

Strategy for Developing Collaborative Plantation Forest: 'A Conflict Resolution Approach in Indonesia

Dr. Bambang Widyanoro
May 2012



TECHNICAL REPORT - Volume 4a

Ministry of Forestry Republic of Indonesia
Directorate General of Forest Production Management
Directorate of Plantation Forest Development

In Collaboration with:

International Tropical Timber Organization (ITTO)
ITTO PD 396/06 Rev.2 (F)
Strategy for Developing Plantation Forest: 'A Conflict Resolution Approach in Indonesia'
Mangala Wanabakti Building, Block IV 7th Floor, Room 709A
Jl. Jend. Gatot Subroto, Jakarta 10270 Indonesia
Tel.: 6221 - 5703246 Ext. 5317
email: ittopd396@gmail.com



Strategy for Developing Collaborative Plantation Forest: 'A Conflict Resolution Approach in Indonesia

TECHNICAL REPORT - VOLUME 4a

May 2012

May 2012



Output 1.1

Development of a strategy, legal framework and institutional arrangement of collaborative plantation forest are accepted by all concerned stakeholder

TECHNICAL REPORT

Volume 4a

Strategy for Developing Collaborative Plantation Forest: *A Conflict Resolution Approach in Indonesia*

ITTO PD 396/06 Rev.2 (F)

“STRATEGY FOR DEVELOPING PLANTATION FOREST:
‘A CONFLICT RESOLUTION APPROACH IN INDONESIA’

Output 1.1

Development of a strategy, legal framework and institutional arrangement of collaborative plantation forest are accepted by all concerned stakeholder

National Expert/Project Management Unit (PMU)

1. Project Coordinator : Ir. Bambang Hendiarto, MSi. (December 2007 – Oktober 2009)
2. Project Coordinator : Ir. Andi Andriadi, MM. (November 2009 – June 2012)
3. Project Secretary : Richma Wahyuni

Address:

ITTO PD 396/06/Rev.2 (F)
Mangala Wanabakti Building Block IV 7th floor, Room 709 A
Jl.Gatot Subroto-Senayan
Jakarta 10270
Email Address: ittopd396@gmail.com

National Consultants

Dr. Bambang Widyanoro, MMAgr.

Executing Agency

Directorate of Plantation Forest Development
Phone : +6221 5730236
Facsimile : +6221 5730258

FOREWORD

Forest plantation development in the future will be a mainstay in meeting the material needs of the timber industry in Indonesia. Until 2030, forest plantations in Indonesia, which covers an area of 20 million hectares of HTI and HTR area of 5 million hectares (Road Map, the Ministry of Forestry, 2010). Therefore a variety of factors that hinder, pose problems, and an obstacle is to be overcome, such as claims, occupation by local community and indigenous people, and work areas overlap with other sectors. Factors that support the successful development should continue to be pursued and improved especially factor of capital investment for private and public, government policy, bio-physics of plants, markets and technology, and social, and demographics.

To support these successes there is no escape from the influence of both local communities and indigenous people and migrant communities. Space or land allocated to the public in the work area of utilization permit for wood utilization from natural forest as well as forest plantation in the area must be optimized to improve their welfare. Access to land resources and capacity of communities must be enhanced to build equity, equality in decision-making, and respect for their rights. Such concept in collaboration should give priority to 3 (three) factors, namely respect for the rights of the public lands, participation in decision making, as well as for mutual-benefit in profit distribution.

Role or involvement of the 3 (three) basic elements, namely the government, corporate, and community in building collaboration is much needed to support the successful development of forest plantations. Strategies that synchronize the three elements must be carefully constructed and done with mutual trust between the three parties. To build that strategy, ITTO project PD 396/06 Rev. 2 (f) conduct studies related to the development of forest plantations, called the "Strategy for Developing Forest Plantation: A Conflict Resolution Approach in Indonesia". The project has been running for 4 (four) years since 2007, with a pattern of collaboration of development of forest plantations in PT. WKS, in the province of Jambi and the PT. AYI in South Kalimantan Province. The study was conducted by a number of 8 (eight) national consultants with their respective activities, including building area of 50 hectare demonstration plot at each location of the company. The results of these studies strongly support the writing of this report, especially in real learning, which in turn awakened understanding as outlined in the memorandum of understanding (MoU) between the partner companies and groups of partners (local communities or indigenous people).

Thanks go to the Director of Business Development of Forest Plantation, Project Coordinator of ITTO PD 396/06 Rev. 2 (f), Jambi Province Forest Service, South Kalimantan

Province Forest Service, and the Forestry and Plantation Office of East Tanjung Jabung District, Jambi Province, and the Forest Service of Hulu Sungai Selatan (South Kalimantan), as well as other parties who contributed greatly to this writing. May this be useful.

Jakarta, May 2012

Bambang Widyanoro

Writer

EXECUTIVE SUMMARY

Study of collaborative forest plantation development strategy: an approach to conflict resolution of land use and utilization of forest resources aim to provide strategic solutions and guidance for policy makers and stakeholders in resolving differences and limitations of the engagement, the recognition of rights, and for equity in benefit in the implementation of plantation development. Approach to conflict resolution methods that are used as far as possible is through the welfare approach or prosperity approach and avoid security approach. Forest plantation development often faces various problems ranging from very simple in the form of land claim to the most difficult form of land ownership. For certain groups, who felt to own the land, it can be "traded" to another party, while in fact changing hands in state forest areas is prohibited by law (Act No 41 of 1999 on Forestry).

Conflict arising from unilateral action begins in the land claim, illegal land occupation (encroachment), licensing overlap, and in many cases because of provocation, giving rise to differences in the interests of land use and utilization of forest resources. Conflict resolution has been done in various ways, but until now the most appropriate way has not been found. In addition to the legal approach, an attempt was made through the welfare approach in the form of collaboration or partnerships between the companies that build forest plantation (collaborative enterprise) and the local community or indigenous people (collaborative group).

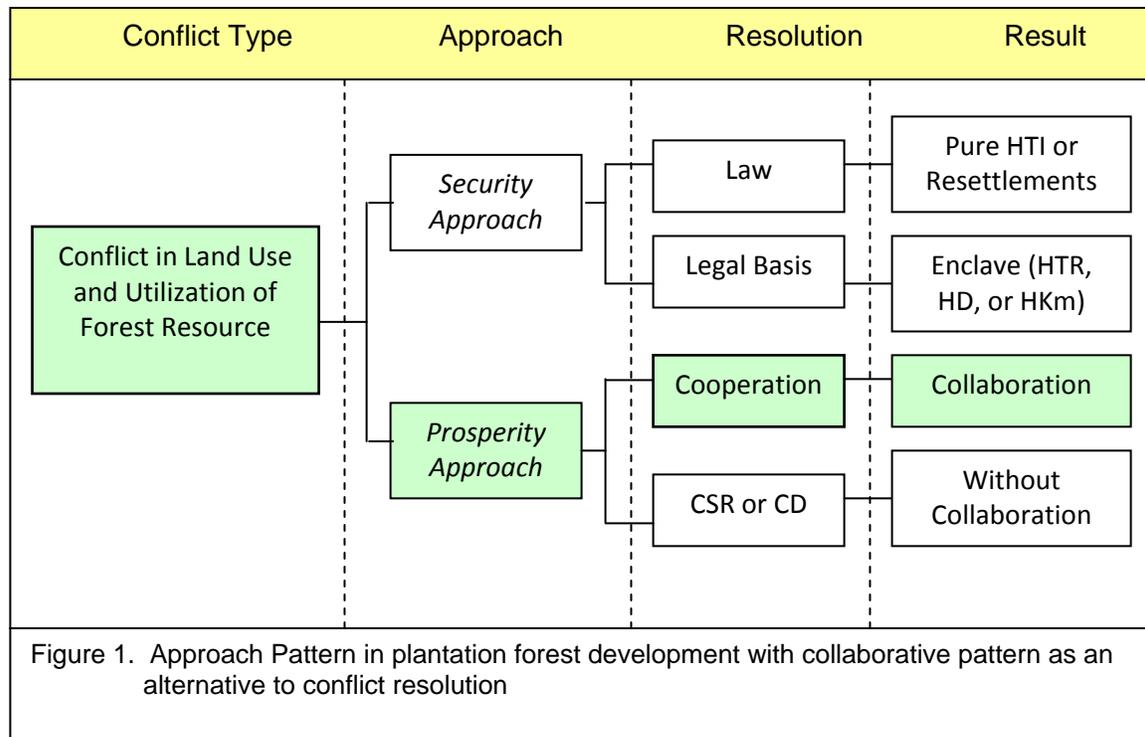
Pattern of HTI development with collaboration is a form of cooperation of mutual benefit between groups of farmers or a forestry business unit that are not strong and the powerful companies (owners of capital, technology, and markets) in the field of forest plantation development. In contrast with partnership, where partnership does not integrate the management, it only emphasizes the benefit sharing aspect with certain covenants that are mutually agreed. Basic requirement for the fulfillment of forest plantation development cooperation with this collaboration patterns are as follows: (1) the participation or involvement of communities in the management of Forest Plantation development in a particular area, (2) collaborating company honors collaborating partner (community) on the acquisition of land by it; and (3) arrangement of benefit sharing between the company and the community who collaborate through the understanding and / or agreements.

Sebab-sebab terjadinya konflik adalah munculnya berbagai permasalahan yang tidak tuntas dalam penyelesaiannya, yaitu antara lain: (1) mekanisme yang kurang efektif dalam membangun kepercayaan; (2) ketidakjelasan penataan batas dan lemahnya penegakan hukum;

(3) tantangan terhadap daya komersial; (4) tatanan organisasi perusahaan yang tidak efektif; (5) tidak berjalannya reformasi hak-hak lokal terhadap kepemilikan lahan-hutan; dan (6) ketidakadilan dalam bagi-manfaat; serta (7) berbagai ketimpangan dan lambatnya proses penyelesaian beberapa keputusan yang telah disepakati bersama.

Causes of conflict is the emergence of various problems that are not completely solved , among other things: (1) ineffective mechanism in trust building, (2) unclear boundary and weak law enforcement, (3) challenges to the commercial power; (4) the company's organizational structure is not effective, (5) unapplied reform of local rights in forest-land ownership, and (6) the inequity in the benefit sharing, and (7) inequalities and the slow process of resolving some of the decisions that has been mutually agreed.

The strategy will be chosen to be in line with Government policy as it relates to the authority of the state forest setting. Policies relating to land use conflict resolution and resource use in the development of plantations should adhere to the criteria 3E +, which is effective, equity (equality), efficient, and have co-benefits (additional benefits) (Engelsen, 2011). Government Policy (c.q. Ministry of Forestry) in meeting these criteria can be done with a security approach and the approach to welfare. Security approach that is effectively and efficiently carried out with due process of law and legal basis, which contributes to the transformation of the integrity of the entire area for a business license for an Entirely Forest Plantation and enclave (the separation of the integrity of the work area) for Community Forestry, Forest Village / Indigenous forests (HD / HAd) and forest Plantation (HTR). The welfare approach that meets all these criteria conducted with the cooperation and corporate social responsibility (CSR), which produces consecutively a collaboration (partnership) in the common forest plants and without collaboration where people can grow plants in the working area of IUPHHK-HT with a maximum share of 5% and 10% of the seed crops from the total effective area of forest plantations (Figure 1).



Strategic solutions that should be done to overcome the problems mentioned above, among others: (1) build trust and good relationship of mutual benefit through the process of accountability and transparency, (2) perfecting the organization of community relations, (3) strengthening the commercial power of the company and collaborative groups, (4) improve decision making in the management of plantations to be collaborated, (5) appreciate or respect for local rights, and (6) speed up the process of resolving the matters agreed upon in several measures to build collaboration that produces additional benefits.

Support for political policies, legality, and regulation is necessary to regulate the principles of collaborative relationships and principles used in conducting such cooperation. Socio-cultural aspects are very important in the foundation of the substance contained in an agreement. Limited financial ability of community to promote the establishment of collaboration, although it does not mean that companies will dominate decisions that will be taken. Investment and markets that support the success of the collaboration is a relationship of inter-dependence. Security tried to be a key factor in achieving the success of plantation investment to support the wood processing industry (industrial timber for plywood, sawn wood, pulp & paper, etc.) as a container for the timber business cooperation. Other factors that support the success of cooperation in forest plantation development patterns of collaboration include: (1) Biophysics of plantations, (2) the recognition or respect local rights, (3) user group collaboration that includes aspects of socio-political, economic, and environment, (4) institutional arrangements, (5) the context of demographic, political, macro, and the market.

Forest plantation development pattern of collaboration involves three main role taker, which are the government, corporate, and community. The three relationships is determined by the conditions of governance, natural resource conditions, and the flow of benefits to society (benefit sharing). Government policy to empower people pursued through: (1) provision of access and capacity building of forest plantations, (2) structuring the collaboration space in the work area of forest plantation development, (3) institutional arrangements in the region and management unit, (4) determining the pattern of collaboration in forest plantation development, and (5) mediation of conflict resolution in land use and Forest Plantation resources. The policy is intended to prevent forest destruction, resolving overlapping licenses, claims, and land occupation with other companies as well as local communities and indigenous peoples, and migrants from other regions. Under this policy, the strategy pursued does not limit the possibility of taking legal action against forest encroachers of forest plantations. Not infrequently the company uses the collaboration group in an effort to isolate settlers that encroaches Forest Plantation, or plant more rapidly in areas occupied or claimed. Another possibility is a compromise made to compromise with communities and indigenous peoples, as well as immigrants and other companies for one planting cycle.

Then set the policy of allocating space for main plantation, superior plants for seed production, staple crops, area for protection or conservation, and infrastructure. The strategy should be pursued through the provision of priority setting for area or block that has problem (overlap, occupation, and land claims), and organize the work area in accordance with its landscape. Institutional setting policy at the regional / site manager or unit is necessary, and can be reached by acting out the function of Forest Management Unit (FMU), the National Forestry Board, Task Force, an institution that is able to provide strict punishment, traditional institution, or community leaders who are still powerful in resolving social conflicts that occurred in the area. The role of cooperative or joint venture group is also the key to success, mainly in increase its economy, and build partnerships / collaborations that can enhance a harmonious relationship among stakeholders.

Policies that provide access and increased capacity to empower communities / forest farmers can be done by providing access to local and indigenous communities to collaborate with IUPHHK-HT, as well as increase the capacity of societal organization, small business, and the productive economy (cooperative / group joint venture). Furthermore, policies that divide the equity in the benefits can be made by dividing proportionately, the equivalent of minimum income of communities / forest farmers in other fields of business, and continuously improve the benefit sharing (mutual-beneficiaries), both major benefits (main-benefit) as well as additional benefits (co-benefit).

Build relationships that improve the socio-political synergy through building harmonious relationships with indigenous and local community leaders to avoid the "door to door approach", and then implement the objectives in accordance with the Millennium Development Goals (MDGs), as well as developing mechanisms and or improve legislation related to the collaboration between the public and Utilization Permit holders of Timber Plantation (IUPHHK-HT). Finally, policies that maintain the stability of contextual collaboration should be taken to stabilize the population demographics of the balancing pressure to the location of forest plantation development, socio-political conditions stabilize the increasing role of non-formal institutions and the strength of local and indigenous communities, as well as stabilize the condition of technology to improve productivity collaboration and the value of commodities.

The action plan is required in order to realize some of the strategies to achieve successful forest plantation development in Indonesia. Patterns of collaboration will run successfully if done through actions: (1) enforce the law to the destroyer of forests and land mafia, (2) perform spatial (landscape) planning consistently, (3) enable the task force for conflict resolution, communication forums and participation forum, (4) establish mechanisms for benefit sharing which is equal and fair as well as provide additional benefits for their cooperation and collaboration for the community and the enterprise; (5) establish the harmonization of forest plantation development, especially in the field; and (6) to stabilize the market and enhance the commercial acumen so as to provide increased revenue for the community in order to alleviate poverty. The substance in this action plan will be realized in practical mechanism in patterns of collaboration in forest plantation development.

TABLE OF CONTENT

	Page
FOREWORD	i
EXECUTIVE SUMMARY	li
TABLE OF CONTENT	vi
LIST OF TABLES	ix
LIST OF FIGURES	ix
I INTRODUCTION	1
1.1. Background	1
1.2. Purpose and Target	3
1.3. Definition and Scope	4
1.3.1 Definition of Conflict and Collaboration	4
1.3.1 Scope	5
1.4. Output	7
1.5. Method	8
II PRESENT CONDITION AND EXPECTATION	9
2.1. Present Condition Plantation Forest Development	10
2.2. Conflict in Land Use and Resources Utilization	11
2.3. Partnership Pattern in Plantation Forest Development	12
2.3.1. Deficient effective mechanism in trust building	13
2.3.2. Unclear border delineation and weakness in law enforcement	14
2.3.3. Challenge from commercialism	15
2.3.4. Challenge from ineffective business organization	16
2.3.4.1. Less effective conflict resolution	16

2.3.4.2.	Mechanism of re-negotiation ignoring the second rotation	16
2.3.5.	Some aspects that need to be improved toward collaboration pattern	17
2.3.5.1.	Building trust and procedures in mutually beneficial relationship through process of accountability and transparency	17
2.3.5.2.	Improvement of organization in community Relation	18
2.3.5.3.	Strengthening commercial power of collaborative business and collaborative group	19
2.3.6.	Improvement of decision making process in the management of Forest Plantation that will be collaborated	20
2.4.	Anticipated Condition	21
2.4.1.	Aspects of policy, politics, and supporting legality	21
2.4.2.	Supporting aspects of social culture	22
2.4.3.	Supporting aspects of investment, finance, and market	23
2.5.	Various factors that support the success of collaboration management	24
2.5.1.	Bio physics of Forest Plantation	24
2.5.2.	Users group / collaboration of Forest Plantation	26
2.5.3.	Institution that support success of collaboration cooperation	26
2.5.4.	Collaboration context of Forest Plantation development	27
III	POLICY AND STRATEGY OF FOREST PLANTATION DEVELOPMENT WITH COLLABORATION PATTERN AS AN ALTERNATIVE IN CONFLICT RESOLUTION	29
3.1.	Government Policy to Empower Communities	31
3.1.1.	Granting of Access and Capacity Enhancement	31
3.1.2.	Space Allocation in Area of IUPHHK-HT	32
3.1.3.	Institutional Order in the Region and Management Unit	33
3.1.4.	Determining Collaboration in Forest Plantation Development	35
3.2.	Strategy of Forest Plantation Collaboration Development	36
3.2.1.	Continual Improvement in Benefit Sharing	36
3.2.2.	Acquiring Harmonization amongst User Group and Enterprise	37

3.2.2.1.	Creating Relationship that Enhances Social Politics Synergy	38
3.2.2.2.	Increase Income for Community Welfare	38
3.2.2.3.	Law Enforcement on Transgression on Land Use	39
3.2.3.	Maintaining Stability of Collaboration Context	40
3.2.3.1.	Stabilizing Demographic Condition	40
3.2.3.2.	Stabilizing Market Condition and Increase Commercial Power	41
3.2.3.3.	Stabilizing the role of institution that Enhances Collaboration	42
3.2.3.4.	Stabilizing Technology Condition	42
3.3.	Action Plan for Forest Plantation Collaboration	43
3.3.1.	Law Enforcement for Forest Destroyer and Land Mafia	43
3.3.2.	Implement Landscape Spatial Arrangement with Consistence	44
3.3.3.	Functionalize Conflict Resolution Task Force, Communication Forum, and Participation Forum	44
3.3.4.	Build Mechanism for Fair Profit Distribution	45
3.3.5.	Build harmonization in Forest Plantation Development	46
3.3.6.	Stabilized Market and Enhance Commercial Power	51
IV	CONCLUSION AND RECOMMENDATION	52
	Conclusion	52
	Recommendation	54
	Suggestion	55
	LIST OF REFERENCE	56

LIST OF TABLES

	Page
Table 1 General features of collaboration cooperation of successful Forest Plantation development	25
Table 2 Action Plan for Forest Plantation development with collaboration pattern as an alternative in conflict resolution in land use	47

LIST OF FIGURES

	Page
Figure 1 Pattern of approach in development of Forest Plantation with collaborative pattern as an alternative conflict resolution	6
Figure 2 Flow of benefit and benefit sharing in development of Forest Plantation with collaborative pattern	29
Figure 3 Space allocation for Industrial Forest Plantation (HTI) and Community Development (CD) Program	33

Chapter 1

INTRODUCTION

1.1. Background

Social change in communities whose lives are based on natural resources will provide a logical consequence, among others, to respond to the policy on how (a) to meet the expectations / demands on natural resources, and (b) to ensure that limited resources are still able to function as an ecosystem (Sardjono, MA, 2011). Policies in community and environmental which has a heterogeneous nature (like Indonesia) and has become more open¹ is facing greater challenges due to (a) the interests / objectives vary, (b) different character / social traditions, and (c) supporting capital are not the same.

Political policy through Law No. 41 Year 1999 on Forestry and government policy contained in Government Regulation (PP) Number 3 Year 2007 jo PP Number 3 Year 2008 on Forest Governance and Compilation of Management Plan and Utilization of Forest to support forest enterprises, in natural as well as plantation forest. Excessive wood exploitation from natural forest, illegal logging, and forest encroachment give rise to very obvious decrease of the availability of forest potential and tree species in the natural tropical forest in Indonesia². As a new paradigm and policy breakthrough in the management of plantation forest in Indonesia³, Plantation forest in shows a continual increase in performance since the 1990s. Ministry of Forestry (2010) reported that HTI plantation has reached an area of 4.22 million hectare from the HTI definitive area of 10.12 million hectare. This low achievement of planting in HTI is because there are still many problems in its implementation, among others super imposed area with other enterprises (estate plantation and mining), also with communities in land use, creating social conflict.

¹ Since the reformation era in 1998, Indonesian people put higher demand on their right of the natural resources (land), including forest. Further, the birth of Law No. 32 Year 1998 about Regional Autonomy, has brought consequences on the decentralization of authority to the region on the utilization of natural resources.

² Up to year 2000, the number of Utilization Permit on Wood Forest Product (IUPHHK) in natural forest reaches around 560 units covering an area of 58 million hectare), while since year 2005 experiences a drastic decrease to around 350 units covering an area of 28 million hectare.

³ Industrial Plantation Forest (HTI) has developed since around year 2000 to fulfill the need of raw material for wood chip industry, pulp and paper that reaches 25 million m3 per year. The definitive area of HTI until year 2010 has reached 9.1 million hectare.

Strategy by forest enterprises to face these problems have been done by complaining to the authorities but have not yet been completely resolved, even new problems arise that keeps changing every year. With the community, the enterprises have also made provision of capital to micro-small enterprises and cooperatives around the forest, become local employer, partnerships or other forms of cooperation. The result have not shown enthusiasm in communities to continuously improve performance, on the contrary they want to switch to other businesses and occupy and claim land to do business of their own in palm oil, rubber, cocoa, and for farming (rice, soybean, corn, etc.).

Government policies that have provided access to the public to be able to do business in the forest area has not reached expectations. The measure is in the slowness of development and achievement of quantity and quality of businesses through schemes (a) Public Forest Plantation (HTR), (b) Community Forest (HKm), (c) Village Forest (HD), and (d) partnerships. Scheme (b), (c), and (d) are community empowerment schemes, while scheme (a) is a public investment that can take advantage of a revolving fund from the Government through the Public Service Board (BLU) - cost of forest development. While efforts in forestry outside forest areas can be the Public Forest (HR), done by managing private land.

Due to the lack of capital and technical ability of communities to manage the social forestry, the company established partnership to implement certain patterns. In this pattern community is yet to be fully involved in forest management, but limited to receiving a share (royalty fee) because the company respects the rights of the land held by them, or given the opportunity to take the job to implement the utilization / development of the forest. Demands continue to grow even to an alarming state not willing to continue the partnership. These partnerships may have not found its true character as yet to be developed as a form of cooperation pattern between companies and communities. Another form of higher levels of partnership is collaboration (a form of combining forest management with community). This is believed to improve the performance of forest development.

Therefore, the ITTO project PD 396/06 Rev. 2 (F) conduct a study, especially in developing strategies to establish forest plantations: an approach to conflict resolution in Indonesia⁴. The conflict that developed in the forest plantation business in Indonesia is not only the forest communities, but also with cross regional migrant communities. In addition, there are also conflicts with other entrepreneurs, especially with enterprises in other sectors, namely the estate crop plantation and mining (Widyantoro, 2009). Forest land tenure reform expected by farmers in general have not materialized significantly (FAO, 2011).

⁴ The title of project ITTO PD 396/06 Rev 2 (F) is "Strategy for Developing Plantation Forest: A Conflict Resolution Approach in Indonesia".

In the preparation of this conflict resolution strategy, several questions arise which are (a) what principles are required in order to achieve the strategy, (b) what is the choice of cooperation patterns desired by both parties and the extent of involvement of both parties in the cooperation, (c) what mechanisms are required by stakeholders to resolve conflicts, (d) how is the benefit sharing pattern arranged so that both cooperating parties work together for mutual benefit.

Some national consultants are involved to assess each activity in the project as follows:

- (a) Strategy for Development of Collaborative Management in Plantation Forest Development in Jambi Province and South Kalimantan Province by Prof. Dr. Ir. Elias, M.Sc.;
- (b) Formal Juridical Framework in Conflict Resolution Approaches in the Provinces of Jambi and South Kalimantan, Indonesia by Dr. Ir. Bambang Widyantoro, MM (Agr);
- (c) Development of Practical Mechanism Collaborative Plantation Forest Based on Relevant Juridical Framework by Dr. Ir. Bambang Widyantoro, MM (Agr);
- (d) Design for Area Demonstration for Collaborative Plantation Forest built in the Provinces of Jambi and South Kalimantan by Ir. Suwignya Utama, MBA;
- (e) Institutional Strengthening in Collaborative Management Approaches for Plantation Forest Development by Ir. Suwignya Utama, MBA;
- (f) Environmental Survey around HTI Area to Look for Suitable Location for Demonstration Plot in the Provinces of Jambi and South Kalimantan by Ir. Hazanal Arifien, M.Sc.;
- (g) Evaluation of Community Participation in location for Collaborative Plantation Forest Development by Dr. Ir. Prudensius Maring, MA;
- (h) Implementation of Collaborative HTI Development at PT. Wira Karya Sakti (WKS) in Jambi Province and PT. Aya Yayang Indonesia (AYI) in South Kalimantan Province by ITTO PD 396/06 Rev. 2(F).

Recommendation of assessment results above will be summarized to support the compilation of guideline on conflict resolution strategy in plantation forest development in Indonesia. Pattern that will be developed is collaborative pattern between community and HTI development companies.

1.2. Purpose and Target

The intent of plantation development strategies drawn up in Indonesia with collaborative pattern is to provide guidance to stakeholders among others the Government, Plantation Forest Development, and Communities in the forest vicinity, or parties related to the development of plantation forests.

The general objective of this study is to provide facilities for stakeholders in setting policies and strategies for plantation forest development through collaboration patterns. The specific objectives are as follows:

- (a) To seek various information on problems in social-economic-environment in plantation forest development and the various conflicts related to it;
- (b) Develop strategies for development of plantation forest collaboration as an alternative to conflict resolution approach;
- (c) Compile guidelines for conflict resolution in plantation forest development through collaborative pattern as a guide in its implementation;

Guideline for conflict resolution in (c) is only of an aid tool for stakeholders in developing patterns that have been made by developer of plantation forest in Indonesia. Moreover, the said guideline could be used to develop collaboration in plantation forest development in other locations if the social and cultural condition of the communities is similar to that in Indonesia.

1.3. Definition and Scope

Definition here is more understood as definition related to conflict and collaboration in plantation forest development. Definition of collaboration differs with definition for partnership. Partnership has been known before in doing cooperation in various forestry activities, while collaboration is not yet known by many in the public. Below will be explained each definition according to result of studies by national consultants about strategy in developing plantation forest: an approach in conflict resolution in Indonesia.

Scope is physical limitation of material to be discussed related to compilation of guidelines in conflict resolution strategy in the development of plantation forest. The choice in plantation forest, according to Elias (2009) is because of its complexity of problem at the present time and in the future in plantation forest development which will be greater than in natural forest.

1.3.1. Definition of Conflict and Collaboration

Conflict is a difference of interests, ideology or opinion, inequities in receipt of benefits between one party and another who caused the problem and can cause harm to either party both material and non-material. Conflict in plantation forest development is the difference between the interests of plantation forest developers and other parties in land use, utilization of results of joint ventures, and inequity in benefit sharing.

Conflict resolution in development of plantation forest is an effort to find solution to the problem arising because of differences of opinions to reach consensus and action to find harmony and mutual benefit among conflicting parties.

Collaboration is a form of cooperation in combined action in the management between one party and another for a particular purpose of mutual benefit for both or for other parties as well. HTI collaboration pattern development is a form of cooperation of management for mutual benefit between groups of farmers or forestry business units that are less powerful with more powerful companies (owners of capital and technology) in plantation forest development. In contrast to partnership, partners do not integrate the management, but only emphasizes the substance of benefit-sharing⁵ with certain agreed covenants.

Basic requirement for the fulfillment of cooperation in plantation forest development with collaboration patterns are as follows:

- (a) Community participation in plantation forest development in a certain area;
- (b) Recognition or tribute of collaborating company on land tenure right of the other party (community); and
- (c) Regulation of profit sharing between company and community that area collaborating through understanding and/or agreement.

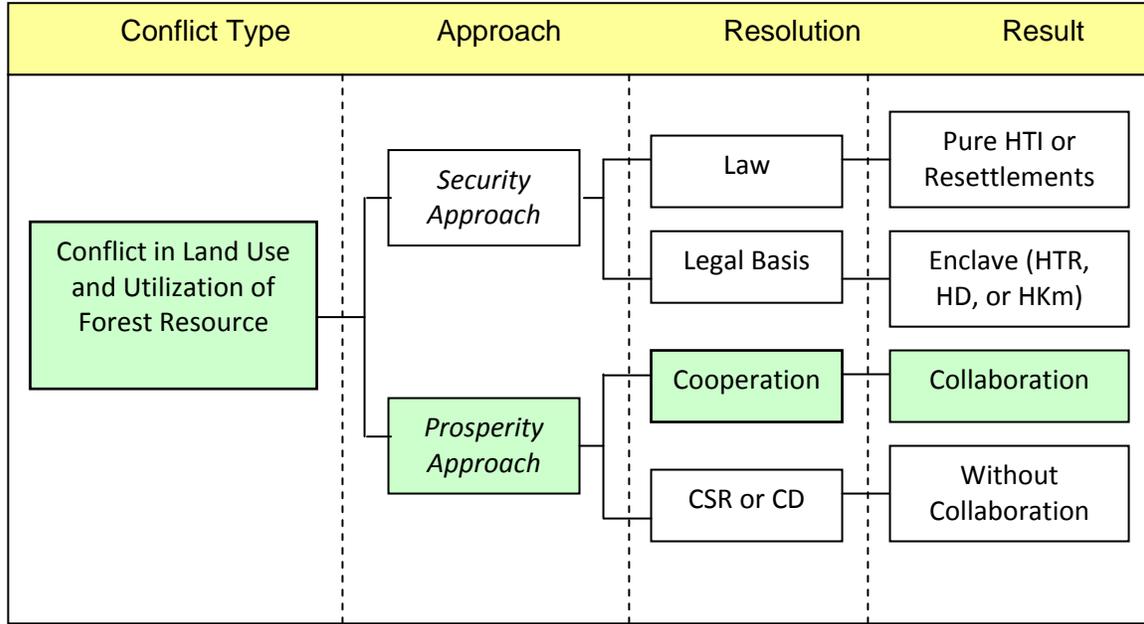
Collaborative patterns of plantation forest development is an alternative to conflict resolution so that development is not constrained by a variety of different interests in land use, especially between community and companies. Government as a dynamic factor and mediator in conflict resolution need to understand the characteristics of the local community. The three main actors should create circumstances for fusion in the management of plantation forest which is mutually benefitting and in harmony.

1.3.2. Scope

The scope of the preparation of guidelines for conflict resolution strategies in plantation forest development is limited to (a) knowledge and understanding of conflict and collaboration, (b) extracting a variety of problems that give rise to conflicts between company and community groups and / or business units that occur in plantation forest development found by case studies, (c) policies and strategies for plantation forest development, and (d) technical guidelines for conflict resolution, and (e) recommendations.

The issue of social conflict could not always be resolved by the settlement even with the welfare approach (prosperity approach). Sometimes it needs to be done with security approach. Below are described the flow of conflict resolution with different results as follows:

⁵ Definition about partnership and collaboration with all its requirements is studied in detail by Widyantoro, B (2009) in "Formal Judicial Framework for Conflict Resolution Approach in Jambi Province and South Kalimantan Province" page 11, and "Development of Practical Mechanism in Collaborative Plantation Forest based on relevant Formal Judicial Framework" pages 3-4.



Note: CSR = Corporate Social Responsibility; CD = Community Development; HTR = *Hutan Tanaman Rakyat* or Public Plantation Forest; HD = *Hutan Desa* or Village Forest; HKm = *Hutan Kecommunityan* or Community Forest

Figure 1. Approach Pattern in plantation forest development with collaborative pattern as an alternative to conflict resolution

Figure 1 illustrates that land use conflict resolution and utilization of forest resources can be done through law, legal basis, partnership, or corporate social responsibility (CSR). The results of conflict resolution can provide (1) development of plantation forests (pure HTI) or local communities, indigenous people and migrants moved from the location outside area of development, (2) enclave for public plantation forests (HTR), Village Forest (HD), or community forestry (HKm), (3) joint collaboration (partnership), or without collaboration by providing land in IUPHHK-HT for productive business partner group.

Guide the development of forest plantations in the pattern of collaboration as an approach to conflict resolution gives more emphasis on socio-economic and environment aspects to support the sustainable management of plantation forests through collaborative patterns. The guide does not include conflict resolution strategy in the management of natural forests. Meant by natural forest management here are forest management on Industrial Plantation Forest (HTI), Community Forest (Community Forestry), Public Forest Plantation (HTR), Village Forest (HD), and the Public Forest (HR). Conflicts usually arise because of differences in interests and inequities in land use and utilization of natural resources (Agrawal and Angelsen, 2010). Difference between the context of legal recognition under state law and customary law are often faced with a complex solution as happens in some areas on the island of Sumatra and Borneo

(Widyantoro, 2009). Case studies are used as reference is the case with the management of plantation PT. Wira Karya Sakti (WKS) in Jambi Province and PT. Aya Yayang Indonesia (AYI)-South Kalimantan Province. The case at both locations can be used for the study of conflict resolution in other plantations.

The pattern that is developed is a pattern of collaborative cooperation in plantation forest development between the license holder for utilization of forest plantations (IUPHHK-HT) and the communities in and around forests. Meaning of collaboration is not the same as partnership that has been developed by the company. However, partnerships can be considered as a starting point to build collaborations between companies holding IUPHHK-HT (**collaborative corporation**) and community groups and / or forestry business units that have not been empowered (**collaborative group**). Community with a variety of limitations should have access to enhancement of capacity to be able to jointly manage the plantation forest and increase its well-being.

This drawn up guide on strategy is a summary of studies that have been carried out by national consultants of ITTO Project PD 396/06 Rev. 2 (F) and extracting strategies from various sources. The outline of this strategy guide is as follows:

- I. Introduction
- II. Case Study on Conflict Resolution in Plantation Forest Management in the Provinces of Jambi and South Kalimantan
- III. Policy and Strategy on Conflict Resolution in Plantation Forest Management
- IV. Guidelines on Conflict Resolution in Plantation Forest Management
- V. Action Plan on Conflict Resolution in Plantation Forest Management

Each chapter consists of sub-chapters which details the basic material in the chapters. The sub-chapters is listed in the list of content of the strategic guideline which elaborations explain its meaning.

1.4. Output

Output of this writing is as follows:

- a. Development of HTI development in Indonesia until year 2010 is pictured clearly and give inspiration on conflict resolution happening in the process of its development;
- b. Results of studies in the form of recommendations made by national consultants can be displayed to support proper strategic compilation in the HTI development in Indonesia;

- c. Policy and strategy of plantation forest development with collaboration pattern as an alternative of conflict resolution on land use and utilization of forest resources in Indonesia;
- d. Guidelines on conflict resolution in the management of plantation forests in Indonesia is complied and implemented at the site level (management unit).

1.5. Method

In the preparation of guidelines on conflict resolution strategies in this HTI development in Indonesia refers to all studies which have been conducted by a national consultant on ITTO project PD 396/06 Rev. 2 (F). The result of such studies becomes the primary basis in the preparation of guidelines for land use and the use of natural resources / forest conflict resolution strategies.

In addition, literature studies was also conducted in order to improve the content of the material intended to establish a forest plantation development strategy in pattern of collaboration as an alternative conflict resolution in development of plantation forest in Indonesia. Extracting field information from communities, companies, and local governments is also made to strengthen the strategy that will be developed. Visited sites are PT. WKS, Sinar Mas Group (SMG) in Jambi Province and PT. Aya Yayang Indonesia (AYI), Barito Pacific Group (BPG) in South Kalimantan Province.

Prior to plantation development strategy of collaboration pattern is published, discussions with relevant parties is carried out, such as the Ministry of Forestry (Directorate HTI), the Forest Service of the Province of Jambi and South Kalimantan, and the East Tanjungjabung District forest service (Jambi) and District of Upper South River District, South Kalimantan, the Association of Indonesian Forest Concessionaires (APHI), NGO Forum, HTI Management Company, and local universities

Chapter 2

PRESENT AND EXPECTED CONDITION

Since the plantation forests were introduced from the early 1980s, the development of forest plantations tends to be very slow. The main cause is because there are enough potential for timber from natural forests, which reach 22 million cubic meters per year that can be produced (APHI, 1995). Development of wood-based industries in Indonesia relies on timber resources of raw materials from natural forests, including fiber-based industry and wood energy. In the decade of the 2000s, the availability wood from natural forest has begun to decline, while timber plantations continue to rise, especially to meet the needs of the raw material of wood-chip industry, pulp and paper. However, the potential of wood from plantations is still not able to meet the overall needs of the raw material timber industry in Indonesia that still require additions of wood from natural forest.

Development of plantations until now is still facing various problems, especially land use, both because of the strong recognition of land rights (claims and occupation) by the local communities and indigenous peoples, as well as business license by business entities (overlap). In addition, other problems often faced by plantation forest managers, are among others: (1) lack of capital investment capital for plantation (2) the effective area of arable land is only about 60 percent, (3) the price of plantation forest timber crops is still very low, and (4) land productivity is very low. Until now, the forms of cooperation developed by partner companies have not produce the optimum benefits for local communities and indigenous people because the income from the plantation forest business is lower compared with the results from the estate crop plantation and mining.

Expected conditions are plantation forest development that reach 10 million net hectares (70%) and HTR area of 1.7 million net hectare (30%) in year 2025 (Ministry of Forestry Road Map, 2011). In addition, the development of community forests (HR) in an area of 50,000 hectares in the island of Java and 5 million ha outside Java will be driven. To reduce conflicts in plantation forest development, formulation of appropriate strategies will be sought. Alternative choices from learned outcomes and case studies are directed at collaborative pattern rather than partnership. The pattern of partnership which is ongoing contains some flaws because it only focuses on the process benefit sharing, and not on involvement in the decision making process

and respect for land tenure that will be used for cooperation. Conditions in the future, development of plantation forest will face serious challenges, particularly in land use conflicts and resource utilization.

2.1. Present Condition Plantation Forest Development

Forest plantation in Indonesia was developed with a variety of schemes, namely the Industrial Plantation Forest (HTI), Public Forest Plantation (HTR), Community Forest (HKm), and Forest Village (HD), and is within production forests area. Other plantations are Public Forest (HR) that are outside forest area and built at the independent initiative of community or a partnership between holder of PLANTATION FORESTS IUPHHK and the community. However, there are still many challenges in its development because of the many claims, encroachment, and overlap in land use that often lead to on-site conflicts. These conditions resulted in the slow development of plantation forest in Indonesia.

Ministry of Forestry (2011) reported that the realization of the HTI plantation for nearly 30 years is only about 4.2 million hectares, which should have reached 9.0 million hectares in accordance with the targets launched in HTI development strategy. Permit for HTI management is obtained from the Ministry of Forestry through IUPHHK-HT. In addition, there are permits obtained by Perhutani State Forest Corporation management in Java with a total area of 2.8 million hectares, consisting on 1.8 million hectares of production forests and 0.7 million hectares of protected forests and conservation forests. It currently has a potential of about 60 million cubic meters consisting of teak (*Tectona grandis*) and non-teak wood. In general, developing plantation forest outside Java is not encouraging, while Perhutani with its plantation forest are still able to continue to improve their forest. Teak wood still has a very high value compared to other forest tree species. Accessibility to forest plantation at Perhutani is a very good - a good road infrastructure, properly connected distribution channels, and electrical energy, and sufficient ports services.

HTI development by holders of IUPHHK-HT which is currently well developed is only HTI-pulp, with plantation forest of acacia (*Acacia mangium*) and eucalypts (*Eucalyptus pellita*), whereas many HTI for wood carpentry are collapsing. From an area of about 1.7 million hectares of HTI-carpentry, only 900,000 hectares still survive, which is developed by holder of IUPHHK-HT individually or in joint venture. In addition, there are transmigration plantations which generally is in a joint venture between state-owned and private companies. HTI transmigration collapse is generally caused by the stoppage of investment capital channel-ed from reforestation funds (DR) by the Ministry of Forestry in 1998 and low accessibility because of the remoteness of the area.

As for other plantation forest such as HTR forest, it is still relatively new (five years running), from a target of 1.7 million hectares by the year 2025 (Road-Map, 2011), but until 2010

only 90,000 hectares is realized through Regents licenses and / or Governor. If the HTR still rely on plants that were developed as HTI-pulp it will be very risky because of the low value. Ministry of Forestry has a policy to allow rubber species that has a better value to be developed on the HTR. However, public do not seem eager to obtain the permission of IUPHHK-HTR. Complex procedures and lack of investment capital are the main obstacles for the development of HTR. Channels for capital investment has actually been opened for borrowing funds through the Board of Public Service (BLU) - Center for Forest Development Funding (P2H Center), Ministry of Forestry, but demand is still very limited because it is a revolving fund. Possible partnership is still constrained by the species of plants that have not been synchronized. Generally, holders IUPHHK large pulp-HTI is willing to cooperate, but not using the same species of plant.

Almost the same as the HTR, the development of HKm and the HD are still very slow. HKm target of 2 million hectares set by the Ministry of Forestry until 2014, reaches only 30,485.55 hectares through licenses from regent or governor. Similarly, HD, from a target of 500,000 hectares only 10,310 hectares is realized through Regent or Governor license. The fundamental problem in both schemes is because the crop has a low value, except for rubber. To plant a superior type of rubber requires a very large fund, which is about Rp 45 - 50 million per hectare on the scale of business, but if public do with self-management, costs range up to Rp20 million per hectare until crop yield gum. HKm can be cultivated to produce non-timber forest produce like rattan, resins, jelutung gum, honey, etc., however, from business aspect, it has not been able to raise the forest value.

On the other hand, HR is highly developed in Java. Until 2010, area of HR reached 2.8 million hectares with production of wood about 6 million m³ per year. HR will continue to grow rapidly along with the proliferation of the timber industry that uses raw materials from HR. This is due to a high demand for meeting the growing industrial raw materials need in Java. Crop productivity per hectare is quite high because the soil in Java is more fertile than outside Java. Plants that are developed by the community for HR are among others sengon (*Paraserianthes falcataria*), jabon (*Antocephalus cadamba*), mahogany (*Swietenia* spp.) In general, HR management are individuals from society, and there are among them who get seeds from the timber industrialists as a program of their corporate social responsibility (CSR). Although the seeds are free, but the wood can be sold freely.

2.2. Conflict in Land Use and Resource Utilization

Figure 1 explains that the conflict of land use and utilization of forest resources is currently showing increase in the quality of dispute between land users. The struggle will evolve further in the direction of destructive tendency or destruction to the spatial order that is being improved by the government. In addition, the planting space that has been designed by the

holder IUPHHK-HT to develop plantation forests is damaged by the claims, occupation, and area overlap for purposes other than forestry businesses.

Approach to conflict resolution can be done in two ways, namely security and welfare approaches. Security approach insists on the legal aspects of security in any conflict resolution even with the use of violence "against" the land users who do not obtain permission. Conflicts with local communities may still be easier to overcome, but with newcomers it will be more difficult to resolve because the problem shifted from merely wanting to use the land for "sale transaction" of land to investors who are generally non-forestry. The expected results of the security approach are **first** implementation in a pure plantation forest development by holders IUPHHK-HT only, without cooperation with any party. Meanwhile, local communities or indigenous peoples, as well as new comers should be resettled to another location. In reality, it is very hard to do although is still possible.

Second, is a resolution through the legal base, which is directed to enclave the conflict area, secluding it from the IUPHK-HT area that has been obtained by the permit holder. However, the area is not allowed for non-forestry business, it is only allowed for the HTR, HD or HKm. The case in PT Wira Karya Sakti (WKS) Jambi is still being championed by the public, especially migrants. They fight for the land area of 41,000 hectares located in the WKS-HT IUPHHK to be used for non-forestry purposes (estate crop plantations). Ministry of Forestry and the Governor of Jambi province in meetings with the community has been giving referrals for planting jelutung and meranti instead of palm oil (Widyantoro, 2009). Government has been mediating the case. Most of the area have found solution by combining palm oil plantations and jelutung for the time being until the end of the palm oil plantation cycle.

The welfare approach is conducted by cooperation through development of plantation forest collaboration and CSR without collaboration. Forms of cooperation has already been initiated by WKS through a partnership, but has not produced the desired shape by a majority of local communities and indigenous people, especially migrants. This situation often interfere with the performance of plantation development by WKS although cooperation on the land that has been carried out beforehand because of its low commercial value. On the other hand, WKS and many other plantation forest companies have channeled funds through CSR in the form of medical assistance, school buildings, place of worship, superior rubber seeds, improvement of village roads, and others. Good intentions are often defeated by other actors who try to speculate by imposing their will to earn money through influencing the transfer of land use.

2.3. Partnership Pattern in Plantation Forest Development

On one side, partnership is useful, on the other hand there is a problem that must be identified and examined for improvements in the future. There is a growing public demand

dynamics over time and needs. At least there are three major obstacles (Nawir, et al, 2000) associated with the partnership that has developed over the years, namely: (1) lack of mechanisms to build trust, (2) clear and rightful boundary, with necessary legal power assurance, (3) unfair distribution of benefits, and (4) ineffective preparation of institution, (5) community involvement in decision making.

The above problem have actually been tried to be overcome repeatedly by the company that owns the (IUPHHK-HT) permit, but the results are not satisfactory because of the demands of the community is still growing. Below is described the factors that are causing it, in order to be clearly identified to find solution.

2.3.1. Low Effectiveness in Mechanism to Develop Trust

To gain the trust of local communities is not an easy process, particularly in relation with skeptical communities due to uncomfortable past experience with a company (Arifin, 2009; Maring, 2009; and Main, 2009). One of the problems in the process of socialization is that there is bias in outreach programs for key target in the socialization program is primarily aimed at group leaders and community leaders. In fact, many plantation companies in Indonesia because they feel they have obtained a valid permit from the government, often ignore the participation and involvement of local communities in the internal management of investment (Elias, 2009). This fact is often conflicting land use as the community / forest farmers are also concerned to fulfill their daily lives.

Some evidence suggests that in its development, PT. Wira Karya Sakti (WKS) is drawing protests from Jambi Farmers Association (PPJ) - a non-governmental organizations (NGOs) in Jambi - which mobilized thousands of peasants from the Jambi community. Although at the end of April 2008 it has been agreed between the Government of Jambi Province and the Minister of Forestry to change the 40,000 hectare concession area in the WKS claimed by and/or occupied by community to change the status into forestry cultivation, with species of meranti (*Shorea sp*) and jelutung (*Dyera sp*), but the problem is not finished because communities have planted the area with palm oil and/or rubber trees (Elias, 2009; Widyantoro, 2009; and Main, 2009). Compromise is to plant meranti and jelutung among plants that has supported their livelihood (Ministry of Forestry and the Governor of Jambi, 2009). With this change, of course WKS will have to improve its partnerships with decision-making mechanisms that lead to collaborative management to avoid the greater demands of the community / farmers in the future. Income levels of community/farmers should be striven to equal the revenue in other sectors.

Likewise, in the PT. Jenggala Universe (JS) in the Barito Pacific Group (BPG) due to no proper socialization process of corporate leaders, an area of 1,200 hectares is claimed by the farmer / community. Community / farmers in the surrounding areas have not benefited from the

planting of forest plantations. The occupation is related to the potential availability of coal in the concession area or as a reserve land to be used for other crops (e.g. rubber). Until now, (JS) leave the area unplanted. Such conditions can lead to wider conflict to spread to other areas. This problem will be more severe than the conflict of land use for oil palm and rubber as an opportunity to earn money from coal is much faster and very large (Arifin, 2009).

Besides the things mentioned above, other pressure factors on the company, includes (1) companies dominate the process of formulating the rights of both parties to the agreement, (2) mechanisms are not effective in obtaining information in a transparent manner. **First**, the case of WKS is associated with the dominant process of formulation of the rights and obligations, individuals do not know the contract documents (SPK) per individual farmer because the document is only given to the Head of Village (Sub-Village) or the head of Farmers Group. This would be a potential conflict between individuals in a group at the time of the distribution of revenue (revenue sharing). Unlike the BP group, the contract document is signed by the individual so that each farmer knows clearly the rights and obligations. Land use contract documents of both companies are not notified to the heirs. This would be a potential conflict in the future.

Second, related to share transparent information, among others: (1) no agreement between the company and its partners on the general provisions in the field to inform each other, (2) there is no schedule for regular periodic meetings to interact and discuss issues that arise; and (3) there is no clear mechanism on monitoring and evaluation activities. Both in WKS and BPG often ignore the transparency of information to be conveyed to the public, e.g. information on wood prices before harvesting and evaluation of a company's financial performance (Nawir, et al., 2000).

2.3.2. Unclear Borders and Weakness in Law Enforcement

Forest boundaries often do not appear in the field, even some forest managers do not implement the unit boundary. But de facto is, even without boundaries, individually held lands in the community is known amongst themselves and is able to show the boundaries of land and is recognized by a neighbor's. The growing migrants from neighboring villages or districts take advantage of the situation of unclear borders of the forest for the benefit of himself and his group (Main, 2009).

IUPHHK-HT holders who have committed their working area boundaries are still experiencing barriers to implementation the development of plantation forest. Boundaries that have gained approval by the government so that it has become a definitive area was still not

enough because it still contains areas that are owned by the community⁶. Therefore, the company is still burdened with their working area boundary, especially pertaining to community land. Those boundaries must be precise and clear to be traced back for optimization of the plantation if necessary at a later date (next cycle).

Furthermore, companies must map out one at a time land ruled by society. If the land is communally owned, the settlement of boundaries should involve the local community (village chief or traditional leader or respected figure). Land use should be done in transparency and consultative dialogue prior to planting activities. If it is the migrant community who control the land then it should be more easily solved than the local community. But sometimes the opposite occur, the migrants is stronger because migrants get additional power from other groups that are very influential in the area. Another additional demographic problem in which people from outside the district or province can even get into the conflict by way of "buying land" offered by rogue elements of illegal land traders. They can stay in that location with a letter of residence as the identity of the village community.

2.3.3. Challenges from Commercial Interest

In addition to timber production and financial benefits in mutually beneficial partnership, it still faces several challenges, among others (1) barriers to effective implementation of plantation forest management plan, (2) inadequate capacity building, (3) investment mechanism which are not yet clearly defined, (4) lack of consideration of the diversified program revenues.

The main challenge to the commercial power is comparative and competitive nature of the commodity that shall be cooperated together. Communities in and around plantations who are close to other areas of businesses will face a tougher challenge because it is always faced with the value of other commodities, like oil palm and rubber or other crops which are more commercial and has a much higher value. Therefore, unit managers should anticipate and always continually make calculations to increase the value of resources that can be multiplied in value.

Internal problems often hinder the effective implementation of management plans. Community and staff management are often given less attention, although they are the closest to the community. Different visions, concepts, and principles to the plantation based development partnership have not been clearly communicated from top management to operational level and field staff. Classical problems in WKS and BPG include (1) multiple interpretations among field staff about the development of partnership whether conflict solving approaches in the occupied lands is good enough, (2) frequent turnover of staff, thus affecting the consistency of application

⁶ The case in PT Finnantara Intiga, West Kalimantan shows condition of border that is unprecise and unclear in the field because almost all of the work area is being occupied by community. Because of it, before company starts its planting activity, a participatory border delination must be done with the ommunities that occupies the land.

of company policies, and also the sustainability of the relationship between corporate staff and the community that is being nurtured, and (3) most companies focus on short-term, thereby not showing the mechanism of re-investment integration, (4) competition with land-use expansion of oil palm cultivation in the WKS, or competition with coal mining in the BPG.

2.3.4. Ineffective Ordinance of Corporate Organization

Early understanding of potential conflicts will help the company in dealing with conflicts before the problem becomes bigger and harder to manage. The main challenge is to develop conflict resolution mechanisms that can be accepted and respected by key partners. In addition to conflict resolution mechanisms, mutually beneficial partnerships need to be built in the MoU including the mechanism of re-negotiation between company and community.

The very fundamental differences in interests between companies and communities / farmers resulted in a conflict of interest in the field. This indicated the existence of conflict between WKS and community / farmers associated with the use of land, as also occurred in the BP group.

2.3.4.1. Less Effective Conflict Resolution

Legal approaches to solving land use conflicts in the field are often not completed because the problem maker is not the actual person being accused. In the closing clause in the MoU it is mentioned that in the event of a dispute between two parties, the settlement is done by consensus, but if consensus is not reached then the dispute will be settled by law in local courts.

Field observations indicate that the appropriate conflict resolution mechanisms are not always built because of a lack of corporate knowledge in the development of several mechanisms. Problems observed in the field include (1) a participatory approach in determining the mechanism of conflict resolution is not commonly used, (2) types of sanctions and how to implement them is not clear. Therefore, companies should set ground rules for resolving conflicts and to impose sanctions, so that conflict resolution mechanisms (or renegotiation) do not permit the parties to change their minds once the MoU has been agreed.

2.3.4.2. Mechanism of re-negotiation does not consider second plantation rotation

Companies should realize that security is an important investment and apply little flexibility into the substance of the agreement. Renegotiation can be done with the following conditions:

- 1) Depending on the company's decision: other things that are not included in the agreement will be renegotiated, and will be accommodated in a separate agreement as long as it is not contrary to the contents of the agreement, and agreed by both parties;
- 2) Legality of the process: the two sides held a copy of the agreement and have the same legal force. Renegotiation of the few points of agreement in the MoU should be known by the notary; and
- 3) Representation of the people: the farmers can be represented by the Chairman of Forest Farmers Group (KTH), or Cooperatives.

Most farmers do not understand on the right or content of the agreement being negotiated. Besides, representative from companies is unable to explain the mechanism of changes regarding the the points in the re-negotiation, for example the chance to re-negotiate price of wood or royalty fee.

2.3.5. Some Aspects that Must be Improved: Toward Collaboration Pattern

Improvements on aspects of management and operational towards better performance in the management of the partnership toward collaboration pattern is largely determined by local conditions and circumstances. Society does not necessarily want to improve co-operation without an object model that is able to improve their welfare.

On the other hand, companies must constantly keep in touch with the latest programs and improve techniques as well as benefit sharing in accordance with the demands of the community dynamics. The performance improvement can be reached through trust building, improve institutional arrangements, ensure and maintain partnerships.

2.3.5.1. Trust building and mutually profitable relationship through process of accountability and transparency

Companies must remain committed from the beginning of the long-term plans and programs agreed upon with the community. In the span of time, a concept of partnership can work as expected on both sides, but the development can be changed according to the social, economic and political dynamics. The company is expected to ensure local community participation approach in the implementation of a socialization program, preparation of agreements, and the draft management plan.

Quite severe conflict is experienced by WKS because of the pressure of the three issues - the company is no longer able to grow in the second cycle of plantation crops because of claim by the community in which farmers want to replace the plant with palm oil or rubber. Although the

community / farmer does not have any official legal tenure, but the company does not have the ability to drive out the farmers from the IUPHHK-HT area. This solution should be sought so as not to grow worse. Companies must do something to build mutually beneficial relationships, among others, to implement a partnership with a combination of species of eucalyptus and acacia with rubber - for palm oil is not justified because this species is not included in the category of forest plants. Company, willingly or not, must make approaches to the community / farmer, it can be done with the help of NGOs, to work together to find the best solution for both sides with due regard to prevailing norms. For that purpose, a review text of the agreement and a change in management plan need to be made.

On the other hand, planting and harvesting activities of the group BP is constrained due to claims by the public related to an alleged content of coal in the plant area, particularly in the area of HTI-trans JS and HS. Albasia, sungkai, and gmelina species for furniture wood is rated by the community to be unable to provide a favorable outcome and must wait a long time to harvest. The interview result with the manager of BPG has provided a good signal to combine the wood species for furniture with rubber in accordance with the participation of surrounding communities. The company may also have the same choice for such a plant which will provide more profit, but still with a combination of timber crops. To stay in accordance with the permit, the plants should be tailored to the needs of the supply of timber to the timber industry.

2.3.5.2. Improvement of Organization in community relation

Claims by the Jambi Farmers' Union in the WKS provide lessons to anticipate the changing social, economic, and political dynamics. Participatory forum between the parties should be built at ground level consisting of elements from the governments, companies, NGOs, and communities (Widyantoro, 2009). At the field level it can be a public resilience institutions within HTI (MFI-HTI), while at the provincial level it can be a HTI Community Communication Forum (FKM-HTI) or it can strengthen the function of the Regional Commissary of the Association of Indonesian Forest Concessionaires (Komda APhi). For the BP group claim has not been as intense as the community demands that occur in the WKS. Therefore, the handling will be simpler, but should remain alert to the dynamic demands of forest communities.

Cooperation which has had the strength or advantage and mutual benefit between the parties should continue to be molded and increased to compensate what the communities could obtain from other companies with different portfolios. For example, WKS had provided employment to the surrounding community through cooperative nurseries, timber transport, and others. These jobs can provide benefits to members of cooperatives and have to be continually kept. BP has not established relevant institutional partnerships with the community, both at field

and management levels. For the foreseeable future an institution has to be established as a forum to discuss issues related to these collaborative relationships.

Community Relations (CR) department should be close to the public so that any problems that arise can be anticipated and resolved faster as early as possible without letting it grow. CR department must also be able to distinguish between indigenous communities and migrants, as well as map out areas that are owned by them. In addition, the CR must also understand the characteristics of the culture and customs of local communities, including existing customary law.

2.3.5.3. Strengthening commercial power in facing collaborating business and collaborating group

WKS and BP groups have linked harvesting product with industries they own. WKS is associated with PT. Lontar Papyrus Pulp and Paper Industry in Jambi, while BPG with PT. Barito Pacific Lumber primary wood processing industry. Both industries are located near the plantation forest area. Thus, the market of timber from the plantation forest development partnership has been secured properly, but still contains problems mainly related to the price of the wood which is still low. Probably this sharing of benefits is considered to be unfair, but the initial agreement has agreed upon the price and a certain portion. Therefore it needs to be pursued so that people receive income from other than wood to give them better benefits.

In addition, the operational cost efficiency is also an important part in the management of small-scale plantation forest, particularly in managing crucial cost components. The disadvantage is such that the operational control activity is only done by the company alone. This resulted that farmers are not being involved in management decisions. It may be that the involvement of the community in providing input to operational management will help companies streamline costs. Through community capacity building around the HTI plantation, out-sourcing activities that can be handled by a small joint venture (KUB) is made possible.

In the long term, reinvestment mechanism should be an important part in the agreement and subsequent management plans. Claim by communities / farmers who happen to WKS for the second rotation of planting showed a group of farmers who do not abide by the Memorandum of Understanding that has been agreed. Plus, it was pointed out that farmers around the plantation offer their land for planting with plants other than wood. These farmers actually own land bigger than two hectares. This has been demonstrated as commerciality of business which are not justified because they are really only able to manage a maximum area of two hectares of land for his family.

Maintaining collaboration in long-term contract is more difficult than the process of initiation. The order must be flexible enough to adapt to the changing socio-economic conditions

within the framework of achieving the goals that are mutually beneficial to both parties. Elias et al (2009) stated that a dynamic process in maintaining partnerships is one way in keeping the collaborative relationship for mutual benefit in the long-term scheme. Transparent information flow, control mechanisms, and renegotiation should always be a part in initiating and implementing partnerships.

2.3.6. Improving Decision Making Process in the Management of Plantation Forest that will be Collaborated

The core of the process towards collaboration is how the process of decision making in the management of plantations forest that shall be established. In addition, the process of recognition and respect for the land which has been held by the public / forest farmers is also an important part that should be a concern if cooperation in collaborative management of plantation forest development is to work. To what extent will the public be involved in the process so that they can retrieve portions of the benefit in equal terms. Communities living inside and around forest in general have the knowledge, skills, and actions in forest management which is relatively low. Because they control the land for generations, they should be involved in plantation forest development planning process on land that is under their control. If people are not involved in the decision making process, it can definitely lead to a conflict of land use and utilization of forest resources (Arifin, 2009)⁷.

Communities still want to an extent a desire to still get a benefit from the forest which had been the source of their livelihood through cultivation on their land, either for food crops or plantations. Replacement of commodities to be planted on public land would change the pattern of their life so that they must adapt to meet their daily need by still being able to plant as they have been doing before. Therefore, in the planning stage, companies must identify and have dialogue with communities /forest farmers in any decision-making (Elias, 2009; Widyanoro 2009; Main 2009). The results of the dialogue and joint decision set forth in the memorandum of agreement between the company and the community/forest farmers. This agreement must become a legal tool that has the force of law respected by both parties.

In making that decision, the company which is far more experienced in the management of plantations forest should not dominate, but must consider the wishes of the people (Maring, 2009). Decisions requiring the agreement of both parties should work towards equality, mutual trust, results-oriented, and benefit sharing should be mutually benefitting⁸. Community

⁷ Land that has been long under the control of communities within and around the forest and used for fulfilling their need for their daily livelihood especially for planting food crops, horticulture, fruit picking, honey, gum, and others.

⁸ Mutual benefit expected by communities is in fact not overwhelming, that is among others to fulfill their need better than before. The measures of benefit varies, but can be approached with the minimum regional wage (UMR)

involvement in decision-making is not only for one time only, but must be evaluated if any changes in the agreement will be made.

2.4. Expected Condition

Plantation forest development in the future will be a mainstay source of raw material for timber industry in Indonesia. Road Map for the Ministry of Forestry (2010) has targeted the area of plantations forest to 10 million hectares of HTI and 1.7 million net hectares for HTR. The problem in the development of plantation forest is mainly caused by land use conflicts and should be addressed. Elias (2009) stated that basically what people in and around plantation forest want is greater access to forest resources to be involved in forest management and obtain services to improve their life. To ensure the successful implementation of collaborative management of plantation forest patterns, expected condition are to include among others:

- a. **First**, communities have ample access toward forest from central and regional government, private companies and state forest corporations having business in forestry, and other stakeholders;
- b. **Second**, communities living inside and around plantation forest have good enough capacity in managing plantation forest.

By using the above figure, the area needed to build 14.5 million hectares of plantation forests is about 22.3 million hectares (reserved area, Road Map for the Ministry of Forestry 2011), consisting of HTI plantations (HTI-pulp, 8.00 million ha; HTI-furniture, 2.62 million ha; HTI-energy, 0.90 million ha), and HTR (HTR-furniture, 1.7 million ha and 2.80 million ha for HR). Based on the above wishes, the expected conditions related to collaborative management of plantation forest development is the increased access and capacity of social welfare. These conditions include: (a) aspects of policy, political, and legal support, (b) social and cultural support, and (c) aspects of investment, financial, and market support. Collaboration in the implementation of cooperation adheres to the principles of good corporate government (GCG) which includes: (a) fairness or equity, (b) transparency, (c) responsibility or accountability, (d) openness, and (e) sustainability. Determination of policy should hold the principle of effective, efficient, equitable, and additional benefits.

2.4.1. Aspects of Supporting Policy, Politics and Legality

The policy of the Government (Ministry of Forestry and Local Government)⁹ guarantees the basic law (legality) for the collaborative management of plantation forest development. In

⁹ According to Law No. 32 Year 2004 about Regional Autonomy, Government in Indonesia is divided in tiers, which is Government (representing Central Government) and Regional Government (Province, District/Municipality).

addition there is the political will and support for implementation of the development of collaborative management of plantation forest from influential senior officials (effective principle). It can be known for example from the availability or absence of budgetary provision/co-funding, existence or absence of section/part, professional staff, and facilities of the Government and Local Government in order to facilitate, foster, and to make plantation forest development program based on collaborative management successful.

The budget in the form of loans or grants must be directly channeled to the forest farmers (principle of efficiency). Meanwhile, if assistance is required, then the budget and planning for assistance is charged to the government. If the company is a guarantor, it does not mean that finances are managed by the company, but it should be known by the chairman of the group (principle of openness). Accountability for all costs incurred in the joint collaboration of plantation forest development is the joint responsibility with farmers group (principle of responsibility).

The policy must contain elements of equality (equivalence principle) in which the holding company IUPHHK-HT and forest farmers have equal bargaining power in decision making. The company is not justified to dominate a collaborative partnership that will create inequality and harms the forest farmers, or it can even lead to new conflicts. In addition to the policy of granting access and capacity of forest farmers, a specific allocation of land can also be given to the farmers in order for them to be able to plant annual crops (principle of additional benefits).

Medium and long term partnership is formally unveiled in a memorandum of understanding (MoU) between the stakeholders in the development of plantation forests. MoU is then followed up with a contract agreement between the individual farmers and holders of IUPHHK-HT with the principles of Good Corporate Governance (GCG). The contract is made and signed before the sub-district or district forestry office officials, or a notary, and was witnessed by officials of District Leader Forum (Muspika) to ensure equality and legality are in force (principle of equivalence).

2.4.2. Supporting Social and Cultural Aspects

There is awareness and proper mindset of the stakeholders to prioritize the resolution of conflicts in the forestry sector through the implementation of collaborative management. For example, there is great interest from the stakeholders, especially communities in and around the plantation forest and plantation forest enterprise to cooperate, and the government considers such cooperation important in order to establish plantation forest. In addition there is a plan of development of collaborative management of plantation forest development at the national level (Ministry of Forestry) and planned by the company in a Business Plan for Forestry (RKU). It is also supported by local government (Provincial Forestry Department), and the district level

(District Forestry Office) which is a short-term plan (annual) and medium to long-term plan (five years).

Recognition or by another term, respect, of land tenure and forest farmers or communities on communal land provides an understanding of common property in land ownership (land tenure). Legislation (Law no. 41 of 1999) does not accommodate public ownership within the state forest area. However, in fact, communities or forest farmers have control of the land for generations to plant arable crops or to meet the needs of daily life before the holder-HT IUPHHK obtain business licenses. On such land, the company must be willing to allocate land for cooperation or for the benefit of annual crops or perennial plant that can provide livelihoods for communities in the short term (one year).

The belief that land use conflicts within the working area of IUPHHK-HT in the state forests can be resolved through collaborative management of plantation forest development. The reason is that forest management collaboration is desired by both the community and shareholders of IUPHHK-HT, because management has elements of collaboration that can provide new sources of revenue for the improvement of public welfare in and around the plantation forest and is a practical tool to resolve social conflicts. Tree planting and forest management activities can be done in a form of cooperation that puts entrepreneurs and community plantation or forest farmers in an equal footing as stakeholders (equivalent principles).

2.4.3. Supporting Aspects of Investment, Financial and Market

There need to be a public institution specialized in financial services to serve the financial management of development funding of plantation forest development based on collaborative management. It is required because during the process of plantation forest development activities are often interrupted due to forest companies and farmers experienced financial difficulties, particularly in the period when plantations forest that are being built have not yielded result (grace period).

Creation of a collaborative management program in plantation forest establishment that offers a financial scheme that is simple, but can provide an adequate income for subsistence farming families during the pre-harvest of forest timber (effective principle). To address the needs of families and the absence livelihood, forest farmers in the grace period, then a part of the forest should be allocated to plant crops to meet the needs of the family, to be planted with food crops and annual crop species. For example, the principal crop plantations is interspersed with plants, plant hedges and fillers that can produce within the next 2-3 years, and plant support for their daily needs (principle of additional benefits).

The certainty of re-investment after timber harvesting and adequate sharing of the benefits to forest farmers, and thus the sustainability of the plantation forest development with

collaboration management can be assured. Re-investment takes place after the planting cycle (e.g. six years planting cycle for acacia and eucalyptus species). It could also be otherwise, where the essential crop (e.g., acacia and eucalyptus), are regarded as additional income for family farmers, while the perennial crop can produce income daily (e.g. rubber). This can provide major benefits in the collaboration (the principle of fairness).

Furthermore it should create market certainty of timber and non-timber forest produce which is free and competitive, capable of absorbing the harvest of plantation forest established with the collaboration management. In this case forest farmers can at least quickly access at any time for the prevailing timber prices in the market. In this regard, government can be facilitate and announce guidelines for the benchmark price of forest products on a regular basis.

2.5. Factors that Support the Success of Collaborative Management

The concept of collaboration in the management of plantation forest development is relatively new, but the pattern of cooperation had existed before, that partnership pattern can contribute valuable learning in continuing the collaboration format. Important contribution of partnerships that have been in operation from aspect of public property, political ecology, ecological anthropology, and environmental sociology have already provide an understanding of the various factors that can support the success of collaboration pattern (referring of opinions of Kaimowitz Angelsen 1999; Charnley and Poe 2007; Ostrom 2007; Larson and Soto, 2008).

The said success factors can be grouped into four sections: Biophysics of plantations forest; related user groups: Institutional arrangement and the external environment (Table 1). Biophysical factors related to resources system. The user group consists of socio-political factors and the local economy. Rules and mechanisms of accountability are part of the institutional order. Demographic, market and macro politics are contextual factors (Agrawal 2001; Dietz et al, 2003; Ostrom 2007, 2009). Within each section, several factors can be influenced by design or through a number of policies, while others are resistant to change, or an external/exogenous factor that can't be controlled.

2.5.1. Biophysics of Plantation Forest

A variety of biophysical factors are associated with system resources used and managed together in collaboration between the company and the community/forest farmers. This includes the size of the resource, the clarity of its physical limits, whether the resource is immovable or moves, the value of resources, the extent to which a resource unit can be stored, and the possibility of estimating the flow rate of profit as well as ease in its monitoring. Institutional arrangements, technological change, and shifts in relative prices can also affect the ease of

monitoring, resource size, and physical boundaries. However, several other features - storage, the precision of estimates and immovability – are apparently irreversible or too costly to maintain.

Table 1. Characteristics in collaborative cooperation in successful plantation forest development

Group of successful factors	Usually contributing factors to successful collaborative cooperation in plantation forest development	Exogenous vs layout
Resource system: <ul style="list-style-type: none"> • Biophysical • Recognition and or tribute 	<ul style="list-style-type: none"> • Common initiative to collaborate • Clear and easy to monitor community land borders • Flow of benefit sharing can be predicted • Resource value in accordance with mutual wish • Land heritage can be traced and proved 	<ul style="list-style-type: none"> • Layout • Layout • Combination • Exogenous • Exogenous
Group of users /collaboration: <ul style="list-style-type: none"> • Social politics • Economy • Environment 	<ul style="list-style-type: none"> • Small to medium size group (easier interaction and face to face discussion) • Mutual dependency between enterprise and community • Homogenous (one tribe) • Relatively well off • Medium dependency on loan • No sudden shocks on resource need • Cultural and environmental value on forest • Previous experience in cooperation 	<ul style="list-style-type: none"> • Combination • Exogenous • Exogenous • Combination • Mostly exogenous • Campuran • Exogenous • Exogenous
Institutional Administration	<ul style="list-style-type: none"> • Easy to understand and implement regulations • Regulations made on site • Regulation take into account differences of level of violation • Regulation help conflict resolution • Regulation assure accountability of users and assisting staff • On site enforcement and effective sanctions • Communication and participation forum • Security of land ownership or land tenure • Ability to seclude outsiders (prevention of entering area of cooperation) 	<ul style="list-style-type: none"> • Layout • Layout • Layout • Layout • Layout • Mostly layout • Combination • Layout • Layout • Layout
Context: <ul style="list-style-type: none"> • Demography • Market • Macro Politics 	<ul style="list-style-type: none"> • Stability of demographic condition • Stability of market condition and increasing commercial power • Stability of policy condition • Stability of technology condition • Government support to lower cost of joint action 	<ul style="list-style-type: none"> • Combination • Mostly exogenous • Mostly layout • Mostly exogenous • Layout

Source: Agrawal and Angelsen, 2010 (modified)

Several studies concluded that communities are more wise in managing forests and have the ability to manage forests of sized between 10 to 15 hectares with clear boundaries and easily monitored, and has a profitability that can be predicted. Larger size forests could not be anticipated to have similar effect. For a family consisting of five persons, the size of the said area to be collaborated can already provide an adequate income for his family (Darusman et al, 2007). Based on these studies, the public can obtain income of above Rp1 million per month (above the UMR).

The additional benefit gained from the collaboration of the management of plantation forest encourage greater initiative for community to cooperate with companies holding IUPHHK-HT. Allocating space of 5% for food crop planting and 10% of space to plant superior species for local people based by decree of Minister of Forestry 70/Kpts-II/1995) also contributed to higher revenues (Widyantoro and Sukadri 2010).

2.5.2. User/Collaboration Group in Plantation Forest Management

The existence of mutual dependence between the users, availability of resources for planning and monitoring, and dependence on forests is associated with a better ability to manage the plantation forest. However, the influence of group size and heterogeneity of forest products and supporting plants is still uncertain (Agrawal 2001). Most resources are managed by groups divided according to various screens, such as ethnicity, gender, religion, welfare, and persona (Agrawal and Gibson 1999). Different dimensions of social diversity vs. politics vs. economics may have different resource governance (Baland and Platteu 1999). Status of indigenous peoples, such as gender, indigenous status, ethnicity, class, and income is a relevant factor to explain the results achieved (Larsen 2003).

In conclusion, small to medium sized communities that have a mutual dependence, relatively affluent, have the technical ability, and adequate institutional facilities and depend on their forests, more potential to create and maintain institutions to regulate the management of more effective collaboration. The effect of diversity of community members is not as clear as the above factors. Some of the above possibilities existing together are extremely rare: an affluent society may not have a high dependence on plantation forests and small communities may not master the vast plantations.

The measure will be difficult when the resources of forest land has been occupied and planted by their forefathers as a legacy to children and families. Evidence cannot be tracked and verified according to the documents required by the legality of land ownership. Therefore, companies should, before making any investment conduct an inventory beforehand of the working area including adequate social aspects, such as: acquisition of land by local communities; existing vegetation; level, local customs and its dependence to the forest, relationship with other business entity, and respected figures by local communities.

2.5.3. Institution Supporting Success of Collaboration Cooperation

Some studies suggest that the management of collaboration or partnership in plantations forest is reinforced by three factors: (1) the certainty of tenure to people who can formulate the rules and exclude others, (2) a number of rules that is easily understood and enforceable to community members among them various community agencies including the imposition of

sanctions, conflict resolution, and (3) accountability mechanisms (Ostrom 1990; McKean 1992, Dietz et al, 2003). Clear and enforceable institutional rules associated with access, utilization, management, exclusion, and removal of natural resources is very necessary to achieve the expected results. Governance of plantation forest resources (such as the HTR, HKm, HR) which are decentralized in investigating the relationship between local institutions and national policy also states the importance of national legislation that support and empower local rules (Agrawal and Ostrom 2001; Ribot et al. 2006). In addition, government regulations No. 19 of 2009 on the District that authorized the District Head to empower the community also helped to resolve conflicts related to land use by the public.

The meaning of local can be defined by birth, residence, relationship with the location, level of dependence on the resource or its contribution to the establishment of local institutions. Local can also refer to the unit at various levels: village, sub-district, district/municipality. Knowledge and local involvement is critical in rule layout and their enforcement (Gibson et al., 2005; Chatre and Agrawal 2008). However, some specific rules may be better designed and enforced by the parties above the local level, particularly if related to the enforcement of rules against their own relatives or dispute between the local management units. Communication forums and participation forum will greatly help resolve the conflict in the area where plantation forest was built at the site with collaborative management. Strengthening of MoU with Muspika or Notary encourages each party to uphold mutual agreement that has been well developed.

The conclusion is that rules that are easily understood and enforced, designed and received in the location in question, which takes into account the different types of offenses, and who helps manage conflict and ensure the accountability of users and staff, will potentially produce effective plantation forest collaboration, including establishment of communication and participation forums (Elias 2009). A number of policies do not understand the role that can be played by local institutions or too difficult to understand, and often use a 'one size applies to all' approach. Therefore, reform of forestry national legislation is clearly needed, so that the various initiatives in collaborative plantation forest management or the provision of access to the public can be integrated with the national timber needs.

2.5.4. Context of Collaboration in Plantation Forest Development

Context is defined as follows: factors relating to demography, culture, technology and market, state of the various state agencies; involvement of nongovernmental organizations, and international aid. Contextual factors determine whether the community can help the proper management of the plantation forest resources that are managed in collaboration. Market and the level of population pressures and changes are a major causative factor (Young 1994; Angelsen and Kaimowitz 1999). Population and market forces that are rapidly changing are more crucial

factor to the success of collaborative management of plantation forests. Higher uncertainty usually indicates a greater negative impact (Bray et al., 2004; Brown 2000).

Better market access that caused the price of various commodities from forestry and agriculture and plantation, or coal to be higher at the site, as well as non-farm employment opportunities will doubly affect plantation forests. Framework of the rental value of land (von Thünen) can be used to investigate in more depth. However, a higher demand for plantation forest products can become a double-edged sword: increasing incentives for long-term management as well as incentives for short-term exploitation and creates the effect of "riders". Technological innovations (such as the preparation of seedlings with tissue culture) that improves the cost-benefit ratio in the harvest of forest crops is likely to disrupt the continuity of resource systems and their governance institutions, unless they are equipped with more stringent regulatory intervention or alternative employment opportunities to reduce the pressure to plantation forests. In this case, the role of the state and regulatory instruments are essential to successful management of collaboration. Decentralization of forestry policies in the last two decades has sparked the growing importance of the need to analyze the effect of various patterns of authority at different levels of governance.

Market pressures, shifting demographics, changing technology and national policy are the most difficult. However, to simplify it, a stability coupled with government efforts to reduce the cost together with community has a positive effect on the success of collaborative management of plantation forest development. Market is strongly associated with increased commercial power on products resulting from the collaboration patterns of plantation forests, which can affect the success of collaborative management cooperation of plantation forests. In this case, a factor which is in a form of granting royalty-sharing should be equal and able to provide welfare to individuals and cooperating communities.

Effect of shifting demographics (migration from different locations) will affect the use of resources. This is triggered by the scarcity of resources in their area so they take advantage of neighboring regions or even between provinces and districts and can control land for the benefit of himself and his group. This shift should be inhibited, especially on land tenure area which has specific of business license. Macro politically, local governments should increase investment in derivative industries from agriculture and estate crops plantations or other sectors, so it will give opportunity to anyone who has the ability to become industrial workers (Widyantoro and Widodo 2010).

Chapter 3

POLICY AND DEVELOPMENT STRATEGY OF PLANTATION FORESTS WITH COLLABORATIVE PATTERN AS AN ALTERNATIVE IN CONFLICT RESOLUTION

Policy in forest plantation development pattern as a collaborative approach to conflict resolution in Indonesia must meet the criteria of 3E + (effectiveness, efficiency, equity, and additional benefits). Policies include policies issued by the government as the license provider and the company as the holder of a license for utilization of timber forest products (IUPHHK). To realize this policy requires the right strategy for plantation forest development in Indonesia. There are two approaches to the strategy used, namely (a) the security approach, and (b) the welfare approach. Security approach should be avoided as far as possible because violence will not end well and can even lead to new, more fatal violence. Security approach is not a focus of discussion in this study because its effectiveness is not known with certainty.

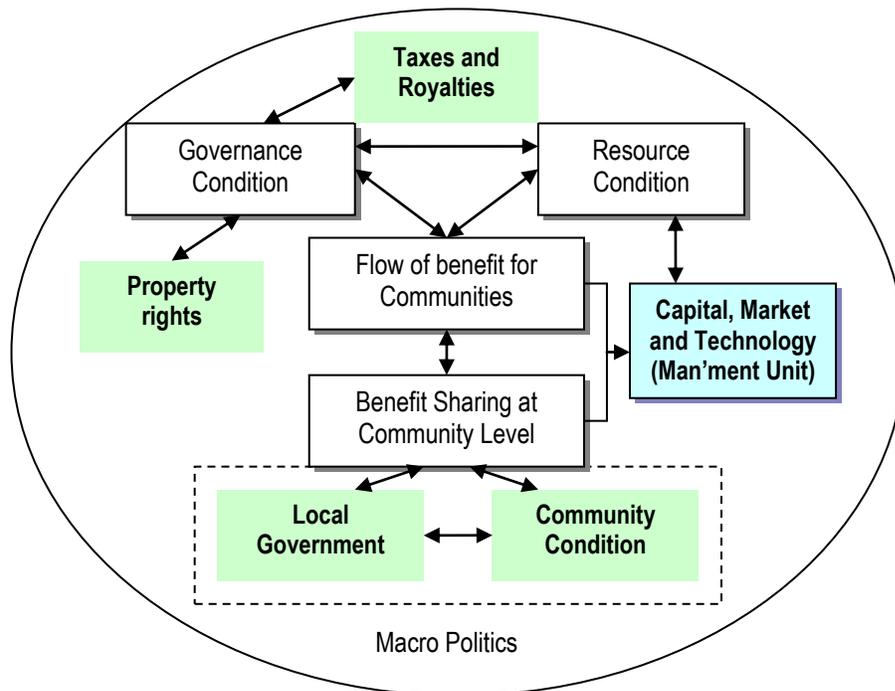


Figure 2. Flow of benefit and benefit sharing in plantation forest (HT) development with collaboration pattern (Mahanty et al. In RECORFT, 2007)

Figure 2 describes how prosperity approach can be done through collaboration between the company holding IUPHHK Plantation Forest (HT) and community/farmers in plantation forest development. Some plantation forest companies, especially industrial plantation forests (HTI) have made HTI development partnership, but the results are not satisfactory for the community/forest farmers. Dissatisfaction with public/farmers is mostly caused by portions and value of money received from the share benefits derived from the crop harvest. Past experience should be a lesson in building the actual concept which is not new, but by improving some drawbacks of partnership, which is the collaboration pattern of plantation forest development.

Below are described the main policies and strategies through the welfare approach. The problems are a major challenge for the plantation forests companies that hold HT IUPHHK permits. This include the consistency of the allocation of space in the area of plantation forests, trust building, commercial power, ineffective organizational structure of company (ineffective conflict resolution, re-negotiation mechanism does not consider second crop rotation), and community involvement in decision making. Elias (2009) found that the most prominent issues and challenges is the limitations of capital and land conflicts (overlapping permits, land occupation, and claims for land ownership), the difference in orientation between the public and license holders.

Policies to enhance benefits in accordance with the ability of forest land for forestry businesses should be provided with an access by the government to that possibility. Business development as an important additional income has become more important due to differences in orientation between the company and the community. The company wants to increase timber production, while the public expects an increase in income from non-timber and timber products (e.g. rubber). A proportional combination should be considered to ensure business continuity by not ignoring the people living in the area (Widyantoro and Sukadri 2009). Improvement of income for communities from plantation forests that are managed together in collaboration may not be as high as expected¹⁰. Flow of benefits and share-of benefits, both to the community / forest farmers, companies, and government can be followed in Figure 1.

Condition and other factual issues which are the weaknesses faced by the community include access by the communities surrounding the plantation forest to the management, management capacity of community around plantation forests have not been evenly distributed, including financial management, entrepreneurship and inadequate marketing skill. Development

¹⁰ Research result on partnership concluded that income of forest farmers for one hectare acacia planting and eucalyptus from tree plantations of 2-3 hectares being managed in partnership by companies in Jambi and Riau is around Rp 240.000 per month. While in West Kalimantan it is around Rp 165.000 per month. If combined with results from rubber latex, it increases sharply, that is around Rp 1.75 million per month (rubber plantation of 2 hectares).

of plantation forest in Indonesia is still not satisfactory due to various factors mentioned above¹¹. This is a major disadvantage faced by the plantation forest management unit in Indonesia, including the financial ability because of the high cost of plantation forest management, while the price of wood from plantation forests is still low.

3.1. Government Policy for Community Empowerment

Since the 1990s, the management of plantation forest (HT) started to grow rapidly, especially plantation forests (HTI) which is capable of supplying around 18 million m³ (30% of the total supply of timber to wood processing industries in Indonesia). It is characterized by increased wood supply from plantation forests in 1990 which is only about 8 million m³ to 31 million m³ in 2010 (Ministry of Forestry Road Map, 2010). The contribution of plantation forests built through partnership pattern has reached to about 2.5 million m³, or 8% of the total supply of timber plantations in Indonesia (APHI, 2010).

To resolve various conflicts of land use and forest utilization, the Government (Ministry of Forestry) has provided an opportunity for the public to participate in forest management in the context of community empowerment. Several schemes of forest utilization and forest management such as through the Forest Village, Forest Community, and Partnership have been provided.

3.1.1. Provision of Access and Capacity Building

Policies to provide access and capacity building to communities to manage forest crops such as Public Plantation Forest (HTR), HKm (Community Forestry for timber enterprises), and HD (Forest Village for plantation forests enterprises), as well as encourage the development of HR (Public Forestry) make increased supply in the future possible. Community capacities which are is still inadequate are: silviculture techniques, financial, and access to banking which is a major problem faced by the public.

The policy is stated in Government Regulation (PP). 6 Year 2007 jo PP. 3 Year 2008 regarding Forest Governance and Forest Management Planning and Forest Utilization. Real policy has been given to community/forest farmers to participate in forest management through the empowerment of communities by providing access and capacity building. To realize community empowerment that can improve their welfare can be done through Village Forest (HD), Community Forest (HKm), and partnership. HD is given the license for the management of the village forest and can take advantage of non-timber forest product, while HKm is granted a

¹¹ The realization of HTI development in Indonesia has only reaches 4.2 million hectares (46% from definitive IUPHHK-HT area of 9.1 million hectare). According to several sources (holders of IUPHHK-HT), the effective plantation forest is only around 60%, some even say under 40%.

license for non-timber forest product collection. If a HD wants to make use of wood, then the unit manager should ask for a IUPHHK-HT or HA, whereas HKm can only submit a IUPHHK HKm-HT license through a cooperative. The implementation for both management units can also be done through a partnership to produce timber.

On the other hand, there is a People Forest Plantation (HTR) within a production forest area that does not have a license. HTR must have a separate license in a form of HTR IUPHHK with an area per family of about 8-15 hectares (Forest Development Funding Center or P2H Center), Ministry of Forestry 2008). HTR plant species can be wholly rubber or combined with some other wood species.

In general, community / forest farmers do not have the ability to access and expertise to manage the forest. Access is granted, but limited to the capital for plantation development. It is necessary for a pattern of cooperation between companies holding IUPHHK-HT and community / forest farmers in order to overcome these problems through a partnership.

Obligations of the partner companies and the government should provide increased capacity to manage forest resources, technology, and guarantees on loans to banks or alternative financial institutions, and the market. Especially for HTR can be done through independent pattern, pattern of the developer, or a partnership (Ministry of Forestry Regulation No. 23/Menhut-II/2007). While in the PLANTATION FORESTS IUPHHK area of work, it is encouraged to perform a joint development partnership or collaboration patterns.

3.1.2. Space Allocation in the IUPHHK-HT Area

Policy to provide space for community empowerment in the work area of IUPHHK-HT has been stated in the Minister of Forestry Decree No. 70/Kpts-II/1995. Provision of space is for essential plant location, protected areas, livelihood plants, seed plant, and infrastructure respectively 70%, 10%, 5% and 10%, and 5%. Type of livelihood plant includes: annual crops (rice and dry agriculture produce) or perennial trees such as rubber in the WKS and AYI area, while the superior plants which are commercial species known locally, such as *Shorea* sp; *Dyera costulata* (in WKS). Main or staple aka essential crops at WKS are *Acacia mangium*, *A. crasicarpa*, *Eucalyptus pellita*, whereas in AYI they are *Paraserianthes falcataria* (sengon), *Gmelina arborea* (gmelina), and *Peronema canescens* (sungkai)¹².

¹² In line with the Decision of the Minister of Forestry No.70/Kpts-II/1995 landscape for development of industrial forest plantation within a forest production area consists of 70% of main plants, 10% of superior trees, 5% of livelihood plants, 5% conservation and protection area, and 5% for facilities and infrastructure.

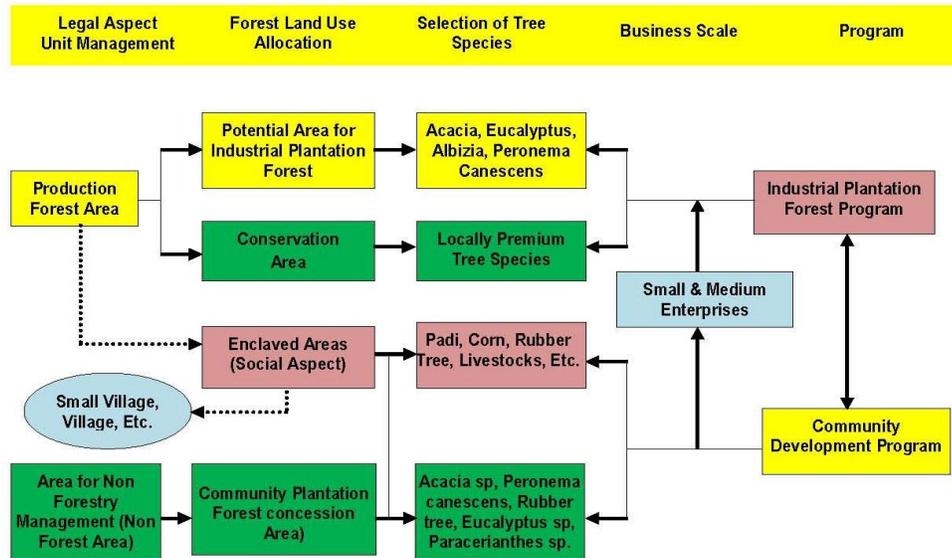


Figure 3. Space allocation for HTI and CD Program

There is a concern for companies holding IUPHHK-HT on the provision of this space because if not strictly controlled, the community/forest farmers often continue to occupy plantation area illegally by opening land for growing crops for their livelihood without the knowledge of forest companies. To overcome the concerns, the Ministry of Forestry issued a letter number 142/BPHT-IV/2007 stating that the seed trees and crop plants did not rule the same as the staple crop, depending on the agreement between the company and the community / forest farmers. To maintain harmony between the plantation management companies and communities, the allocation of acreage to plant for livelihood and the seed should be consistently carried out mainly by plantation management companies as a form of access to the public to obtain additional benefits.

Area for essential crops that is cooperated with the community should provide benefits commensurate with if they use their land for other purposes. Although this is difficult, but to maintain business continuity for plantation company management, continuous improvement must be pursued in order to obtain enhanced benefit for the community/forest farmers. If this cannot be achieved, then community will deny their commitment to the MoU that has been agreed upon, especially for plantation investments in the next cycle (Nawir et.al., 2003).

3.1.3. Institutional Administration in the Region and Management Unit

Law 41 of 1999 on Forestry mandated that forests should be managed to provide multiple benefits to many parties and for the welfare of the people. Although the government is to monitor, develop, and control various activities in the forest, but this control must respect the rights of

indigenous peoples, encourage participation and empower people through participation in the development of forests and forestry.

Institutional policies in the area include the elements of coaching, mentoring, facilitation and conflict mediation, while at the management unit it include top management commitment, organizational community relations (CR), and facilitation of community capacity building. Community empowerment has been mandated in the PP. 6 Year 2007 jo PP. 3 Year 2008 regarding Forest Management, Forest Management Planning. Empowerment of local people is an obligation of the Central Government, Provincial Governments and District/Municipality [(Article 83, paragraph (1) and paragraph (2)].

Coordination of community development at the site, including in the work area of IUPHHK-HT, is performed by the head of sub-district in accordance with the PP. 19 Year 2008 about Sub-District. In the implementation, any agreement between companies and communities that collaborate should be strengthened by the Sub-District Head or the Sub-District Council Leader ('Muspika') and or a Notary. This is necessary as to bind both parties to each other to abide by the rules of the collaborating parties. On the one hand, the company as the holder IUPHHK-HT to manage the plantation, but on the other side, the community/farmer has control of forest land for generations without a clear evidence of land ownership.

For the management unit, the conflict has become an integral part of the overall management of plantation forests. Obligation attached to empower people is done through a partnership pattern. Top management commitment is the key to successful collaboration. These commitments must be realized daily by the unit that is responsible for collaborative cooperation. Strengthening the CR organization is also the key to the success because they are the ones who daily come face to face with the public / forest farmers. CR should report directly to Operational Manager or Field Operation Director (FOD) and then to the Area Manager or Head of a smallest unit of forest sustainability.

In addition, the establishment of plantation forest development communications forum at the provincial or district/municipality level and participation forum in the operational unit at the sub-district level should become a certainty (Elias, 2009; and Widyantoro 2009). Social dynamics near plantation forest is very fast - especially close to residential areas - so it needs quick handling. The role of Head of Sub-District as coordinator of community empowerment is important and has a central role at the operational level. Rapid handling at the district level that is close to the location of plantation forest development needs to be done. Conflict resolution also requires persuasive ways and with dialogue that understand each other.

3.1.4. Fixing Collaboration Pattern in Plantation Forest Development

Collaborative pattern demands participation in decision-making, recognition or respect for the rights of local communities, as well as for the proportional benefit sharing as the main element. In both patterns, the company that hold a license holder must have an agreement and cooperation with individuals or communities/indigenous peoples in managing land – plantation forests. At this stage the land – plantation forest occupied or claimed by the communities have no legal strength on land ownership (Maturana, et. Al 2005).

In the pattern of participatory management/collaboration, each party is bound by the sequence of the management functions that include planning, organizing, implementing and monitoring and evaluation, and supervision. This series of functions shall be incorporated in the MoU which focuses on the important things agreed upon, such as the willingness of cooperation in collaboration, the principles of cooperation, the portion benefit sharing, involvement in decision-making process, and support documentation associated with land tenure. MoU period is usually no more than six months, and thereafter to be followed by an agreement of cooperation in the development of HTI-collaborative pattern for a specified period. Agreement made should be more detailed and binding for both parties to uphold the agreement, particularly in terms of planning responsibilities, rights and obligations as well as mechanisms of benefit sharing.

Another advantage is the pattern of collaboration is among others the immediacy of identification of each problem of cooperation because of the involvement of both parties in the management. Both are able to ensure the accountability of each corresponding rights and obligations agreed upon. Ensure conformity between the results of planned and realization. Losses and the risk of failure that may occur are burdened on both sides. Therefore, each party or jointly preserve the unity and cooperation and substantial crop yields, as well as other benefits as a compensation of collaboration cooperation to provide their area for crop plant and superior plants.

Government need to determine on the pattern of collaboration. In determining the pattern of collaboration attention need to be given to fundamentals and principles, guidance, agreements, benefit sharing mechanism, the establishment of forums of communications and participation, and the rights and obligations of each. Company must be able to carry out its implementation although with some variations depending on the conditions of the community. The proportion of benefit sharing is the most crucial because it involves the amount of revenue to be received. However, equality of benefit sharing ought to be definitely established from the beginning.

3.2. Strategy on Plantation Forest Development Collaboration

The power of IUPHHK holder of plantation forest in the production forest is in the hand of the manager of plantation forests producing wood pulp (HTI-pulp): with capital, technology, and management capabilities; while HTI furniture/tools have less or do not have collaboration capabilities. The major current drawback of HTI IUPHHK holding companies is the lack of confidence because of poor past experiences in doing partnership with the community/forest farmers where they do not get optimal results compared to business other than forestry. The use of the term HTI is to distinguish the meaning with other forest crops systems, such as the HTR that is within production forests, and the People Forest (HR) which is outside of production forest area.

Challenges faced by the holder IUPHHK-HT in the future, among others, are the population pressure that will claim and occupy the plantation area, benefit sharing that satisfy welfare and justice, the limited ability of community/forest farmers in decision making. On the other hand, the opportunity has been opened where land tenure by local communities and indigenous peoples in and around the plantation forest can be equated in a collaboration with the holder of the crude IUPHHK-HT. Below are discussed a variety of strategies to realize the collaboration policy that meets the criteria of 3E + (effective, efficient, equitable, and has the added benefit).

3.2.1. Continuous Improvement in Benefit Sharing

Some scientists have pointed out the specific benefits gained in collaborative patterns of forest plants (Mahanty et al, 2007). The public can receive those benefits that is generally divided into social, economic (direct and indirect), environment, and management (Mukherjee et. Al., 2007; Widyantoro 2009)¹³. Community/farmers should clearly receive immediate benefits to meet the needs of everyday life. Additional benefits to be gained may even be higher than cooperative collaboration in planting wood species. Gain from wood is the result obtained after the harvest (6-10 years) depending to the plantation rotation cycle. Indirect benefit received by local community is infrastructure construction such as: building worship facilities, schools, clinics, roads and bridges in forest areas or inter village link made by the company. In addition, there are environmental benefits that can be felt directly by the public, such as growth and development of villages or districts so as to increase its business in other productive sectors.

¹³ **Social Benefit** among others: (a) strengthening and fostering coordination as well as good governance mechanism, relationship and network (social capital); (b) political empowerment; creation and job opportunities for local communities; (c) institutional building, land tenure right, capacity, welfare and security. **Economic Benefit** among others: (a) access to wood and non-wood products for direct household use; (b) income from sale of wood and non-wood products; (c) results of *agro-forestry*; (d) environmental services market; (e) and manpower in activities of collaboration forest management. **Environmental Benefit** among others: (a) maintenance of environmental services (biodiversity, soil fertility, agricultural productivity, carbon uptake, water and air quality); and (b) sustainable and properly managed forest resource (Mukherjee, et al. 2002 and RECORFTC, 2007).

IUPHHK-HT holders will receive the benefits of collaborative cooperation especially from timber to supply the raw materials for its industry. Local government (district/sub-district) plays good governance over resources and the flow of benefits, which in turn will impact the receiving of increased taxes and royalties from land use, production results, and other benefits that can be enjoyed directly (tangible benefit). Participation forum can encourage efforts to increase the benefits that can be accepted by both parties that collaborate, as well as the organizer of the government.

Figure 1 illustrates the flow of benefits and benefit sharing to be received by the community. Stream of benefits is derived from three interrelated components, namely the condition of resources, governance, and the flow and benefit sharing to communities. The collaborating company as license holder has access to market and technology, as well as management skills. Conditions should be clearly defined on resource boundaries that are controlled by local communities or indigenous peoples. The extent of the area depends on the ability of the early community/farmers in the use of forest land for generations. In some locations, it is limited to the fulfillment of daily needs that are generally only about 2-5 hectares. Developments since the 1990s, where communities started to plant rubber where rubber sap is taken to be marketed by middlemen who come to the location of the rubber tapping.

These efforts must continually be increased, either through an increase in the price of the harvested product or in the value of environmental and social development through improved health, education, poverty alleviation in rural communities near plantation forests. This obligation is in fact not solely the responsibility of the company, but also the responsibility of the government through its various programs. Sub-District Head shall also coordinate community development programs in the sub-district (PP. 19 of 2008). Measure that can be accepted by society as an increase in welfare is above the minimum wage (UMR) per month. In general, the public as plasma in oil palm obtain from harvest yield above the minimum wage, and some have even gained over Rp 2.5 million per month (Widyantoro, 2009). This limitation should be considered part of the company in collaboration with the community/forest farmers. If this is not achieved, the community/forest farmers will turn to other business.

3.2.2. Creating Harmony among Groups of Users and Comapny

Before the companies plan their working area for the plantation forest management unit, it is often confronted with claims, illegal occupation, and overlapping areas and business licensing. Background in socio-political, macro economy and environment of community/forest farmers would involve the government and NGOs.

Continuity of partnership collaboration is also influenced by the strength of the binding regulations for both. In addition, the influence of cultural and environmental value of plantation

forests will support its success. Appropriate policy for the social, political, economic, and environment situation are discussed below.

3.2.2.1. Fostering Relationship that Enhances Social-Political Synergy

Differences in ethnicity, gender, and income in a given location / area can create difference in acceptance in collaboration cooperation (Agrawal and Angelsen 2007). On the other hand, the economic development of the community / local forest farmers and outside influences can directly affect the level of cooperation of collaboration. Heterogeneity of the community / forest farmers could complicate negotiations due to a different understanding.

Political support for development of plantation forests in regional areas often does not conform to the regional development goals and increase local revenue. Plantation forests are not able to contribute a higher rate of return than other non-forestry business resulting in low plantation forests. Supposedly, terms of land use for forestry and non-forestry should be differentiated, but this would complicate planning. Forest areas exist prior to any other area of business activity. Allocation of land in each region must have been taken into account to support the development of business other than forestry. Therefore, the implementation of spatial planning with tough sanctions is to be key to the success of plantation forest development.

Customary law also needs to get serious attention because they are mostly located in remote area and prefer the application of customary law rather than state law. Adherence to their traditional chief can be an advantage to the company if the role of the chief can really be optimized. Companies do need not use a long time to carry out cooperation with the community/forest farmers. This synergy is what is needed by the company rather than having to go "door to door" to make a deal with forest farmers/community.

3.2.2.2. Increasing Livelihood for Welfare of Communities

Not infrequent conflict happen between group of land user in particular local communities and estate crop plantation investors. Settlement of conflict can usually be done through a compromise that can be mediated through the traditional chief or through proportional division of benefit sharing. Business with estate crop plantations is more attractive to the community than business with forestry (wood) which has a much smaller value of benefits. Consistency of application of spatial (landscape) for plantation forests development, which allocate space for beneficial crop planting, is very effective in helping to improve household incomes for communities/forest farmers.

Collaborative forest management initiatives become important for bringing together the views of increasing community/forest farmers' revenue. The area of plantation forests should not be viewed as a unit of planted trees to produce wood only, but can be for non-timber produce

desired by the community/forest farmers. Provision of space for non-timber plantation for beneficial crop is 5% of the effective area of plantation forests. On this land they can make the management of land outside of the main crops which are then considered as "savings", while the food crops for even a regular income (FGD Community Empowerment, 2009).

Efforts to harmonize the relationship between groups of users and companies cannot be separated from the value of the benefit to be received by the community / farmers who are highly dependent on forest land under their control. Clear area boundaries and can be monitored will facilitate the prediction of the flow of benefits in a more precise way so that the expected economic value can be calculated more precisely. In turn, the creation of relationships that eliminate conflict would create income for communities / farmers in plantation forests development.

3.2.2.3. Law Enforcement against Land Use Violation

Understanding of the law in the eyes of local communities or society in general is often not the same as company employees who have had a much higher knowledge. Rules that are simple and easy to understand as well as the sanctions against the violators have been known to lead to successful collaborative partnership (Elias 2009). Approach to conflict resolution is a security and justice approach. Any violators of the law in the area of plantations are given strict sanctions to make them wary. But in reality, law enforcement in Indonesia in general have not been properly implemented so as to encourage people (public) not to be afraid of breaking the law by doing harm others. Although some people have been exposed to legal sanctions, but it is not a deterrent and make them even more daring.

In general, law enforcement officials are somewhat reluctant to impose sanctions to the community/forest farmers who violate the agreement or the regulations made by the government. Awareness of the law has not become the nature of most of community/ forest farmers in almost all locations/regions. Strengthening of MoU by Muspika officials (sub-district level) or through a notary has greatly help increase aware-ness of the law. A case in WKS has led to counter-productive situation due to the absence of the imposition of tough sanctions to non-governmental organizations (NGOs)-Farmers Union of Jambi (RPM) which at the same time have caused loss of the ability of company to work with communities in a particular¹⁴ location. In the same case, there is also a legal process to members of RPM who violates the law in sale of state forest land. The cases are derived from migrant communities, rather than indigenous communities who have the hereditary control of land.

¹⁴ Reported by WKS (2009) that PPJ that initially ask for 41.000 ha, lately (2010) only 7.000 ha is requested by the new PPJ. However, company keep working in this residual area although the new chairman of PPJ persisted in influencing community/forest farmers.

Whatever the arguments is, sale of land/state forest is not justified by the state law. Such a situation must go through the legal approach for making communities /forest farmers and migrants to be aware. A relatively small company that does not have the ability for security approach security will continue to be undermined by rogue elements who seek opportunities due to weak law enforcement.

3.2.3. Maintaining Stability of Contextual Collaboration

Below is discussed the success of which is determined by several factors, namely stability of demographic conditions, stability of market conditions and increased stability of commercial power, as well as macro-political stability. Stability means not without difference in actions and attitudes that can lead to conflict, but the differences are still within the bounds of the layout.

Beyond the limits of the layout, there are exogenous factors that cannot be controlled, but with a straightforward approach understanding can be achieved within the limits that do not interfere with demo-graphic stability, market and macro-politics. A variety of stabilizing support will result in a controlled order to organize the collaboration patterns of plantation forest development.

3.2.3.1. Stabilizing Demographic Condition

Important collaboration elements are participatory involvement in decision-making in management, recognition of local rights, and benefit sharing and outcomes of collaboration. Heterogeneity can produce innovative ethnicity better than a uniform homogeneity. Growth and development of collaboration can grow and evolve rapidly due to positive assimilation (Muhyi, 2011). However, demographic instability would result in the growth and development of the business unit which will be blocked more quickly. This is caused by differences in understanding and different interests. In general, local people / forest farmers want long-term sustainability of cooperation, but migrants have more short-term¹⁵ thinking.

In certain limits, companies still accept the possibility of cooperation with all parties, but with norms and criteria established by the company. This is different to the community / local forest farmers where the company is obliged to cooperate with a mutual land use. The case in WKS clearly illustrates the unstable condition of the conflict as more migrants are more dominant in demanding land use. Local ethnic groups at AYI and WKS are relatively uniform, but migrants

¹⁵ Community/local forest farmers has a longer term idea because its domiciled in the vicinity of the forest to foster a healthy life, comfortable, and easy to get forest produce, and can be enjoyed in the long term. Migrants have short term of thought because generally they are not settlers near the forest, and expect result in s shorter time period including exchanges in capital and land trading (Case in WKS and AYI).

are from the neighboring provinces of Jambi, namely Riau, Sumatra, North Sumatra, West and South Sumatra. Migrants from outside the province of Jambi are more pressing in land claim including selling the plantation forest land.

Population growth in this province, particularly for non-skilled urban continue to grow so as to increasingly put pressure on forest as the only area of open land. That should receive attention from the local government to prevent the occurrence of continuous encroachment by law enforcement. In addition, the macro plan that encourages new investment areas of non-land based business should be prioritized to expand employment opportunities for the new workforce. This should be accompanied by capacity building to enhance knowledge, skills and behavior of non-skilled labor, both for local communities and indigenous people as well as migrants.

3.2.3.2. Stabilizing Market Condition and Increasing Commercial Power

Sustainability of collaborative partnership in plantation forest development will be largely determined by market structure and mechanism, as well as the value of the product itself. The timber market as a staple crop in WKS (*Acacia* sp. and *Eucalyptus* sp.) is until now only to meet the needs of pulp and paper industry of PT. Lontar Papyrus in Jambi and PT. Indah Kiat Pulp & Paper, Tbk. in Riau (Sinar Mas Group, 'SMG'). In the case of AYI, the sengon (*Paraserianthes* sp.) timber is destined for veneer and lumber industries in the Barito Pacific Group, ('BPG'). Thus there is no market mechanism to the flow of benefits received by the community / forest farmers because of a very limited market or with a single buyer (*monopsony* and or *oligopsony*). Price is determined by the buyers with such a depressed level that could harm the community / forest farmers.

Although the species of acacia and eucalyptus wood can be utilized by industries other than pulp and paper e.g. for construction timber for sawmills or other industries, but they are not profitable because the yield is very low. The government can intervene by setting a floor price or the lowest price in order that the collaborating community/forest farmers can enjoy equality as in the non-timber business of plantation forests.

In the situation of the cooperation of different commodities, the public should be informed about the prices of commodities in the market so that the flow of benefit can be predicted well. Community / forest farmers have to find out how much benefit to be gained in the future with joint collaboration. Additional benefits should be created to increase the revenue to be gained from such cooperation. Collaboration is not limited only to wait for the results obtained only after the harvested crop-yield, but partial collaboration opportunities have also to be created, such as outsourcing of planting activities, outsourcing of nursery construction, harvesting, and other plantation forest development activities. Of collaborative work, the community / forest farmers can earn additional revenue of approximately Rp 2.315.000 (Widyantoro and Sukadri, 2008).

3.2.3.3. Stabilizing the Role of Institution that Enhances Collaboration

The government's policy of partnership has been stated in Government Regulation (PP). 6 Year 2007 jo PP. 3 of 2008. However, the rules of implementation (Ministerial Rule) have not been published by the Ministry of Forestry, which includes the principles, respect and recognition of local rights, guidelines by the Government, rule on the mechanism of the agreement, assistance, and benefit sharing. Initial policy requires multi-actor and multilevel involvement. The lowest level (site level) is the management unit, companion, elements of the sub-district and village; actors (community/ forest farmers) must abide to what has already been established. Regulations to be and has been published by the Government (Cq. Ministry of Forestry) must be adhered to by all parties. Therefore, in the policy formulation the role of each party should be included to strengthen mutual agreements.

The management unit must formulate an agreement between holders of IUPHHK-HT and community / forest farmers. Various things can be done to watch over the course of cooperation and collaboration in order to monitor in accordance with what has been agreed. Harmonization of policies between the government and local governments should also be aligned (not mutually counterproductive) which can lead to differences in perception and action.

Communication and participation forums that have been formed are optimized to initiate the government's policy. In addition, management units must establish operating policies that can continue to enhance the value of collaboration with the ultimate goal of obtaining continual improvement of results. Past experience that is less conducive to collaboration should continue to be evaluated and improved from year to year. Ongoing collaborations or partnerships outside demonstration plots in the WKS has increased royalties by setting the distance: the location of a partnership with the furthest distance from the pulp and paper mills earn less than that located nearer. Although it means vulnerability to the farthest location, this effort tries to improve the condition of the company's operational policy.

3.2.3.4. Stabilizing Technological Condition

Plantation technology has been dominated by companies that collaborate. WKS has mastered the technology of vegetative propagation of plants through tissue culture of plus trees. Vegetative propagation has produced several clones of eucalypt species that can increase productivity (Mean Annual Increment, 'MAI') to about 45 m³/ hectare/year. Efforts to stabilize this technology should be followed by plant treatment in the field, including through intensive maintenance. Thus, in 6-7 years the plantation can produce a minimum of 200 m³ per hectare of timber harvest.

Stability of this technology should not only be limited for the main plant, but also for other plant species developed by the community, for example, superior rubber. The species is dedicated to the fulfillment of the division of space in the working area of IUPHHK-HT which is 5% of the total effective area of arable land. Technological developments should continue to be monitored particularly the provision of seeds, planting techniques and plant tending that will enable an increase of several folds of crop yields, or choose a species that has a higher sale's value. Collaborating company must provide facilities for research and development to practice "progressive yield principle" in which this principle implies that the next result should be higher than previous ones.

In addition, attention should be given to the technology of wood processing in order that wood from the crops can be processed faster, and the next harvest will continue. As for the increase in processed rubber latex as plant for livelihood is handed over to other industries outside the company, except if the company will be entering or already have the rubber processing industry.

3.3. Action Plan on Development of Collaboration Plantation Forest

The action plan on conflict resolution is derived from policies and strategies that have been prepared. The action plan is made in the form of a matrix that contains the policies, strategies, action plans and indicators, as well as the person in charge of each of these action plans. This derivative translation can be followed in Table 2.

There are seven policies that require attention to underlying development strategies and action plans. Policies to be formulated should meet the criteria of 3E +, which is effective, efficient, equity, and has co-benefit. Based on the developmental level of conflict in the field, the most prominent problem is the appearance of land use conflicts and resource utilization. Below are described some of the critical success factors of an action plan.

3.3.1. Law Enforcement for Forest Destruction and Land Mafia

Disparities in regional development priorities often leave the role of plantation forests in the scale of priorities and therefore, the forestry sector in the region is marginalized. Such conditions often hit the limits of legality according to the provincial/district spatial plan (RTRWP/K) which has been validated, especially in the forest. In other conditions, persons in the government deliberately take advantage of the unapproved legalization of RTRWP / K while charts are still not accurate. However it has become the basis for the granting of non-forestry enterprises in the forest. Such conditions can result in damage to forests.

Forest destruction can occur due to squatters or clearing of land for non-forestry cultivation in forest areas, forest burning, mining and illegal logging. In general, movements and

actions of people and companies who are trying other than forestry enterprise are uncontrolled, and often fight back. In addition, it is also not rare for unscrupulous brokers are dealing in sale of land¹⁶ transactions. Such problems must be resolved legally and consistently in order to deter the perpetrators from destroying forest.

Resolution of conflicts through law enforcement may be effective, but only temporary because people tend to be fearless to do acts in violation of the law. Barriers to forest destruction, occupation, and land claim can be effective if local communities and indigenous peoples becomes a fortress of defense against the entry of migrants from other area / location, as well as companies doing the same besides only tending forest crops. Sometimes the opposite is true, other areas of business (e.g. palm oil, coal mining, etc.) which offer benefits much higher than in the development of HT. It's a daunting challenge for companies building plantation forests.

3.3.2. Implementing Landscape Layout Consistently

The allocation of space to divide the portion of the allotment area within the working area IUPHHK-HT is crucial if it is not done consistently. The Company may object to these portions because generally effective area of arable land is only about 60 percent of the concession license, including for the portion of other planting purposes (seed trees and plants for livelihood). In addition there are areas that are almost impossible to forest tree species, such as rivers, infrastructure, settlement, rocks and quartz sandy soil, protected areas or conservation for germ plasma.

To balance the need is to engage with communities / farmers who occupy the forest and land outside the 60 per cent by persuading them to become part of the plantation forest development to be planted with main crop. These lands are generally to be commercialized outside the forestry sector by the communities or investors. Therefore, the company had no better choice than having to allocate space in IUPHHK-HT - which can be done through compromises - in order to optimize utilization of land for construction of plantation forest. To that end, the company must do so in earnest in order to reduce the growing conflict.

3.3.3. Funtionalize Conflict Resolution *Task Force* , Communication Forum and Participation Forum

Task Force Team established by the Ministry of Forestry is intended to provide recommendations to the Director General of Forestry Enterprises (BUK), Ministry of Forestry, in resolving land use conflicts. In the last decade, land use conflicts occur more often with very strong tug of war between conflicting parties. Many of these problems cannot be resolved, even

¹⁶ Land mafias has become more active among others in some locations because of the presence of financiers who see opportunities in non-forestry business (for example: palm oil plantation and coal), or taking advantage of the weakness of law because of the unclear forest area and concession.

after asking facilitation by the government. National Forestry Council (NSC) at several IUPHHK-HT locations had a dialogue to mediate the conflict, but have not able to overcome it.

The task force team at least encourages the formation of the communication forum which is made up of multi-stakeholder and multi-actor at the district level chaired by head of local government. This is necessary to dig up any problems as early as possible on overlap, occupation, and land claims by various parties (citizens and companies who do business in other than forestry field). Mediation for dialogue would help to know the various interests that might be accommodated and co-operated within the area of the IUPHHK-HT concession holder.

In addition, it should be followed up with the participation forum, where the forum is located at the site (management unit). For this forum not to become a place for long and never ending debates, then its formation should be facilitated jointly by the company, traditional chiefs and community leaders. Parties must mediate and strengthen agreements that will be built at field level.

3.3.4. Building Equitable Benefit Sharing Mechanism

Mechanism for equitable benefit sharing is not easy to be implemented by the company because of the burden of enterprises in the development of plantation forest. Justice is not very measurable if each party does not have the data accurately and be held accountable. Fair benefit sharing portion can be referenced for example through regional sector minimum wage approach (UMRS). In WKS which is situated in the East Tanjung Jabung District where demonstration plot of ITTO PD 396/06 Rev. (2) is located, applicable UMRS amounted to Rp1.2 million per month (Jambi District Government, 2010). By this standard the company that will collaborate with the community will face objection because based on study of the collaboration, the community only earn a maximum of Rp260.000 per month for the 3 hectares of land that is "handed over" to the company (Wijayanto, 2009).

Therefore, companies should think of giving the chance for other business opportunities in concessions. Existing space in IUPHHK-HT has been allocated to rubber plant that can be made into a livelihood enterprise by the community. The amount of revenue gained from these efforts may reach Rp1.5 million / ha per month (Jambi Forest Service, 2010). If people work together in collaboration, where most land is "handed over" to the company (for example 3 hectares) and 2 hectares of land planted with rubber, then the community will have an average income of Rp 2.02 million per month. However, if IUPHHK-HT is surrounded with dense community, then the company will not be able to accommodate all the people who follow such a scheme. For this, companies are trying to encourage people to form a Joint Business Group (UKB) or cooperatives in order to do other continuous activities which will give them a minimum UMRS income.

3.3.5. Building Harmonization in Plantation Forest Development

Many social problems exist around the forest, let alone IUPHHK-HT with working area that is usually near villages and settlements. Companies should establish harmonization or alignment in order to perform the construction of plantation forests in a peaceful condition. Investor will feel safer and secure about working area that is ensured. So it is with all stakeholders around plantation forests, government and non-government, community and traditional leaders. In short, companies should establish good relations with all stakeholders.

Companies can engage in dialogue with indigenous community, their leaders, and local government agencies. Participation of the company to follow some traditional activity or national holidays, including an event limited to political parties can improve relations and socio-political synergy.

Table 2. Action plan for plantation forest development with collaboration pattern as an alternative in land use conflict resolution

Policy	Strategy	Action Plan	Indicator	Responsible Institution
Resist forest destroyers, super imposition, encroachment and land claim by local community and indigenous people, migrants, and/or other companies	Take legal action against violations of plantation forest encroachers	<ul style="list-style-type: none"> Coordinate with local security apparatus. Report to responsible institution to process further Provide fund for operational cost in encroached areas 	<ul style="list-style-type: none"> Existing coordination with security apparatus Police report Availability of fund for work area patrol 	<ul style="list-style-type: none"> IUPHHK Company Police apparatus Attorney Judiciary
	Using a collaborative group to exclude migrants who penetrated plantation forests.	<ul style="list-style-type: none"> Build team for control and resolution of conflict in land use or TPK-PL. Build plantation forest security units jointly with community/forest farmers. 	<ul style="list-style-type: none"> TPK-PL formed and in function. Plantation forest security units formed and in function. 	<ul style="list-style-type: none"> Company Community that will collaborate with company
	Plant more rapidly in occupied and claimed areas	<ul style="list-style-type: none"> Provide tighter security in areas where plantation have been done. Combine main species planting with other species 	<ul style="list-style-type: none"> Area collaborated Main species in combination with other plants. 	<ul style="list-style-type: none"> Company Community that will collaborate
	Compromise to one community or company planting cycle	<ul style="list-style-type: none"> Do interplanting inbetween main plants in community or company plantation. Replace plants in conflict area according to agreement. 	<ul style="list-style-type: none"> Interplanting in community or other company plantation. No plants not in line with activities of plantation forest development. 	<ul style="list-style-type: none"> Company Collaborating Community Companions
Landscape spatial allocation for plantation forest development	Prioritizing administration of space/blok that has problem (super imposed, occupation and claim)	<ul style="list-style-type: none"> Complete outside border delineation of plantation forests work area. Micro and macro delineation and inventory of location/work area Map out problem area/block/workplot. 	<ul style="list-style-type: none"> Complete area delineation. Macro and micro delineation Result of social, environment, and administrative area (village/sub-district) inventory Map of problem blocks. 	<ul style="list-style-type: none"> Company Forestry Office Planning (Minist. of Forestry) Companions.
	Work area administration in accordance with landscape (staple crop, livelihood plants, superior plants, infrastructure, protection area)	<ul style="list-style-type: none"> Space allocation commensurate with company work plan (RKU) of 10 years. Utilize work area block in line with RKU. 	<ul style="list-style-type: none"> Planting blocks in line with landscape. Space organized for plant allocation. Optimal utilization of available space 	<ul style="list-style-type: none"> Minist. of Forestry. Company Space using community. Forestry Office.

Table 2..... (continue)

Policy	Strategy	Action Plan	Indicator	Responsible Institution
Institutional organization in local/site or management unit level	Functionalize National Board of Forestry in conflict resolution	<ul style="list-style-type: none"> • Build and functionalize task force at the Ministry of Forestry. • Build communication forum among stakeholders and participation forum on plantation forests development at the management unit. • Conduct dialogue with local government about conflict resolution. 	<ul style="list-style-type: none"> • Conflict resolution task force is built and in function • Communication forum and participation forum is built and in function. • Beneficial conflict resolution action. 	<ul style="list-style-type: none"> • Company IUPHHK • Police apparatus • Attorney • Judiciary
	Functionalize institution that is able to give firm sanctions.	<ul style="list-style-type: none"> • Build mechanism regulation on conflict resolution in plantation forests. • Make simple rule but able to give firm sanction. 	<ul style="list-style-type: none"> • Conflict resolution mechanism is available • Firm sanctions are implemented. 	<ul style="list-style-type: none"> • Company • TPK-HT • Sub-district Muspika /Village Head
	Functionalize traditional institution and or dominant community leader, and business enterprise entity such as Cooperatives.	<ul style="list-style-type: none"> • Cooperating with traditional institution and or community leader for conflict resolution individually as well as communal. • Build and functionalize Cooperatives /Mutual Enterprise Group (KUB). 	<ul style="list-style-type: none"> • MoU with chief or leader of traditional community • Cooperative / KUB is built and in function 	<ul style="list-style-type: none"> • Company • Traditional institution and local community leader • Cooperative. • UKM and Cooperatives
	Build partnership or collaboration between company and IUPHHK holder and community.	<ul style="list-style-type: none"> • Build partnership/collaboration in plantation forests development. • Build alternative funding institution (LKA) 	<ul style="list-style-type: none"> • Issuance of Minister of Forestry regulation on partnership/collaboration . • LKA is built and in function 	<ul style="list-style-type: none"> • Ministry of Forestry • Association • Center of BP2H. • Regent
Give access to capacity enhancement for community and forest farmers empowerment.	Give ccess to local communities and indigenous population to collaborate with IUPHHK-HT	<ul style="list-style-type: none"> • Provide space in the IUPHHK-HT area for productive business (livelihood and superior plants). • Prepare plantation forests land for collaborating community. 	<ul style="list-style-type: none"> • Existence of collaboration scheme on management of plantation forests. • Available space in IUPHHK-HT for productive activity. 	<ul style="list-style-type: none"> • Company • Community/cooperatives /KUB managers. • Regent/sub-district head • Companions.
	Enhance community capacity in organization, small business, and productive economy (cooperatives/joint business, etc.).	<ul style="list-style-type: none"> • Provide training and education to community/ cooperatives. • Build demonstration plots for productive business by Cooperatives/KUB. 	<ul style="list-style-type: none"> • Skilled community, knowledgeable, and productive. • Demonstration plot built. 	<ul style="list-style-type: none"> • Ministry of Forestry. • Company • Community. • Forestry Office.

Table 2.... (continue)

Policy	Strategy	Action Plan	Indicator	Responsible institution
Equity distribution in benefit sharing	Distribute proportionally, minimum equal to income of community/ forest farmers in other business.	<ul style="list-style-type: none"> • Make MoU and cooperation agreement. • Predidting benefit flow • Calculate other productive business in the area of IUPHHK-HT (additional benefit). 	<ul style="list-style-type: none"> • MoU and Coordination Agreement signed • Benefit flow predicted • Availability of other productive business. 	<ul style="list-style-type: none"> • Company • Community/forest farmers • Sub-district Head / Muspika apparatus • Companions
	Continually improve mutually benefitting benefit sharing	<ul style="list-style-type: none"> • Regulate mechanism for benefit sharing that is mutually agreed upon • Develop agri business and other productive business to balance business in staple plantation. 	<ul style="list-style-type: none"> • Equitable benefit sharing mechanism is available • Community do not prtotest • Agri business and other productive business built 	<ul style="list-style-type: none"> • Company • Community/forest farmers • Companions • Sub-district head/ Muspika apparatus
Build relationship that enhance social-political synergy	Build harmonious relationship with traditional community and local community leader	<ul style="list-style-type: none"> • Create dialogue with traditional community or community leader prior to plantation forests development. • Create positive relations with formal institutions. • Participate in important national and regional events. 	<ul style="list-style-type: none"> • Harmonization is created with traditional community and community leader • Formal institutions support development of plantation forests in their area. • Participated in several important national and regional events. 	<ul style="list-style-type: none"> • Company • Local traditional institution • Community leader • Formal institutions (minimum at village or sub-district level).
	Align purpose in line with <i>Millenium Development Goals</i> (MDGs)	<ul style="list-style-type: none"> • Build religious facilities, school, clinic, and other constructions usable by surrounding communities. • Involve women for light and productive work in plantation forests development 	<ul style="list-style-type: none"> • Religious facilities built, schools minimally at primary and secondary levels, and other facilities for community. • Employment of women in plantation forests develop-ment activities. 	<ul style="list-style-type: none"> • Company • Village Head and Sub-District Head • Traditional elder • Community leader • Companion
	Cooperate with traditional institution in development of plantation forests.	<ul style="list-style-type: none"> • Build agreement with traditional community in some activities of plantation forests development. • Employ local community and indigenous population (min. 60 %) 	<ul style="list-style-type: none"> • MoU with local traditional community is built • Local community and indigenous population working with company. 	<ul style="list-style-type: none"> • Company • Traditional elder, Head of Village, Head of Sub-District • Companion

Table 2.... (continue)

Policy	Strategy	Action Plan	Indicator	Responsible Institution
Retain contextual stability of collaboration	Improve law and regulations related to partnership or collaboration between community and company	<ul style="list-style-type: none"> Obligate company to implement partnership or collaboration in a consistent manner. Compile law and regulations which enhances quality of partnership or collaboration 	<ul style="list-style-type: none"> Company has implement partnership/collaboration The issuance of law and regulations related to partnership/collaboration. 	<ul style="list-style-type: none"> Ministry of Forestry Company & association National Forestry Board Local government
	Stabilize market and commercial power of collaboration in management of plantation forests development.	<ul style="list-style-type: none"> Specify plant species for staple plantation, plant for livelihood, and superior plants which is more productive Socialize cooperation in collaboration for management in plantation forests development. Create competitive market (not monopsony) 	<ul style="list-style-type: none"> Existence of productive plantation with high value Involvement of conflicting community to collaborate Wood price not depressed Existence of market mechanism (not a single market) 	<ul style="list-style-type: none"> Company Community/forest farmers Companion Institution/comission on Monitoring of Business Competition
	Stabilize demography which balances population pressure to location of plantation forest development	<ul style="list-style-type: none"> Resettlement of indigenous population or local community living within the plantation forests area. Seclude migrant community which encroach forest . 	<ul style="list-style-type: none"> Location for housing settlement for indigenous people and local community is built. No forest encroachment by migrant community 	<ul style="list-style-type: none"> Local government (Governor, Regent/ Mayor, Sub-District Head, and Village Head) Company Traditional Leader
	Stabilize role of institution which enhances partnership / collaboration	<ul style="list-style-type: none"> Create dialogue periodically in communication forum and participation forum Involve local universities to enhance value of partnership / collaboration. 	<ul style="list-style-type: none"> Dialogue is created periodically (min. once in every three months) Innovation exists in enhancing productivity and community income. 	<ul style="list-style-type: none"> Company Local universities. Community/forest farmers Sub-district Head
	Stabilize technological condition to enhance productivity and value of commodity of partnership/ collaboration	<ul style="list-style-type: none"> Make comparative studies to other region which apply a more efficient new technology. Apply simple technology which enable the increase of commodity value 	<ul style="list-style-type: none"> New, more productive technology is applied Simple technology that is able to enhance value of commodity is applied. 	<ul style="list-style-type: none"> Company R & D Institution

Another more concrete form is a community development with its various forms of development, such as religious facilities, schools, multipurpose building, polyclinics for community, and others which have a high value to the good name of the company. Politically, the company can work together with a quite strong non-governmental organization (NGO) in the area. Company may cooperate with the NGO if necessary to assist community in collaboration with the company.

3.3.6. Stabilizing Market and Enhancing Commercial Power

Market for commodity from the crop of collaboration has actually been guaranteed by the industry is in the group¹⁷. Such conditions do not reflect actual market conditions and competitive market mechanism may not occur. At least, the company is to ensure market certainty. It's just that, a compromise price of timber harvest is a crucial point because it determines the amount of revenue to be received by community. Company is more likely to apply a royalty¹⁸ to the community that "surrender" their land to the company to grow staple crops. In addition, other quantities can be added depending on the distance of the area (land) of the community who cooperated. The further the land, royalties gets cheaper because the company must bear the cost of transporting the timber to the mill. Such company policy was not the best solution because the results obtained by community are too small. Therefore, the company must continually strive to improve the commercial power of what is being cooperated and thinking about what the community can be obtain as an added benefit.

Additional benefits will enhance the collaboration of commercial cooperation. Community that is willing to collaborate with the company should receive a different treatment from that which does not collaborate. Community in collaboration with the company shall be treated as part of the management of plantation forests development. Therefore, they should be given an advantage in some cases, such as a priority in volume of outsourced work in the development activities of plantation forests. Local community and indigenous people will very likely get a chance to utilize the space for livelihood plants.

To design all activities related to collaboration with community cooperation, the role of company community relationship (CR) is very important. They are the ones closest to the local community and indigenous people. Officers must blend with the community early in order to accommodate all the existing problems in the field. This is done so that problems can be resolved quickly, before it becomes increasingly larger.

¹⁷ At WKS, all trees originating from its HT is allocated for raw material of pulp and paper industry of PT. Lontar Papyrus in Jambi, while in BP group for veneer and swamill industries within its area of concession.

¹⁸ Royalty is known at the Sinas Mas Group. Calculation of royalties is based on wood volume that is produced from harvest times the tariff fixed by the company (for example Rp15.000 per m3).

Chapter 4

CONCLUSION AND RECOMMENDATION

4.1. Conclusion

Differences in interests between parties over land and forest resource users and beneficiaries led to many frictions that lead to horizontal and vertical conflict. Frictions that caused the conflict are caused by claims, occupation, and overlapping land use. Different development policies between the Government and Local Government after the reformation or during the era of regional autonomy have influenced the actions of forests and forestry development. Laws and regulations related to land-based development, among others, Law no. 41 of 1999 on Forestry and Law. 32 of 2004 on Regional Autonomy, Law no. 5 of 1960 on the Fundamentals of Agrarian Affairs, as well as government regulation and its implementing regulations are sometimes not synchronized and consistent, giving rise to different interpretations according to its interest. Further, such implementation would cause disharmony among the sectors and regions, including the community involved in the development process.

Development of forest plantation in Indonesia is so rapid and is not free from conflict, either with community or with non-forestry sector companies. The expansion of forest plantations throughout Indonesia are often in conflict with the local community and indigenous peoples, as well as migrant community. The latter often served as the trigger that led to the conflict because they not only control the land to farm, but sold land to other communities and investors. Conflicts involving various stakeholders in an effort to the expansion of forest plantations will affect the performance of company as the holder of an operating license. Work area for forest plantation development is difficult to achieve optimal area, sometimes it only reached a maximum of 60% of the total area of arable land that could be planted with staple crops, the remaining area have problems with others.

Causes of conflict is the emergence of various problems that are not final in its solution, among other things: (1) less effective mechanism in building trust, (2) unclear boundary and weak law enforcement, (3) challenges to the commercial power; (4) ineffective orderliness in company

organization, (5) no reformation of local rights to forest-land ownership, and (6) inequity in benefit sharing, and (7) imbalances and the slow process of resolving some of the decisions that have been mutually agreed.

Approach to conflict resolution can be done with two approaches, namely the approach to security (security approach) and the welfare approach (prosperity approach). The security approach is more focused on the conflict among forestry companies and / or inter-sector areas of non-forestry businesses, and community newcomers. Conflict with the local community and indigenous peoples should as far as possible be resolved through the welfare approach through various actions of partnership or collaboration. Cooperative collaboration in crop patterns of collaborative forest management emphasizes community involvement in decision-making process and would determine the management of plantations. Principal terms of cooperation fulfillment of forest plantation development patterns of collaboration include: (1) community participation in forest plantation development in a particular area, (2) the recognition or respect for the company to collaborate on land ownership by another party (community), and (3) the arrangements of benefits sharing between the company and the community who collaborate through understanding and / or agreements.

Strategic solutions that should be done to overcome the problems mentioned above include a mutually beneficial relationship, strengthening governance with communication forum and participation forum, improvement of plantation forest values and additional benefits, improve decision making, respect for local rights, and speed up the process settlement of the things that has been agreed. Various supports are needed to achieve success. Support includes several key factors that influence its success, namely: (1) investment and market that support the success of the collaboration is a relationship of mutual dependence, and (2) business security becomes a key factor in achieving the success of the plantation investment. Other factors, (3) biophysics of plantation forests, (4) recognition and respect for local rights, (5) user group collaboration that includes aspects of socio-political, economic, and environment, (6) institutional arrangements, (7) demographic, macro politics, and market context.

Strengthening the leading role in plantation forest development with collaboration pattern include government, private, and community. The inter-relationship between the three is determined by the conditions of governance, natural resource conditions, and the flow of benefits for the community (benefits sharing). Mediation on conflict resolution in land use and utilization of plantation forest resources is to be the primary role of government. The private sector wants certainty of area and security guarantee of investment. Community party wants its rights to be recognized to work or manage their land to make ends meet, or for the purpose of increasing revenue to be more prosperous. Cooperation between the company and the community can have a double function as a form of investment security as well as to improve welfare. Not infrequently

the company uses the collaboration in an effort to isolate settlers who penetrated the forest plantations, or plant more rapidly in areas occupied or claimed. The role of cooperative or joint venture group is also the key to success mainly in increasing its economy, and build partnerships/collaborations that can enhance a harmonious relationship among related stakeholders.

Policies that provide access and capacity building to empower the community / forest farmers can be done by providing access to the local community and indigenous people to collaborate with IUPHHK-HT, as well as community capacity building in the organization, small to medium business, and the productive economy (cooperative / joint venture group). Furthermore, policies that divide the equity in the benefits can be made by dividing proportionately, equivalent to minimum income to the community / forest farmer in other fields of business, and continuously improve the mutual-benefit through benefit sharing.

Action plan is required in order to realize some of the strategies to achieve successful forest plantation development in Indonesia. Patterns of collaboration will run successfully if following actions are done: (1) enforce the law to persons who destroy forests and land mafia, (2) perform spatial (landscape) planning consistently, (3) enable the task force for conflict resolution, communication forums and participation forum, (4) establish mechanisms for benefit sharing which is equal and fair as well as provide additional benefits to the community and company for their cooperation and collaboration; and (5) establish the harmonization of forest plantation development, especially in the field; and (6) to stabilize the market and enhance the commercial power so as to provide increased revenue for the community in order to alleviate poverty. The substance expressed in this action plan will be realized in a practical mechanism of plantation forest development collaboration patterns.

4.2. Recommendations

- (1) Company with license for wood forest product utilization can use legal action if conflict resolution cannot be finished with prosperity approach especially in difficult cases and has a tendency to lead to anarchy;
- (2) Development of plantation forest with collaboration pattern as an approach to conflict resolution must be first sought by building a pre-condition (condition of social-cultural, and economy of local community and indigenous population) after it is exactly known the conflict statement of land use and utilization of forest resource;
- (3) On locations for plantation forests development where other plant species have been planted, in addition to main business of concession holder, a compromise could be arranged for one

planting cycle or interspersed between plantings by community, superior trees or livelihood plants in planted in accord with landscape planning;

- (4) Business permit holding company must make effort continually to improve benefit sharing to local community and indigenous people related to the development of plantation forests through collaboration pattern as a form of providing access. In addition, company should increase capacity to foster local community and indigenous population in the vicinity of plantation forests in order to enable them to do productive business to enhance their welfare;
- (5) Government has the duty to provide a conducive business climate to entrepreneurs in plantation forests development. Resolution to arising conflict should as far as possible be done with dialogue to produce harmony in plantation forest development. The role of institutions such as National Board of Forestry, Minister of Forestry task force, traditional institution and community leaders, as well as communication forum and participation forum to help conflict resolution through efforts in collaboration.

4.3. Suggestion

- (1) Increase of conflicts happening in several locations of plantation forest development which lead to destructive tendency must be found solution through law enforcement and strong mediation from the government;
- (2) If resolution in the form of judicial process does not succeed, other forms must be tried as for example a legal basis with schemes that is acceptable to stakeholders but which is not detrimental to forest area;
- (3) Acceptable mediation should be developed in forms of cooperation which enhances forest value, such as giving access to community to participate in development through a small scale business enterprise (for example in allocating 5% of effective IUPHHK-HT area) and/or through CSR that is able to boost productive business sector.

LIST OF REFERENCES

- Arifien, H. 2009. *Survei Lingkungan Sekitar Areal HTI untuk Mencari Lokasi yang Sesuai untuk Plot Demonstrasi di Provinsi Jambi dan Provinsi Kalimantan-Selatan*. Environmental Survey in the Vicinity of HTI Area to Identify Proper Location for Demonstration Plot in the Provinces of Jambi and South Kalimantan ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- Bao Huy. 2005. *Community Forest Management: CFM Technical guideline*. Hanoi, Vietnam.
- Elias. 2009. *Strategy for Developing Plantation Forest: A Conflict Resolution Approach in Indonesia*. ITTO Project PD 396/06 Rev.2. Jakarta.
- FAO. 2005. *Community-Based Tree and Forest Enterprises*. Food and Agriculture Organization of the United Nation, Rome, Italy.
- Ingles, AW., Arne Musch, and Helle Qwist-Hoffmann. 1999. *The Participatory Process for Supporting Collaborative Management of Natural Resources: An Overview*. Food and Agriculture Organization of The United Nation. Rome, Italy.
- ITTO. 2007. *Community-Based Forest Enterprises: Their status and potential in tropical countries*. ITTO Technical Series 28. ITTO, Yokohama, Japan.
- Kementerian Kehutanan; Ministry of Forestry* 2011. *Road Map Pembangunan Industri Kehutanan berbasis Hutan Tanaman*. *Kementerian Kehutanan RI*. Road Map of Forest Industries Development based on Plantation Forest. Ministry of Forestry, RI. Jakarta.
- Kusumanto, T., E.L. Yuliani, P. Macoun, Y. Indriatmoko and H. Adnan. 2005. *Learning to Adapt: Managing Forests Together in Indonesia*. CIFOR, YGB and PSHK-ODA. Bogor, Indonesia.
- Maring, P. 2009. *Penilaian Partisipasi Community pada Lokasi Pembangunan Hutan Tanaman Kolaboratif*. Community Participation at the Location of Collaborative Plantation Forest Development, ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- Maturana, J., Hosgood, J., and Suhartanto, A. 2005. *Moving Toward Community-Company Partnerships*. CIFOR. Bogor, Indonesia.
- MOF. 2007. *Regulation of MOF No. 23, 2007: Community-based Forest Plantation*. Jakarta, Indonesia.
- MOFR. 2006. *Working Group for Accelerating Community-based Plantation*. "Discussion paper for accelerating community-based tree planting in Indonesia." Prepared with support from World Bank-WWF Alliance. Jakarta, Indonesia.
- Nawir, AA., Levania S., Irfan Mudhofar. 2003. *Towards Mutually-Beneficial Company-Community Partnerships in Timber Plantation: Lessons Learnt from Indonesia (Working Paper No. 26)*. CIFOR. Bogor.

- Peluso, N.L. 1999. The Role of Forest in Sustaining Smallholders. In R. Schmidt, J.K. Berry & J.C. Gordon, eds. *Forest to fight poverty: Creating national strategies*, pp. 38-64. New Haven, Connecticut, USA & London, Yale University Press.
- RECOFTC. 2007. *Sharing The Wealth: Policy and Legal Frameworks to Support Equitable Sharing of Costs and Benefits from Community Forestry*. Synthesis of discussion at the Second Community Forestry Forum, 21-22 March 2007, Bangkok, Thailand, RECOFTC, FAO and SNV, Bangkok.
- Utama, S. 2009. *Desain untuk Area Demonstrasi Hutan Tanaman Kolaboratif yang Dibangun di Jambi dan Kalimantan Selatan*. Design for Demonstration Area of Collaborative Plantation Forest built in Jambi and South Kalimantan. ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- _____. 2009. *Penguatan Kelembagaan pada Pendekatan Manajemen Kolaboratif untuk Pembangunan Hutan Tanaman*. Institutional Strengthening in Collaborative Management Approach for Plantation Forest Development. ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- _____. 2009. *Pelaksanaan Pembangunan HTI pola Kolaboratif di Lokasi PT. Wira Karya Sakti (WKS) di Provinsi Jambi dan PT. Aya Yayang Indonesia (AYI) di Provinsi Kalimantan-Selatan oleh Tim ITTO Project PD 396/06 Rev. 2(F)*. Implementation of HTI Development using Collaborative pattern at Location of P.T. Wira Karya Sakti (WKS) in Jambi Province and P.T. Aya Yayang Indonesia at South Kalimantan Province by the ITTO Project PD 396/06 Rev. 2(F) Team. Jakarta.
- White, A. and Martin, A. 2002. *Who own the world's forest? Forest tenure and public forest in transition*. Forest Trends/Center for International Environmental Law. Washington, DC.
- White, A. and Martin, A. 2003. *Strategies for Strengthening Community Property Rights over Forests: Lesson and opportunities for practitioners*. Forest Trends. Washington, DC.
- Widyantoro, B and Doddy S. Sukadri. 2007. *Integrated Community-based Forest Plantation: Case Study on Forest Plantation in Finnantara, Co. Ltd, West Kalimantan*. Jakarta, Indonesia.
- Widyantoro, B. 2009. *Kerangka Yuridis Formal untuk Pendekatan Resolusi Konflik di Provinsi Jambi dan Provinsi Kalimantan Selatan*, Formal Judicial Framework in Conflict Resolution Approach in the Provinces of Jambi and South Kalimantan, Indonesia. ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- _____. 2009. *Pengembangan Mekanisme Praktis Hutan Tanaman Kolaboratif Berdasarkan Kerangka Yuridis Formal yang Relevan*. Development of Practical Mechanism of Collaborative Plantation Development based on Relevant Formal and Judicial Framework. ITTO Project PD 396/06 Rev. 2(F). Jakarta.
- World Bank. 2006. *Sustaining Economic Growth, Rural Livelihood, and Environmental Benefits: Strategic Options for Forest Assistance in Indonesia*. World Bank, Jakarta, Indonesia.