The Ulu Masen REDD demonstration activity: Challenges at the policy and implementation levels

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Abstract

This paper discuses the policy and implementation context within which the REDD demontration activity of Ulu Masen is being undertaken. It is seen that the demonstration activity is at odds with the regulations released by the Government of Indonesia for the endorsement of such projects. The project faces several implementation challenges such as effectively reducing the supply of timber (that is reducing legal and illegal logging) in a setting where the demand for timber for reconstruction purposes in Aceh is ongoing. It is also seen that the involvement of local communities in the consultation process is weak, which raises concerns about the use of the criteria of 'free prior informed consent' in the design and implementation of REDD.

1. Introduction

Indonesia is a leading country in the efforts towards designing and testing activities on Reducing Emissions from Deforestation and Forest Degradation (REDD). The international community welcomes these efforts since Indonesia is allegedly the world's third largest emitter of CO₂ after the United States and China.¹ But whereas in the two former countries the bulk of emissions accrue to energy consumption (96% and 74% respectively), in Indonesia the loss of forests is responsible for 85% of the country's total CO₂ emissions (PEACE 2007).

¹ This is likely to vary depending on the source consulted. For example, according to <u>www.nationmaster.com</u> (based on data from WRI's CAIT) Indonesia is not the world's 3rd largest CO2 emitter, but the 18th. Though the United States and China maintain their positions as the world's first and second largest CO₂ emitters. See: http://www.nationmaster.com/graph/env co2 emi-environment-co2-emissions

In anticipation to the COP 13 held in Bali in 2007, Indonesia began to ponder REDD implementation strategies through the 'Indonesian Forest Climate Alliance', which is led by the Ministry of Forestry and supported by the World Bank, Australia, the United Kingdom and Germany. REDD has raised much interest in Indonesia because of the potential revenues it stands to deliver should it be approved in a post-Kyoto regime. The Indonesian government estimates that if the country can cut deforestation by 50%, revenues from REDD can lie between \$2.5 and \$4.5 billion a year (MoFor 2008a).

The island of Sumatra is particularly important for Indonesia's efforts towards designing and testing REDD activities since it accounts for approximately 56% of all the emissions from deforestation in Indonesia. In Sumatra the bulk of emissions comes from dryland- and peat swamp forests (MoFor 2008a: 32-5).

The province of Aceh (in Sumatra) is host to one of Indonesia's first REDD demonstration activities; the project of Ulu Masen, which is proposed by the Provincial Government (Nagroe Aceh Darussalam) in collaboration with Fauna & Flora International and Carbon Conservation Pty. Ltd. This paper focuses on this demonstration activity for several reasons:

- The province of Aceh harbours the largest forest expanse in Sumatra; approximately 3.3 million ha, of which 750,000 ha are located in the demonstration project (PDN 2007).
- There is a high incidence of poverty in villages near to forest areas (EoA 2009) and according to the project proponents some 130,000 persons live in communities adjacent to Ulu Masen (PDN 2007).
- The province went through several decades of civil war that had a profound impact on the institutional framework for the management of forest resources. Of particular importance is the Aceh special Autonomy Law of 2001 that grants local autonomy over the use and allocation of benefits from natural resource management.²
- A traditionally weak forest governance poses a considerable challenge to Ulu Masen's REDD project which aims at relying on increased monitoring and law enforcement to curb deforestation (PDN 2007). This challenge cannot be sufficiently underscored considering that large tracts of forests became accessible to logging in the wake of the termination of hostilities.

The methods used for this study include a review of primary, secondary and gray literature as well as interviews with staff of Indonesian NGOs (6), international NGOs (4), Local Government

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² See: http://www.kbri-canberra.org.au/s issues/aceh/aceh specautonomy.htm

officials (3), Central Government officials (2), and leaders of local communities (4).³ This paper is structured in five sections. In the second section REDD is framed within the concept of payments for environmental services and the framework conditions that need to be met to implement REDD are discussed. The third section looks at the procedures that the Indonesian Government has drafted to endorse REDD demonstration activities and discusses how the project stands within these procedures. The fourth section looks and discusses the implementation strategy proposed for the project and the challenges it is likely to face. Conclusions are drawn in the fifth section.

2. The general conditions for REDD

Essentially, REDD is a payment for an environmental service. The basic idea of REDD is that actors that succeed in reducing the greenhouse gas emissions (GHS) occurring through deforestation and/or forest degradation are rewarded by the international community, which stands to benefit from this service. Reducing deforestation and forest degradation is regarded as essential in the efforts to mitigate climate change (UNFCCC 2008) since deforestation and forest degradation account for almost 20% of all GHS anthropogenic emissions. Following Wunder (2005), a payment for an environmental service is a voluntary transaction in which a well defined environmental service – or land use likely to secure that service – is bought by at least one environmental service buyer from at least one environmental service provider if, and only if, the environmental service provider secures the environmental service provision. This means that payments are conditional. Thus, should actors fail to provide the service, the buyers are not compelled to issue any payments. But for REDD to become a reality as described above, a number of enabling conditions must be met such as establish baselines, monitoring and carbon financial schemes, undertake policy and institutional reform, and last but not least, establish fair and transparent benefit sharing schemes with local actors. Additional conditions necessarily include the availability of alternative livelihoods for local actors involved in logging (either legal or illegal) in the areas targeted for its reduction or even its termination.

Institutional, organizational and policy reform are necessary conditions to reduce both legal and illegal logging. Without them, very little can be achieved by any other measures. Institutions are

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³ The interviews with leaders of local communities include: the Head of Indigenous People Forum of Aceh Jaya, the Secretary of the 'Syarikat Mukim Aceh Jaya', the head of the village 'Sarah Raya' and the head of the village 'Pase Geulima'.

defined here as the laws, rules and regulations that structure social interaction to achieve a specific goal through the provision of information, incentives and sanctions, whereas organizations are the actors that enforce institutions and either reward compliance or punish non compliance (Elster 1989; Knight 1992; Nee 1998). For example, the Ministry of Forestry (an organization) is responsible, together with the police (another organization) and civil society, of enforcing the forestry law and its by-rules, as well as the normative framework that targets the implementation of REDD demonstration activities (the institutions). Policy, according to the Webster's dictionary, is a definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions.

Whereas much of the discussion on REDD revolves around how to establish reference emission levels, monitor forest cover and account for carbon stocks (Brown et al. 2007; Faloon et al. 2007; Gibbs et al. 2007; Mollicone et al. 2007; Ramankutty et al. 2007; Murdiyarso et al. 2008; Wertz-Kanounnikoff et al. 2008), the likely financing and carbon trading mechanisms (Karousakis and Corfee-Morlot 2007; Tavoni et al. 2007; Angelsen 2008; Hagem and Westskog 2008; Johns et al. 2008; Laurance 2008) as well as what the potential revenues from selling carbon may be (Pfaff et al. 2006; Canadell and Raupach 2008), there is also an urgent need to ponder policy measures, governance reform and fair benefit sharing schemes (Eliasch 2008; Scheyvens et al. 2008). A coherent and strong policy and institutional framework that fosters land use planning and addresses the underlying causes of deforestation is key for the implementation of REDD since many of the direct and indirect causes of deforestation are outside the forest sector (Nabuurs et al. 2007: 566; Eliasch 2008; Karsenty 2008; Scheyvens et al. 2008; Cotula and Mayers 2009). Therefore, policy coordination across sectors (i.e. forestry, agriculture, infrastructure) is essential to effectively address deforestation and forest degradation and establish an enabling environment for REDD. These issues have been on the international policy and academic agenda long before 'REDD' became a buzzword (UN 1992; Repetto 1993; Adger and Brown 1994: Ch. 5; Pearce 2007), and their achievement – and consequent reduction of deforestation and forest degradation - poses a massive challenge because they will be at odds with powerful agricultural and logging interests that (in a context of weak policy, institutional and implementation capacity) prefer business as usual instead of advocating policy and institutional reform, or land use planning processes that target nonforested lands and seek to engage local communities (Koh and Wilcove 2007; Pearce 2007; Schwartzman et al. 2007; Stone 2007; Fitzherbert et al. 2008; FoE 2008). Similarly challenging will also be to improve forest governance and undo a number of practices that consistently marginalize local communities from accessing forest resources such as forest protection models

that drive eviction and expropriation of local communities, zoning of forest lands — by governments and NGOs — without proper consultation with local communities, violations of customary land and territorial rights, land speculation, land grabbing, etc. (Griffiths 2007). To meaningfully engage local communities — in both the design and implementation of REDD activities — it will be necessary to recognize traditional tenure rights and knowledge, and establish transparent and fair benefit sharing mechanisms (Humphreys 2008; Macchi et al. 2008; Scheyvens et al. 2008; Cotula and Mayers 2009; G.W 2009).

The degree of local involvement in the design and implementation any REDD activity will depend crucially on how the livelihoods of local communities are affected (Leach and Leach 2004; Schwartzman et al. 2007). Therefore, communities will need accurate information about REDD. Namely, they need to know what REDD is about, what their participation will be and what costs and benefits can they expect from their engagement. According to the United Nations REDD Programme (UN-REDD 2009), REDD demonstration activities need to be implemented through 'free prior informed consent'. Free means that there should be no coercion, manipulation or intimidation of local communities. Prior implies that local communities have been sought well in advance of the authorization and/or the beginning of any activities, and provide enough time for consultations with such communities. Informed means that local communities have knowledge of (at least) the nature, size, duration, pace, reversibility, scope and areas involving the proposed activities; that they know the reasons why the project/activity is being proposed; that local communities have access to a preliminary assessment of the possible economic, social and environmental impacts (including potential risks as well as fair and equitable benefit sharing in a context that respects the precautionary principle); that they know who is likely to be involved in the execution of the proposed project (including community members, private sector staff, research institutions, government employees, etc.); and that they understand the procedures that the project may involve. Consultations are to be undertaken in good faith; hence, appropriate solutions to existing or potential conflicts should be sought in an environment of mutual respect and in full and equitable participation. Local communities should be able to participate through their own – freely – chosen representatives and customary (as well as other) institutions. Consultations should include a gender perspective, as well as the participation of children and youth. The process of consultation must accommodate the possibility of withholding consent.

3. The norms for endorsing REDD activities in Indonesia: Divergent policy approaches and the troubles towards the endorsement of Ulu Masen

The implementation of REDD in Indonesia follows a national approach and foresees subnational implementation of demonstration activities. According to the Regulation of the Minister of Forestry on the Implementation of Demonstration Activities on Reduction of Emissions from Deforestation and Degradation, the government is proponent as well as partner in any REDD demonstration activities (MoFor 2008b). Besides being proponent and partner in REDD demonstration activities, the central government is also in charge of endorsing (by means of a previous assessment) the implementation of REDD demonstration activities (MoFor 2008b). This is derived from the COP 13 decision on REDD, which states that "demonstration activities should be undertaken with the approval of the host party", and where "the party" is understood as the host country (UNFCCC 2008: 2/CP. 13). The assessment of the viability of REDD demonstration activities is assigned by the Minister to the Working Group on Climate Change in the Department of Forestry, which conducts an evaluation of the feasibility of the demonstration activities (MoFor 2008b; 2009). Based on this evaluation the Minister approves or rejects the proposed activities.

The conception of the REDD demonstration activity in Ulu Masen began before the Central Government established the endorsement procedures described above. In the project design note the Central Government appears neither as proponent nor as partner of the REDD demonstration activity, only the Provincial Government of Aceh, which runs counter to the regulations released by the Central Government. What the project developers expect from the Central Government in the project design note is the endorsement of the project. Whereas high ranking officials of the Ministry of Forests expressed that the Indonesian Government cannot easily endorse Ulu Masen as a REDD demonstration activity — on the grounds that it has not

⁴ Nur Masripatin: Presentation at the Asia Forest Partnership & Partner Dialogue. Bali, Indonesia. May 28.

⁵ In the specific case of the implementation of demonstration REDD activities, the Indonesian state claims as state forests all lands which are not privately owned (MoFor 2008b: Article 1 # 3). Thus it seems to claim sovereignty over carbon stocks.

⁶ The project design note submitted for auditing to the 'Climate, Community and Biodiversity Alliance (CCBA)' – and later validated by SmartWood (2008) – dates from December 2007 (PDN 2007), whereas the Regulation of the Minister of Forestry on the Implementation of Demonstration Activities on REDD was released on December 2008, and the decree that established the Working Group on Climate Change in the Department of Forestry was released in January 2009.

been submitted for official endorsement⁷ – the project design note states that the project was submitted to the National Working Group on Climate and Forests as a REDD pilot project. But the decree that established the sanctioning attributions of this working group was only released in January 2009 (MoFor 2009). Thus, the project was submitted to the Working Group before it was accredited with an official mandate, and therefore it could not have made an official recommendation to the Minister for endorsement at that time. Hence, government officials contend it has not been submitted.

The project proponents probably base the expectation of an official endorsement on the fact that the Ulu Masen demonstration activity is linked, and builds on another project previously endorsed by the Indonesian Government (the World Bank's multi-donor fund grant for the benefit of the Republic of Indonesia), and whose implementers are the Leuser International Foundation and Fauna and Flora International (WB 2006; PDN 2007). Nonetheless, Indonesian officials seem to regard the Ulu Masen demonstration activity as a separate issue. Additional problems arise for an endorsement from the central government from the fact that an agreement was signed between foreign stakeholders — Carbon Conservation Pty. Ltd. and Merryl Lynch — to sell carbon credits, again, without the partake of the central government.⁸ According to Indonesian officials, any financial international transaction of the kind described above requires the endorsement of the Indonesian Ministry of Finance as well as the Ministry of Foreign Affairs.⁹

The province of Aceh – after almost thirty years of civil war – obtained a special autonomy status in 2001 (Law No. 18/2001) where – among other things – the Central Government renegotiated with the Provincial Government the benefit sharing from the revenues obtained from the exploitation of Aceh's natural resources. The award of increased autonomy for Provincial Governments is seen as a tradeoff that the Central Government was willing to take in order to keep the unity of the Indonesian Republic as a response to violent separatist movements – notably those in Aceh, Papua and East Timor (Barr et al. 2006). Thus, the Acehnese provincial authorities went on to receive 80% of the income generated by the forestry sector, and the central government 20%. Later, the Law on Governing Aceh (LOGA, Law No. 11/2006) transferred even more powers to the provincial Government, granting it more authority to

⁷ Nur Masripatin and Wahjudi Wardojo, personal communication.

⁸ See: http://www.ml.com/index.asp?id=7695 7696 8149 88278 95339 96307

⁹ Nur Masripatin and Wahjudi Wardojo, personal communication.

manage, plan, implement and supervise the exploration and exploitation of its natural resources (EoA 2009). Apparently, because of these institutional reforms, the Acehnese government finds itself empowered to deal with and take charge of REDD demonstration activities, whereas the central government claims that on this matter it has the first – and final – word, most particularly when it involves foreign stakeholders and – potential – revenues amounting to several hundred million USD. To the best of the authors' knowledge, the Central Government still maintains the authority over Aceh's foreign policy relations as well as over its external defence and monetary affairs. ¹⁰

The authors sketch two hypotheses to explain the difficulties around an official endorsement of the Ulu Masen demonstration activity. The first one is that the actors have divergent interpretations of the law, where the Provincial Government finds it has attributions to negotiate matters over which the Central Government says it has the upper hand. The second hypothesis is derived from the first one with the additional component that the Acehnese Government would be seeing the institutional reform — and the prospects brought forward by REDD — as an opportunity to further its independence from the Indonesian Government. This would throw a monkey wrench into the demonstration activity of Ulu Masen, and will difficult even more an official endorsement of the demonstration activity. In spite of how progressive and well conceived the demonstration activity can be, the Central Government seems less willing to assume a spectator role (which contradicts its own regulations on REDD), much less if by doing so it runs peril of eroding its sovereignty. Furthermore, Indonesian officials fail to see a reason why the Central Government should be left aside in Ulu Masen, as it is the Indonesian government the one who is accountable to the UNFCCC.¹¹

4. The challenges to the implementation strategy of the Ulu Masen demonstration activity

Following the project design note (PDN 2007), during the next 30 years the project will seek to develop and test carbon finance mechanisms to reduce legal and illegal logging, conserve biodiversity and contribute to the area's sustainable economic and social development. In an area of approximately 750,000 ha the project aims at reducing deforestation down to 85% by

¹¹ Nur Masripatin and Wahjudi Wardojo. Personal communication. This position is also stated in Indonesia's National Carbon Accounting System (MoFor 2009).

¹⁰ See: http://www.kbri-canberra.org.au/s issues/aceh/aceh specautonomy.htm

means of land use planning tools (which includes re-classification of forests) as well as by increasing monitoring and law enforcement, restoration, reforestation and through sustainable community logging. The process of land reclassification is foreseen as an essential tool to turn logging areas into permanent protection forests and community managed, low impact, limited production forest areas (ibid: 23).

The proponents aim at building the project through a participatory process by inviting all levels of government and civil society to contribute to the design and implementation of the project's activities. The project design document assigns a key role to the districts and villages (Mukims) which – in virtue of Aceh's special autonomy law – play a crucial role in the management of the land and its natural resources. Whereas the project proponents have indeed undertaken efforts towards consulting with local communities, interviews performed for this study show that while communities tend to agree with the goal of protecting the forest in the long term, there is also concern about the recognition - and protection - of traditional community rights over natural resources. There seems to be a limited understanding of the project's implications for local livelihoods in the short and the long term. Likewise, there appears to be limited understanding of the rights and responsibilities of communities within the project as well as the benefits they may stand to obtain. This suggests that the criteria of 'free prior informed consent' are not being strictly followed. The interviews indicate that the project needs to intensify communications with local communities, and explain its goals as well as how it is going to protect - or contribute to recognize – local community rights and livelihoods. Likewise, it needs to convey to local communities what the outcomes will be, and particularly what benefits can they expect. To local communities these issues are not clear. A project validation report undertaken by SmartWood (2008) also found that the project did not explained clearly through what processes and efforts it is going to include and reach out to individual actors and wider sectors of villages. Interestingly, best practices in community involvement is not a compelling criteria for project approval by SmartWood, it is an optional point.

Illegal logging has been traditionally a significant source of income for farmers in Ulu Masen. ¹² It is estimated that in Aceh Jaya – before the tsunami – approximately 30% of farmers depended on income from illegal logging (WB 2006). In the communities adjacent to the Ulu Masen forest, the number of farmers earning an income from illegal logging is estimated to be somewhere between 2,000 and 3,000 (PDN 2007) in 61 villages. Therefore, it will be crucial for

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¹² Allegedly there is no historical data on timber volumes extracted illegally (PDN 2007: 14).

the project to enable alternative income sources significant enough to offset the benefits villagers obtain from engaging in illegal logging. Illegal logging is very selective — targeting high value species — and allegedly villagers undertake it through non-mechanized methods. It is well known that timber barons are often behind illegal logging and sponsor it at the village level, and if villagers do not wish to participate then others are found who will. There is also fear among villagers of reporting illegal logging, because local authorities (police, the military) act in collusion with timber barons, and anyone denouncing illegal logging is bound to face reprisals (EoA 2009). There is a uncertainty about how big this problem is. It is not known how much illegal logging is attributable to subsistence purposes and how much to ruthless exploitation, or how much is done through non-mechanized methods and how much take place through mechanized logging.

Since some of the measures to reduce deforestation (legal and illegal) include land reclassification and fostering low impact community forest management, the project will face the challenges of differentiating where is illegal logging at the village level taking place by local initiative – for subsistence purposes – or by the hand of a logging baron. The challenge lies in fostering the former for low impact community forest management, and identifying and halting the latter. An evident challenge for the process of land reclassification lies in avoiding the exclusion of communities from accessing the forest. Having access to the forest and obtaining recognition of traditional rights is one of the main concerns of the villagers around Ulu Masen, thus this is an issue the project proponents cannot afford to oversee, otherwise the project is bound to face local resistance.

The project proposes to reduce illegal logging through a number of measures such as enhanced enforcement through the improvement of synergies between law enforcement and other relevant agencies. Nonetheless, this will be a difficult task considering that at the provincial level a number of government agencies have overlapping mandates and compete against each other over the management of forest resources, creating a lot of confusion about their roles; namely, who is responsible and accountable for what. This governance conundrum has enabled a

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¹³ The project proponents find that the income from logging operations of this kind are low (for example, a full time chainsaw operator would earn about \$272/month, whereas a transporter using buffalo earns around \$622/year). Eye on Aceh (EoA 2009: 10) makes similar observations.

¹⁴ Such mechanisms of reprisal and corruption, where authorities and logging interests act together, is not a problem exclusive to Aceh and it has been observed and documented in other countries (Ibarra 2003; Ibarra et al. 2008). The fact is that these mechanisms, in an environment of weak forest governance, can be very effective in making the payoffs of following the rule of law extremely low for local actors.

corruption system that is often regarded more powerful than the formal system. It is also recognized that the ability and the political will at the provincial level to improve forest governance in Aceh is low (EoA 2009).

To improve forest governance the project will also seek the establishment of community agreements and the creation of employment for local people as wardens to conduct forest monitoring and patrolling. However, unless retaliation measures against those observing the law can be curtailed, and the payouts received by those involved in illegal logging — especially the end dealers who make extremely high profits — can be effectively cut, the prospects of involving villagers in monitoring and patrolling is not very promising. It remains to be seen whether recognizing customary rights over forests provides an incentive powerful enough for villagers to engage in forest protection. Alone this measure will probably not do the trick. It will need to be accompanied by an institutional and organizational reform that effectively dismantles corruption and patronizing.

Besides fostering sustainable community forest management, the project also proposes an array of integrated activities to improve local livelihoods such as forest conservation, restoration, accelerated tree planting, orchards, mangroves and fruit farms. The project proponents foresee that through the decline of logging in natural forests, the consequent reduction of timber supply will increase the price of timber. They also assume that increasing the supply of other goods (through accelerated tree planting, orchards, mangroves, fruit farms and community forest management, and particularly through the increased availability of timber from forest plantations and reforestation) will have a neutralizing market effect that will tend to offset leakage (PDN 2007: 52). This assumption raises a number of questions considering that is envisages the supply of goods, but fails to discuss the demand side.

First, the assumption of the market neutralizing effect of increasing the supply of several goods to counteract the shortage of a single – specific – one will stand only if the increased supplies of alternative goods are perfect substitutes for the timber that was being extracted from natural forests. The project developers recognize that the forests of Aceh are rich in hardwoods species which usually earn the highest prices in the logging trade – both legal and illegal (PDN 2007: 20). Thus, it is hard to envisage how increasing the availability of other goods will substitute, or neutralize the demand of high value timer.

Second, the assumption apparently does not account for the time lag there will probably arise between the moment in which the timber supply is reduced, and the moment in which forest plantations are able to supply the demand for timber. This means that in the absence of timber from forest plantations ready to supply the demand (assuming that they will be able to deliver the same species and timber quality), the market may be easily facing a time lag (an excess of demand) of several decades. Moreover, unless the production of alternative products finds markets ready to absorb the increased offer and provide an income significant enough to compensate local actors for not engaging in logging, this does not point to a market offsetting process, but to a timber supply shortage (that will indeed produce a price increase in the local timber market and will keep logging a lucrative activity) and an excess supply of an array of other products. In this case, the reclassification of forestlands will probably mean that illegal logging will surge in permanent protection forests.

Third, the assumption leaves out the main culprits of illegal logging (who probably have little to do with the proposed alternative livelihoods); namely, logging barons and local authorities reaping the higher benefits. Nonetheless, if the project is successful in withdrawing the local partake in illegal logging, the benefits received by the end-dealers may be significantly reduced if this means that they will need to engage labour from afar at higher costs. Such an outcome may have the potential of reducing illegal logging assuming local tenure rights are in place and of course assuming that the project is able to convince villagers to break with a traditional income source.

Fourth, to induce a market neutralizing effect of a timber supply shortage, the demand for timber from natural forests needs to be reduced as well. To reduce the demand for timber from natural forests in Ulu Masen, timber must be sourced either from other natural forests (which means increasing production elsewhere) or by making available substitute goods. The first case spells leakage. The second case also points to leakage outside the forest sector. For example, if timber is being used for construction, then likely substitute goods would be concrete, iron, etc., which are highly energy intensive and may offset any climate mitigation effect of not logging natural forests.

Addressing the demand for timber to neutralize the effect of a supply shortage may thus prove to be a daunting challenge. After the termination of hostilities and before the tsunami, the rise of logging licenses in Aceh had an increase of 150%. Whereas the maximum allowable cut for forest concessions was set in 2005 to 47,000m³, in 2006 (that is, after the tsunami) this figure had rocketed to 500,000³ in response to the increased demand for timber for reconstruction. ¹⁵ Since

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 $^{^{15}}$ According to Eye on Aceh (2009), the actual annual timber volume required for reconstruction amounts to some 700,000m 3 .

the tsunami the province has seen a dramatic increase of both legal and illegal logging, as well as of land clearance and applications of permits for land clearance (PDN 2007; EoA 2009). In response to the runaway logging, the governor of Aceh declared an indefinite logging moratorium in the province. Nevertheless, as long as the demand for timber for reconstruction continue, this can only lead to logging being undertaken elsewhere and/or increased illegal logging. ¹⁶

Whereas some of the alternative products proposed — orchards, mangroves and fruit farms — will probably serve subsistence purposes, their potential for developing alternative livelihoods will depend not only on the existence of a market demand for such products, but also as on the establishment of local entrepreneurship and the development of marketing channels. Thus, two challenges stand out: First, farmers must be convinced of the products' market viability; second local capacity/entrepreneurship must be built for farmers to uptake and maintain the commercial production of such products. Building such human capital may take years to achieve. This is also valid for the development of community forestry initiatives, which are most often challenged by a lack of local entrepreneurial and technical know-how (Pandit et al. 2008).

The REDD demonstration activity proposed for Ulu Masen resembles in many ways so-called "integrated conservation and development projects (ICDPs)". ICDPs have traditionally a holistic approach, but have been primarily focused on conservation. Implemented by governmental agencies and/or NGOs, ICDPs seek to create alternative income sources for communities through environmentally friendly commercial activities, and thus require investments in alternative production modalities, as well as in local institution- and capacity building while seeking to gain the goodwill of local stakeholders through benefit transfers. A number of flaws have been documented for ICDPs like a weak contingency on which payments and/or technical support are issued and a tendency to develop a dependency of communities from project developers through paternalistic interventions (Ferraro and Simpson 2000; Grieg-Gran et al. 2005; Wunder 2005; 2006). Thus, many ICDPs have failed in meeting donor expectations because of high transaction costs, few positive conservation outcomes and small financial benefits for local communities (Gutman 2003; Roe and Elliot 2004; Sunderland et al. 2008). Nonetheless it has also been documented that ICDPs do stand a chance of achieving positive outcomes when conservation, poverty reduction and institutional capacity building are consistently undertaken by project developers (Vermeulen 2004; Hammill et al. 2005).

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¹⁶ See: http://www.worldwatch.org/node/5179

Like ICDPs, the REDD demonstration activity in Ulu Masen has a holistic approach, envisaging forest protection and community development. It is being proposed and implemented by the provincial government, an international NGO and a private enterprise. It seeks to create alternative income sources for communities through environmentally friendly commercial activities requiring investments in alternative production modalities, and it also requires local institution- and capacity building. The project foresees the establishment of a financial strategy (i.e. community development funds, alternative livelihood funds, and community based forestry funds) that will support these activities over a time span of 30 years. This can be innovative provided that the funding, technical assistance and any payments issued to local actors participating in the demonstration activity are truly contingent on the verifiable establishment and maintenance of land uses that will effectively deliver reductions of emissions from deforestation and forest degradation. This would correspond to a PES scheme. If the activity is implemented following a PES scheme then it will stand out from traditional ICDPs, and will give it an opportunity to avoid flaws associated with these projects (like designing paternalistic interventions). The time horizon over which the project is initially conceived gives it a rare opportunity to build local entrepreneurship. If conditionality is consequently followed, there is a real chance to implement the activity without creating dependence of local stakeholders from the project. On the other hand, the project seems to be particularly challenging for the Provincial Government. Whereas the autonomy status is a positive development towards the local empowerment over the management of natural resources, it is apparently not a sufficient condition to guarantee good forest governance. The Provincial Government will face a strong challenge to reform from within; by re-assigning clear mandates to its different agencies and reducing the overlapping responsibilities they have, as well as curtailing the mechanisms that foster corruption. Corruption exists because it delivers large payoffs to those participating. Reducing – or in the best of cases, eliminating – such payoffs will be crucial to affirm the Provincial Government's credibility and its compromise towards the demonstration activity.

5. Conclusions

The demonstration activity in Ulu Masen faces a number of challenges such as official endorsement, effective involvement of local actors, and reducing illegal logging, which is embedded in a weak environment of forest governance and is also a traditional source of income for villagers.

Assuming that the Central- and the Provincial Government are able to deal over Ulu Masen transparently and in good will, the authors believe that it should be possible to reach an agreement that will make all the parts better off. The policy of excluding the Central Government from an active partake in Ulu Masen is not very promising and this is something that the project developers must realize, whereas the Central Government probably has an interest in seeing Ulu Masen take off since it would speak well of its leadership to the international community, not to mention that the potential financial rewards for the actors involved can be substantial.

The weak involvement of local actors signals that the criteria of 'free prior informed consent' are being given second place in the process of design and implementation. If so, there is a risk that local actors may end up with little or no bargaining power over the development of a project which is hard for them to understand, and over which they have uncertainty as to what is it that they stand to win. The fact that the project has a recognized weakness in including local actors in the consultation process gives reasons for concern. Moreover, it bodes ill for local communities that international environmental organizations regard criteria of best practices in community involvement as 'optional'. Particularly when it comes to land reclassification; if consultations with local communities are weak, their voice will be correspondingly weak and the final land reclassification will probably not reflect their main concerns.

The reduction of timber supply is a major issue in an area that faces considerable reconstruction needs. To expect to offset a timber supply shortage through the increased supply of several goods (imperfect substitutes for timber from natural forests) is not realistic. The authors are by no means disregarding the efforts towards creating alternative livelihoods, but want to point to the fact that one cannot simply replace a lung with a kidney.

Last, but not least, additional institutional and organizational reform is necessary beyond the existing autonomy status reached by Aceh. If illegal logging is to be curtailed, and forest governance sensibly improved, reform of the province's institutions and organizations will be necessary. Otherwise, the project will have to reach to the massive hiring of forest wardens and patrolling units. Thus the demonstration activity will end up implementing a command-and-control strategy. From the past, we know that these strategies were implemented by protection projects that excluded local communities from accessing forests, and were at pains at controlling illegal logging.

References

- Adger, N. W. and K. Brown. 1994. *Land use and the causes of global warming*. John Wiley & Sons Ltd. Sussex.
- Angelsen, A. 2008. How do we set the reference levels for REDD payments? In: A. Angelsen. *Moving Ahead with REDD, Issues, Options and Implications*, pp. 53-64. Center for International Forestry Research. Bogor.
- Barr, C., I. A. P. Resosudarmo, A. Dermawan, J. McCarthy, M. Moeliono and B. Setiono. 2006. Decentralization of forest administration in Indonesia. Implications for forest sustainability, economic development and community livelihoods. Center for International Forestry Research. Bogor.
- Brown, S., M. Hall, K. Andrasko, F. Ruiz, W. Marzoli, G. Guerrero, O. Masera, A. Dushku, B. DeJong and J. Cornell. 2007. "Baselines for land-use change in the tropics: application to avoided deforestation projects." *Mitigation and Adaptation Strategies for Global Change* 12(6): 1001-1026.
- Canadell, J. G. and M. Raupach. 2008. "Managing forests for climate change mitigation." Science 320: 1456-1457.
- Cotula, L. and J. Mayers. 2009. Tenure in REDD Start point or afterthought? Natural Resources Issues No. 15. International Institute for Environment and Development. London.
- Eliasch, J. 2008. Climate change: Financing global forests. The Stationery Office Limited, UK.
- Elster, J. 1989. Nuts and Bolts for the Social Sciences. Cambridge University Press. Cambridge.
- EoA. 2009. Challenges of forest governance in Aceh. Eye on Aceh. http://www.aceh-eye.org/data-files/english-format/ngo/ngo-eoa/ngo-eoa/2009-03-00.pdf.
- Faloon, P., C. D. Jones, C. E. Cerri, R. Al-Adamat, P. Kamoni, T. Bhattacharyya, M. Easter, K. Paustian, K. Killian, K. Coleman and E. Milne. 2007. "Climate change and its impact on soil and vegtetation carbon storage in Kenya, Jordan, India and Brazil." *Agriculture, Ecosystems and Environment* 122: 114-124.
- Ferraro, P. J. and D. Simpson. 2000. The cost effectiveness of conservation payments. Discussion Paper 00-31. Resources for the Future. Washington D.C.
- Fitzherbert, E. B., M. J. Struebig, A. Morel, F. Danielsen, C. A. Brühl, P. F. Donald and B. Phalan. 2008. "How will oil palm expansion affect biodiversity?" *Trends in Ecology and Evolution* 23(10): 538-545.
- FoE. 2008. Malaysian pal oil green gold or green wash? Social justice, forests and agrofuels. October, Issue 114. Friends of the Earth.
- G.W. 2009. Honest engagement. Transparency and civil society participation in REDD. Global Witness.

 http://www.globalwitness.org/media_library_detail.php/759/en/honest_engagement_transparency_and_civil_society_participation_in_redd.
- Gibbs, H. K., S. Brown, J. O. Niles and J. A. Foley. 2007. "Monitoring and estimating tropical forest carbon stocks: making REDD a reality." *Environmental Research Letters* 2: 13.
- Grieg-Gran, M., I. Porras and S. Wunder. 2005. "How can market mechanisms for forest environmental services help the poor? Preliminary lessons from Latin America." *World Development* 33(9): 1511-1527.

- Griffiths, T. 2007. Seeing 'RED'? 'Avoided deforestation' and the rights of indigenous peoples and local communities. Forest Peoples Programme. 1c Fosseway Centre, Stratford Road Moreton-in-Marsh, GL56 9NQ, UK.
- Gutman, P. 2003. Financing for SNRM: From goodwill to payments for environmental services. In: P. Gutman. From goodwill to payments for environmental services. A survey of financing options for sustainable natural resource management in developing countries, pp. 57-60. WWF Macroeconomics Program Office. Washington, DC.
- Hagem, C. and H. Westskog. 2008. "Intertemporal emission trading with a dominant agent: How does a restriction on borrowing affect efficiency?" *Environmental Resource Economics* 40: 217-232.
- Hammill, A., L. Leclerc, O. Myatt-Hirvonen and Z. Salinas. 2005. Using the sustainable livelihoods approach to reduce vulnerability to climate change. In: C. Robledo, M. Kanninen and L. Pedroni. *Tropical forests and adaptation to climate change: In search of synergies*, pp. 71-96. CIFOR. Bogor.
- Humphreys, D. 2008. "The politics of 'Avoided Deforestation': historical context and contemporary issues." *International Forestry Review* 10(3): 433-442.
- Ibarra, E. 2003. *Private forest use decisions and state forest policy effectiveness in Costa Rica: The role of institutions, private stakeholders and the state.* Verlag, Dr. Kessel. Remagen-Oberwinter, Deutschland.
- Ibarra, E., M. Romero and S. Gatter. 2008. Análisis del marco legal para el manejo forestal por pequeños productores rurales en la Amazonía Ecuatoriana. Center for International Forestry Research. Quito, Ecuador.
- Johns, T., F. Merry, C. Stickler, D. Nepstad, N. Laponte and S. Goetz. 2008. "A three-fund approach to incorporating government, public and private forest stewards into a REDD funding mechanism." *International Forestry Review* 10(3): 458-464.
- Karousakis, K. and J. Corfee-Morlot. 2007. Financing mechanisms to reduce emissions from deforestation: Issues in design and implementation. International Energy Agency, OECD. Paris.
- Karsenty, A. 2008. "The architecture of proposed REDD schemes after Bali: facing critical choices." *International Forestry Review* 10(3): 443-457.
- Knight, J. 1992. Institutions and Social Conflict. Cambridge University Press. Cambridge.
- Koh, L. P. and D. S. Wilcove. 2007. "Cashing in palm oil for conservation." *Nature* 448(30): 993-994.
- Laurance, W. F. 2008. "Can carbon trading save forests?" BioScience 58(4): 286-287.
- Leach, G. and M. Leach. 2004. "Carbonising forest landscapes? Linking climate change mitigation and rural livelihoods." *IDS Bulletin* 35(3): 76-83.
- Macchi, M., G. Oviedo, S. Gotheil, K. Cross, A. Boedhihartono and C. Wolfangel. 2008. Indigenous and traditional peoples and climate change. IUCN. Gland, Switzerland.
- MoFor. 2008a. IFCA 2007 Consolidation report: Reducing Emissions from Deforestation and Forest Degradation in Indonesia. Forestry and Research Development Agency (FORDA), Ministry of Forestry of the Republic of Indonesia. Jakarta.

- MoFor. 2008b. The implementation of demonstration activities reduction of emission from deforestation and degradation. Ministry of Forestry of the Republic of Indonesia. Regulation number: P.68/Menhut-II/2008. Jakarta.
- MoFor. 2009. Working group on climate change in the Ministry of Forestry. Ministry of Forestry of the Republic of Indonesia. Decree number: SK. 13/Menhut-II/2009. Jakarta.
- Mollicone, D., A. Freibauer, E. D. Schulze, S. Braatz, G. Grassi and S. Federici. 2007. "Elements for the expected mechanisms on 'reuced emissons from deforestation and degradation, REDD' under UNFCCC." *Environmental Research Letters* 2: 7.
- Murdiyarso, D., M. Skutsch, Manuel Guariguata, M. Kanninen, C. Luttrell, P. Verweij and O. S. Martins. 2008. How do we measure and monitor forest degradation? In: A. Angelsen. *Moving Ahead with REDD, Issues, Options and Implications*, pp. 99-106. Center for International Forestry Research. Bogor.
- Nabuurs, G. J., O. Masera, K. Andrasko, P. Benitez-Ponce, R. Boer, M. Dutschke, E. Elsiddig, J. Ford-Robertson, P. Frumhoff, T. Karjalainen, O. Krankina, W. A. Kurz, M. Matsumoto, W. Oyhantcabal, N. H. Ravindranath, M. J. S. Sanchez and X. Zhang. 2007. Forestry. In: B. Metz, O. R. Davidson, P. R. Bosch, R. Dave and L. A. Meyer. Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, pp. 541-584. Cambridge University Press. Cambridge, United Kingdom and New York, NY, USA.
- Nee, V. 1998. Sources of the New Institutionalism. In: M. C. Brinton and V. Nee. *The New Institutionalism in Sociology*, pp. 1-16. Russell Sage Foundation. New York.
- Pandit, B. H., A. Albano and C. Kumar. 2008. *Improving forest benefits for the poor. Learning from community-based forest enterprises in Nepal.* Center for International Forestry Research. Bogor.
- PDN, U. M. 2007. Reducing carbon emissions from deforestation in the Ulu Masen ecosystem, Aceh, Indonesia. A triple-benefit project design note for CCBA audit. Resubmitted December 29. The Provincial Government of Nanggroe Aceh Darussalam (Aceh), in collaboration with Fauna & Flora International & Carbon Conservation Pty. Ltd.
- PEACE. 2007. Indonesia and climate change: Current status and policies. PT Pelangi Energi Abadi Citra Enviro (PEACE), The World Bank, DFID-Indonesia. Jakarta.
- Pearce, F. 2007. "Bog Barons: Indonesia's carbon catastrophe." *New Scientist*(2632): 5 pp. http://www.newscientist.com/article/mg19626321.600-bog-barons-indonesias-carbon-catastrophe.html?full=true&print=true
- Pfaff, A., S. Kerr, L. Lipper, R. Cavatassi, B. Davis, J. Hendy and A. Sanchez-Azofeifa. 2006. "Will buying tropical forest carbon benefit the poor? Evidence from Costa Rica." *Land Use Policy* 24: 600-610.
- Ramankutty, N., H. K. Gibbs, F. Achard, R. Defries, J. A. Foley and R. A. Houghton. 2007. "Challenges to estimating carbon emissions from tropical deforestation." *Global Change Biology* 2007(13): 51-66.
- Repetto, R. 1993. How to Account for Environmental Degradation. In: W. L. Adamowicz, W. White and W. E. Phillips. *Forestry and the Environment: Economic Perspectives*, pp. 3-18. CAB International. Wallingford, Oxon.
- Roe, D. and J. Elliot. 2004. Meeting the MDGs Is conservation relevant? In: D. Roe. *The Millennium Development Goals and Conservation*, pp. 7-20. International Institute for Environment and Development (IIED). London.

- Scheyvens, H., K. Harada and F. López-Casero. 2008. Reduced emissions from deforestation and forest degradation in developing countries: Risks and opportunities for rural communities in the Asia-Pacific region. In: H. Hamanaka, A. Morishima, H. Mori and P. King. Climate change policies in the Asia-Pacific: Re-uniting climate change and sustainable development. IGES White Paper, pp. 79-104. Institute for Global Environmental Strategies (IGES). Hayama, Japan.
- Schwartzman, S., D. Nepstad and P. Moutinho. 2007. Getting REDD right. Reducing emissions from deforestation and forest degradation (REDD) in the United Nations Framework Convention on Climate Change (UNFCCC). Woods Hole Research Center.
- Stone, R. 2007. "Can oil palm plantations come clean?" Science 317: 1491.
- Sunderland, T. C. H., C. Ehringhaus and B. M. Campbell. 2008. "Conservation and development in tropical forest landscapes: a time to face the trade-offs?" *Environmental Conservation* 34(4): 276-279.
- SW. 2008. Validation report for: Provincial Government of Nanggroe Darussalam Fauna & Flora International Carbon Conservation in Ulu Masen Ecosystem (Aceh Province, Indonesia). Rainforest Alliance. Denpasar, Bali, Indonesia.
- Tavoni, M., B. Sohngen and V. Bosetti. 2007. "Forestry and the carbon market response to stabilize climate." *Energy Policy* 35(11): 5346-5353.
- UN-REDD. 2009. UN-REDD Programme operational guidance: Engagement of indigenous & other forest dependent communities. UN-REDD Programme.
- UN. 1992. Chapter 11: Combating deforestation. In. *Earth Summit. Agenda 21*, pp. UN Department of Economic and Social Affairs. Division for Sustainable Development. Rio de Janeiro.
- UNFCCC. 2008. Decision 2/CP.13. Reducing emissions from deforestation in developing countries: Approaches to stimulate action. Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007. Addendum. Part Two: Action taken by the Conference of the Parties at its thirteenth session. United Nations Framework Convention on Climate Change.
- Vermeulen, S. 2004. Reconciling global and local Priorities for conservation and development. In: D. Roe. *The Millennium Development Goals and Conservation*, pp. 73-88. International Institute for Environment and Development (IIED). London.
- WB. 2006. Project appraisal document for a proposed multi-donor fund grant for the benefit of the Republic of Indonesia in the amount of \$17.53 million to Leuser International Foundation and Fauna & Flora International for a project for integrating environment and forest protection into the recovery and future development of Aceh. Report No. 34610-ID. The World Bank, Environment and Social Development Unit, East Asia and Pacific Region.
- Wertz-Kanounnikoff, S., L. V. Verchot, M. Kanninen and D. Murdiyarso. 2008. How do we monitor, report and verify carbon emissions from forests? In: A. Angelsen. *Moving Ahead with REDD, Issues, Options and Implications*, pp. 87-98. Center for International Forestry Research. Bogor.
- Wunder, S. 2005. Payments for environmental services: Some nuts and bolts. Occasional Paper No. 42. CIFOR. Bogor.
- Wunder, S. 2006. "Are direct payments for environmental services spelling doom for sustainable forest management in the tropics?" *Ecology and Society* 11(2): 23.

