

# FINAL REPORT

## *Title of Application*

Conservation Concessions in Indonesia: An Investigation of their potential and the opportunity of international market scheme implementation

## *Name of Applicant and/or Organisation*

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## *Objectives as stated in original application:*

*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 is conservation concessions. 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.*

*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 them.*

*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 forests.*

*Developing the conservation concession approach in Indonesia, by NGOs, 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 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.*

*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 regulation execution from previous concessions should be evaluated to uncover the potential implications for conservation concessions, impact to local community, and the possibility to implement international market scheme for conservation concessions in Indonesia.*

*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? Also how is the opportunity to establish international market scheme for this concession?*

*The objective of this research is:*

***To investigate potential response and possibility of Conservation Concessions Implementation in Indonesia and the proposed International Market Scheme.***

*This would require research, with a particular focus on Indonesia:*

- a) Competition with timber concession: Look at previous and current levels of logging concessions implementation in Indonesia and whether conservation payments could compete*
- b) Government of Indonesia & Regulatory issues: How conservation concessions could be implemented in Indonesia alongside existing logging concessions? What regulatory and legal changes need to take place at national government level?*
- c) Structural Issues: Examine the structural problems that might impede the successful introduction of conservation concessions, especially:
  - i) The excessive capacity of Indonesia's wood-processing industry, and*
  - ii) The expansion of oil palm plantation and other agricultural commodities**
- d) To present a coherent and well justified design-proposal for an international market in tropical forest conservation concessions.*
- e) To carry out a case study in Indonesia, looking at a specified area of rainforest, how a conservation concession might operate there, and what implications it might have for the economic and social dynamics of the area; I would also want briefly to identify the broader issues for Indonesia as a whole.*
- f) To identify the potential buyers and sellers in the market, to suggest how they might be motivated to come to the market, and to sketch out the key components of any campaign of awareness/persuasion in the developed world.<sup>1</sup>*

*This project will be conducted by visiting an area of rainforest that would be suitable for a conservation concession. The current intention is to visit Siberut: an island off the west coast of Sumatra. Siberut features a wealth of endemic species of fauna as well flora. Among the most impressive ecological characteristics is the presence of four primates that constitute the highest density of endemic primates per unit area found anywhere in the world. However, biodiversity on small, isolated islands is extremely vulnerable to severe outside shocks such as rapid, uncontrolled commercial logging. Active and pending concessions threaten to destroy, at a minimum, 70% of habitat remaining outside Siberut National Park, and are likely to impact an even greater area including the interior of the Park.*

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<sup>1</sup> The motivation for sellers might lie primarily in the present failure of tropical governments to monetise their forest resources efficiently (Brown 2001; Schneider et al, 2002). The motivation for buyers might come primarily from the deep concern among the Western public over tropical deforestation. This was highlighted by Kramer & Mercer (1997) in their contingent valuation study of American households' Willingness-To-Pay (WTP) to preserve 5% of tropical forests - they found households had an average WTP of \$21-\$31, which amounted to \$1.9-\$2.8bn when aggregated across the USA.

*We would also seek to interview a broad range of stakeholders, NGOs including local community members, park wardens, and Government officials. Through this, we would hope to gain a full understanding of the social and economic dynamics of the area, in order to build a picture of the implications a conservation concession might have, and how it might be balanced with the present economic interests of the local population.*

*The intention is to make a valid and substantive contribution to the debate over tropical deforestation generally, and the role of conservation concessions specifically. We would hope the ideas presented could yield significant recommendations for GOI potential concessionaires alike*

### **Result and Recommendation after obtaining the project**

This project has considered many aspects related to conservation agenda in Indonesia in order to discuss the implementation of conservation concessions and its potential. Based on the implementation of conservation programs in Indonesia, we also came up with recommendation for each aspect discussed:

#### **A. 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 highly compared to the costs of illegal logging. A preliminary result shows that the transaction costs amounted to Rp. 203.000,- per m<sup>3</sup> (£15 per m<sup>3</sup>). 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 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.

## **B. 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 Mentawaiian 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 improve in the long term concessions.

### **C. 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 focused 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.<sup>2</sup>

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 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.

### **D. 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 legitimization, because there is no process to get the legitimization itself. Hence, there will be no collective government, who will understand entirely about the new policies. On the other hand,

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<sup>2</sup> [www.eia-international.org](http://www.eia-international.org), 5<sup>th</sup> September 2003

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.

This project had been conducted by visiting Siberut Island in west coast Sumatra Island. Not only that Siberut features a wealth of endemic species of fauna as well flora, but also among the most impressive ecological characteristics is the presence of four primates that constitute the highest density of endemic primates per unit area found anywhere in the world. However, biodiversity on small, isolated islands is extremely vulnerable to severe outside shocks such as rapid, uncontrolled commercial logging. Active and pending concessions threaten to destroy, at a minimum, 70% of habitat remaining outside Siberut National Park, and are likely to impact an even greater area including the interior of the Park.

The important issue in Siberut is that Conservation Indonesia (CII) is now conducting conservation concessions there since receiving Declaration of ministry of Forestry in support of Conservation Concessions on April 2001. So far the result is they are facing range of problems, not only with Siberut National Parks management, timber concessionaires, but also local government and GOI policies on forest management.

We would also seek to interview a broad range of stakeholders, NGOs including local community members, park wardens, and Government officials. Through this, we would hope to gain a full understanding of the social and economic dynamics of the area, in order to build a picture of the implications a conservation concession might have, and how it might be balanced with the present economic interests of the local population.

The intention is to make a valid and substantive contribution to the debate over tropical deforestation generally, and the role of conservation concessions specifically. We would hope the ideas presented could yield significant recommendations for GOI potential concessionaires alike

### **International Market for CC**

This preliminary research on how the potential of CC for international market has come up with several important issues below:

#### 1. Property Rights

Property rights in tropical rainforests are of fundamental importance and, if approached wrongly, have the potential to derail conservation concessions. Conservation buyers should be biased towards purchasing conservation concessions from communal or private owners, where property rights are less likely to be disputed, and where the concession revenues are likely to offer a more meaningful conservation incentive than when paid to a government owner.

A nascent trend has been identified of governments increasingly divesting ownership and usage rights in tropical forests to local communities (White & Martin, 2002). When conservation buyers do, therefore, negotiate with government sellers, they should take advantage of this trend to push for greater community rights.

Full and detailed consultation should take place with local communities in every situation to ensure their free and informed consent is given. Where it is not, the concession proposal should be dropped.

Lastly, buyers of concessions should make the nature and extent of their involvement with local communities clear and transparent in their written output. Not only will this serve to reassure the wider conservation and development profession, but will help them focus their own minds on the importance of community engagement.

#### 2. Development Aid

The study found that the use of concession revenues to provide development aid to local communities is generally welcomed, as is the fact that conservation concessions allow considerable flexibility for how the aid money is spent.

Two caveats on its use emerged, however.

Development aid should not be used as a substitute for the fair allocation of property rights: the prospect of development aid might make a community less insistent on its longer term rights in an area, and this should not be allowed to happen.

Development aid should not create unsustainable material wants. A long-term plan should be drawn up to ensure stability and avoid the situation of material goods being provided one year, only to be withdrawn the next.

### 3. Enforcement

The enforcement model used in the implemented conservation concessions in Peru and Guyana leaves the NGO (the concession buyer) responsible for detection of wrongdoing, and the host government (the concession seller) responsible for all other aspects of enforcement. For the purposes of detection a force of local rangers are trained and employed by the NGO.

This model appears acceptable, in principle, but with an important caveat. It is recommended that the terms of rangers' employment be as long-term as possible, to ensure that the economic gain from employment cannot be suddenly withdrawn. It is also recommended that, in order to minimize division within the community, the nature of their detection responsibilities be carefully defined, and targeted as far as possible against external, rather than internal, interests.

The study also found that there is a need to know more details about the role of host governments in the enforcement process. Enforcement problems may surface at a later stage than other issues, but are no less important for that.

### 4. External Review

The study found, from the high degree of scepticism about conservation concessions, that there is an urgent need for external, or 3<sup>rd</sup> party, review of the existing projects. The value of such a review would lie not only in assuaging the UK-based conservation and development community, but also in reassuring future stakeholders in future projects.

Given, however, that the study found limited appetite for establishing a wholly new international body, which may in any case be premature for such an undeveloped market, it is recommended that one of two possible options be considered.

## **Conservation Concession in Indonesia: Case study in Siberut Island – Sumatra**

### **Mentawai People and their bond with valued forest**

Based on interview with local NGO Citra Mandiri Foundation, (YCM), Mentawai people for generations has managed the forest with their traditional wisdom. This wisdom has been conducted aligned with cultural approaches. For example, in logging the tree, the Mentawai people perform specific rule, such as: the type of logged tree should be based on requirement, amount, diameter size, direction of logging, tools for logging, etc.

Globalization gives big impact on cultural independent in Mentawai people. It also becomes a threat to their identities, traditional culture, and control on their land, indigenous knowledge and artistic expressions. It's happened since they no longer have power to make important decision on their way of life (Kompas, Sabtu 17 Juli 2004).

Efforts to conserve Siberut should be conducted as soon as possible under several considerations. Physically, Siberut Island is a way of barrier for Sumatra Island from the gray waves of Indian Ocean. The type of soil in Siberut is very sensitive to erosion (organosol), and land cover (forest) expose will catalyst erosion, thus destroy and demolish most of biodiversity in the island.

Based on those experiences and information above, a way to protect and conserve forest and biodiversity in Siberut Island should be done by integrated system on biodiversity conservation based on cultural and traditional values in Mentawai community. Entry point through cultural values approach with the community is very important in order to acquire their involvement.

### **How and where is the position of CC?**

Forest characteristic in Siberut shows deep emotional and material bond between community and the forest. Thus, to know community typology is very important in association with forest utilization. If we based on Indonesian Eco-label Institution (LEI) then community typology will be divided into 4 aspects: (1) community production technique (2) space utilization zone (3) level of farming intensity (4) primary production motive. This application will be fully dependent on developed locations.

Based on our preliminary research on CC in Siberut and also secondary information from NGO who is conducting CC in Siberut, also our interview with various stakeholders, including local community, then we came out with several recommendations on important things to be considered to apply CC in Siberut. The recommendations were structured by their level of importance:

1. Building a process to drive public participation on decision making related to forest management. This can be conducted by different participation methods. From this activity, community will acknowledge natural resource they have: strength, weakness, opportunity, and threat.
2. Poise all external issues, which have different senses with local knowledge and cultural value, and keep the participation process. For example, one conservation organization, which wants to conserve the population of primates in Siberut should also consider the cultural value, where primates are used for sacrificial in traditional ceremony.
3. Developing alternative income generating activities for local community to help them maintain conservation efforts. It's already initiated by several local NGOs through cultivation of coconut, rattan, and cloves, also honey bee farming, fishery, ecotourism development, etc. This income generating activities also conducted to maintain participation process in local institution.
4. Developing the initiation of local regulation.
5. Initiate the advocation efforts on local government level, reassess and develop policies which consider more on cultural value and environmental issues.

6. Support national policies, which support holistic information and condition of CC implementation in Indonesia. Not only comparing the revenue from CC and TC, but also consider all conservation efforts as long term, public involvement, and value added conservation programs. The public involvement should be taken from planning, implementation and evaluation. The policies should also include some of these aspects: property right, jurisdictional boundaries, and institutional development.

### **Publication**

This research has been presented in 2 international conferences: XVIII Annual Meeting of Society for Conservation Biology (New York, July 2004) and Student Conference on Conservation Sciences (Cambridge, March 2005).

Further publication is still under planning to be submitted as an article on CC in Indonesia in international conservation journal.

### **Particular challenges faced and solution adopted:**

1. On the beginning of our project, there was conflict in Siberut (although it wasn't clear whose conflict and what's the issue). It then resulted some of our research team cannot go there. Only 1 project member went to Siberut and conducted the whole interviews.
2. Community in Siberut has been very uninterested with most of conservation projects or research since it has been many of them never give advantages to the community and it rarely provide sustainable programs. We need more than 6-8 months of field research to approach the community. The solution was we modified and change some of the content and questions in interviews.
3. Most of the community can only speak Mentawaiian language, so it was a big effort to conduct interviews and to get more information about the problem and progress of CC in Siberut. We hired translators from local NGO to guide and help us conducting almost all interviews.

### **Changes to the project arising during the year:**

1. During our research schedule, the condition in Siberut was not suitable to conduct intense interviews with the community. However, since we need first data from the community we still conducted the interviews, although there some changes in questions and only 1 of our research member went there.

*Expenditure vs Budget:*

**SUMMARY OF FINANCIAL REPORT  
Rufford Small Grant**

<b>Expenses</b>	<b>Amount</b>
<b>Income</b>	
Rufford small Grant	4152
<b>TOTAL</b>	<b>4152</b>
<b>Expenditure</b>	
local travel	900
Accommodations	300
Food	250
Insurance	350
Medical/health safety	300
Counterpart wages	
field equipment	522
Survey and interview material	355
Publication/output	303
Film/Photography	221
Communication (local and inter-local)	400
Administration support	251
other	---
<b>TOTAL</b>	<b>4,152</b>

*Where next? How will you take your work forward?*

From our preliminary research of CC in Siberut, we found out that to wish for community be part of conservation program in one area will need many considerations and allow more time. Most of conservation programs in Indonesia have been conducted by delivering new program and new approach to community. This will be very difficult for local community to be part of conservation activities, because they've been lived with cultural values and tradition for generations. CC is not only the new mechanism for conservation effort in Indonesia, it also has been connected with Timber concession, either as the substitute or go along together. Bad practices of TC in Indonesia have given tough experiences in conducting good and participatory conservation activities, because local community never gets any advantages. How to make conservation activities become part of their lives, is the big question too.

However, the most important thing to be considered by local community is their acknowledgement to their environment and how they value it. So, in my next research, I would like to go backward and conduct a research on valuing the environment by local community, later together with them develop their own 'conservation concessions' to protect and maintain the natural resources in their areas. In the next plan, I will also change the location of the research, where less intervention from external issues but more collaboration with local government.

Ecological Footprint Analysis will be the method to measures the amount of renewable and non-renewable ecologically productive land and water area required to support the resource demands and absorb the wastes of a given population or specific activities (Wackernagel & Reese, 1999). When the community knows how they value their own natural resources, then they will understand why they have to conserve them. Regarding to the implementation of Conservation concessions, this methods will also very useful to gather international interest and international market to support CC in Indonesia. Local case study in one preservation area in Indonesia can be moved forward to global study for better conservation practices.