from West Irian Jaya to West Papua. *Radio New Zealand International*, 7 February. Available on the internet: <http://www.rnzi.com/pages/news.php?op=read&id=29965> (retrieved 31 December 2007).
- Applegate, G., Smith, R., Fox, J.J., Mitchell, A., Packham, D., Tapper, N. & Baines, G. (2002). Forest fires in Indonesia: Impacts and solutions. In Colfer, C.J.P. & Resosudarmo, I.A.P. (eds), *Which Way Forward? People, Forests and Policymaking in Indonesia*. Washington, D.C.: Resources for the Future, Bogor: CIFOR & Singapore: Institute of Southeast Asian Studies, pp. 293-308.
- Arif, A.K., Hasugian, M., Simatupang, S. & Batubara, H. (2006). Fallen in the Forests. *Tempo*, 25 September, pp. 20-3.
- Arnscheidt, J. (2003). Towards integrated environmental policy-making in Indonesia? In Bedner, A. & Niessen, N. (eds), *Towards Integrated Environmental Law in Indonesia?* Leiden (Netherlands): CNWS, pp. 49-59.
- Arnscheidt, J. (forthcoming). "Debating" *Nature Conservation: Policy, Law and Practice in Indonesia, a Discourse Analysis of History and Present*. PhD Thesis at te Van Vollenhoven Institute, University of Leiden, the Netherlands.
- Bachtiar, H.W. (1994). Sejarah Irian Jaya. In Koentjaraningrat (ed), *Irian Jaya: Membangun Masyarakat Majemuk*. Jakarta: Penerbit Djambatan, pp. 44-96.

- Badan Pusat Statistik Propinsi Riau (2007). Data sektoral: pertanian. Available on the internet: <http://riau.bps.go.id/pertanian.html>
- Badrika, I. W. (2002). *Sejarah SMA: Nasional Indonesia dan Umum. Untuk Kelas XII, Program Ilmu Sosial dan Bahasa*. 3 volumes. Jakarta: Penerbit Erlangga, 214+304+340 pp.
- Barr, C. (2001). *Banking on Sustainability: Structural Adjustment and Forestry Reform in Post-Suharto Indonesia*. Bogor (Indonesia): CIFOR and Washington D.C.: WWF Macroeconomics, 140 pp. Available on the internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/books/profits.pdf](http://www.cifor.cgiar.org/publications/pdf_files/books/profits.pdf)
- Barr, C. (2007). Intensely managed forest plantations in Indonesia: overview of recent trends and current plans. Presentation given at the Meeting of the Forests Dialogue, Pekanbaru, Sumatra, 5-8 March.
- Barr, C., Resosudarmo, I.A.P., Dermawan, A. & McCarthy, J. (2006). *Decentralisation of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Bogor (Indonesia): CIFOR, 195 pp. Available on the internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BBarr0601.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BBarr0601.pdf)
- Barr, C., Resosudarmo, I.A.P., Dermawan, A. & Setiono, B. (2006). Decentralization's effects on forest concessions and timber production. In Barr, C.M., Resosudarmo, I.A.P., Dermawan, A. & McCarthy, J. (eds), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Bogor: CIFOR, 87-107. Document available on the Internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BBarr0601.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BBarr0601.pdf) (retrieved 28 November 2008).
- Barr, C.M. (1999). *Discipline and Accumulate: State Practive and Elite Consolidation in Indonesia's Timber Sector, 1967-1998*. Master's Thesis presented at the Faculty of the Graduate School of Cornell University, 300 pp.
- Barr, C.M. (2001). *Banking on Sustainability: Structural Adjustment and Forestry Reform in Post-Suharto Indonesia*. Bogor (Indonesia): CIFOR, 142 pp. Document available on the Internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/books/profits.pdf](http://www.cifor.cgiar.org/publications/pdf_files/books/profits.pdf) (retrieved 19 December 2008).
- Barr, C.M. (2006). Forest administration and forestry sector development prior to 1998. In Barr, C.M., Resosudarmo, I.A.P., Dermawan, A. & McCarthy, J. (eds), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Bogor: CIFOR, 18-30. Document available on the Internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BBarr0601.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BBarr0601.pdf) (retrieved 28 November 2008).
- Barr, C.M. (2007). Intensively managed forest plantations in Indonesia: overview of recent trends and current plans. Presentation at the Forests Dialogue on Intensively Managed Forest Plantations in Indonesia held in Pekanbaru, Riau (Indonesia) 5-8 March 2007, 29 slides.
- BKSDA (Balai Konservasi Sumber Daya Alam) Jawa Tengah (2005). *Buku Informasi Kawasan Konservasi: Cagar Alam, Taman Wisata Alam, Suaka Margasatwa, Taman Nasional Gunung Merapi dans Gunung Merbabu*. Semarang: BKSDA, 68 pp.

- Bowe, M., Rahawarin, P., Wattimena, M.C. & Pangkali, L.B. (2003). Laporan survey pengumpulan data HPH, HTI dan perkebunan PT Korindo Group. Jayapura: WWF Indonesia Region Sahul Papua. Unpublished report, 47 pp.
- Brown, D.W. (1999). *Addicted to Rent: Corporate and Spatial Distribution of Forest Resources in Indonesia; Implications for Forest Sustainability and Government Policy*. Jakarta: Indonesia-UK Tropical Forest Management Programme, 92 pp.
- Campbell, J. (1991). *Irian Jaya: the Timeless Domain*. Edinburgh: Tynron Press, 180 pp.
- Campbell, J.Y. (2002). Differing perspectives on community forestry in Indonesia. In Colfer, C.J.P. & Resosudarmo, I.A.P. (eds), *Which Way Forward? People, Forests and Policymaking in Indonesia*. Washington, D.C.: Resources for the Future, Bogor: CIFOR & Singapore: Institute of Southeast Asian Studies, pp. 110-25.
- Casson, A. & Obidzinski, K. (2002). From New Order to regional autonomy: shifting dynamics of “illegal” logging in Kalimantan, Indonesia. *World Development* 30(12):2133-51.
- Chauvel, R. & Bhakti, I.N. (2004). *The Papua Conflict: Jakarta’s Perceptions and Policies*. Policy Studies 5. Washington: East-West Center, 100 pp. Document available on the Internet: <http://www.eastwestcenter.org/fileadmin/stored/pdfs/PS005.pdf> (retrieved 22 September 2008).
- CIFOR (2003). Konsesi untuk Konservasi (Izin Usaha Konservasi Hutan). *Warta Kebijakan CIFOR* no. 12, 6 pp.
- Cohen, T. (2006). Earth most diverse marine life found off Indonesia’s Papua Province, new species of shark, coral, shrimp need protection. *Innovations Report*, 25 September. Article available on the Internet: [http://www.innovations-report.de/html/berichte/umwelt\\_naturschutz/bericht-71014.html](http://www.innovations-report.de/html/berichte/umwelt_naturschutz/bericht-71014.html) (Retrieved 23 October 2008).
- Colchester, M. (1986a). Banking on disaster: international support for Transmigration. *The Ecologist* 16(2/3):61-9.
- Colchester, M. (1986b). Unity and Diversity: Indonesian policy towards tribal peoples. *The Ecologist* 16(2/3):89-98.
- Colchester, M., Jiwan, N., Andiko, Sirait, M., Firdaus, A.Y., Surambo, A. & Pane, H. (2006). *Promised Land: Palm Oil and Land Acquisition in Indonesia: Implications for Local Communities and Indigenous Peoples*. Moreton-in-Marsh (UK): Forest Peoples Programme and Bogor: Sawit Watch, 197 pp. Document available on the Internet: [http://www.forestpeoples.org/documents/prv\\_sector/oil\\_palm/promised\\_land\\_eng.pdf](http://www.forestpeoples.org/documents/prv_sector/oil_palm/promised_land_eng.pdf) (retrieved 19 December 2008).
- Colfer, C.J.P. (2002). Ten propositions to explain Kalimantan’s fires. In Colfer, C.J.P. & Resosudarmo, I.A.P. (eds), *Which Way Forward? People, Forests and Policymaking in Indonesia*. Washington, D.C.: Resources for the Future, Bogor: CIFOR & Singapore: Institute of Southeast Asian Studies, pp. 309-24.
- Colombijn, F. (2005). A moving history of Middle Sumatra, 1600-1870. *Modern Asian Studies* 39(1):1-38.

- Cribb, R. (2003). Environmentalism in Indonesian politics. In Bedner, A. & Niessen, N. (eds), *Towards Integrated Environmental Law in Indonesia?* Leiden (Netherlands): CNWS, pp. 37-48.
- Dauvergne, P. (2001). *Loggers and Degradation in the Asia-Pacific: Corporations and Environmental Management*. Cambridge: Cambridge University Press, 202 pp.
- De Hontheim, A. (2008). *Chasseurs de diables et collecteurs d'art : tentatives de conversion des Asmat par les missionnaires pionniers protestants et catholiques*. Brussels: Peter Lang, 317 pp.
- De Koninck, R. (2005). *L'Asie du Sud-Est*. Paris: Armand Colin, 362 pp.
- Defert, G. (1996). *L'Indonésie et la Nouvelle-Guinée-Occidentale : maintien des frontières coloniales ou respect des identités communautaires*. Paris : L'Harmattan, 454 pp.
- Departemen Kehutanan (1986). *Sejarah Kehutanan Indonesia*. Two volumes. Jakarta: Departemen Kehutanan.
- Departemen Kehutanan (2002). *Statistik Bina Produksi Kehutanan Tahun 2001*. Jakarta: Departemen Kehutanan. Available online: <http://www.dephut.go.id/content.php?id=159&lev=1>
- Departemen Kehutanan (2003). *Statistik Bina Produksi Kehutanan Tahun 2002*. Jakarta: Departemen Kehutanan. Available online: <http://www.dephut.go.id/content.php?id=160&lev=1>
- Departemen Kehutanan (2004). *Statistik Bina Produksi Kehutanan Tahun 2003*. Jakarta: Departemen Kehutanan. Available online: <http://www.dephut.go.id/content.php?id=161&lev=1>
- Departemen Kehutanan (2005). *Statistik Bina Produksi Kehutanan Tahun 2004*. Jakarta: Departemen Kehutanan. Available online: <http://www.dephut.go.id/content.php?id=162&lev=1>
- Departemen Kehutanan (2006). *Statistik Bina Produksi Kehutanan Tahun 2005*. Jakarta: Departemen Kehutanan, 95 pp. Available online: <http://www.dephut.go.id/content.php?id=234&lev=1>
- Departemen Kehutanan (Dirjen Reboisasi dan Rehabilitasi Lahan) (1992). *Institutional Strengthening for Evaluation and Effectiveness of the Upper Solo (Wonogiri) Watershed Protection Project*. Solo (Central Java): Project Planning and Implementation Unit, 101 pp.
- Departemen Pekerjaan Umum (1988). *Pengembangan Wilayah Waduk Wonogiri*. Solo (Central Java): Proyek Pengembangan Wilayah Sungai Bengawan Solo, 18 pp.
- DFID Indonesia (2002). *Illegal Logging: A Struggle on all Fronts*. Jakarta: DFID, 22 pp.
- Dinas Kehutanan Jawa Tengah (2006). Pelaksanaan sistem PHBM Provinsi Jawa Tengah. Explanatory Leaflet. Semarang (Central Java): Dinas Kehutanan, 8 pp.
- Dinas Kehutanan Papua (2007a). Data HPH/IUPHHK di Provinsi Papua Tahun 2007. Unpublished one-page table.
- Dinas Kehutanan Papua (2007b). Data perkembangan Ijin pemanfaatan kayu (IPK). Unpublished one-page table.

- Donovan, R.Z. (2001). A perspective on the Perum Perhutani Certification Suspension. Accessed 1<sup>st</sup> November on <http://www.rainforest-alliance.org/news/2001/perhutani-perspective.html>
- Durand, F. (1994). *Les forêts en Asie du Sud-Est : Recul et exploitation : le cas de l'Indonésie*. Paris : L'Harmattan, 411 pp.
- Echols, J.M. & Shadily, H. (1989). *Kamus Indonesia Inggris: An Indonesian-English Dictionary*. Third Edition. Jakarta: Gramedia, 618 pp.
- Effendi, E. (2007). Expansion of Tesso Nilo National Park: WWF-APRIL "solution" that will accelerate the destruction of Sumatra's forest. Greenomics Indonesia Position Paper, 3 pp.
- Eyes on the Forest (2007). Protection of high conservation value forests in Sumatra, Indonesia. Unpublished presentation, 10 pp.
- FAO (2005). Global Forest Resources Assessment Tables. Database available on the Internet: <http://www.fao.org/forestry/32006/en/> (retrieved 12 November 2008).
- Fernandes, C. (2007). *Reluctant Indonesians: Australia, Indonesia and the Future of West Papua*. Carlton North (Australia): Scribe, 144 pp.
- Ford, M. (2003). Who are the *Orang Riau*? Negotiating identity across geographic and ethnic divides. In Aspinall, E. & Fealy, G. (eds), *Local Power and Politics in Indonesia: Decentralisation and Democratisation*. Singapore: Institute of Southeast Asian Studies and Jakarta: Centre for Strategic and International Studies,
- Forest Stewardship Council (2008). Global FSC certificates: type and distribution. PowerPoint presentation. Bonn: FSC, 9 slides. Presentation available on the Internet: [http://www.fsc.org/fileadmin/web-data/public/document\\_center/powerpoints\\_graphs/facts\\_figures/08-04-01\\_Global\\_FSC\\_certificates\\_-\\_type\\_and\\_distribution\\_-\\_FINAL.pdf](http://www.fsc.org/fileadmin/web-data/public/document_center/powerpoints_graphs/facts_figures/08-04-01_Global_FSC_certificates_-_type_and_distribution_-_FINAL.pdf) (retrieved 18 December 2008).
- Gautam, M., Lele, U., Kartodihardjo, H., Khan, A. Erwinsyah & Rana, S. (2000). *Indonesia: The Challenges of World Bank Involvement*. Evaluation Country Case Study Series, World Bank Operations Evaluation Department. Washington, D.C.: World Bank, 170 pp. Document available on the Internet: [http://lnweb90.worldbank.org/oed/oeddoclib.nsf/b57456d58aba40e585256ad400736404/749c3a7fe1d679c98525697000785b5a/\\$FILE/IndForCS.pdf](http://lnweb90.worldbank.org/oed/oeddoclib.nsf/b57456d58aba40e585256ad400736404/749c3a7fe1d679c98525697000785b5a/$FILE/IndForCS.pdf) (Retrieved 24 December 2008).
- Gellert, P.K. (2005). Oligarchy in the timber markets of Indonesia: from Apkindo to IBRA to the future of the forests. In Resosudarmo, B.P. (ed), *The Politics and Economics of Indonesia's Natural Resources*. Singapore: Institute of Southeast Asian Studies, pp. 145-61.
- Guizol, P., Muhtaman, D., San Afri Awang & Roda, J.M. (undated). *Strategy for Sustainable Development of Furniture Industries and Teak Forests in Java*. Bogor: CIFOR, 146 pp.
- Hardiyanto (2004). Identifikasi kesiapan unit manajemen hutan rakyat menuju sertifikasi PHBML. *E-Label (Jurnal Sertifikasi Ekolabel)* II:38-52.

- Henley, D. & Davidson, J.S. (2007). Radical conservatism – the protean politics of adat. In Davidson, J.S. & Henley, D. (eds), *The Revival of Tradition in Indonesian Politics: The Deployment of Adat from Colonialism to Indigenism*. London: Routledge, pp. 1-49.
- Hidayat, M.S., Djumala, D. & Swajaya, NG. (2003). *Indonesia and the WSSD: Forging Consensus for Global Agreement on Sustainable Development 2002*. New York City: Permanent Mission of the Republic of Indonesia to the United Nations, 307 pp.
- Hindley, D. (1967). *The Communist Party of Indonesia 1951-1963*. Berkeley: University of California Press, 308 pp.
- ICG (2001). Indonesia: next steps in military reform. ICG Asia Report no. 24. Jakarta: International Crisis Group, 27 pp. Document available on the Internet (subscription): <http://www.crisisgroup.org/home/index.cfm?l=1&id=1463> (Retrieved 29 December 2008).
- ICG (2002). Indonesia: resources and conflict in Papua. *International Crisis Group Asia Report* no. 39. Jakarta/Brussels: ICG, 45 pp.
- ICRAF, AMAN & FPP (2003). *In Search of Recognition*. Bogor: World Agroforestry Centre (ICRAF), 42 pp.
- International Crisis Group (2001). Kekerasan etnis di Indonesia: pelajaran dari Kalimantan. International Crisis Group Asian Report no. 19, 34 pp. Document available on the Internet: [http://www.crisisgroup.org/library/documents/asia/indonesia/indonesian\\_translations/indonesia\\_kekerasan\\_etsnis\\_di\\_indonesia\\_pelajaran\\_dari\\_kalimantan.pdf](http://www.crisisgroup.org/library/documents/asia/indonesia/indonesian_translations/indonesia_kekerasan_etsnis_di_indonesia_pelajaran_dari_kalimantan.pdf) (retrieved 23 December 2008).
- Jennings, S., Nussbaum, R., Judd, N. & Evans, T. (2003a). HCVF Toolkit Part 1: Introduction to HCVF. Oxford: Proforest, 27 pp. Document available on the Internet: [http://assets.panda.org/downloads/hcvf\\_toolkit\\_part\\_1\\_final.pdf](http://assets.panda.org/downloads/hcvf_toolkit_part_1_final.pdf) (Retrieved 28 December 2008)
- Jennings, S., Nussbaum, R., Judd, N. & Evans, T. (2003b). HCVF Toolkit Part 2: Defining high conservation value forests at a national level: practical guide. Oxford: Proforest, 72 pp. Document available on the Internet: [http://assets.panda.org/downloads/hcvf\\_toolkit\\_part\\_2\\_final.pdf](http://assets.panda.org/downloads/hcvf_toolkit_part_2_final.pdf) (Retrieved 28 December 2008)
- Jennings, S., Nussbaum, R., Judd, N. & Evans, T. (2003c). HCVF Toolkit Part 3: Identifying and managing high conservation value forests: a guide for forest managers. Oxford: Proforest, 62 pp. Document available on the Internet: [http://assets.panda.org/downloads/hcvf\\_toolkit\\_part\\_3\\_final.pdf](http://assets.panda.org/downloads/hcvf_toolkit_part_3_final.pdf) (Retrieved 28 December 2008)
- Jepson, P., Jarvie, J.K., MacKinnon, K. & Monk, K.A. (2001). The end for Indonesia's lowland forests? *Science* 292(5518):859-61.
- JICA (Japan International Cooperation Agency) Study Team (2007). *The Study on countermeasures for Sedimentation in the wonogiri Multipurpose Dam Reservoir in the Republic of Indonesia. Newsletter No. 4: Results of the Third Workshop and Proposed Master Plan*. Jakarta: Japan International Cooperation Agency, 6 pp.
- Jikalauhari (2006a). Ambisiusme perkebunan sawit di Riau. *Berita Jikalauhari* 3(10):6-7.

- Jikalahari (2006b). Kronologis penyerangan dan amuk Security RAPP terhadap masyarakat desa Gading Permai Kecamatan Kampar Kiri Hilir, Kabupaten Kampar, Provinsi Riau. Available on the internet:  
[http://jikalahari.org/index.php?option=com\\_remository&Itemid=17&func=download&filecatid=6&chk=381e0ceb237fdcfefb0556d540aa4a70](http://jikalahari.org/index.php?option=com_remository&Itemid=17&func=download&filecatid=6&chk=381e0ceb237fdcfefb0556d540aa4a70)
- Jikalahari (undated). Selamatkan hutan alam Riau yang tersisa: pengelolaan hutan secara adil dan lestari untuk generasi sekarang dan yang akan datang. Leaflet. Pekanbaru: Jikalahari, 6 pp.
- Juni Adi, N., Arganata, F., Chehafudin, M., Fuad, F.H., Nugraheni, S.C.A., Sanyoto, R., Soriaga, R. & Walpole, P. (2004). *Communities Transforming Forestlands: Java, Indonesia. A Collaborative Study by Lembaga ARuPA, Yayasan Koling and Asia Forest Network*. Tagbilaran (Philippines): Asia Forest Network, 49 pp.
- Kartodikromo, M. (2002). *Pergaulan Orang Buangan di Boven Digul*. Jakarta: Perpustakaan Populer Gramedia, 178 pp.
- Kempf, H. (2007). Les tourbières, source identifiée de 10 % des émissions mondiales de CO2. *Le Monde*, 15 December.
- Khalik, A. (2004). Illegal Logging escalating: police. *The Jakarta Post*, 28 May, 2 pp.
- King, P. (2004). *West Papua and Indonesia since Suharto: Independence, Autonomy or Chaos?* Sydney: The University of South Wales Press, 240 pp.
- Koentjaraningrat (1994). Lingkungan Alam. In Koentjaraningrat (ed), *Irian Jaya: Membangun Masyarakat Majemuk*. Jakarta: Penerbit Djambatan, pp. 3-22.
- Kunaifi, D. (2007). A common vision for change in Indonesia's pulp and paper industry. Presentation at the Forests Dialogue on Intensively Managed Forest Plantations in Indonesia held in Pekanbaru, Riau (Indonesia) 5-8 March 2007, 18 slides.
- Kurniawan, M.N. (2003). TNI confesses involvement in rampant illegal logging. *The Jakarta Post*, 16 January.
- Kustiani, R. (2005). Operasi Hutan Lestari dilanjutkan. *Tempo Interaktif*, 19 July 2005. Article available on the Internet:  
<http://www.tempointeractive.com/hg/ekbis/2005/07/19/brk,20050719-64071.id.html>  
 (Retrieved 21 October 2008).
- Laburthe, P. & Fauveaud, S. (2002). *Etude de la filière teck à Java Centre : des industries du meuble de Jepara aux plantations de teck*. DEA Thesis in Environmental and Natural Resources Economics (*DEA économie de l'environnement et des ressources naturelles*), Institut National Agronomique Paris-Grignon, 78 pp.
- Levang, P. (1997). *La Terre d'en face : la transmigration en Indonésie*. Paris: ORSTOM, 419 pp.
- Li, T.M. (2007). Adat in Central Sulawesi: contemporary deployments. In Davidson, J.S. & Henley, D. (eds), *The Revival of Tradition in Indonesian Politics: The Deployment of Adat from Colonialism to Indigenism*. London: Routledge, pp. 337-70.
- Lufti, M., Suwardi, Syair, A. & Amin, U. (1977). *Sejarah Riau*. Pekanbaru (Riau): Universitas Riau, 927 pp.

- Maryudi, A. (2005). Beberapa kendala bagi sertifikasi hutan rakyat. *Jurnal Hutan Rakyat* VII(3):25-39.
- Matthews, E. (ed) (2002). *The State of the Forest: Indonesia*. Bogor: Forest Watch Indonesia & Washington D.C.: Global Forest Watch, 115 pp. Document available on the Internet: <http://www.globalforestwatch.org/common/indonesia/sof.indonesia.english.low.pdf> (Retrieved 29 December 2008).
- McCarthy, J., Barr, C., Resosudarmo, A.P. & Dermawan, A. (2006). Origins and scope of Indonesia's decentralization laws. In Barr, C.M., Resosudarmo, I.A.P., Dermawan, A. & McCarthy, J. (eds), *Decentralization of Forest Administration in Indonesia: Implications for Forest Sustainability, Economic Development and Community Livelihoods*. Bogor: CIFOR, 31-57. Document available on the Internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BBarr0601.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BBarr0601.pdf) (retrieved 28 November 2008).
- Moniaga, S. (2007). From bumiputera to masyarakat adat: a long and confusing journey. In Davidson, J.S. & Henley, D. (eds), *The Revival of Tradition in Indonesian Politics: The Deployment of Adat from Colonialism to Indigenism*. London: Routledge, pp. 275-94.
- Muchlis, M.R. & Syarifudin, M. (2005). *Sejarah Nasional Indonesia dan Umum SMA*. Jakarta: Erlangga. 3 volumes, 213 + 303 + 339 pp.
- Muhtaman, D.R. & Prasetyo, A.F. (2006). Forest certification in Indonesia. In Cashore, B., Gale, F., Meidinger, E. & Newsom, D. (eds), *Confronting Sustainability: Forest Certification in Developing and Transitioning Countries*. Yale F&ES Publication Series Number 8. New Haven: Yale School of Forestry and Environmental Studies, pp. 33-68.
- Mulyadi Bratamihardja, Satyawan Sunito & Kartasubrata, J. (2005). *Forest Management in Java 1975-1999: Towards Collaborative Forest Management*. ICRAF Southeast Asia working paper no. 2005\_1. Bogor (West Java): World Agroforestry Centre (ICRAF), 28 pp.
- Musthofid & Witjaksana, D. (2002). Efforts to curb illegal logging hampered by corruption. *The Jakarta Post*, 19 September.
- Nakashima, E. (2006). A lost world in Indonesia yields riches for scientists. *The Washington Post*, 8 February, page A01. Article available on the Internet: <http://www.washingtonpost.com/wp-dyn/content/article/2006/02/07/AR2006020702082.html> (Retrieved 23 October 2008).
- Newman, J. & Lawson, S. (2005). The last frontier: illegal logging in Papua and China's massive timber theft. London: Environmental Investigation Agency and Bogor: Telapak, 32 pp. Document available on the Internet: <http://www.eia-global.org/PDF/reports--lastfrontier--forests--feb05.pdf> (Retrieved 21 October 2008).
- Nizami Jamil, H.O.K., Hasbi Zaidi, M., Nasir, M., Maliha Aziz, Hj., Rahimah, T., Sri Wahyuni Mahdar & Zulkifli, H. (2004). *Pakaian Tradisional Melayu Riau*. Pekanbaru (Riau): Lembaga Adat Melayu Riau / LPNU, 233 pp.
- Notohadiprawiro, T., Sukodarmodjo, S. & Dradjad, M. (1980). Beberapa fakta dan angka tentang lingkungan fisik waduk Wonogiri dan kepentingannya sebagai dasar pengelolaan. Talk given at the Workshop on the Development and Sustainability of the

- Wonogiri Dam area (Lokakarnya Pengembangan dan Pelestarian Wilayah Waduk Wonogiri), 16-19 June 1980, 11 pp.
- Obidzinski, K. (2005a). Illegal Logging in Indonesia: Myth and Reality. In Resosudarmo, B.P. (ed), *The Politics and Economics of Indonesia's Natural Resources*. Singapore: Institute of Southeast Asian Studies, pp. 193-205.
- Obidzinski, K. (2005b). Illegal forest activities in Indonesia. *The Indonesian Quarterly* 33(2):100-4.
- Peluso, N. L. (1992). *Rich Forests, Poor People: Resource Control and Resistance in Java*. Berkeley: University of California Press, 321 pp.
- Persepsi (2000). Persepsi: Perhimpunan untuk Studi dan Pengembangan Ekonomi dan Sosial. Klaten (Jawa Tengah): Persepsi, 12 pp.
- PHPA & WWF (1995). Pemungutan gaharu di Apau Kayan: permasalahan dan konteksnya. Unpublished report for WWF Indonesia Programme, 76 pp.
- Pimenta, J. (2006). *Reciprocidade, Mercado e desigualdade social entre os Ashaninka do Rio Amônia*. Departamento de Antropologia da Universidade nacional de Brasília, Série Antropologia 392, 34 pp. Available on the internet: <http://www.unb.br/ics/dan/Serie392empdf.pdf>
- Pirard, R. & Rokhim, R. (2006). Asia Pulp & Paper Indonesia: the business rationale that led to forest degradation and financial collapse. CIFOR working paper 31. Bogor: CIFOR, 27 pp. Document available on the Internet: <http://chrislang.files.wordpress.com/2008/09/appcifor2006.pdf> (retrieved 19 December 2008).
- Pramoedya Ananta Toer (2000). *The Mute's Soliloquy: A Memoir*. Translation by Willem Samuels of the novel originally entitled *Nyani Suni Seorang Bisu: Catatan-catatan dari Pulau Buru*. New York: Penguin, 400 pp.
- PT Indah Kiat (1999). Form 20-F for fiscal year ended December 31, 1999. Washington D.C.: Securities and Exchange Commission.
- Qomar, N. (2000). Integrasi sub-sistem sosial dalam pengelolaan hutan Tasso Nilo di Riau untuk pelestarian gajah dan ekosistemnya. Masters Thesis, University of Gajah Mada, Yogyakarta, Indonesia, 149 pp.
- Rab, H.T. (2004a). *Pembangunan dan Kerusakan Alam Riau: Deforestisasi (sic) dan Ambruknya Ekonomi Negara*. Volume 1. Pekanbaru (Riau): Riau Cultural Institute (*Lembaga Studi Sosial Budaya Riau*), 419 pp.
- Rab, H.T. (2004b). *Pembangunan dan Kerusakan Alam Riau: Dampak Lingkungan dan Etnis Cleansing*. Volume 2. Pekanbaru (Riau): Riau Cultural Institute (*Lembaga Studi Sosial Budaya Riau*), 398 pp.
- Raillon, F. (2007). *Indonésie : les voies de la survie*. Paris: Belin / La Documentation française, 223 pp.
- Raweyai, Y. (2002). *Mengapa Papua Ingin Merdeka*. Jayapura (Papua): Presidium Dewan Papua, 167 pp.
- Redford, K.H. (1991). The ecologically noble savage. *Cultural Survival Quarterly* 15(1):41-4.

- Ricklef, M.C. (200&). *A history of Modern Indonesia since c. 1200*. Third Edition. Basingstoke: Palgrave, 495 pp.
- Ross, M.L. (2001). *Timber Booms and Institutional Breakdown in Southeast Asia*. Cambridge: Cambridge University Press, 238 pp.
- San Afri Awang, Santoso, H., Widayanti, W.T., Nugroho, Y., Kustomo & Sapardiono (2001). *Gurat Hutan Rakyat di Kapur Selatan*. Yogyakarta: Debut Press, 140 pp.
- Schneider, F. (2007). Certification FSC et gouvernance d'entreprise en Indonésie. Master Thesis at Agro Paris Tech / ENGREF, 86 pp.
- Seymour, F. (1991). *Social Forestry on Public Lands in Indonesia: a Blurring of Ends and Means?* Paper presented for the seminar, "Social Forestry: Innovation in International Forestry Management Practices, February 17, 1991, at the Paul H. Nitze School of Advanced International Studies, the Johns Hopkins University, Washington D.C. Unpublished document, 28 pp.
- Seymour, F. & Rutherford, D. (1993). Contractual agreements in the Java social forestry program. In Fox, J. (ed), *Legal Frameworks for Forest Management in Asia: Case Studies of Community/State Relations*. Occasional Paper No. 16. Honolulu (Hawai'i): East-West Center, 31-7.
- Sijabat, R.M. (2007). Greens divided on Riau deal. *The Jakarta Post*, 15 February 2007.
- Simon, H. (1993). *Metode Inventore Hutan*. Yogyakarta: Aditya Media, 585p.
- Sinar Harapan (2005). Operasi Hutan Lestari II: Bupati Sorong diperiksa Polda Papua. *Sinar Harapan*, 12 March. Article available on the Internet: <http://www.sinarharapan.co.id/berita/0503/12/sh02.html> (Retrieved 21 October 2008).
- Smith, J., Obidzinski, K., Subarudi & Suramenggala, I. (2003). Illegal logging, collusive corruption and fragmented governments in Kalimantan, Indonesia. *International Forestry Review* 5(3):293-302.
- Sneddon, J. N. (1996). *Indonesian: A Comprehensive Grammar*. London: Routledge, 387 pp.
- Soepardi, R. (1974). *Hutan dan Kehutanan Dalam Tiga Jaman*. Two volumes. Jakarta: Perum Perhutani.
- Sudradjat, R. (1997). Progress and lessons learned from Upper Solo (Wonogiri) Conservation Project to control sedimentation in the Wonogiri Dam, Indonesia. Voluntary Paper presented at the XI World Forestry Congress, Antalya, Turkey, 13-22 October 1997.
- Sumule, A. (2007). Recognition of customary rights in Papua: Creating the basis for poverty reduction and growth in the forest sector. Presentation at the Peace and Sustainability Session hosted by the Institute for Environmental Security held at the Hague, 14-15 March, 23 pp. PowerPoint Presentation available on the Internet: <http://www.envirosecurity.org/sustainability/presentations/Sumule.pdf> (Retrieved 20 October 2008).
- Supriatna, J. & Mangunjaya, F. (2005). Mengganti HPH dengan konsesi konservasi? *Sinar Harapan*, 31 January. Article available on the Internet: <http://www.sinarharapan.co.id/berita/0501/31/opi02.html> (Retrieved 28 December 2008).

- Surya (2007). Rencana perluasan 100 ribu ha: hutan Tesso Nilo malah terancam punah. *RiauInfo.com*, 4 October. Available on the internet: <http://www.riauinfo.com/main/news.php?c=10&id=2650>
- Suwardi, Budi Utomo, I., Wibowo, S. Wangen, P. & Ardianto, H. (2006). *Sejarah Perjuangan Rakyat Riau 1942-2002*. Second of two volumes. Pekanbaru (Riau): PT Sutra Benta Perkasa, 314 pp.
- Team Jaringan Monitoring Hutan Irian Jaya (1998). Laporan hasil investigasi PT Texmaco Group di Kabupaten Merauke, Irian Jaya. Unpublished report, Jayapura, 52 pp.
- The Jakarta Post (2007). Walhi backs police fight against logging. *The Jakarta Post* 24 February:9.
- Tokede, M.J., William, D., Widodo, Gandhi, Y., Imburi, C., Patriahadi, Marwa, J. & Yufuai, M.C. (2005). *The Impact of Special Autonomy on Papua's Forestry Sector: Empowering Customary Identities (Masyarakat Adat) in Decentralized Forestry Development in Manokwari District*. Case-Studies on Decentralization and Forests in Indonesia no. 13. Bogor: CIFOR, 46 pp. Document available on the Internet: [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BTokede0501.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BTokede0501.pdf) (retrieved 20 October 2008)
- UNDP (United Nations Development Programme) & FUNDWI (Fund of the United Nations for the Development of West Irian) (1968). *The Role of Forest-Based Industries in the Economic and Social Development of West Irian*. New York: United Nations, 173 pp.
- Van Oijen, D. (2007). Shut the door on illegal merbau! An investigation by Greenpeace and Milieudedefensie / Friends of the Earth Netherlands on the use of merbau timber for floors and exterior doors in Europe and related illegal timber trade. Amsterdam: Greenpeace & Milieudedefensie, 33 pp. Document available on the Internet: <http://www.milieudedefensie.nl/globalisering/publicaties/rapporten/Milieudedefensie%20Merbau%20rapport%20definitief.pdf> (Retrieved 21 October 2008).
- Wahyudi, L.S. (2003). Military told to stay away from logging. *The Jakarta Post*, 3 January.
- Wallace, A.R. (2007[1869]). *The Malay Archipelago*. New York: Cosimo, 515 pp.
- Wee, V. (2002). Ethno-nationalism in process: Atavism, ethnicity and indigenism in Riau. Southeast Asia Research Centre Working Papers Series No. 22. Hong Kong: City University of Hong Kong, 31 pp. Available on the internet: [http://www.cityu.edu.hk/searc/WP22\\_02\\_Wee.pdf](http://www.cityu.edu.hk/searc/WP22_02_Wee.pdf)
- Wiryo (2003). Klasifikasi kawasan konservasi di Indonesia. *Warta Kebijakan CIFOR* no. 11. Bogor: CIFOR, 6 pp. Document available on the Internet: <http://www.cifor.cgiar.org/acm/download/pub/wk/warta11.pdf> (Retrieved 26 December 2008).
- Witular, R.A. (2004). Indonesia: Britain rejects RI plywood over illegal timber issue. *The Jakarta Post*, 8 January.
- Woolford, K. (2006). "First Contact Expedition". Text available on the Internet: <http://www.papua-adventures.com/first-contact.html> (retrieved 31 October 2008).
- World Bank, DFID, ICRAF & CIFOR (2006). *Sustaining Economic Growth, Rural Livelihoods and Environment Benefits: Strategic Options for Forest Assistance in Indonesia*. Jakarta: The World Bank, 215 pp.

- Wrangham, R. (2002). Changing policy discourses and traditional communities, 1960-1999. In Colfer, C.J.P. & Resosudarmo, I.A.P. (eds), *Which Way Forward? People, Forests and Policymaking in Indonesia*. Washington, D.C.: Resources for the Future, Bogor: CIFOR & Singapore: Institute of Southeast Asian Studies, pp. 20-35.
- Wright, T. (2007). Indonesia's logging fight: smugglers defy crackdown to feed demand in China. *The Wall Street Journal*, 3<sup>rd</sup> July, p. A5. Article available on the Internet: <http://www.eia-global.org/PDF/article--WSJonIndoIL--forests--jul07.pdf>
- WWF (undated a). The Tesso Nilo conservation landscape, Sumatra, Indonesia. Unpublished document. Available on the internet: <http://www.worldwildlife.org/tigers/projects.cfm>
- WWF (undated b). Upaya mitigasi konflik Manusia dan Gajah. Pekanbaru: WWF Riau Elephant Conservation Programme, 6 pp.
- Yusuf, A., Bidu Utomo, I., Wibowo, S., Wangen, P. & Ardianto, H. (2006). *Sejarah Perjuangan Rakyat Riau 1942-2002*. First of two volumes. Pekanbaru (Riau): PT Sutra Benta Perkasa, 449 pp.
- Zubrinich, K. (1997). *Cosmology and Colonisation: History and Culture of the Asmat of Irian Jaya*. PhD Thesis submitted at Charles Sturt University, Sydney, Australia, 400 pp.