Developing a Sustainable Plantation Wood Supply Through Successful Community-Company Partnerships in Indonesia

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Introduction

Since the early 1990s, the industrial timber plantation (Hutan Tanaman Industri - HTI) scheme has been intended to serve as a major source of timber to meet domestic and export demand. The need to meet a large gap between legal wood supply and demand for forests products has been the recent years as high as 50 million m³ per year (MoF 2007) although statistics on domestic consumption are lacking. As Indonesia’s human population grows by some 3 million people per year and GDP growth is over 5% per year, wood consumption is set to continue increasing – as are opportunities to export wood and wood products.

While the plan to meet timber production needs from plantations offers promise, the development of the timber plantation has been slower than originally planned. As of 2008, from the total of 7.1 million hectares allocated for Indonesia’s plantation development, less than 4 million hectares have actually been planted (Ministry of Forestry 2008). Some major constraints related to the development of timber plantation in Indonesia, include: unclear HTI licensing processes, poor land use planning, land use conflicts, limited financial viability, and the threat from other land uses such as oil palm and mining (IFC 2010).

Of the above obstacles identified, plantation development is probably constrained more often by social issues than by managerial or environmental issues (Nawir et al 2003). Unclear boundaries, a lack of communication between local communities and government agencies responsible for concession allocation, encroachment and ancestral land claims are frequent. In most cases, these issues lead to conflict between companies and local communities in areas surrounding the plantation. For timber concession holders, resolving these conflicts takes time and significantly increases costs.
This paper focuses on company-community partnership as a means of reducing conflict and turning the constraint into a positive relationship that benefits both the companies and the communities. Some companies have had good success in working with local communities on or near HTI lands. This paper discusses lessons learned from company-community programs in three Indonesian timber companies: PT Wira Karya Sakti, PT Finnantara Intiga, and PT Xylo Indah Pratama. Other companies have community partnership programs as well – but are not reported here. The last section of the paper will discuss some principles and approaches that are worth trying as companies and communities find a way to find mutual benefit from industrial tree plantations.
CONFLICTS IN TIMBER PLANTATIONS

In general, there are three underlying causes of conflict over natural resources in Indonesia, particularly in HTI, which are: (i) unclear land tenure, (ii) environmental degradation, and (iii) imprecise employee recruitment systems (Sakai 2002, Wulan et al 2004). Of these causes, unclear land tenure has been the main trigger of most conflicts. When some forest areas were assigned to a forest concession, local communities faced difficulties in accessing the land and resources (Kartodihardjo and Supriono 2000, Obidzinsky and Chaudhury 2009). In most cases, the communities’ legal position over the land rights (and resources) was weaker than the forest concession holders. In addition, company’s lack of knowledge on existing land use or title considered as sacred or important to the local community further damaged the relations in some areas. This can be portrayed in the land use of graveyards or agricultural lands.

The implementation of the Decentralization Policy in 1999 encouraged local stakeholders to participate more actively in the decision making processes related to land use. The local communities’ awareness increased as they were encouraged to stand up for their rights and participate in the forest allocation processes, particularly those in the forest areas adjacent to their villages. Since the implementation of this policy, conflicts between companies and the communities in the forestry sector are reported to have increased. Research conducted by Wulan et al (2004) found that during the period of 1997 to 2003 the number of conflicts in forestry increased greater than those in the New Order era (1970-1998). Some 39% of the 359 recorded conflict cases occurred in HTI.

These conflicts have cost the companies a significant amount of money, as the communities claimed not only for compensation of the land used but also for the loss of trees in the concession areas. Social conflicts increase costs related to timber plantation development in many ways, including higher investment costs caused by the delay of projects; higher operational costs, when conflicts disrupted the operations (e.g., land invasions, road blockages, theft of timber) and result of damage to a company’s reputation that may lead to potential loss of market (Wilson, 2009).
COMMUNITY-COMPANY PARTNERSHIP IN HTI

In the Government Regulation No. 6/2007 on Forest management and the Development Plans for the Usage and Management of Forests (Tata Hutan dan Penyusunan Rencana Pengelolaan serta Pemanfaatan Hutan), HTI concession holders are required by law to allocate a maximum 5% of the total plantation area to develop a partnership program with the local community. Similar requirements appeared in the Ministerial Decree No P.3/Menhut II/2008 on the delineation processes of HTI concession areas which require HTI companies to develop partnership in the enrichment planting area.

Since 1997, the government has sponsored several types of partnership, such as HTI-Trans with requirement to hire transmigrates’ as labor in the plantations, community forestry (hutan kemasyarakatan), village forest (hutan desa) social forestry programs, and farm forestry credit schemes. Maturana et al (2005) includes two types of approaches for company and community interactions i.e.: the direct cash benefit schemes (also known as community development (CD)) and the partnership schemes.

The Community Development (CD) program, proposed through the Law No. 41/1999 on Forestry and the Government Regulation No 34/2002, requires forest companies to provide direct cash benefit schemes for agricultural support and to build infrastructure amenities, such as: religious, education and health facilities. In addition to this, 20% of the company’s shares should be allocated to the local community cooperatives (Walhi 2003). To some extent, providing (unskilled) employment to local communities is considered as an alternative income solution for the communities and minimizes the conflicts (Obidzinsky and Chaudhury 2009). However, these jobs are often seasonal and are rarely “permanent” jobs as they relate to field activities of land preparation, planting, weeding and harvesting.

Partnership schemes require involvement of the communities as company partners in establishing profitable timber plantations. In these partnerships both parties share the risks and profits in developing the plantation in conflict areas, in
addition to providing regular job opportunities in the plantation for the communities themselves. The partnership is more crucial when the concession area is an important source of income for the communities and when community expectations are high. The partnership is regarded as a mutual and sustainable partnership where the company and the community work together based on a shared agreement, in order to secure their mutual interests and objectives.

Several types of partnership have been implemented across Indonesia (Mayers and Vermeulen 2002, Nawir et al 2003, Wulan et al 2003, and Maturana et al 2005). If these studies show one thing in common, it is that perfect partnerships rarely happen and that successful partnerships require a great deal of effort by both parties.

The following are examples from three partnership programs between companies and communities, i.e. PT Wira Karya Sakti, PT Finnantara Intiga and PT Xylo Indah Pratama.

PT Wira Karya Sakti
Since 1990, PT Wira Karya Sakti (PT WKS) has managed a concession area of approximately 203,450 ha in Jambi to supply the Lontar Papyrus Pulp and Paper Industry. With a mill capacity of 430,000 tons per year, PT WKS is committed to supplying some 1.9 million m³ of pulpwod per year.

The communities living in the surrounding concession areas are dominated by Malay, Javanese, and Sundanese ethnic people. Some of these communities claim that PT WKS concession areas overlap with some of their private and adat lands. At the beginning of concession operations, the adat lands claims by local communities covered some 40% of the concession area – of which some 27,000 ha was deemed suitable for plantation development.

To resolve these land conflicts, the company initiated two partnership schemes:

1. **WKS-Hutan Rakyat** (Community Forest) in 1995, which later in 1999 was improved to **WKS Hutan Rakyat Pola Kemitraan** (Community Forest Partnership). This partnership involves developing plantations on private lands.

2. In 1999, PT WKS also developed another partnership scheme called **WKS-Hutan Tanaman Pola Kemitraan** (Timber Plantation Partnership), covering areas where the concession area overlapped with lands claimed by communities.

PT WKS started with Hutan Rakyat program in 1995 designed to develop better relationships with the local communities by proposing to develop plantation on community land. The partnership developed an 8-year contract with a benefit sharing scheme of 50/50 at the end of harvesting period with PT WKS bearing all of the risk. For this scheme, the landowners were represented by farmer
groups. The agreement was drafted in a simple and easy-to-understand language for farmers. It also set out only the responsibilities and rights of the parties involved.

In the two newer schemes, both WKS Hutan Rakyat Pola Kemitraan and WKS-Hutan Tanaman Pola Kemitraan, formal arrangements included better legal coverage aspect in the institutional development with the hopes of avoiding any further conflicts over the concession lands. PT WKS in particular involved the local government from the initial development of the program to ensure a better socialization process to the communities. The community group, Forest Farmer Cooperative (KTH – Kelompok Tani Hutan) was established, followed by a Memorandum of Understanding before signing the contractual agreement. This process is presented in Figure 1 below:

Figure 1. The processes of the community-company partnership development in PT Wira Karya Sakti (source: Nawir et al 2003)
With these schemes, the aspirations are not only to reduce the number of conflicts but also to enable the company to increase the amount of Acacia mangium produced. Acacia planting would turn the unproductive lands into more productive use, providing local jobs and fiber for the mill. In addition, for up to 1 year, PT WKS would pay the standard labor wages for planting and maintenance activities. In both schemes, the plantation developed 90% of the areas stipulated in the agreement; while the remaining 10% was allocated for agribusiness practices, including: food crops, cash crops, and fishponds. The contract period is for 43 years.

The partnership went further by trying to transform the farmer cooperatives to be more commercial. PT WKS and the farmer cooperative formed a joint venture company called Bumi Teguh Pratiwi. In the early stages, the sharing profit was 80:20 for PT WKS and the cooperative respectively. Eventually the share due to the cooperative would increase - after 35 years, the composition would shift to 35:65 for PT WKS and the cooperative. Then the new scheme would add financial and in-kind agribusiness support, capacity building development, and specific social funds from PT WKS.

However, these objectives were not met as smoothly as expected. The joint venture did not work as planned and in some places, conflicts between the company and the communities still occurred. In 2008, around 300 farmers from 5 districts of the Jambi Province held a demonstration at the local government office to protest the land confiscation by PT WKS over their private lands (Tempo Interaktif 2008). Then in February 2010, the farmers claimed that the partnership was not profitable. Additionally, there were concerns that some of the private and ‘adat’ lands managed by PT WKS would not be returned to the communities (Media Indonesia 2010a, Tempo Interaktif 2010). The conflict continued until June, escalating in July 2010 with the community’s revolt by initiating the planting of oil palm, palm, and pineapple produce within the concession area. By August 2010 the conflict intensified, resulting in the detention of the company’s heavy equipments and a coup d’état over the plantation areas. As a consequence, the company has indefinitely suspended its operations (Media Indonesia 2010b) and is now seeking legal approaches and negotiations to resolve the conflicts. This approach is specifically for the land containing timber plantation’s license issued to PT WKS currently being occupied/claimed by the community. As for the concession land occupied prior to the company’s operation, PT WKS would offer an enclave status to the landowners according to the Ministry of Forestry regulations.

PT Finnantara Intiga

PT Finnantara Intiga (PT FI) manages 299,700 ha of concession area in West Kalimantan province. PT FI started their HTI operation in 1996. Initially, the majority of ownership was held by Nordic Forest Development Holdings Pte Limited (NFDH), a subsidiary of STORA ENSO, at that time. This part is generated from direct communication with PT FI, Rouysikin 2005, and Nawir et al 2003.
the second largest pulp and paper company in the world. In 2004, the majority of shares were bought by Global Forest Limited, a limited liability company under the Sinar Mas Group. The remaining shares remained with PT Inhutani III. Of the 299,700 ha (mostly degraded lands), only 63% or 190,000 ha was available/financially feasible for plantation development.

Communities in the surrounding areas are mostly dominated by the indigenous Dayak people (80%), while the remaining are from the Javanese and Malayan ethnic origins. During the early stages of plantation development, PT FI learned that the Dayak communities lived within most of the concessions areas. Thus, before establishing the plantation, PT FI initiated partnerships with local communities to recognize the local people’s rights while securing the operational concession areas.

It took a while for PT FI to convince the communities who were traumatized by the previous bad experience with the partnership scheme of PT Inhutani III. The program started in 1996 with almost no villages wanting to cooperate with PT FI. After three years of intensive courtship and regular discussions, the relationship with the communities improved and showed some good results. In 1998, 7,000 ha of the areas were planted on the area under the partnership agreement with no less than 130 villages surrounding or within the concession areas joining the partnership by 2005.

Figure 2 describes the partnership scheme developed within PT FI’s concession. In this scheme, the process starts with planning and technical preparations, including collection of the information needed regarding the communities’ socio-economic conditions, to the identification of potential areas for planting. Then, a socialization process was conducted by a task force team comprising some stakeholders, including the local government of districts and sub district levels. Communities and the company then designated areas for the partnership program, which in return determined the amount of compensation for the communities and the potential job opportunities. The types of established infrastructures and planted species were also included in the negotiations.
The agreement included the following points:

1. Both parties agreed to manage the designated area with the division of: 85% for Acacia plantation, 10% for native species planting and 5% for rubber planting.
2. After harvesting, the company and the communities will share 90%/10% of the profit respectively.
3. Currently the minimum royalty for communities is IDR 15,000 per ton of harvested timber. Since the initial stage of the program, the royalty provided has been doubled to IDR 30,000 per ton.
In addition, the company also provides land incentives (IDR 40,000/ha of land planted), infrastructures funds (IDR 20,000/hectare of land planted), assistance in developing organizations, social funds, credit assistances and technical assistance in agriculture.

The communities, with guidance from PT FI, established a Community Development Group (KBU- Kelompok Usaha Bersama) so that the communities may improve the management of the partnership with PT FI. The group is responsible for the implementation of five major components covered in the partnership, including: credit and savings, community plantation, permanent-types of agriculture, short-term perennial crops cultivation, and local species plantation.

The whole partnership process brings about intangible benefits for the communities involved. The communities themselves have improved their negotiation skills when dealing and resolving conflicts with the company. Conflicts are now resolved through dialogue instead of physical confrontation or demonstrations. PT FI has started outsourcing some plantation operations jobs requiring low-level skills and virtually no investment for expensive equipment. It also provides more job opportunities for communities and opens greater involvement in the plantation operation leading to an improved understanding and trust between both parties.

However, this partnership scheme requires large financial support from PT FI as the timber concessions owner. It is expensive to develop the plantation derived from partnerships due to the geographically fragmented location of plantation lands. This form of partnership also increased the production costs per m3 of timber by providing shared profits to communities. At some point it caused delays to the operation of the company’s plantation. For example the harvesting period, which was set for 8 years, was delayed due to a lack of budget for profit sharing and infrastructure development.

PT Xylo Indah Pratama³

PT Xylo Indah Pratama (XIP) started their business in 1989 when they set up a factory in Musi Rawas, in South Sumatera Province and bought local woods to supply a large pencil producer, Faber Castel. Since 1995 they have used Pulai darat (Alstonia scholaris) timber from local communities. This species is a good material source for pencil slat and has been grown for years in many community areas, next to rubber and home garden plantations. Interestingly, this species was previously considered a weed and had a very low value.

To meet the growing demands for its pencil industry, PT XIP has since developed several community-based schemes. First is a direct buying scheme from the farmers. Up until 2010, PT XIP bought from 72,652 farmers in Musi Rawas District where the pulai timber comes from some 221,000 ha of community lands in 20 sub districts. Partly urged by the requirements to obtain timber

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³ This part is generated from direct communication with PT XIP, Mayers and Vermeulen 2002, Nawir et al 2003
certification from Forest Stewardship Council (FSC), the company initiated the establishment of community groups in 2007. However, until 2010, only 3 groups are established.

The main limitations to facilitating the establishment of more groups are PT XIP’s lack of budget allocation. In addition, many group members feel that they gain only small additional economic benefits by joining the groups. There is no price difference for timber coming from farmers who join the groups and those who don’t. PT XIP provides benefits for farmers who join the group through a compensation fee for existing/standing pulai tress in their land for approximately IDR 5,000 per tree per year and free pulai seeds. Apparently, those benefits are not attractive enough for farmers to join the groups.

The second scheme was a partnership program initiated in 1997 between PT XIP and the local communities. The District Forestry Office provided initial funding through the Dana Reboisasi (Reforestation Fund) from the Forestry Department. PT XIP received IDR 10 billion to established 5,000 ha of pulai gading plantation on the communities’ lands. The local communities provided the lands, while PT XIP was responsible for providing planting materials and management of the plantation for 11 years as covered by the contract period. Figure 3 shows the process of this partnership scheme.

During the contract, the community was not allowed to cut or replace the plants with species other than pulai gading. At the end of the contract, the landowner would get 50% of the net profits, after a deduction for tax and other harvesting costs. Plus, the landowner would gain some income from tree thinning within the 5th and 7th year timeframe. Until 2003, 3,007 ha of plantation was developed from the target of 5,000 ha (Table 1).
Table 1. Planting realization of PT XIP in communities’ lands

<table>
<thead>
<tr>
<th>Year</th>
<th>Planting area (ha)</th>
<th>Location unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>274</td>
<td>Jayaloka, Rahma</td>
</tr>
<tr>
<td>1998</td>
<td>704</td>
<td>Cecar, Pagar Ayu, SP7, SP8, SP9</td>
</tr>
<tr>
<td>1999</td>
<td>440</td>
<td>Cecar, Rahma, SP7, SP8, SP9, Tapah</td>
</tr>
<tr>
<td>2000</td>
<td>305</td>
<td>Cecar, Rahma, SP7, SP8, SP9, Tapah</td>
</tr>
<tr>
<td>2001</td>
<td>617</td>
<td>Cecar, SP7, SP8, SP9</td>
</tr>
<tr>
<td>2002</td>
<td>199</td>
<td>Lubuk Linggau</td>
</tr>
<tr>
<td>2003</td>
<td>352</td>
<td>Lubuk Linggau</td>
</tr>
<tr>
<td>2004</td>
<td>115</td>
<td>SP5</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>3007</td>
</tr>
</tbody>
</table>

To facilitate the implementation of the partnership scheme, some new farmer groups were established. PT XIP dealt with communities only through the leaders of the groups. In the beginning, it is thought that the arrangement would make the partnership more efficient (low-cost) as PT XIP dealt only with the appointed community representatives. For PT XIP the arrangement would also help to manage communities’ expectations and demands to the company that are not relevant to the partnership. However, the community felt this did not help them to establish trust with PT XIP and reduced the possible transfer of knowledge needed to support plantation maintenance.

Some bigger issues surfaced during the implementation of the partnership, adding to the communication concerns. First, the additional income from thinning activities in the 5th and 7th years did not materialized. Second, it turned out that the selected main species of pulai gading was not suitable for plantation in the designated areas resulting in a lower growth rate than expected. The communities started to compare earnings with the rubber plantations in the neighboring areas which are more profitable. Some community groups demanded early harvesting so their areas could be replaced with rubber. For those who decided to harvest after 11 years, as agreed in the contract, the harvesting volume was much lower than the target. The average production volume was around 30 m³ per ha from the targeted 500 m³ per ha and the net profit shared for the farmer was IDR 20 million per ha, way below the expected financial shares. After this experience, the company decided to discontinue the second scheme. Now PT XIP obtains most of their timber supply from the pulai trees that grow on community lands, as they had done in 1995. There are concerns over timber shortage in the near future, but no solution has been proposed so far.

Regardless of the failure in increasing timber production, the whole process improved the relationship between PT XIP and the local community. There has been no recorded increase of conflicts, even when the partnership didn’t bring any positive results or when it was terminated.
LESSONS LEARNED

Experiences from these three partnerships provide valuable lessons for future development of community-company partnerships in timber plantation areas. One thing is obvious from all of the cases above: it takes years to gain mutual trust, to establish effective partnerships, and it requires continuous efforts from all parties involved.

**Informative and flexible agreements are required**

Sound understanding and common expectations from all parties involved in the partnership is essential in achieving effective collaboration. Thoughtful consideration, such as the simplicity of using straightforward and comprehensible language for the written agreement, may lead to better understanding and greater commitment from all parties. When compared to PT FI and PT WKS, PT XIP provided a simple contract that was easily understood by most of the landowners. This resulted in a commitment by the landowners to obey the contract. When the trees did not grow as expected, the communities did not harvest the trees without prior notice to the company; some even decided to keep the trees until the end of the contract. Another valuable lesson from the PT XIP partnership is the flexibility of PT XIP to provide solutions based on existing progress. Although not required in the contract, when the pulai trees showed slow growth and some groups opted for early harvesting and a switch to rubber, PT XIP still provided some maintenance fees for the farmers. In a long-term partnership, some aspects in the agreement might change and would not be relevant to the current situation. It is important to provide room for adjustments as conditions change.

**Better knowledge of technical issues will ensure a better end result**

Good planning and appropriate technical knowledge is essential for an effective collaboration. The examples from PT XIP show how the lack of knowledge on the tree species suited for the terrain negated the main objective of the agreement. Being confident of technical information on critical aspects such as growth rates is essential before entering into contracts. This will not only improve plantation production but also establish better communications with the communities and build trust and confidence for all parties.
Expenses related to social issues should be included in long-term financial plan

It takes time and resources to build an effective partnership. From all the partnerships above, each took longer than 10 years to develop. The whole process required human resources and financial support paid mostly by the lead company. Figure 4 shows the proportion of cost for loan repayment, investment, operational (planting and harvesting), partnership/social costs and overhead (administration, fee and taxes).

The three companies provided more than 10% of their total cost to finance the social issue and partnership development – and in the case of PT FI, over 40% of total cost. The expenses include training costs, income/livelihood diversification program, infrastructure constructions and other occasional social funds. Social costs are recurring and company-community partnership development is a long-term effort - hence, the cost related to social matters should be included in the long-term financial plan. It will help to ensure sustainability and avoid unexpected disruption of the program (references: PT XIP and PT FI).

When possible, alternative cost-sharing or alternatives revenues to bear social costs should be sought. The companies can involve the sub-national government and share some of social costs (example of PT XIP and the reforestation fund). Carbon revenues gained from a CDM (Clean Development Mechanism) or VCS (Voluntary Carbon Standard) program for plantation on degraded lands is another potential alternative. Potential use of carbon revenues to solve social barriers and improve social condition provides a very strong case for the additionality needed in a carbon project (Voluntary Carbon Standard 2007.1).
POSITIVE COMMUNITY-COMPANY PARTNERSHIP: WHAT PRINCIPLES ARE NEEDED?

This section discusses some general principles considered crucial to the development of a positive community-company partnership. Social, economic, political, market and ecological attributes of a site also combine to encourage adaptation and innovation.

Getting all required information at the initial stage.
Having sufficient information to design a good plan is a pre-condition to start the partnership; including documenting the expectations from all parties. This also includes understanding the production economics of the crop – costs, cash flows and net revenues are all vitally important.

Proper socialization and comprehensible agreements.
Complicated or difficult language used in a contract causes confusion, leading to a low level of commitment and can lead to disagreements. Providing clear explanations and proper socialization to all parties involved before the contract is signed is essential.

Intensive and continuous approach.
Having regular meetings with the community, both formal and informal, helps build better relationships between both parties and improve transparency. By discussing openly all things related to the agreement and the partnership, concerns which may lead to future conflicts can be voiced and dealt with. Regular monitoring and evaluation is also essential to assessing if some adjustments should be made to accommodate new developments that may affect the partnership. This should be done regularly and communicated openly to all parties.

Providing alternative livelihood incomes.
All the partnerships of three companies above had agreed to share some economic benefits at harvest. However, the partnership should also
consider options for communities to get some income prior to the final harvest. In addition, competition with other perennial crops such as oil palm and rubber may make it harder to justify forest plantations where it is legally allowable to plant other crops. Rising prices and regular income from oil palm and rubber provides a major economic incentive for communities to plant these crops. Considering the growing competitiveness, it is important to agree on how best to support the community economic interests, while continuing to respect the provisions of the agreement, and the law, in establishing a productive timber plantation.

**Intermediary agent.**
Intermediaries, including local governments, NGOs, or other local authorities, play an important role in facilitating the agreement process, as well as monitoring the implementation of the partnership; even though the involvement of these institutions will increase the transaction costs. Nevertheless, their involvement should ensure fair treatment for all parties and help provide capacity building and the technical assistance required by the communities and the company in supporting the implementation of a partnership program.

In most cases, the local government’s role is limited only to the socialization process of the program during the initial phase. Their support is also limited to conflicts resolution processes when conflicts already occur, but rarely in conflict prevention. Actually in some cases, active participation of the local government would prevent any violation to the agreement. The local government can also align the agreements with or even include it in the development plan of the district or province.
CONCLUSION

Partnership is not an impossible mission nor an inexpensive one. Partnerships are able to work effectively as long as it is based on a win-win situation for all parties involved. A mutual and beneficial relationship is created when all the parties involved agree on compatible goals and are clear about their expectations, particularly related to the responsibilities for both the costs, benefits and risks of engaging in plantation forestry.

Fewer conflict in the area covered in the agreement can be a clear, positive impact of a company-community partnership. Avoiding conflict and the costs associated with conflict should be considered as a form of net income by both parties.

Access to alternative revenues will help expedite the development of sustainable plantation in Indonesia, to pay some costs associated with social issues and to help ensuring sustainability of company-community partnerships. Revenues from carbon projects that establish plantations on degraded land offer new opportunities for plantation owners and communities alike while contributing to Government climate change mitigation goals (IFC 2010a).
REFERENCES


