

**CONSERVATION CONCESSIONS IN INDONESIA:
AN INVESTIGATION OF THEIR POTENTIAL**

By

S. Puspitasari

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**School of Environmental Sciences
University of East Anglia
University Plain
Norwich
NR4 7TJ**

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ABSTRACT

Conservation concessions are a recent development in the tropics: concession sellers protect natural ecosystems in exchange for a steady stream of structured compensation from conservationists and other investors. Conservation concessions are now under active consideration by several NGOs in Indonesia. The potential for their further implementation in Indonesia is the central subject of this paper. Five core issues are critically examined: (1) competition with existing timber concessions in Indonesian production forests, (2) Government of Indonesia and regulatory support, (3) monitoring systems, (4) local community involvement, and (5) standardising the conservation concession mechanism.

The chosen methodology was to conduct a Literature Survey and Elite Interviews. The interviews were conducted with 17 key informants, who represented the Forestry Department, international NGOs, national NGOs, academia, donor agencies, and independent consultancies. The interviews covered the core issues mentioned above, while the Literature Survey focused on the history of conservation concessions and the wider conservation context in Indonesia.

From these studies, the author found: (1) that there are currently several international NGOs who are, or will be, implementing conservation concessions in Indonesia; (2) that the Government of Indonesia, through a Declaration of the Ministry of Forestry, has explicitly expressed support for the conservation concession mechanism, but that more substantial GOI support will be needed; (3) that a permanent ban on commercial logging remains difficult to realize; (4) that long-term engagement with local communities is perhaps the most important single issue (and that current practice still falls far short of the ideal); (5) that a new monitoring system is essential, involving all stakeholder group many different groups - NGOs, local and central government, Forestry Department, local communities, and academia; (6) and that the standardisation of conservation concessions is both unnecessary and undesirable, since the diversity of on-the-ground conditions requires that each concession agreement be uniquely tailored to each concession area.

1. INTRODUCTION

Indonesia's forests are in crisis - a crisis that has been regrettably overshadowed by the country's recent economic and political upheavals. Forest degradation and conversion have accelerated to some 2 million ha per year. Central and local governments continue to see natural resources - particularly forests - as a means of generating much-needed revenues and bestowing political patronage. A prominent Indonesian forest campaigner has called this approach 'national suicide' (Down to Earth, 2002; Kartodiharjo, 2003).

Indonesia has more than 8.6 million hectares of critical land, areas the government describes as: 'Land which is generally unable to fulfil any of the normal soil functions, including water absorption or the production of even meagre subsistence crop'. A further 12 million hectares is classified as having 'serious erosion' problems. These problems are the direct result of forest destruction (Down to Earth, 2002).

The pressures on Indonesia's forests are relentless – pressure from timber concessions, from overcapacity in forestry related industries, from illegal logging, from oil palm plantation, and from forest fires. A lack of Government institutions, inadequate implementation of Forest Laws and monitoring systems, and a capacity building deficiency are the chief causes of Indonesian forest degradation.

Conservationists, especially National and International NGOs in Indonesia, are always looking for suitable measures to protect forests in Indonesia. The latest mechanism under consideration are conservation concessions. The idea to protect natural ecosystems in exchange for a steady stream or structured compensation from conservationists or other investors can be widely applied in Indonesia.

Conservation International, a USA-based International NGO, has experimented with this mechanism in several countries in the world, most notably in Peru and Guyana. Both of these conservation concessions have obtained support from the host government and most other parties, even though concessionaires have had to tackle many problems with regard to legal back-up, social conflict, etc. However, based on the result of these pilot concessions, it would seem that there is potential to expand conservation concessions in the region.

1.1. Conservation Concessions in Indonesia

The development of conservation concessions in Indonesia started about 7 years ago, when YLI (Yayasan Leuser Indonesia) or Indonesian Leuser Foundation, a private foundation, obtained a seven-year conservation concession. This concession is to manage the ecosystem in Gunung Leuser National Park through a decree (SK) from the Minister of Forestry, approved by the President.⁵ It targets a 2.1 million-hectare ecosystem that includes production and protection forests, as well as a 0.9 million hectare national park (Wells et al, 1999).

At present, there are several NGOs or other organisations, which are or will be implementing conservation concessions in Indonesia. Birdlife Indonesia will try to implement a conservation concession in production forests in East Kalimantan, where logging concessions are in place: the hope is to take over the management of the forest from timber companies by paying the compensation to them⁶.

Another conservation concession is also being established by Conservation International Indonesia on the Southern border of Siberut National Park (off the western coast Sumatra). They will pay compensation to the companies who have logging concessions in the production forests⁷.

Implemented in Indonesia, conservation concessions can extend the protection that parks offer, especially in areas that allow logging. Siberut National Park protects just under half of the 400,000 hectare island of Siberut, off the western coast of Sumatra. Only about 60 percent of the 205,000 hectares outside the park remains naturally forested. Pending concessions for commercial logging and oil palm plantations threaten 80 percent of the island – including areas within the park. However, the local government of Siberut and Conservation International are negotiating a conservation concession that could extend the area protected by the park and curtail encroachment by logging and agriculture (Hardner & Rice, 2002).

Developing the conservation concession approach in Indonesia will have several major goals in mind. Most important, perhaps, is that a portion of concession payments would be directed to local communities to support employment and social services. In the same way that a logging company would pay local residents wages

⁵ No. 33 / 1998 on The Management of Leuser Ecosystem Area, clause 2 and 3.

⁶ Rudyanto, personal communication, 2003

⁷ Wiratno, personal communication, 2003

and benefits to work in the mills, the financier of conservation concession would hire them to preserve the forest.

Conservation concessions are one of many possible conservation interventions and are more appropriate, for example, where guaranteed permanence is of pre-eminent importance. It is therefore important to view conservation concessions as a complement rather as a replacement to national parks and other traditional protected areas.

Government support in developing and implementing this approach will be significant. The legislative support by forest law or other government regulation will help conservation concessions create a new market for biodiversity. In April 2001, the Government of Peru included conservation concessions as one of the legal uses of its 67 million hectares of public forest. Under the new Peruvian Law, concessions could be acquired by applying for specific areas of interest to the bidder. The 1st tropical conservation concession was then launched in Peru (Hardner & Rice, 2002; Rice, 2002).

1.2. Research Area

The idea of conservation concessions is now considered as one new strategy for conservation efforts in Indonesia. Together with other existing concessions, this new mechanism will need much attention and preparation. It will require potentially a long battle for it to be accepted and implemented, especially given the complex problems that Indonesia's forestry sector is facing in terms of restructuring and decentralisation. The main concern regarding conservation concessions in Indonesia is how they will be implemented. The role of government institutions, law enforcement, the timber companies' responsibility, and regulations execution from previous concessions should be evaluated to uncover the potential implications for conservation concessions.

From the previous timber concessions and determining the obstacles, the implementation of conservation concessions in Indonesia will need a lot of preparation. How will they work together with timber and logging concessions? Will they work with the same approach and under the same conditions? How will the GOI support this new concession model? How great is the potential for conservation concession implementation in the future, and what are the obstacles?

Determining all the issues related to conservation concession implementation will yield significant recommendations for GOI potential concessionaires alike.

2. OBJECTIVE

To Investigate the Potential for Conservation Concession Implementation in Indonesia.

This would require research into three areas, with a particular focus on Indonesia:

- a) Competition with timber concessions:** Look at previous and current levels of logging concessions in Indonesia and whether conservation payments could compete
- b) Government of Indonesia & Regulatory issues:**
 - i)** How conservation concessions could be implemented in Indonesia alongside existing logging concessions?
 - ii)** What regulatory and legal changes need to take place at national government level?
 - iii)** Decentralisation issues: Forest management authority problem between central and local government
 - iv)** Conflict with local communities
 - v)** Standardising the for conservation concession mechanism

3. LITERATURE REVIEW

3.1. Deforestation and Forest Degradation in Indonesia

Indonesia is one of the biologically richest countries, containing almost 10% of world's remaining tropical forest (Mainhardt, 2001). Although it only occupies 1.3% of the world's land area, some 17% of species on earth are found there. Its forests contain 11% of the world's plant species, 12% of mammal species, 15% of reptiles and amphibians and 17% of birds. Borneo alone has at least 3,000 species of trees; 2,000 species of orchids and 1,000 species of ferns: over a third of these plants are unique to the island. Over 1,400 species of bird have been recorded in Indonesia, 420 of which are endemic. One reason for this high biodiversity is that Indonesia lies on the Wallace line at the junction of two major biogeographical zones. To the west of Bali, including the island of Borneo, species are similar to those occurring in mainland Asia; to the east of Bali, flora and fauna typical of Australia are found such as eucalyptus trees and marsupials. Indonesia's forests are a centre of genetic diversity for many important food and economic crops including tropical fruits, bamboo, rattan, orchids and timber. They also provide a wide range of commercially valuable products such as timber, fruits, vegetables, nuts, spices, medicines, perfumes, seed oils, fodder, fibres, dyes, preservatives and pesticides. Over 6,000 plant and animal species are used by Indonesian communities in their everyday lives (Down to Earth, 2002).

3.1.1. The threat to biodiversity: Deforestation & Forest Degradation

The two main drivers of deforestation in Indonesia are:

1. Unsustainable timber extraction, especially widespread illegal logging; and
2. Forestland conversion for agricultural expansion, including associated forest fires.

Unsustainable timber extraction is a direct consequence of Indonesia's excessive industrial wood processing capacity. This over-capacity is a result of pervasive rent-seeking and corruption linked to the Suharto regime. During Suharto's 32-year authoritarian rule, forest policy sought to maximize the timber output, government revenues, and private wealth. Much of the resource's rents were captured by a small

group of well-connected businessmen who influenced policy and ignored sustainable forest management regulations (Down to Earth, 2002; Brown, 1999).

Recent GOI data reveal that the forests can sustainably supply only between 30 to 50 percent of the timber currently being processed. Data indicates that in 1997 the aggregate round wood consumption of the three major wood industries was approximately 55 million cubic meters (m³). By contrast, Indonesia's Ministry of Forests and Estate Crops' (MoFEC) statistics indicate that Indonesia's official log supply for 1997 was 26 million m³, which is 29 million m³ below the volumes estimated to have been consumed by the nation's wood processors (Sheng, 2001).

The imbalance between sustainable raw material supply and industrial wood processing capacity is a major driver of illegal logging. In November 2000, provincial forestry officials in Bengkulu stated that 48,000 of conservation forest in the province had been damaged by illegal logging. In addition to the illegal logging, large numbers of timber concession-holders are known to routinely violate sustainable forest management regulations by over-harvesting and failing to cultivate plantations as required by law (Down to Earth, 2002).

The second significant driver of deforestation is forestland conversion, predominantly for agricultural expansion. Currently, the largest commercial force behind land conversion is palm oil (Down to Earth, 2002). The conversion of forestlands to oil palm plantations, coupled with the associated practice of setting fires for land clearing, makes palm oil a key element in the deforestation equation. At the root of this threat to Indonesia's forest are the government's land-use allocation processes that have been assessed by both Indonesian and foreign observers as inappropriate, corrupt, and conflict-ridden.

3.2. Forest and Logging Concession Implementation

Until the 1992 Spatial Management Act, Indonesia had no integrated land-use planning. While the forestry authorities in Jakarta were awarding logging concessions (*HPH*) to private companies, other ministries were also handing out rights to forest peoples' lands, for example, as mining concessions or transmigration sites. Poor coordination between central authorities and inaccurate maps produced overlapping concessions. Not uncommonly indigenous communities found both a logging and a mining company claiming their land. Meanwhile, during the 1980s, local authorities had been drawing up regional development plans independently of the Forestry

Department. The result was two separate and often contradictory land-use zoning schemes. From 1992, the two sets of plans had to be consolidated (Down to Earth, 2002)

The *HPH*-concession system was hugely damaging: it destroyed forests through over-logging; increased the likelihood of forest fires; violated indigenous rights; deprived forest peoples of their livelihoods and institutionalised corruption. Logging trails opened up forest to exploitation by outsiders, including local townspeople, migrants and transmigrants placed on inappropriate sites. Logging camps employing non-local labour brought disruption to forest-dwellers and social conflict.

In theory, commercial loggers were required to practise selective logging and, later, to replant logged areas under Indonesia's *TPTT*⁸ system. In reality, timber companies had a free rein due to minimal supervision of logging concessions and rampant corruption. Illegal practices, such as exceeding the annual allowable cut and felling outside concession limits, were commonplace and companies did all they could to avoid paying forestry taxes and levies (Down to Earth, 2002).

3.4. Conservation Concession – Concept and Case Study

3.4.1. Concept & Application

The concept of conservation concessions was developed from nations experiencing challenges in developing their natural resources for economic ends. Although sustainable resource management seeks to provide these benefits while conserving natural ecosystems, experience suggests that a number of obstacles limit both the adoption of sustainable practices and their usefulness in conservation strategies (Rice, 2002).

Under a conservation concession agreement, national authorities of local resource users agree to protect natural ecosystems in exchange for a steady stream or structured compensation from the conservationist and other investors (Rice, 2002). These co-called conservation concessions not only protect the land but also finance conservation services and provide employment for local people (Hardner & Rice, 2002).

⁸ *Tebang Pilih Tanam Indonesia (TPTI)* means the Indonesian Selective Logging and Replanting system. Forest activists joked that the acronym really stood for *Tebang pasti Tanam inshallah* (logging is definite, but replanting depends on Allah's will.) Trees are felled on a 35-year cycle. Only trees with a diameter of over 50cm can be harvested in normal Production Forest and over 60cm in Limited Production Forest.

Conservation concessions have been implemented in several tropical nations in the world, including:

The middle-income nation of Costa Rica pays rural residents about \$35 annually per hectare of forest protected and excess demand for conservation contracts suggests that these payments are higher than necessary (Chomitz, 1998).

Even cheaper, Conservation International is protecting 81,000 hectares of rain forest in Guyana through a conservation concession that costs approximately \$1.25 per hectare per year, and the Wildlife Foundation in Kenya is securing migration corridors on private land through conservation leases at \$4 per acre per year (Ferraro, 2002).

In 2002, Conservation International and its Guatemalan partner, ProPetén, finalized conservation concession contracts with the communities that manage some 75,000 hectares of forest within the multiple-use zone (where commercial exploitation of forest resources is allowed, but its core zones are protected against all activities other than those judged to be environmentally benign, such as scientific research and ecotourism). These additional conservation areas will begin to provide habitat links between the reserve's core zones of Tikal and El Mirador national park (Hardner & Rice, 2002).

Other payment initiatives are being designed or are under way in Peru, Mexico, El Salvador, Colombia, Honduras, Panama, Russia and Madagascar. Payment can be made for protecting entire ecosystems or specific species, with diverse institutional arrangements existing among governments, firms, multilateral donors, communities, and individuals (Ferraro, 2002).

The use of conservation concession for resource protection offers a number of distinct benefits (Hardner & Rice, 2002; Rice, 2002):

1. Enables host countries to capitalize on their biodiversity-rich habitats.

The concession approach allows tropical countries to benefit economically by protecting their natural resources and alleviates economic reliance on volatile timber and agricultural commodity markets. This benefit can be achieved without depreciating the value of the natural resource (and without damaging wildlife habitats or other aspects of environment).

2. Stable source of funds for economic development

Many economic activities, including conventional natural resource extraction, yield revenue flows that are subject to unpredictable fluctuations. Logging,

mining, and tourism revenues, for instance, depend on international market conditions. Government revenue streams, moreover, are vulnerable to weaknesses in the capacity needed to capture all taxes and fees.

By contrast, a conservation concession offers regular, low risk payment of a known amount, denominated in a stable foreign currency, for as long as the terms of the agreement are met.

3. Direct, transparent conservation objectives

A conservation concession agreement sets out clear and transparent conservation objectives that can be monitored based on readily verifiable norms. Payments can be linked to the successful accomplishment of these objectives. This approach can therefore demonstrate clear conservation benefits to potential biodiversity investors.

4. Catalyze conservation in situations where creating a national park may be infeasible

Conservation concessions provide governments with an economically sound motive for creating protected areas that extend beyond park systems. Concession payments also ensure long-term management of these areas, in contrast to under-funded national parks.

5. Reduce risk of failure by establishing ongoing economic incentive for cooperation.

Substantial financial risk accompanies business investment in many developing countries, but a well-constructed incentive system based on annual payment in return for resource monitoring and other conservation services should dramatically reduce the temptation to break a concession agreement.

3.4.2. Case Study: Los Amigos, Peru (Conservation International, 2002)

Peru presents the best legal environment for private investment in conservation in Latin America. The interim administration of President Valentin Paniagua passed legislation in 2001 that formally recognise the use of conservation concessions on public lands, in addition to a law that allows private financing and management of national parks. In Peru, conservation concessions are granted on the basis of the ability of the applicant to properly finance and execute the management of the area for conservation.

Context and Players: Peru has an extensive protected areas system, distributed throughout the country, and managed centrally by the Instituto Nacional de Recursos Naturales (INRENA). While the legislative basis for existing and future parks is strong, park funding is most likely insufficient at present to meet the management objectives of existing parks – a problem that is partially addressed in Peru’s new protected areas legislation that allows for private financing and management of national parks. However, there remain approximately 80 million hectares of public forestland in Peru that is not yet zoned for any purpose, in which protected areas are needed to ensure the conservation of Peru’s biological diversity. The intent of Peru’s new Forestry and Wildlife Law is to incentivise the private sector to manage these forest resources, including the use of both timber and conservation concessions.

The Government of Peru under the Forestry and Wildlife Law No. 27308 issued the 135,832 hectares Los Amigos conservation concession in July 2001 to the Amazon Conservation Association (ACA) to provide an area for the establishment of an international biological research station in the Amazon basin. In addition, the concession is ideally situated to provide habitat connectivity between several national parks, and provides a buffer zone between areas of high logging activity and the upper Los Amigos watershed that is believed to be inhabited by an uncontacted indigenous people.

The process of engagement with local stakeholders included 12 meetings with local communities from November 2000 – June 2001. These meetings served to familiarize communities with ACA and their plans for a conservation concession, research, and community education programs. The unstable situation with loggers in Puerto Maldonado made engagement of this interest group unfeasible.

The national stakeholders process included the signing of a framework agreement with the Minister of Agriculture, a meeting with President Paniagua to present the proposed plan for a conservation concession and constant contact with the Director of Forestry at INRENA, Suarez de Freitas.

Contract Design: The contract between ACA and INRENA has four main features:

1. The term of the concession is 40 years, on a rolling renewal system. Under this system INRENA assesses the concession’s performance every five years, and provided that contract conditions are met, the concession contract is renewed for another forty years.
2. ACA must submit for approval by INRENA a management plan for the area.

3. ACA is responsible for managing the area for purposes of conservation, research, and education.
4. No fees need be paid to the government for the conservation concessions. However, ACA is committed to the investment plan described in their concession proposal to government.
5. If ACA chooses to extract non-timber resources from the area, or conduct ecotourism, they must pay INRENA fees on commercial endeavours. Any resources utilization must be approved by INRENA.

Los Amigos was a flagship deal under Peru's new Forestry and Wildlife Law, which identifies conservation concessions as a legitimate use of public lands. It offers an important means of overcoming the funding and capacity constraints that limit the effective management in other protected areas in Peru as well as the country's vast forest estate that currently remains un-zoned and unmanaged. ACA has chosen to heavily finance an international research centre in the Los Amigos concession.

3.5. The Initial Conservation Concession in Indonesia: Integrated Conservation and Development Projects (ICDP) in Gunung Leuser National Park

The ICDP in Gunung Leuser National Park (Sumatra) is targeting a 2.1 million-hectare ecosystem that includes production and protection forests, as well as 0.9 million hectare national park. Yayasan Leuser Indonesia (YLI), a private foundation, received seven year conservation concession to manage the ecosystem in 1995 through a decree from the Minister of Forestry, approved by the president. This was the first example of a conservation concession being granted to a private organization in Indonesia. YLI is led by a very influential and well-connected board, and the project steering committee chaired by Ministry of National Development Planning, Indonesia (BAPPENAS), includes three ministers and two provincial governors. The Government of Indonesia's 40 percent contribution to the US\$66 million ICDP budget was paid in advance from the Reforestation Fund, bypassing its own cumbersome budget mechanisms (the annual park management budget is about US\$400,000). The European Union (EU) is providing the external funds (Wells et al, 1999).

The main threats to the ecosystem include large scale illegal logging, poaching, agricultural encroachment by small farmers, destructive logging operations, conversion of neighbouring forests for estate corps and transmigration projects, and

road construction. Blatant encroachment and logging in the park have been unimpeded by PHPA for many years.

Five major programs are led by foreign consultants and senior Indonesian staff seconded from government agencies and universities:

1. Administration
2. Conversion (park management, boundary demarcation, and law enforcement)
3. Buffer Zone Development (outside the park but inside the ecosystem)
4. Intensive Zone Development (outside the ecosystem but within the same district / kabupaten)
5. Research, Monitoring, and Evaluation

This ICDP has barely begun implementation, many operational issues have yet to be resolved, and little tangible action has taken place. However, the project already breaks new ground in conservation by having (Wells et al, 1999):

1. Paid substantial attention to establishing powerful political support, a sound legal basis, and functional institutional arrangement at a high level.
2. Established a strong, centralized, and well supported park and project management unit independent of the Department of Forestry (through a concession) in a provincial rather in the park
3. Ensured continuity between the preparation and implementation phases with key individuals involved in the preparation now also responsible for ICDP implementation
4. Understood the importance of balancing positive incentives with law enforcement
5. Established a flexible financing mechanism
6. Planned contractual agreement specifying the conservation obligations of beneficiaries of the development investment
7. Adopted a landscape ecosystem – scale approach.

Gunung Leuser is one of the few projects that attempts to respond effectively to many of the lessons of earlier ICDP experiences. However, the challenges in overcoming decades of ineffective park conservation are enormous, the project has many critics, and it is heavily dependent on a few key individuals.

4. STUDY METHODS AND APPROACH

To Investigate the Potential for Conservation Concession Implementation in Indonesia, I followed these 2 stages:

1. Literature survey
2. A series of key-informant interviews (elite interviewing)

4.1. Literature Survey

The literature on conservation concessions implementation in Indonesia is still very limited. This is not surprising, since conservation concessions are a new idea in the tropics.

Given the paucity of literature directly focused on conservation concessions, the survey investigated the following related areas:

1. All forms of direct payment for biodiversity conservation, including conservation concessions, conservation performance payments, and conservation easements
2. The marketing of conservation services
3. The financing of conservation services
4. The partnership between corporations and conservation groups
5. Biodiversity hotspots – the areas in critical need of conservation
6. National Parks – their successes and failures
7. The relationship between debt and deforestation
8. Forest certification
9. Forest law and policies

4.2. Elite Interviewing

Elite interview is a specialized case of interviewing that focuses on a particular type of interviewee. “Elite” individuals are those considered to be influential, prominent, and/or well-informed people in an organization or community. They are selected for interviews on the basis of their expertise in areas relevant to the research (Rubin and Rubin, 1995).

4.2.1. Arranging the Interview

Briefing Note

Before conducting the interview, a 3-page Briefing Note was sent in advance to all the interviewees. The Briefing Note contained preliminary information on my research, including objectives and methods, as well as introductory information about conservation concessions.

The purpose of the Briefing Note was to give a general introduction to conservation concessions, and an idea of how they might work in Indonesia. Prior knowledge of conservation concessions was not considered important: in some ways, the less preconceptions interviewees had the better.

Questionnaires

The 6–page questionnaires was structured into 30 questions, covering the following key subjects: the interviewees’ conservation opinions, their understanding of conservation concession, their assessment of the potential for conservation concession implementation in Indonesia (including competition with timber concessions), the role of the Government of Indonesia, and other structural issues.

Interviews were conducted in English or Indonesian depending on the preference of the interviewee. The questionnaire was drafted in English, and translated into an Indonesian version by the author.

Contacting the Interviewees

Having identified the interviewees, they were then contacted by email and by phone. They were each provided a succinct and clear account of what the research is about, what the research is seeking to achieve, and why they had been selected for interview.

List of Interviewees

A list was constructed of 25 conservation professionals actively involved in Indonesian conservation policy. Names were selected primarily on the basis of my own knowledge and experience in environmental research, and supplemented by the information of colleagues. Interviews were conducted with 17 on the list. To ensure that the study benefited from the greatest amount of expertise possible, and from the widest diversity of perspective, it was deemed essential to interview at least one individual from each of the following six sectors: Government of Indonesia,

international NGOs, national NGOs, academia, donor agencies, and independent consultancies.

17 interviewees (their name and responsibilities) are as follows:

National NGOs

1. Longgena Ginting - National Executive Director of WALHI / Friends of the Earth Indonesia (Email interview)
2. Mardi Minangsari – Telapak Foundation, Indonesia (Face to face Interview)
3. Arby – Telapak Foundation, Indonesia (Face to face Interview)
4. Rina - Forest Watch Indonesia (Email Interview)

International NGOs

1. Duncan Neville – Sulawesi and Papua Program Manager, The Nature Conservancy (TNC) (Phone Interview)
2. Wiratno – Policy Analyst, Conservation International Indonesia (CII) (Phone Interview)
3. Rudyanto – Senior Program Officer, Asia Division Birdlife International (Online Messenger Interview)
4. Elaine Pingkan Slamet – Forest Officer, World Wide Fund (WWF) Indonesia (Email Interview)

Academia

1. Hariadi Kartodiharjo – Lecturer in Faculty of Forestry and Post Graduate Program, Bogor University of Agriculture; Chief of Eco-label Certification Assessment, Indonesian Eco-label Institution (Email Interview)
2. Damayanti Buchori – Lecturer in Faculty of Agriculture and Post Graduate Program, Bogor University of Agriculture; Director of Centre for Integrated Pest Management, Indonesia (Phone Interview)
3. Paul Jepson – School of Geography and the Environment, University of Oxford, UK (Face to face Interview)
4. Sven Wunder – Senior Economist, Centre for International Forestry Research (CIFOR), Indonesia (Phone and Email Interview)

Donor Agencies

1. Reed Merrill – Protected Areas & Forest Management Advisor for the USAID–funded Natural Resources Management Program in Indonesia (Email Interview)

Independent Consultancies

1. Ambrosius Ruwindrijarto – Indonesia (Phone Interview)
2. Jared J. Hardner – Hardner & Gullison Associates, USA (Phone Interview)
3. John Claussen – Senior Associate for Conservation and Community Investment Forum (CCIF), USA (Phone Interview)

Forestry Department, Government of Indonesia

1. Sri Mulyati – Forestry Technician for Biodiversity Conservation in Gunung Halimun National Park, Department of Forestry of Republic of Indonesia (Email Interview)

4.2.2. Conducting the Interviews

All interviews were conducted by the author herself. Interviews were conducted face-to-face, by phone, email, and on-line messenger. Some of the questions are specially directed to particular group of interview.

Notes were taken during the interview, and then written up in detail immediately afterwards. This is a well-practised form of processing interview material in such circumstances (Grant, 2000).

Criteria were developed for appraising the reliability and veracity of the opinions and information provided by the respondent. A personal “internal” assessment was required – noted down immediately after each interview – of the respondent as an individual: was there an impression of openness and spontaneity?

Documents such as the transcript legislative committee hearings, specialised publications or newspaper reports were also sometimes used to provide a check on the information supplied in the interview.

At the end of the interview, all respondents were given an opportunity to say whether there was anything else they wanted to raise which they considered important.

4.2.3. Collecting and analysing the result

All data is presented qualitatively in section 5, and discussed in section 6.

4.3. Recommendation for methods

Face-to-face interviewing proved to be the most suitable method for this research, since it appeared to generate better interaction with the respondents and deeper consideration by them of the subject in hand. However, most of the interviews with respondents in Indonesia were conducted by phone and email: The Gulf War, a Foreign Office travel warning on flying to Indonesia, made a visit to the country impossible. The outbreak of the SARS epidemic extended this period of restricted travel.

5. RESULTS

This chapter presents the results from the elite interviews and literature research. It is structured according to the main interview subjects: the respondents' understanding of conservation concessions, their assessment of the potential for conservation concession implementation in Indonesia (including competition with timber concessions), the role of the Government of Indonesia, and other structural issues.

5.1. General Overview of the Potential of Conservation Concessions in Indonesia

The elite interviews identified the basic opinions of the respondents regarding to the potential of conservation concessions in Indonesia.

Most of those interviewed were familiar with the term 'conservation concessions'. However, only 50% of the interviewees really understood the concept behind them, and how they work in practice. Most of this group were from International NGOs (CII, TNC, WWF, and Birdlife International), who have been implementing or planning conservation concessions in Indonesia or elsewhere.

The development of conservation concessions in Indonesia have been greatly influenced by the experience in other countries, such as Guyana and Peru, where conservation concessions have been implemented over the last 3 years by Conservation International. However, the earlier experience of the Indonesian Leuser Foundation, also strongly influenced the implementation of this mechanism.

Back in 1997, the Indonesian Leuser Foundation received a joint grant from the Government of Indonesia and European Union to manage the ecosystem in Gunung Leuser National Park. Although this grant was part of Integrated Conservation and Development Programme (ICDP), it is considered by most conservationists to be the first conservation concession in Indonesia.

Although the ICDP in Gunung Leuser National Park did not give a satisfactory result, the idea of granting NGOs or other organizations the right to manage the land was considered as a new conservation mechanism to save the forest and biodiversity.

The term 'conservation concessions' was first used in Indonesia by CII about 2 years ago. CII was trying to replace a timber concession with a conservation concession in production area on the southern border of Siberut National Park, Sumatra.

As a conservation mechanism, 60% of respondents considered that conservation concessions will work successfully. This positive feedback came mostly from International NGOs and consultants. However, almost all the National NGOs gave negative feedback on this issue. Their critical arguments centred on the inadequacies of the GOI institutions, of Foresting Law implementation and of current monitoring systems.

When it came to the impact on local communities, less respondents were optimistic that conservation concessions would significantly improve the current situation: only 47% felt that would help increase community involvement and help ease land rights disputes (Table 1).

The existence of large-scale timber concessions in Indonesia was considered to be the biggest threat for the implementation of conservation concessions in Indonesia. Almost half of the respondents believed that both types of concession cannot work together. Overlapping of concession areas, variation in the methods of implementing conservation concessions, inadequacy of GOI institutions, and ineffective implementation of Forestry Law, was the major explanations for the negative response. Only 27% believed that timber concessions and conservation concessions can still exist and work together. The rest mentioned that both types of concession can work together only under certain conditions, in particular the existence of a strong legal framework, excellent monitoring and evaluation system, and strong support from GOI (Table 1).

With regard to the role of GOI, all interviewees believed that the Government will support conservation concessions as a conservation programme in Indonesia. Most significantly on this issue, CII received Government support through a Declaration of the Ministry of Forestry – ‘In support of “Conservation Concessions”’, (April 2001). This committed the Ministry to exploring the concept of “conservation concessions”⁹ for the purpose of creating a market that will allow conservation investors to complete economically for the right to manage natural resources.

However, the initiative to standardise the conservation concession mechanism in Indonesia was considered unnecessary by more than half of the respondents. They stressed the need for different approaches in different areas, and flexible methods.

⁹ Developed by Center for Applied Biodiversity Science at Conservation International, a U.S. – based non-profit organization.

The results above, present the general idea about the potential for conservation concession implementation in Indonesia. Conflict with local communities and large scale timber concessions were still considered as threats. However, GOI has evidently opened its arms to conservation concessions by declaring openly its support for the mechanism to CII. Further specific results derived from the objectives of the research will be described in the sections below.

Table 1: General overview of the potential of conservation concessions in Indonesia

	Total Pop.	Nationality		Organisation affiliation					
		Indonesian	Foreigner	Gov.	Academics	Donor Agency	Intl. NGO	Nat. NGO	Consultant
Prior knowledge of conservation concessions									
Had heard of them before	12 (80%)	6	6	0	3	1	4	1	3
Never heard of them before	3 (20%)	3	0	1	1	0	0	1	0
General impressions of conservation concessions:									
<i>A. As a conservation mechanism</i>									
Optimistic	9 (60%)	4	5	0	1	1	3	1	3
Pessimistic	6 (40%)	5	1	1	3	0	1	1	0
<i>B. Impact on local community</i>									
Optimistic	7 (47%)	2	5	0	1	1	3	0	2
Pessimistic	8 (53%)	7	1	1	3	0	1	2	1
Competition with Timber Concession									
Can work together with conservation concessions (Complement)	4 (27%)	0	4	0	1	0	1	0	2
Cannot work together with conservation concessions (Substitute)	8 (53%)	8	0	1	2	0	3	1	1
Conditional option	3 (20%)	1	2	0	1	1	0	1	0
Government of Indonesia									
<i>A. Regulatory support</i>									
Support	15 (100%)	9	6	1	4	1	4	2	3
Oppose	0								
<i>B. Standardisation of conservation concessions Mechanism</i>									
Required	9 (60%)	6	3	1	4	0	2	2	0
Not required	6 (40%)	3	3	0	0	1	2	0	3

5.2. Conservation Agenda in Indonesia

This section examines the current state following the statements and opinions of the people interviewed of the Indonesian conservation agenda. We look at the present levels of tropical deforestation, at the different conservation mechanism, and at the cost of Indonesian forest conservation.

5.2.1. Current level of tropical deforestation

All respondents were highly concerned about the level of tropical deforestation in Indonesia. Some of them specifically mentioned the areas in Indonesia with the highest rate of deforestation: the Sumatra and Kalimantan forests. Poor evaluation and monitoring system, weak regulation and inadequate forest policies were considered the main causes.

5.2.2. Unsuccessful conservation mechanisms

(National Parks, timber certification, debt-for-nature swaps, eco-tourism, non-timber forest products, biodiversity prospecting, other forms of ICDP)

Interviewees attributed the failure of most conservation mechanisms in Indonesia to the poor implementation of forest regulation, the lack of government support, and to the inadequate education for biodiversity awareness.

Surprisingly, national parks scheme were considered the most successful conservation mechanism in Indonesia by respondents from Forestry Department and professional consultant. Their experiences in collaboration with many NGOs in different countries including Indonesia gave risen to this opinion.

5.2.3. The cost of tropical forest conservation

A combination of forest owners, forest dwellers, GOI and the international community should bear the cost of tropical forest conservation. However, most respondents particularly mentioned Government of Indonesia and the international communities.

5.3. Purpose of Conservation Concessions in Indonesia and Impact to Local Communities

This section describes the views of the respondents and regarding conservation concessions: their purpose as conservation mechanism and their probable impact on local communities.

5.3.1. Conservation Concession as a conservation mechanism:

Taking into account the implementation of previous conservation mechanisms, such as ICDPs, debt for nature swaps, and protected areas, gathered from interviewees, the successful of conservation concessions in Indonesia will depend on several issues:

1. Transparency – especially in planning the programs and long term funding
2. Authority – Who will be responsible for the success of the concessions? Who will receive the benefits? Who will monitor and evaluate the concessions?
3. Regulation – How will Government of Indonesia support the concessions? How will GOI formulate an effective and efficient regulation?
4. Monitoring and Evaluation – Who will be responsible for the implementation of a monitoring and evaluation system? How will it function?

Conservation concessions were considered, by most NGOs and donor agency, as good solution for the current Indonesian deforestation crisis, and ought to be tested, because:

1. Before implementing conservation concessions, concessionaires need to gather all information regarding natural resources and local communities and be aware of all the challenges in the area. This information will be critical for creating suitable and applicable methods for conservation concessions.
2. Conservation concessions will economically benefit the Government of Indonesia and local communities, by:
 - i) Direct payments to local communities and Government of Indonesia
 - ii) Developing the institutional capacity of the local government and local communities

5.3.2. Impact on local communities

Although half the respondents viewed the probable impact of conservation concessions on local communities negatively, most conservationists from International NGOs, the ones actually planning to implement conservation concessions in the future, repeatedly stressed their desire to engage with local communities from the beginning. In other words, conservation concession buyers hope to gain the support of local communities through their direct participation in the implementation process.

Direct payments to local communities can also help them to develop sustainable economic activities. Employment by the concessionaires of local people as forest rangers was considered a further form of community involvement.

Conservation International Indonesia (CII), in the proposed Conservation Management Agreement (CMA) for their Siberut concession, are planning a high level of community involvement, as well as a number of welfare infrastructure programmes, relating to health, transportation, education, and the management of the conservation area. Most significant of all, CII are planning to implement alternative economic development programs at the community level. The CMA, with its emphasis on investing in local community benefits and development, will require collaboration with partners, a flexible institutional structure, and resources to fund the programs. The current co-management initiative implemented by UNESCO provides a valuable model for this.

5.4. The Challenges of Conservation Concession Implementation in Indonesia

5.4.1. Competition with Timber Concessions

Timber concessions are still the principal form of resource concession implemented in Indonesia hitherto. Most people interviewed, especially from NGOs, assumed that timber concessions are successfully generating revenue for both the timber industry and the Government of Indonesia (it will as well depend on the contract or agreement negotiated). For Government of Indonesia, it will be therefore be important to generate the same, or greater, economic benefits from conservation concessions. A preliminary result from a recent study shows that the transaction cost for timber concessions amounted to Rp. 203.000,- per m³ (£15 per m³). The cost includes ‘supporting cost’ to guidance and control forest concession by Government of

Indonesia that is amounted to around Rp. 900 million (£67,000) per year for a timber concession with a yearly log production of 45,000 m³ (Kartodihardjo & Putro, 2002). In view of these sums, it will be challenging to stop timber concessions in Indonesia, although CII insists that they will close timber concessions in production forest in Siberut, before implementing a conservation concession there.

Other respondents suggested that both concessions have to work together to ensure the need for both conservation and national income is met. Some interviewees raised the issue of population growth, economic growth, and the development of wood industries in Indonesia as further obstacles to forest conservation in Indonesia. Interviewees also predicted more direct difficulties for conservation concessions: the problem of overlapping concession areas, inadequate regulations and monitoring systems, and the poor enforcement of contract law in Indonesia.

5.4.2. Local Community Approaches

Successful management means getting institutional relationships right. Often the most important of these is with the local community. Those interviewees actually involved in implementing conservation concessions claimed that they will involve the local community from the 1st day of the planning.

CII proposes to implement a new conservation and development initiative, supported by multi-stakeholder taskforce (PHKA⁶, LIPI⁷, UNESCO, and CI), and with continual consultation and participation of local communities. Their approach will be a participatory strategy for investing in local community benefits and development. This approach will require an adaptive framework that allows evolution in response to changing conditions.

5.4.3. Government of Indonesia and Regulatory Issues

In evaluating the implementation of timber concessions in Indonesia, most interviewees from NGOs and academics were of the same opinion. The Government of Indonesia supports timber concessions through regulations and decrees, but the enforcement is weak.

The Forestry Department only started to evaluate the implementation of timber concessions two years ago. They used five evaluation criteria: 1. Forest conservation,

⁶ PHKA: Directorate General of Forest Protection and Nature Conservation

⁷ LIPI: Indonesian Science Institute

2. Combating illegal logging, 3. Combating forest fire, 4. Supporting decentralisation, 5. Forest rehabilitation.

In relation to conservation concession implementation in Indonesia, most respondents assumed that the Government of Indonesia will support them enthusiastically. Pressure from the international community over their failure to protect the rain forest was seen as the main reason for the Government of Indonesia to shift some of the responsibilities of protecting the forest to NGOs or other organizations.

Forest Regulations and Decentralisation

The respondents predicted that there will be clash of priorities between the central government in Jakarta and local government (district level). With conservation concessions, the central government will support the maintaining of forest land, the actual responsibility for which has been shifted to local government. There is a strong possibility that local government will not fully support this mechanism. The 'income' generated from timber concessions will decline with interference from central government and the implementation of conservation concessions. A suitable policy framework is not in place, and it will be difficult to reconcile some of the institutions necessary to work together on policy (PHKA and BPK).

The Acts of Parliament on Regional Autonomy and on Economic Democracy were the prelude to a series of other major laws. The most important of these laws were:

- 1) **The Basic Law on Regional Government** (Regulation No. 22/1999) and
- 2) **Basic Law on the Financial Balance between Central and Regional Government** (Regulation No. 25/1999).

Both these laws appear to represent a major shift in the locus of management of Indonesia's forests. Yet at present, these laws still lack essential guidelines for their implementation. Without these guidelines, the laws themselves are merely a ready template that could be used for a variety of possibilities. Many lawyers and government officials regard these laws as essentially inoperable. They transfer functions and funding not to provinces as a whole but to individual districts. The attempt to apply them has already created innumerable difficulties.

This national policy makes it incumbent on the local government to coordinate and build capacity in forestry institutions. In particular: coordination with the industrial sector, concessionaires, contractors in the wood processing industry, the Indonesian

Army, academic institutions, and with those NGOs, directly involved in forest and natural resource management.

To implement conservation concessions will therefore require a great deal of discussion and agreement between local and central government, especially to resolve issues of competence and authority.

5.4.4. Standardised Mechanisms for Conservation Concessions

Several international NGOs will implement conservation concessions in Indonesia. The possible need to standardise this new mechanism is still under discussion among NGOs and the Government of Indonesia.

Most of the respondents from NGOs considered that conservation concessions should be developed initially on a case-by-case basis. After an initial assessment of the concessions, the standardization should be considered. Different organizations have different objectives. Therefore, rather than establish full standardization, respondents suggested it would be better to start with a 'Minimum Standard' for conservation concessions. This way groups could apply for conservation concessions at the Minimum Standard, but be encouraged to exceed these standards as well.

The initiative to standardise conservation concession mechanisms was also regarded as unnecessarily by other respondents. According to them, the market will decide which conservation concession mechanism is the most effective and efficient.

The standard mechanism for conservation concessions in Indonesia could be outlined by Ministry of Forestry in consultation with relevant NGOs, and established under Ministerial Decree. It would also be possible to establish different decrees for different conservation concession mechanisms.

However, other respondents argued that global mechanisms for conservation concessions are also needed. Global mechanisms should be flexible and adaptable, and able to recognise best practise in individual countries.

5.4.5. Monitoring and Evaluation System for Conservation Concessions

The monitoring system in Indonesia's protected areas still does not function well. Given this, respondents from NGOs considered the main priority is the Government

of Indonesia to be the establishment of a working monitoring system for Indonesia's existing protected areas.

Most interviewees referred to the inadequate monitoring system for timber concessions and were of the opinion that Indonesia will need a different monitoring system for conservation concessions. Learning from the experience of timber concessions, the monitoring system for conservation concessions should be designed and run by both the relevant NGO and the Forestry Department. An independent 3rd Party should also be involved, which would consist of researchers, academics, conservationists, and local community representatives.

5.5. Sustainable Funding for Conservation Concessions

The experience of conservation concessions in countries such as Guyana, Peru and Guatemala, where the government received funding from the international community, considered a risky mechanism in Indonesia by most NGO respondents. The donor countries might have restrictive standards and objectives for the concessions. They would be able to withdraw funding anytime they considered the desired objectives were not met. For that reason, together with the weakness of Indonesian Forest Law implementation, it would be very difficult to turn conservation concession into a sustainable conservation program. Moreover, given the prevailing politic and economic conditions in Indonesia, one International NGOs mentioned that the initiative to involve other countries in funding conservation concessions would be negatively reflected as 'forest seller'.

Most International NGOs planning to implement conservation concessions in Indonesia will obtain the funding from other countries through donor agencies. These donors will require a specific contract and clear outcomes. However, NGOs were confident that they will be able to engage the donor countries and fulfil the required outcomes, especially with regard to local community involvement.

5.6. Proposed Conservation Concessions in Indonesia

The conservation concession mechanisms in Indonesia have been adopted from different sources. Conservation International Indonesia (CII) adopted this mechanism from the Center for Applied Biodiversity Science at Conservation International in the US. Another International NGOs, Birdlife Indonesia, acquired the idea to implement conservation concessions from other country experiences (Guyana, Guatemala, and Peru). They also obtained the information from literature research and articles about

new mechanism to protect natural ecosystems in exchange for a structured compensation from conservationist or other investors.

However, most respondents considered that the conservation concession mechanism in Indonesia had been inspired by the Integrated Conservation and Development Project (ICDP) in Gunung Leuser National Park (Sumatra). This was the first example of a conservation concession being granted to a private organization in Indonesia, namely Yayasan Leuser Indonesia (YLI).

5.6.1. CII's Conservation Concession Proposal for the Southern Border of Siberut National Park

CII, in collaboration with PHKA, Indonesian Sciences Institute (LIPI), and UNESCO, proposes to implement a long term Conservation Management Agreement, and work with the Mentawai Community, the Local Government, and Government of Indonesia to fulfil the intentions of UNESCO's "Siberut Biosphere Reserve".

As part of this proposal, CII hopes to impose a permanent ban on commercial logging and on the other plantations on Siberut. The combination of, on the other hand, a ban on commercial exploitation and long term participatory engagement with the local communities is the only way, according to CII, that Indonesia can ensure that Siberut achieves its goal as a Biosphere Reserve.

A ban on logging in Siberut is supported by a wide spectrum of stakeholders including local communities, key figures in Local and National Government, scientific bodies (LIPI), international organisations (UNESCO), multilateral financial institutions (ADB), and a range of local, national and international NGOs (YCM, Walhi, Conservation International).

The four principal obligations of Conservation International under the Conservation Management Agreement will be to:

1. Serve as the coordinating agency for partners involved in the implementation of conservation and environmentally compatible economic development on Siberut
2. Contribute to capacity building and strengthening of Local Government
3. Support efforts to strengthen Siberut National Park through implementation of collaborative management systems

4. Implement appropriate alternative economic development programs at the community level

Conservation International Indonesia (CII) from discussions and meetings believes GOI will fully support this concession. However, CII also considers that the surest way to implement conservation concessions in Indonesia is by collaboration among all sectors involved, which are government (both local and central), policy stakeholders, scientists, local communities, and NGOs.

In this vein, CII believes that the monitoring and evaluation of the concession should be conducted by an independent team, in which all the stakeholder groups are represented.

CII will be ready to implement the conservation concession on Siberut in 2004. What they need to accomplish now is the preparation of vital information about Siberut (including natural resource inventory, logging activity, conflicts with local communities, etc). This information will be critical for arranging appropriate programs for the concession.

The approach to local communities is also being considered as a key challenge. For this CII will need what they call “Multilayer Policy Intervention”. This intervention will require local and central government clearly to apportion their separate areas of competence in forest management.

5.6.2. Birdlife Indonesia (BI)

Birdlife Indonesia (BI) will employ a different mechanism in implementing conservation concessions. The target areas for the concessions are production forests, where timber concessions are currently in place. BI will take over the concession permit from the timber companies by paying compensation or through other mechanisms (which are still under consideration). The right to manage the land or forests will be acquired by BI.

Under Indonesian forest regulations, no organization is permitted to buy production forest, because they are state-owned. However, permits are granted to utilize the forest and its resources. Under utilization purposes, companies or organizations will get permit to manage the forest, either to log or not to log.

Under Government Regulation No. 34/2002, concerning Forest Utilization Permits, BI is planning to manage the forest under a permit to utilize forest production in

woods. This permit will give additional advantages, in particular the term of the permit is 55 years, and can be extended.

This permit can only be granted to individuals, private corporations, and state – owned companies. To get this permit, BI will establish their own corporation, and submit a management plan for the first five years of implementation.

With this mechanism, BI presumes that they will get more independence in implementing conservation concessions. The biggest problem for BI now is a crisis of trust from how to convince local communities that conservation concessions will be different from timber concessions?

5.6.3. The Nature Conservancy (TNC) on East Kalimantan

TNC is currently in the process of working with timber concessionaires and local communities to establish stakeholder working groups to resolve conflicts. The objective is to establish conservation easements on strategic timber concessions. TNC is planning to work on a log – tracking project with Intuhani, a public/private (50% Indonesian govt.) logging company with 3 large concessions in the Berau district, East Kalimantan. TNC will be also working with concessionaires on FSC (Forest Stewardship Council) certification.

5.7. The Potential for Conservation Concessions in Indonesia

In late 2002, the Conservation and Community Investment Forum (CCIF), a US-based investment consultant, began an investigation of natural extraction concessions in Indonesia. Although CCIF is more focused on developing conservation concessions in strategic marine environments in Indonesia, their investigation in East Kalimantan and Raja Ampat (West Papua) should give valuable information on the possibility of implementing conservation concessions in Indonesia.

CCIF's field studies consisted of a series of interviews with NGOs, concessionaires, local communities, and government representatives regarding the following issues:

1. Authority – Who is responsible for issuing the concessions?
2. The Deal – How is the deal structured?
3. Performance – How are existing concessions monitored?
4. Opportunities – Opportunities for communities to engage with concessionaires for direct compensation for their resources and willingness of relevant stakeholders to entertain conservation concessions.

5.7.1. The Raja Ampat Islands

Both Atlas Pacific Ltd. and Irian Diving presently possess the right to manage part of the Raja Ampat area for resource extraction and marine resort purposes. The rights and advantages were awarded directly by the local communities and not by the government.

Atlas Pacific ultimately negotiated a 25 year lease from the local family landowner and paid a one-time direct payment of US\$40,000 (£27,000) in 1997. In addition, Atlas Pacific contributes to the village by providing medical supplies to the local hospital, by supporting Christmas celebrations, by bartering of fuel and food for building materials, etc.

In the case of Irian Diving, they are most explicit in asking the villagers to monitor and protect the coral reef in return for the company's payment.

Both Atlas Pacific and Irian Diving rely on a healthy marine environment, which is why they selected the Raja Ampat area. They need a pristine environment to ensure their activities. The presence of both companies has maintained and improved the condition of the coral reef, because they regularly patrol the area to prevent outside fishermen from cyanide and dynamite fishing.

A conservation concession in this area, an effective approach to the community through economic, educational, and religious support, would have a real chance of succeeding. The CCIF study calls for the rapid establishment of a conservation concession in Raja Ampat, based on four principal activities:

1. Setting up a consortium who will own and manage the concession
2. Organizing an adat-based monitoring and adapt-based law enforcement
3. Initiation of sustainable, people-based business in and around the concession area
4. Support education in the area.

5.7.2. Berau District, East Kalimantan

Since 1998 the PMDH program (Forest Community Development Program) has required timber concessionaires to work with local communities to establish joint management over portions of forest and agree specific conditions for logging community lands. Based on CCIF report, only 50% of the companies are doing the PMDH program properly. The other half is taking advantage of the system to secure

a series of unconditional and unregulated concessions. These timber concessionaires end up paying communities to secure the unconditional rights to log at a rate of approximately Rp.1,500 per m³ of wood (£0.11 per m³ wood). Annual payments to communities are generally around 120 million rupiahs per year (£8900 per year), and only 50% of this actually reaches the communities. It's not clear where the remainder of the money goes.

PT Kalimantan Jaya, a company operating a 335,000 expressed interest in possibly selling its rights to a conservation group, if the price was acceptable.

6. DISCUSSION AND RECOMMENDATIONS

In this chapter, the results are discussed and the future potential of conservation concessions in Indonesia as assessed: the possibilities for their use and the challenges facing their implementation. Throughout the chapter, the wider conservation context in Indonesia is taken into account.

Recommendations for the implementation of conservation concessions will be highlighted and discussed in each section.

6.1. Timber Concessions in Indonesia

In the last 10 years, the rate of deforestation in Indonesia has reached 1.6 million ha per annum, and in the last 3 years 1.8 million ha per annum. The largest part of this damage is caused by the illegal activities of timber concessionaires (Kartodihardjo, 2003).

Like many governments in Southeast Asia, the regime of the former President Soeharto regime “allowed resource rents to flow as excess profits to timber concessionaires”. The following ideas have been put forward to explain this strategy (Jepson, 2003):

1. Timber provided a means of quickly increasing GNP
2. Opening this resource to foreign firms created a lucrative flow of investment funds and revenue into public and private (army-managed) sector institutes, that had become dysfunctional because of lack of funds to pay salaries
3. The granting of lucrative capital-generating forest concessions to individuals and corporations enabled to extend initially tenuous and limited power base beyond the army
4. This act assisted mutually beneficial collaborations between the indigenous Indonesian governing elite (known as Pribumi) and businessmen from the Chinese minority.

The transaction costs of a legal logging business are high compared to the costs of illegal logging. A preliminary result shows that the transaction costs amounted to Rp. 203.000,- per m³ (£15 per m³). The costs include, for example, a “supporting cost” paid to the Government for guidance and control of the forest concession: for a concession. Although there is no quantitative data, it is believed that the transaction costs of illegal logging are lower than the figure mentioned above. This gives an idea

why illegal logging is more attractive than the legal logging business (Kartodihardjo & Putro, 2003).

Since the time of President Soeharto, the implementation of timber concessions has been poorly managed and supervised. There are many causes of the failure of timber concessions in Indonesia:

1. Weakness of indigenous claims to state forests
2. Lack of forest property rights authorization by timber concessionaires
3. High cost of legal concessions, e.g. double tax for the concessionaires, hence strong incentives to log illegally
4. Poor adherence to regulations by timber companies, even in legal concessions; the situation has been exacerbated by weakness of Government controls and the absence of any monitoring system until two years ago
5. Lack of human resources in state forestry institutions, which can be related to corruption, nepotism, etc
6. Lack of transparency in the reporting and regulating of timber concessions.

Moreover, the reducing number of timber concessions brings dissatisfaction to timber concessionaires since demand for tropical wood in the market remains high. These conditions lead to illegal logging.

If we keep in mind the situation 30 years ago, the initial plan for timber concessions came from the Government of Indonesia, via the Forestry Department. The initial plan stated that the actions of the concessionaires would be monitored by the Forestry Department. The poor implementation of timber concessions can therefore be largely attributed to the inadequate efforts of the Forestry Department.

Concession holders can claim that the existing policies of the Government of Indonesia are not consistent, for example the discontinuation of the reforestation fund. On the other hand, the Forestry Department can claim that such policy changes are aimed at further supporting forest management.

It is worth noting that the elimination of timber concessions significantly changes the status of production forests from limited access to unlimited access (for different sectors). This in turn can trigger illegal logging or illegal activity in the absence of sustainable forest management (Kartodiharjo, 2002).

Recommendation:

We can conclude from the above that if the conservation effort is only directed at finding a legal mechanism to ban timber concessions, without simultaneously trying to address the crisis in forest policy, then that effort will be wasted.

Therefore, the proposals by most NGOs for a permanent ban on timber concessions and a substitution with conservation concessions should be considered and planned carefully. Firstly, because a reduction in the number of legal timber concessions could actually increase the rate of illegal logging, i.e. timber harvesting could be just “forced underground”. Secondly because the successful of conservation concessions implementation not entirely depends on the scope of timber concessions, but whether conservation concessions can become part of the solution for timber concessions crisis. Especially, how conservation concessions will answer the questions of excessive transactional cost.

6.2. Local Communities Approaches and Involvement

It is the same for conventional protected areas and timber concessions as it is for proposed conservation concessions. Successful management means getting institutional relationships right. Often one of these institutional relationships is with the local community. Protected areas, timber concessions, and conservation concessions all face a similar task of working on this on a case-by-case, site-specific basis.

Local forest communities have been regarded by Indonesia’s powerful wood industry and successive governments in Jakarta as a problem, an obstacle to the profitable exploitation of the forests. While the need to deal with forest communities has long been recognised by Jakarta, the measures designed to do this have failed. These include commitments to community development by logging companies, schemes for small-scale miners, social forestry schemes, shares for co-operatives - all of which have been designed without input from forest communities. They failed because they were cosmetic measures, which paid lip-service to public concerns, and did not affect company profits or government revenues. There was a complete lack of political will to carry out the fundamental changes in forest management needed to effect real change. The escalation in protests by communities whose forests and livelihoods were being destroyed in the meantime provided damning evidence of this failure.

Another consideration is that most of the international NGOs who will implement conservation concessions in Indonesia are not entirely committed to involving the communities in their programs. Their highest priority appears to be the protection of the ecosystem and forest area. Alongside this, their engagement with local communities appears more artificial than genuine – the mere fulfilment of a statutory obligation.

Conservation concessions, which attempt genuinely to develop sustainable involvement with local community, will be facing another obstacle. Local communities have undergone difficult and often negative experience from previous conservation efforts. Persuading them of the greater benefits of conservation concessions will not be easy; concessions will need slowly to build strong relationship with local communities.

Two international NGO's are currently investigating the appropriate level of commitment engagement: (1) Birdlife Indonesia, collaborating with the Alliance of Indigenous Peoples of the Archipelago, AMAN (an indigenous people's organisation set up to strengthen their bargaining power *vis-à-vis* the government and the private sector), is examining the suitability of community involvement in conservation concession implementation in East Kalimantan; (2) CII, at present, is still building the relationship with the local Mentawai communities by discussions with their leaders and representatives how the concession in Siberut might work.

Recommendation:

Signing contract with local communities and making direct payments to them will require full and well thought-out preparation. Based on the experiences of previous conservation programs with local community, it is advisable to begin with a 'Pilot Conservation Concessions'.

Pilot Conservation Concessions can be thought of as short-term, or trial, conservation concessions, which will be applied on the basis of annual contracts with local communities. These short-term concessions will hopefully give the concessionaires and the local communities: a) time to adjust to all the objectives and the goals of the concessions b) recognition of the problems that may arise in the future, and c) ideas as to what can be improved in the long term concessions.

6.3. Local and Central Government of Indonesia – Preparation for Decentralization

The implementation of decentralization in Indonesia will also completely re-mould bureaucratic, policy and regulatory relationship between local and central government. With regard to conservation concession implementation in Indonesia, decentralization will strongly influence new forestry policies, policies which are the subject of long – fought discussions between local government, central government, and the communities.

Decentralization is structurally undermined by a number of problem: (1) the poverty of central and local government communication, especially in the implementation of forestry policy, (2) the involvement of the army and state bureaucrats in illegal logging, and (3) the fact that illegal logging proves in some cases, to be the only rational way for local communities to recover their resource rights from their current inequitable allocation. With different and diverse stakeholder views in this sector, an authoritarian approach from central government, instructional approach from the central – such as by presidential decree or instruction – is unlikely to achieve support or yield positive results.

Points of contention (Fox et al, 1999)

The struggle for power between the central and the regions has been focussed on the following:

Logging revenues: under the 1999 law on fiscal decentralisation, revenues from forestry should be divided 80% for the regions and 20% for central government. In 2000, Forestry Minister Nur Mahmudi proposed a 70% - 30% split which angered the regional heads.

Reforestation Fund revenues: central government proposals initially split Reforestation Fund revenues at 40% for the regions and 60% for central government. This was later changed to 90:10 in favour of the regions.

Decision-making over concessions: a November 2000 decree (SK05.1/2000) permitted local governments to issue logging permits. The Minister attempted to reverse the decision the following year, as some district heads (*Bupatis*) were issuing hundreds of logging licences in their areas, but he was widely ignored. In February this year the *Bupatis* pressed Megawati to hand over full control of the forests.

Hierarchy of authority: *Bupatis* feel they can ignore directives from central government because there is no hierarchy of authority between central, provincial and district levels. They argue that local regulations (*Perda*) carry the same weight as central government decrees so they can follow edicts which contradict those coming from Jakarta.

From the community's point of view, it is assumed decentralization will only benefit the local government, while they will be charged more taxes to make good government income.

The implementation of decentralization during this transition time will confront with more difficulties:

1. Legal problems – the uncertain legal status of many regulations will make their implementation more problematic during the transitional period.
2. Institutional limitations – the liquidation of central government institutions at the district level could leave an administration vacuum; the limited funding and limited facilities of regional forestry institutions mean they would be poorly equipped to fill this vacuum.
3. Misallocation of natural resources – there is presently no mechanism for cross-compensation between districts, nor any mechanism for conflict resolution; districts have tended to display considerable self interest in exploiting natural resources, generally with little regard to the interest of local communities. (Kartodihardjo, 2001).

One of the main drawbacks of regional autonomy is its tendency to strengthen the position of powerful local political and business elites. Entrepreneurs, government officials and members of the security forces are colluding to extract as much profit from the forests as they can, in as short a time as possible, through local timber concession licensing powers.

In Central Kalimantan, for example, investigations by the Indonesian NGO Telapak assisted by the UK-based EIA (The Environmental Investigation Agency), have documented rampant illegal logging within Tanjung Puting National Park. This is known to be controlled by Abdul Rasyid, a member of Indonesia's highest legislative body, the *MPR*. His company, Tanjung Lingga, has been identified as the transit point for all stolen timber in Central Kalimantan, and most recently, linked to illegal

exports of timber on to China. Although Rasyid has been investigated by the Attorney General's office, no arrest has ever resulted.⁸

In some areas, the state forestry companies (Perhutani and Inhutani) have been accused of colluding with local officials and timber entrepreneurs to fell illegally. Civil society groups have pressed local governments to take control away from these corruption-riddled companies.

Recommendation:

The present transition to decentralisation means that the struggle for more local democracy and financial control of forestry in the regions is only just beginning. Conservation concession holders could exploit regional autonomy to lobby local governments to implement more equitable forest management.

Present decentralization in Indonesia is shot through with scepticism: there is scepticism among central government, local government, and local communities. Central government is concerned that local governments will increase their general income by disregarding sustainable forestry principles. Meanwhile, local government doubts the sincerity of central government in wanting to devolve power to local government. Local communities are sceptical about all layers of government.

This scepticism presents an opportunity for conservation concessions. The conservation concession holders could take advantage of decentralisation in Indonesia by driving for a better forest management agenda. Conservation concessions, with well-managed programs, which deliver financial incentives to government, welfare to local communities and conservation for everyone, such concessions could potentially make winner out of all stakeholders.

6.4. Conflict of Forest Ownership in Indonesia

Conflicts over forest and land ownership in Indonesia among local communities, government, and the private sector have been widespread. Table 2 illustrates the extent of such conflict and shows how the Indonesian Army has been a structural problem behind most of it.

⁸ www.eia-international.org, 5th September 2003

Table 2. Conflict of Forest and Land Practice in Indonesia (2001)⁹

Type of conflict	Conflict over forests and lands			
	Number of conflicts	Number of villages involved	Area of land (Ha)	Involvement of Indonesian Army (No. of cases)
Plantations	261	566	569.733	37
Timber concessions	66	122	578.684	4
Mining Projects	38	74	255.102	3
Housing Projects	181	235	208.374	11
Tourism Projects	63	106	80.971	5
Industrial Projects	87	120	64.866	3
Irrigation Projects	72	168	78.619	8
Mangrove Drainage	26	42	40.899	3
Conservation areas	19	27	20.751	4

The weak internal controls within government organs (which results in their output actually obstructing the implementation of the policies they proclaim) result from the reality of the weakness of civil society, with a range of negative effects on forest management as a whole. In the context of efforts to save the forest, therefore, the reform of government institutions and their bureaucracy can be considered the real issue, of which the other matters are only symptoms.

Most of the forest in Indonesia is designated as state forest, and the government undertakes its management. To a great extent therefore, the government's performance determines the success of forest management. The government's formal role in exercising guidance and control over the management of forests by concessions appears to be fairly tight, and among other things it requires, by implication, at least 58 visits to each forest industry site per year (Kartodihardjo, 2003). The volume of wood not reported and the area of forest destroyed suggest that the government's control and guidance have proven ineffective. This is hardly surprising previous research indicates that legitimate concessionaires, complying with all government regulations, must pay between 26% and 48% of their operational costs in dealing with the government.¹⁰

⁹ Source: Agrarian Revitalization Consortium (July 2001)

¹⁰ The various procedures for legalizing documents, permits, entertainment expenses, and others, results in an increase in operational costs. If the companies did not pay the officials, they could not continue with their field activities.

Recommendation:

Due to the inter-linkage of the above problems, law enforcement measures can, at best, temporally reduce social conflict since the conflicts are based on an imbalance in the allocation of rights and resources. The weakness of forestry law has been evaluated by ICEL (2001) as lying in its centralistic spirit, which does not match the era of autonomy. A similar spirit also can be found in other laws related to forest.

At this point, conservation concession holders should focus on the redistribution of forest benefits, or the opening of opportunities to obtain shares in commercial enterprises. Moreover, the concessionaires should also look at conflicts over the use of forest resources, respect for traditional or customary rights to the forests, and the existence of illegal economic institutions based on the theft of wood.

Partnership with local communities and local government is an essential prerequisite therefore of conservation concessions. Transparent and credible administrative procedures that enable co-decision-making with local communities have to be introduced. It seems that implementing an “incremental strategy” in handling forest degradation is the most promising approach and the key lies not in central government but in the commitment of local government leaders.

6.5. Relevance to Indonesian Forest Policies

The Government of Indonesia is currently in a transition period, and predicts that in the next 5 – 10 years there will be fundamental changes in forestry policies.

However, there are early indications that the transition period will not yield any improvements in Indonesian forest policies in Indonesia. Because:

1. Recommendations for forestry policies are not based on solving the principal problems.
2. Failure to identify the main problems in forest management. This occurs because policy makers do not properly investigate the concerns and expectations of their intended beneficiaries. In other words, policy makers decide what is best for forest stakeholders, not those stakeholders themselves.
3. New forest policies which do address the primary problem do not receive legitimation, because there is no process to get the legitimation itself. Hence, there will be no collective government, who will understand entirely about the new policies. On the other hand, within the government will always be arguing them. This condition, then, causes delay in implementing the new policies.

4. The government (which is responsible for deciding and implementing public policy) does not conduct its role as a neutral intermediary.

There is a strong possibility that conservation concessions will be supported by the Government of Indonesia, as an alternative to timber concessions. However, with Indonesian forest policy in its current condition, legal back-up cannot be relied on completely.

Recommendation:

Advocates of conservation concessions from the international NGOs should start collaborating with other sectors, such as academia, local NGOs, and independent consultancies. This partnership will help produce broad and balanced identification of the main problems in Indonesian forest management, and will help stimulate appropriate policies. CII is involving the local government in Siberut in preparing the conservation concessions on that island. The main purpose of this collaboration is also to build capacity in local government over the longer-term.

Re-structuring the Forestry Department should be a long-term priority. It seems that many forestry officers and other government officials responsible for forestry law enforcement, are involved in timber-related business (Kartodihardjo & Putro, 2003). Strengthening forestry laws, without improving forestry institutions, will never deliver the conservation solutions.

6.6. Standardising the Implementation of Conservation Concessions

The main argument for standardising conservation concessions centres on the monitoring and evaluation system: It is more efficient to establish a single, universal monitoring and evaluation system to cover all conservation concession in the country. However, the experience of timber concessions in Indonesia suggests this argument is not as conclusive as it may first appear.

The 30 year history of timber concessions in Indonesia is fully supported by regulations and policies from Government of Indonesia. But it was not until two years ago that a complete and comprehensive monitoring and evaluation system was finally implemented for timber concessions.

Indonesia, as an archipelago nation, is blessed with a wide diversity, not only of flora and fauna but of landscapes and ethnic groups too. The different locations of

conservation concessions will require different approaches and methods, especially since most of the proposed conservation concessions in Indonesia will closely involve local communities.

Recommendation:

The most important thing that conservation concession holders in Indonesia should consider is finding appropriate and suitable methods for community involvement. They should involve the local community in every stage of planning in order to define the level of community participation and in order to tailor programs to meet their specific needs. If concessionaires can engage local communities and build sustainable collaboration with them, then local communities can be involved in the next step too: the monitoring and evaluation system.

What must now be prepared are a set of national guidelines and principles on conservation concession implementation, specific enough to ensure fair treatment of local communities and conservation best practice, while abroad and flexible enough to allow for location-specific interpretation. The guidelines should give advice on:

1. Contract objectives – what is the conservation concessions trying to achieve in respects of conservation and development, what target is it trying to set, and how can these be included in a contract?
2. Payment system – who will receive the concession revenues, in what form and by what mechanism?
3. Stakeholders participation – who should be engaged in the implementation process and how?
4. Management plan
5. Monitoring and evaluation system

6.7. Monitoring and Evaluation System

Recommendation:

In establishing the monitoring and evaluation system for conservation concessions there is something to learn from the 30 year history of timber concessions in Indonesia, where a monitoring system was fully implemented only 2 years ago.

The monitoring and evaluation system for timber concessions is divided into two assessors:

- (1) The Independent Team (consists of NGOs, academia, the Indonesian Science Institute, and other independent conservationists)
- (2) The Integrated Team, which is from the Forestry Department.

It is recommended that the monitoring system for conservation concessions should also involve many different sectors: NGOs, local and national government, the Forestry Department, local communities, and academia. Monitoring activity should be conducted regularly in every stage of implementation and in every program. Meanwhile, an evaluation report should be produced at least every 12 months. The results should be acknowledged and assessed by the above sectors, which should provide a balanced assessment, whether conservation concessions are viable and their further continuation desirable.

The Proposed Mechanisms and the Potential of Conservation Concession Implementation in Indonesia

Reviewing the experience from other countries and all the potential benefits for local communities, there is little doubt that conservation concessions have considerable potential and deserve to be tested in Indonesia.

For local communities, conservation concessions should prove more flexible to local circumstance than previous conservation mechanisms, while for concessionaires they should provide greater independence from government interference. Overall, conservation concessions should greatly diminish the bureaucratic load within the system. They also offer the following further advantages:

1. Intervention – conservation concessions can be established on land or forest covered by other concessions (e.g. logging or mining) by offering compensation direct to the existing concessionaires. Conservation concessions thus provide a means of making emergency conservation interventions, which are nevertheless underpinned by contract law and officially recognised by GOI.
2. Stability and durability – the long-term contract and stable revenue flows that characterise conservation concessions allow all stakeholders to plan more carefully and accurately, for the future. (This stability should lower financial risk and should be therefore lower forest owners' discount rate on their assets).

3. Transparency – conservation concessions offer a transparent mechanism for all stakeholders: investors and donor agencies are shown clear conservation objectives and outcomes in return for their money, local communities help design local development programs in return for their co-operation and governments get to see a long-term management plan for the area that should assist them in their administration duties.

From CII, BI, and TNC case studies, we reviewed the support that conservation concessions now have: (1) Support from the Government of Indonesia - through a Declaration of the Ministry of Forestry, (2) Funding availability - all of them are international NGOs which are regularly funded for their programs in Indonesia (3) Better monitoring system – by recommending an independent team as part of the assessment process, formed from NGOs, academia, and local communities.

The report from CCIF “An Analysis of the Suitability of Establishing Concessions for Conservation in Indonesia”, support the idea of implementing conservation concessions in two different strategic areas in Indonesia. Through economic, education, and religious support to local communities, conservation concessions will have a real opportunity in Raja Ampat, West Papua. Meanwhile in the Berau District of East Kalimantan, although there are large-scale timber concessions operating in this area, the concessionaires expressed interest in possibly selling resource right to conservationists. TNC is now in the process of working with timber concession holders and local communities to solve conflicts and related issues.

However, it will require time and support from every sector before conservation concessions are fully integrated into the Indonesian conservation agenda. Given the context of often contradictory forest policies and given the existence of massive timber concessions, the implementation of conservation concessions in Indonesia will undoubtedly need a lot of groundwork.

All the challenges of implementing conservation concessions in Indonesia, now or in the future, cannot be solved instantly, and will require enthusiasm and commitment from all participants. Doubts over this new mechanism should not be expressed as scepticism, but rather as awareness of the future obstacles.

Those doubters in local NGOs and GOI, who remain negative or even hostile towards conservation concessions, should bear in mind that Indonesia’s fast shrinking forests make conservation a necessity, not a luxury, and that most previous schemes and

mechanisms have come to nothing. Conservation concessions are about the only game in town – what they need now is constructive criticism, not ill-considered rejection. To implement conservation concessions in Indonesia, unquestionably require the political will to force through substantial changes in Indonesian forest policy, and to build capacity in local government, in the Forestry Department and in NGOs themselves.

7. CONCLUSION: Next Steps

This study has examined the potential for implementing conservation concessions in Indonesia. It has looked into both the conservation agenda and the deforestation agenda to assess how conservation concessions might fit into the social, political and physical landscape of Indonesia. In particular, the study has investigated the nature and extent of existing timber concessions, the regulatory role of GOI, the politically fraught process of decentralisation, the values and aspirations of local communities, and the possible role of a monitoring and evaluation system for conservation concessions.

The study found that a permanent ban on timber concessions would almost certainly prove unworkable and do little to solve the forest crisis in Indonesia. The success of conservation concessions depends not solely on the scope of timber harvesting, but on whether this mechanism can itself address the shortfalls in forest conservation policy. The study found that Government support through decrees and regulations will be important, but is not enough on its own. Government support must be backed up with the excellent management and leadership that are crucial to establishing collaboration among the different tiers of government (local and central). With regard to the process of decentralization, the strengthening of law enforcement has to be backed up by an improvement in forestry laws and institutions. This is essential for focusing all minds on finding better solutions, and reducing pointless conflicts between central and local government, and between government and communities.

The effective monitoring and evaluation of established conservation concessions will be a critical function for helping to build the long-term credibility of the mechanism. The fact that no monitoring system existed for timber concessions until two years ago did much to undermine faith in timber concessionaires. It is therefore recommended that GOI establish a monitoring and evaluation system for conservation concessions, but that all the other stake-holder groups are involved: local and international NGO's, Forestry Department, local government, local communities, and academia.

Local community input should be sought from the very earliest stages of concession planning. This is in concessionaires' own interests: it will help their long-term planning and help them prepare for potential obstacles.

National guidelines and principles should be prepared by GOI, in consultation with NGO's, for conservation concession implementation. These should ensure high

conservation and welfare standards, while allowing flexibility for location-specific variation.

Several further actions are required:

- First, Government of Indonesia and the Ministry of Forestry should re-evaluate existing timber concessions in Indonesia, and enact an immediate ban on unauthorized logging and forest conversion.
- Second, central and local government should work together in identifying everyone in authority in forest policy and legislation, apply precisely and wisely.
- Third, with the collaboration of all stake-holders, programs to facilitate conservation concession implementation should be developed by concessionaires. These programs should encompass concession contracts, the framework for long-term and sustainable funding, as well as alternative livelihood schemes for local communities.
- Fourth, GOI, NGOs, and other organizations who will be directly involved in concession implementation should make comprehensive preparations, including strengthening their institutional structure, planning integrated programs with all partners (especially local communities), and establishing sources for sustainable funding.

8. BIBLIOGRAPHY

- Barracough, S.L., & Ghimire, K.B. (2000). Agricultural Expansion & Tropical Deforestation. Earthscan, London.
- Barracough, S.L., & Ghimire, K.B. (1995). Forests and Livelihoods: The Social Dynamics of Deforestation in Developing Countries. Macmillan, London.
- Berry, J.M. (2001). Validity and reliability issues in Elite Interviewing. Paper presented at: Workshop on Elite Interviewing, San Francisco, 29-8-2001. American Political Science Association, San Francisco.
- Boyd, J., & Simpson, R.D. (1999). Economics and biodiversity conservation options: an argument for continued experimentation and measured expectations. The Science of the Total Environment, 240: 91-105.
- Brown, A.W. (1999). Addicted to rent: corporate and spatial distribution of forest resources in Indonesia: Implications for forest sustainability and government policy. Indonesia-UK Tropical Forest Management Programme, Jakarta.
- Brown, K. (2001). Cut and run? Evolving institutions for global forest governance. Journal of International Development, 13: 893-905.
- Bruner, A.G., Gullison, R.E., Rice, R.E., & da Fonesca, G.A.B. (2001). Effectiveness of parks in protecting tropical biodiversity. Science, 291: 125-126.
- Chomitz, K.M., Brenes, E., & Constantino, L. (1998). Financing environmental services: the Costa Rican experience. Central America Country Management Unit: Economic Notes, No.10. World Bank, Washington DC.
- Colchester, M. (1993). The International Timber Trade Organisation: kill or cure for the rainforest? In: Reader in Tropical Forestry, ed. S. Rietbergen. Earthscan, London.
- Conservation and Community Investment Forum (Forthcoming). An Analysis of the Suitability of Establishing Concessions for Conservation in Indonesia. Unpublished.
- Conservation International (2003a). Conservation Concession Case Study: Guyana. CI/Center for Applied Biodiversity Science, Washington DC.
- Conservation International (2003b). Conservation Concession Case Study: Los Amigos, Peru. CI/Center for Applied Biodiversity Science, Washington DC.
- Conservation International (Forthcoming). Guide to developing a Conservation Concession. CI/Centre for Applied Biodiversity Science, Washington DC.
- Down to Earth. (2002). Forest, people, and rights. Forest people programme and Rainforest foundation. Indonesia. (Special report).

- Egler, I. (2002). Brazil: selling biodiversity with local livelihoods. In: Biodiversity, Sustainability and Human Communities – Protecting beyond the Protected, ed.'s T. O'Riordan and S. Stoll-Kleemann. Cambridge University Press, Cambridge, 210pp.
- Ferraro, P.J. (2001). Global habitat protection: limitations of development interventions and a role for conservation performance payments. Conservation Biology, 15 (4): 990-1000.
- Ferraro, P.J., & Kiss, A. (2002). Direct payments to conserve biodiversity. Science, 298: 1718-1719.
- Ferraro, P.J., & Simpson, R.D. (2002). The cost-effectiveness of conservation payments. Land Economics, 78 (3): 339-353.
- FoE (2001). Asia Pulp & Paper. Briefing Note. Friends of the Earth, London.
- Food & Agriculture Organisation (2001). Global Forest Resources Assessment 2000. FAO, Rome.
- Fox, J., Wasson, M., Applegate, J. (1999). Forest use policies and strategies in Indonesia: A need for change. World Bank, Indonesia.
- Godoy, R., Wilkie, D., Overman, H., Cubas, A., Cubas, G., Demmer, J., McSweeney, K., & Brokaw, N. (2000). Valuation of consumption and sale of forest goods from a Central American rain forest. Nature, 406: 62-63.
- Grant, W. (2000). Elite interviewing: A practical guide. University of Warwick, Warwick.
- Hardner, J., & Rice, R. (2002). Rethinking green consumerism. Scientific American, May: 89-95
- Indonesian Ministry of Forestry, LIPI, Conservation International, & UNESCO (2003). A vision for conservation and environmentally compatible development in the Siberut Biosphere Reserve: A justification for ending commercial logging on Siberut. White Paper, Draft. Ministry of Forestry, Jakarta.
- Jepson, P. (2002). Parks, politics and image: Protected area policy in Suharto's new order Indonesia. Doctoral Thesis. School of Geography and Environment, University of Oxford.
- Kahn, J.R., & McDonald, J.A. (1995). Third-world debt and tropical deforestation. Ecological Economics, 12: 107-123.
- Kartodihardjo, H. (2003). Kondisi kerusakan hutan di Indonesia: Permasalahan dan rekomendasi kebijakan (The degree of forest damage in Indonesia: problems and policy recommendations). Paper prepared for INFID. Jakarta.
- Kartodihardjo, H. (2002). Halusinasi masa transisi? Masalah pemerintahan penyelenggaraan kehutanan (Halucination in transition period? Government

difficulties in forestry management). Discussion paper for Forestry Department. Bogor University of Agriculture. Bogor.

Kartodihardjo, H., Putro, H. R. (2002). Can forest resources right in Indonesia be reformed without shaping up the bureaucracy? Bogor.

Katzman, M.T., & Cale, W.G. (1990). Tropical forest preservation using economic incentives: a proposal of conservation easements. Bioscience, 40: 827-832.

Kramer, R.A., & Mercer, D.E. (1997). Valuing a global environmental good: US residents' willingness to pay to protect tropical rain forests. Land Economics, 73 (2): 196-210.

Mainhardt, H. (2001). IMF Intervention in Indonesia: Undermining Macroeconomic Stability and Sustainable Development by Perpetuating Deforestation. WWF, Indonesia.

Michaelowa, A., & Dutschke, M. (2000). Climate Policy and Development: Flexible Instruments and Developing Countries. Elgar, Cheltenham.

Myers, N., Mittermeier, R.A., Mittermeier, C.G., da Fonesca, G.A.B., & Kent, J. (2000). Biodiversity hotspots for conservation priorities. Nature, 403: 853-858.

Nielsen, E., Ratay, S., & Rice, R. (Forthcoming). Achieving biodiversity conservation using conservation concessions to complement agroforestry. In: Agroforestry and Biodiversity Conservation in Tropical Landscapes, ed.'s G. Schroth, G.A.B. da Fonesca, C.A. Harvey, C. Gascon, H.L. Vasconcelos, & A.M.N. Izac. Island Press, Washington DC.

Nielsen, E., & Rice, R. (Forthcoming). Sustainable forest management and direct incentives for biodiversity conservation. Revue Tiers Monde.

Nielsen, E., Rice, R., & Hardner, J. (Forthcoming). Globalisation and direct incentives for conservation. In: Globalisierung und Perspektiven internationaler Verantwortlichkeit, ed.'s R.C. Meier-Walser & P. Stein. Saur-Verlag, Munich.

Pearce, D., Barbier, E.B., & Markandya, A. (1994). Sustainable Development: Economics and Environment in the Third World. Earthscan, London.

Pearce, D. (1998). Economics and Environment: Essays on Ecological Economics and Sustainable Development. Elgar, Cheltenham.

Pearce, F. (2003). A greyer shade of green. New Scientist, 178: 41-43.

Perman, R., Ma, Y., McGilvray, J., & Common, M. (1999). Natural Resource and Environmental Economics. 2nd Edition: Pearson Education, Harlow.

Rice, R. (2002). Conservation Concessions – Concept Description. Conservation International, Washington DC.

- Rice, R., Linke, J., Suarez, L., & Bruner, A. (2003). Conservation incentive agreements: an approach to linking conservation and economic development on indigenous lands in Ecuador. Paper presented at: International Conference on Rural Livelihoods, Forests and Biodiversity, Bonn, 19-23 May 2003.
- Rice, R. (2003). Conservation incentive agreements: a new approach to biodiversity conservation in the tropics. Paper presented at: Melanesia CBC Meeting, Alotau, Papua New Guinea, 7 March 2003.
- Rubin, H.J. and Rubin, I.S. (1995) Qualitative Interviewing: the Art of Hearing Data (London: Sage).
- Rubinoff, I. (1983). A strategy for preserving tropical rainforests. Ambio, 12: 255-258.
- Sakar, A.U., & Ebbs, K.L. (1992). A possible solution to tropical troubles? Debt-for-Nature swaps. Futures, 24 (7): 653-668.
- Sandler, T. (1993). Tropical deforestation: markets and market failures. Land Economics, 69 (3): 225-233.
- Sandler, T. (1997). Global Challenges: An Approach to Environmental, Economic and Political Problems. Cambridge University Press, Cambridge.
- Schneider, R.R., Arima, E., Verissimo, A., Souza, C., & Barreto, P. (2002). Sustainable Amazon: Limitations and Opportunities for Rural Development. World Bank, Washington DC.
- Sheng, F. (2001). Liberalizing the forestry sector in the name of conservation: A review of Indonesia's experience. Conservation International, Washington DC.
- Simpson, R.D., & Sedjo, R.A. (1996). Paying for the conservation of endangered ecosystems: a comparison of direct and indirect approaches. Environment and Development Politics, 1: 241-257.
- Silver, W.L., Ostertag, R., & Lgo, A.E. (2000). The potential for carbon sequestration through reforestation of abandoned tropical agricultural and pasture lands. Restoration Ecology, 8 (4): 394-407.
- Silvius, M.J., Setiadi, B., Diemont, W.H., Sjarkowi, F., Jansen, H.G.P., Siepel, H., Rieley, J.O., Verhagen, A., Beintema, A., Burnhill, L., & Clements-Hunt, P. (2002). Bio-rights. Wetlands International, Amsterdam.
- Strong, A. L. (1983). Easements as a development control in the United States. Landscape & Planning, 10 (1): 43-64.
- WCFSD (1999). Our Forests, Our Future. Cambridge University Press, Cambridge.

Wells, M., Guggenheim, S., Khan, A., Wardojo, W., & Jepson, P. (1999). Investing in Biodiversity: A Review of Indonesia's Integrated Conservation and Development Projects. World Bank, Washington DC.

White, A., & Martin, A. (2002). Who Owns the World's Forests? Forest Trends, Washington DC.