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Benefit Distribution from Forest Resources:

Study of A Case in Mataliba', East Kalimantan, Indonesia

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Abstract

This report objectives were to identify main of problems of people in Mataliba'; key actors; conflict contributors and to recommend implementation plans of participatory approach (PAR). The Dayak Bahau people living in Mataliba', East Kalimantan, Indonesia has been faced with the problem of unequal distribution of benefits from the forest located in their customary area stemming from the operation of logging concessionaires granted permit by the government. This problem is exacerbated by the shrinking forest lands and the low income and the lack of alternative livelihood which are considered conflict contributors. Owing to the complexity of the problem and the involvement of other sectors such as the local and central governments, NGOs, private concessionaires and surrounding communities, it is necessary to utilize participatory approaches

to arrive at a solution to the problem. In this report, Participatory Action Research (PAR) was applied to come up with a plan of action to empower the local people to an equitable distribution of forest resources benefits. The recommended plan of action to address shrinking forest land were as follows: securing funding for reforestation from the District Forestry Service (DFS), tapping farmers' cooperative as partner in sourcing funds for reforestation, and securing agreement with neighboring villages to ensure proper land utilization. To address low income and the lack of alternative livelihood, the following actions were recommended: defining appropriate boundaries, developing land use plan, and formulating regulations that would govern small-scale logging operations.

Key words: Mataliba' community, benefit distribution, Participatory Action Research, Dayak Bahau

1. Introduction

Mataliba' is a large settlement of the Dayak Bahau tribe in East Kalimantan, Indonesia. The territory covers approximately 88,000 hectares, or 880 km², extending from the estuary of the Pari' River to the mountain bordering the Tabang sub-district (Fig. 1).

The natural resources in Mataliba' are timber, rattan, aloe wood (gaharu), honey bee trees, resins, edible bird's nest, gold, uranium and coal. The main source of livelihood in the village is agriculture, particularly dry farming/shifting cultivation (*luma'*). This is followed by forest products extraction. Timber contributes a major portion of the income of the community.

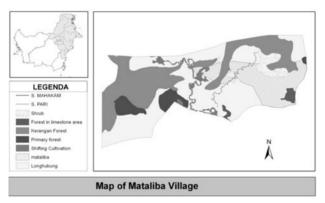


Figure 1. Map of Mataliba' Village

The forest in the Mataliba' district provides various benefits to its inhabitants. Direct benefits result from the income obtained from hunting and tourism activities, and the sale of timber and non-timber forest products (NTFPs). The forest products that are used for household purposes also serve to fulfill the need for subsistence, infrastructure, and fuel which alleviates poverty. On the other hand, the indirect benefits include technical and managerial capacity-building, diversification of livelihood/income and political empowerment. Given the potential of these benefits to uplift the lives of the inhabitants, its distribution is therefore critical in ensuring that all members of the society benefit from the forest resources especially towards poverty alleviation.

Effective benefit distribution depends to a large extent on the agenda of the government and the private concessionaires. It also depends on the needs and involvement of, and mechanism of distribution within, the community. Therefore, for the process to be equitable there must be a balance between the needs of the government and the private concessionaires on one hand, and the interests of the community on the other.

To ensure that the community can safeguard its interests, it is necessary to involve the members in a process where they can create knowledge and educate themselves in order to move as one. This is achieved through Participatory Action Research (PAR). PAR is a decision-making activity that recognizes the people's right to participate in the production of transformative and action-oriented knowledge affecting them (Nanang and Devung, 2003). The strength of PAR essentially lies in creating a people-centered mindset through which personal and social transformation may be achieved with the end goal of empowering and liberating marginalized people. Thus it is able to address problems on social acceptance and, more importantly, issues on inequality among stakeholders.

2. Statement of the problem

This report have identified that the main issue confronting the Mataliba' community is the unequal distribution of benefits

from the use of the forest within their village. The problem arose when HTI, a private logging company, was granted permit by the government to utilize the forest resources without consultation with the local people. Moreover, there is not any compensation is given to the village for the logging activities of the company. Compounding the problem is the fact that only a few of the villagers are employed in the logging operations. Such social problems have led to feelings of despondency on the part of the community and further hostility towards the logging company. Based on those situation, two roots of problem were identified comprise (1) shrinking of the forest land and (2) low income and lack of alternative livelihood (Figure 2).

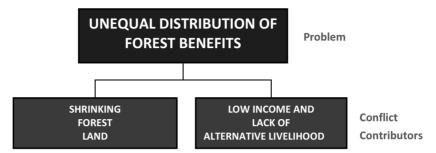


Figure 2. The Problem and the conflict contributors

3. Identification of key actors and their potential conflicts

3.1. List of constituen and stakeholder key roles

This report had identified four key actors involved to the problem stated in Chapter 2. Local people were the central actor because they were most affected by the role of other stakeholders. The position of local people was very weak because they live in low income, have low education level, and do not have bargaining power to governments and companies. On the other side, governments, companies, did not have any program to empower the local people while Non-Governmental Organizations plays as mediator among the constituencies (Table 1).

No	key constituen and stakeholder	Role	Impact to the problem
1	Local people	Farmer, wildlife hunter and local wisdom protector	Low income, low education level and powerless
2	Governments	Regulation and decision maker concerning of concession	Unfair to local people. Do not have an implementable solution to the problem
3	Companies	Forest yield production and management	Degrade forest and cause deforestation
4	Non-Governmental Organizations (NGOs)	Mediator and facilitator	Mediating local people, government and companies

Table 1. List of key constituen and stakeholders

3.2. Conflict contributors

(1) Shrinking of forest land

Despite the occurrence of a big forest fire in 1982 which burnt a small portion of the forest, the forest in Mataliba' was in good condition until 1988. However, this situation would drastically change starting 1992 when the commercial exploitation of the natural forest began in earnest with the granting of permits for logging (HPH), industrial tree plantations (HPHTI), and transmigration. In that year, PT. Limbang Praja Timber (PT. LPT), a sub-contractor of the PT. Barito Pacific Group, started clear-cutting 8,400 hectares of the Customary Forest of Mataliba' and 6,800 hectares along the Meriti River for HTI-Trans (Industrial Forest Estate) for use by the trans-migrants, without any coordination and consultation with the Mataliba' community. Most forest land in the upper region of the Pari' River was also converted into falcataria (*Paraserianthes falcataria*) and gmelina (*Gmelina arborea*) plantations and partly for a transmigration settlement.

In 1997 the situation would take a turn for the worse. In that year, PT. LPT stole around 4,000 cubic meters (around 1,000 pieces of timber) from the area, and neglected about 6,000 cubic meters more in the forest (Imang et al., 2004). The large-scale forest fire of 1997/1998 also happened which destroyed approximately 40% of the Mataliba' forest. This fire decimated orchards, pepper and cacao gardens, and industrial forests (Sengon and Gmelina). It was also responsible for several human casualties. In addition, HTI also embarked on more deforestation for its expansion and provide areas for new settlements (Imang et al., 2004).

For the Mataliba' community, the shrinking forest cover has only served to highlight the lost opportunities to rightfully gain from the forest resources. The logging activity has only served to enrich the concessionaires while forever destroying a potential resource for the community. Even some of the cleared land has been taken over by the neighboring villages which encroached on the Dayak Bahau territory after the 1997/1998 fire. Together, these factors contributed to the unequal distribution of benefits because the community now has limited and restricted access to the forest resources.

(2) Low income and lack of alternative livelihood

The dire economic situation of the Dayak Bahau people can be traced to their unsustainable agricultural practices and the management of their ancestral/customary land by the central government which has prevented the villagers from utilizing the land and its forest resources. One factor that contributes to the low income of the people is their practice of swidden and shifting agriculture which does not give them enough harvest to adequately meet their year-long needs. Another factor is the restriction of their access to the forest due to the concession granted by the government to private companies. This has resulted in the loss of opportunity to harvest the natural resources from the forest and gain from it. At the same time, they have also lost certain hunting and fishing privileges as the forest has been occupied by Timorese trans-migrants. Lastly, only a handful people directly benefit from the timber resources because the traditional harvesting method, called *banjir kap*, is only done by the able-bodied men in the community.

Banjir kap (literally "cutting during the flood") is the traditional, non-mechanized logging technique used by small-scale enterprises. However, since the early 1970s this practice has since been replaced with the use of mechanized logging equipment by virtue of Government Reoslution No. 20/1970 which set that all logging be mechanized (Maunati, 2005). Mechanization required skilled labor and since the local people did not have the necessary skills to operate the equipment, many of them were displaced by foreign workers. With no other skills, they were faced with the lack of alternative livelihoods. In addition, only a few were able to find other work in the logging companies and entrepreneurs. The swidden and shifting agriculture also did not offer a very lucrative alternative.

It can therefore be seen that not all community members have equal chances to gain from the fruits of the forest resources. The low income of the community members, combined with the lack of alternative livelihoods, contribute greatly to the unequal distribution of the benefits gained from the forest resources.

4. Participatory Action Research (PAR)

4.1. Conceptual Framework

Participatory Action Research is a complex process involving several sectors (Fig. 3). The process entails the participation of key players (local government, and scientists and NGOs) with the local people at the center of the planning activity. The success of PAR hinges on the essential contributory function of the village people with political, technical and socio-economic support from the government, NGOs and scientists. Through this model, the community is able to draw up a comprehensive and all-encompassing plan of action called "Village Action".

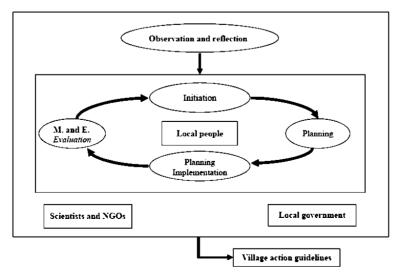


Figure 3. Conceptual framework of PAR (Source: Inoue 2003)

4.2. Key actors

(1) Local people

Ninety percent (90%) of the local community in Mataliba' are farmers. They earn money from the sale of timber as well as non-timber forest products (NTFP) such as resins. They are also engaged in hunting activities (wild pigs and deer) and fishing. The villagers fulfill their needs for rice and other agricultural products by growing them in their own *ladang* and rice paddies. Amenities are bought mostly from the local traders or from mobile traders while some villagers travel all the way to the East Kalimantan capital of Samarinda to buy their goods, clothes, and other needs.

(2) Government

The primary role of the government is to make regulations and issue logging concessions. This responsibility is of utmost concern to the local communities since it has far-reaching implications on their lives. This is especially true when the government restricts villagers' access to the customary forests due to the concessions issued to the private companies. The root cause of this conflict is the fact that there has been no formal recognition of the customary forests by the government. As a consequence, the local people are no longer allowed to manage their customary forest. At the same time, government has not been able to effectively solve boundary disputes among villages. This has further caused confusion among the local people.

(3) Private concessionaires

The companies operating within the Mataliba' area are PT. LPT and HTI. These companies have the greatest impact on the community since they now manage the forest and control the exploitation of the forest resources. Owing to the negative impact of their activities on the environment, such as the massive deforestation and forest fires for land clearing, they are mostly unwelcome in the community.

(4) Non-Governmental Organizations (NGOs)

In the forest management structure of the Mataliba' community, the role of the NGOs cannot be overemphasized. This stems from the support of the local NGO in Kutai Barat which has seen to the success of the "moral movement" of the local people to obtain compensation over the widespread destruction of the customary forest. The NGO played an important facilitatory and capacity-building role in many cases, helping to bridge the often divergent views between local people and government agencies, improving social cohesion and cooperation in the village, and managing conflicts within or among communities.

In several instances, the NGO acted as mediator in the conflict resolution between HPH/HPHTI and the local community. It was also successful in stopping the government from issuing concession permits without prior consultation with local communities. Furthermore, the NGO has facilitated the development of the village land-use plan and helped the community frame regulations regarding the duties and responsibilities of small loggers operating within its territory. Lastly, the NGO provided technical assistance in forest management and offered guidance in awareness-building and sustainable management of the forest.

4.3. Stakeholder conflicts

The local community constantly deals with numerous issues and conflicts that confront it from various sectors (Fig. 4). Since PAR is envisioned to provide support to the local community as it deals with these conflicts, the process provides a way for the community to make observations of its physical and social surroundings, assess their impacts, and find solutions to problems and challenges. Central to this undertaking is an evaluation of the conflicts within the community and between the community and its environs (Table 2) to provide the framework by which the community can draw up the guidelines for its action.

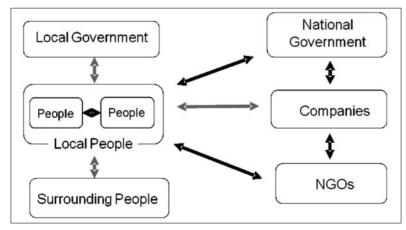


Figure 4. Levels of conflict experienced by the local community (Black arrows indicate low conflict levels. Gray arrows indicate high conflict levels)

Table 2. Sources of conflicts with the local communit	y
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CONCERNED SECTOR	CONFLICTS	
Conflict with Government	 Non-support of community-drafted sustainable forest utilization plan No mandatory reforestation policies put in place Community customary rights to forests not recognized Lack of government policies to protect customary rights Divergent needs and priorities 	
Conflict with Private Concessionaires	 Lack of coordination and consultation with community Active deforestation Clearing of land for trans-migrants Non-compensation to the community Forest fire attributed to company 	
Conflict within Community	 Differing views on use and control of forest land and resources Increased demand for resources due to rapid population growth Unequal distribution of forest resources Scarcity due to forest resource degradation Differing ethnicity Differences in economic status (wealth ranking) Differences in labor capacity 	
Conflict with Neighboring Communities	 Competition for employment, land and resources Territorial disputes Non-tolerance (trans-migrants) Fear of cultural erosion (trans-migrants) 	

5. Conflict Resolution

Given the situation of the Dayak Bahau people and the numerous conflicts it has within and outside of the community, it becomes imperative for the community to find means to rectify the conflicts. This can be done by participatory approaches, such as PAR, which are geared towards improving social capacity for the management of activities in line with the sustainable use and management of the forest resources.

Such participatory approaches are also aimed at enhancing cooperation between the various stakeholders in managing the forest resources. Furthermore, they serve to strengthen the people's capacity to prevent untoward incidents such as forest fires. Through participatory approaches, the community's welfare is enhanced through better agricultural production, autonomy, and information sharing.

PAR is therefore an indispensible tool in addressing the negative impacts of shrinking forest land and the low income and lack of alternative livelihood on the members of the community. Through PAR palliative solutions to the problem of unequal benefit distribution of forest resources may be obtained. This can be done by enabling the local community to secure funding for reforestation from DFS, tapping farmers' cooperative as partner in sourcing funds for reforestation, securing agreement with neighboring villages as to proper land utilization, defining appropriate boundaries, developing land use plan, and formulating regulations that would govern small-scale logging operations. The template for the general plan of action is shown in Fig. 5.

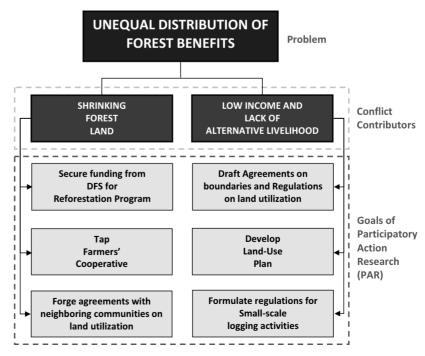


Figure 5. Participatory approach strategy template

6. Implementation Plan

Srinivasan (1990) states that effective participatory techniques require the implementation of tools to strengthen the capacity of local people to identify and analyze priority needs, opportunities and constraints. This is done through careful planning and implementation of strategies and programs and evaluation of results. In this instance, PAR is used to come up with specific programs to address the two conflict contributors to the unequal distribution of forest resources. The details of the Implementation Plans are given in Table 3 for shrinking forest land and Table 4 for the low income and lack of alternative livelihood.

7. Influence of external factors

Natural climatic factors play the most active drivers of forest conditions. Global warming and the erratic weather conditions brought about by the El Nino and La Nina phenomena and the corresponding droughts, forest fires and flooding that they bring, are increasingly affecting the fragile forest ecosystem. Nevertheless, these factors are putting pressure on the government to be proactive in mitigating the adverse effects and in protecting forest resources. For instance, the central government issued Act No. 41/1999 which focused on sustainable development and benefit distribution of forest resources. The Ministry of Forestry's Strategic Plan 2005-2009 was also made to reduce illegal logging, rehabilitate forest natural resources and economically empower people living inside and at the outskirts of forest areas. A significant decrease in deforestation rate from 1996-2000 has resulted from government policies.

Another impetus to preserving the forests is international carbon trading. Through this strategy, the community can directly gain by increasing the forest cover and trading the carbon credits.

Lastly, political stability is an important factor that affects the community. This includes the political will of the central and local governments to involve people as stewards in sustainable forest management and balance the interests of the private concessionaires and those of the local people. A good political situation is also ideal so that the government can concentrate on programs that have positive impacts on the forests and the people that depend on them.

Table 3. Implementation plan of activities to address shrinking forest land.

IMPLEMENTATION PLAN							
Task	ACTIVITY	In-Charge					
	Goal: Secure funding from DFS for Reforestation Program						
1	Organize village to designate village representative as liaison officer to the government	Project Manager					
2	Identify government requirements for funding projects	Project Manager					
3	Conduct proposal writing for village head and local government personnel	Project Staff					
4	Gather data needed for the proposal to be submitted to DFS	Village Head and the Project Staff					
5	Identify alternative funding sources both local and international	Project Manager					
6	Write the proposal and submit to DFS and other funding agencies	Village Head and Project Staff					
Goal: Tap farmers' cooperative							
1	Convene meeting with village head and officers of the farmer's cooperative to explain rationale for increasing contribution dues	Village Head. Cooperative Officers and Project manager					
2	Arrange meeting with members of the farmer's cooperative to explain the need to increase member's contribution	Project Staff and Village Officers					
3	Embark on an information campaign to expand membership	Village Officers					
	Goal: Forge agreements with neighboring communities on land u	tilization					
1	Convene meeting with village head and his officers to formulate plan of action in regard to securing an agreement with the head and officers of neighboring villages	Village Head					
2	Organize the meeting with the officers of the other villages. The agreement should include how clearing of land should be made and the areas where they can clear land and cut trees for swidden farming	Village Head					
3	Conduct information campaign to disseminate the agreements made in the meeting	Village Officers					
4	Form a coordinating and monitoring body composed by villagers from both Mataliba' and the neighboring villages.	District Mayor					
5	Identify proper procedure to address complaints on improper implementation of the agreement	Project Manager and Village Head					
6	Information campaign on proper complaint procedure	Village Officers					

Table 4. Implementation plan of activities to address low income and lack of alternative livelihood

	IMPLEMENTATION PLAN						
Task	ACTIVITY	In-Charge					
	Goal: Draft Agreements on boundaries and Regulations on land utilization						
1	Convene a meeting between the village head and his representatives, the local government, the HTI Trans, and the HTH to define the boundaries for HTI trans settlements, logging concession area of HTH and areas where the populace can undertake swidden agriculture. This should avoid disputes arising from conflicting claims on forest area.	Village Head and District Mayor					
2	Information campaign on fixed boundaries	Village Officers					
Goal: Develop Land-Use Plan							
1	Conduct survey to identify appropriate or suitable use of land damaged by forest fires considering the needs of the local people and the characteristics of the land	Head of Local Government Planning Office and Village Head					
2	Call for a meeting with the village people to know their preferences in regard to the use of the village land including the deforested portions damaged by forest fire.	Village Head and Municipal Mayor					
3	Set up the planning committee tasked with developing the local land use. The planning committee should include the representative of the villagers who should be consulted frequently.	Village Head and Municipal Mayor					
4	Convene the first meeting and decide on frequency of the succeeding meetings	Village Head and Municipal Mayor					
Goal: Formulate regulations for Small-scale logging activities							
1	Call for a meeting with the village people to know their preferences for a policy on small scale logging. Incorporate these in the deliberations on the propose ordinance at the local municipal hall.	Village Head					
2	Petition the district Mayor to include village representation in the policy making body tasked to formulate the policy on small scale logging.	Village Head and Project Head					
3	Information campaign on proper complaint procedure	Village Officers					

8. Conclusion

The Mataliba' community is saddled with the problem of unequal distribution of benefits from forest resources due to the activities of private logging concessionaires operating in their customary land. This problem is exacerbated by the shrinking forest land and the low income and lack of alternative livelihood of the members of the community. To rectify this situation, participatory approaches, such as PAR, must be implemented. In PAR, the active involvement of all stakeholders is deemed necessary for the success of the planned activities designed to give the local people more equitable distribution of forest resources. These activities include securing funding for reforestation from DFS, tapping farmers' cooperative as partner in sourcing funds for reforestation and securing agreement with neighboring villages as to proper land utilization to solve the problem on shrinking forest land. To address low income and the lack of alternative livelihood, defining appropriate boundaries, developing land use plan, and formulating regulations that would govern small-scale logging operations are recommended.

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References

- Gilmour, D.A. 2007. Regulatory frameworks for community forestry with particular reference to Asia. Proceeding: International Conference on Poverty Reduction and Forest, Bangkok. p 1-7.
- Inoue, M. 2004.nSummary of the guidelines and recommendations in Guidelines and Recommendations for Participatory, Sustainable Forest Use and Management Institute for Global Environmental Strategies. Kanagawa, Japan.
- Imang, N, A. D. Gani, Y. Yasuhiro, Yokota, T. Saito, A. Mochizuki. 2004. Forest management and community participation in Mataliba'. Indonesia Country Report 2004 29~46.

- Maunati, Y. 2005. Sharing the Fruit of Forestry Products: Indigenous People and Their Incomes in the Forestry Sector in East Kalimantan, Indonesia. ADB Institute Discussion Paper No, 24.
- Nanang, M. and Devung, G. S. 2004. Village action guideline for Mataliba'. In: Institute for Global Environmental Strategies (IGES) eds. Guidelines and Recommendations for Participatory, Sustainable Forest Use and Management.
- Srinivasan, L. 1990. Tools for community participation: a manual for training trainers in participatory techniques. UNDP PROWESS/UNDP Technical series involving woman in water and sanitation.