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# Deliberation Process Analysis of Community Based Forest Management Policies Implementation in Indonesia

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Abstract— Political and social changes since Indonesian's reformation placed Perhutani in an uneasy position. It led to massive deforestation and degradation in state forests land in Java until now. These acts, perpetrated by miss-management and decrease in the quality of forests resource, were driven by a complicated set of issues. Community-Based Forest Management (CBFM was known as PHBM) was introduced by Indonesian Forest Enterprises (Perhutani) during a period of political and social transition in Indonesia, to address increasing rate of forest degradation in Java. The debates between proponents and opponents of the scheme within Perhutani consumed much of the agency's time and energy otherwise invested into PHBM implementation on the field. As a result, PHBM stalled as it was not integrated effectively into the organization of forestry resources management planning. It is due to the gaps in perceptions between community and Perhutani. Additionally, PHBM not managed according to the Collaborative Forest Management principles, and the dominant roles of Perhutani in the implementation of PHBM steer it towards Co-optation Forest Management.

Keywords - CBFM; deliberation; collaborative; co-optation

## I. INTRODUCTION

Approximately 2.5 million ha of forestland in Java and Madura is administered and managed by Perhutani, the parastatal forest company of Perhutani. The forestland gazetted during Dutch colonialization as permanent forest estates, which distinguished from an agricultural land of private ownership [1]. According to the Government Regulation, Perhutani is mandated to directly regulate the uses the forestland, while it also determines forest management, exploitation, marketing as well as protection [2]

Over the years, Perhutani has to adopt the colonial model of exclusionary policy toward rural people. Perhutani even exerted more stringent control on the activities of its forestland. It featured with armed forest police who are complementing the managerial and technical lines [3]. The independent company prohibited local communities' access to forest resources. The only legal access is the short-term use of forestland -usually lasted for two years during the reforestation period- for agricultural [4].

Perhutani implemented Community-Based Forest Management (CBFM was known as PHBM) which aimed to change forest resource management in Java based on community development concept. This decision is entering a complication with no open end. Since this inception in 2001 until now, there is no fixed format to improve productivity and sustainability of forest management by PHBM. Some studies on PHBM conducted by organization and researchers showing the stagnancy in operation field of PHBM [5] and [6].

Political and social changes since Indonesian's reformation placed Perhutani in an uneasy position. Troubled by massive timber theft in all its areas, Perhutani also faces pressures and resistance from the communities living around the forests, regarding the use of forest resources. Additionally, advocacy by non-governmental organizations (NGOs) and academics regarding mismanagement of forest resources in Java, indirectly places Perhutani in a politically vulnerable position [7].

In such political situation, internally within Perhutani, there is a conflict of interest between The Green Group and The Red Group who compete for strategic positions in Perhutani. The terms of green and red group emerge to reaffirm the existence of opposing groups that aspire to grab strategic positions at Perhutani during the reform between 1999–2001. Both groups believe that the political reform offers the right opportunity to implement community-based forest resources management to address the variety of post-reform issues [6].

The model used is collaborative forest management such as Joint Forest Management (JFM) in West Bengal, India, which can adopt as a model for forest management in Java. JFM model is believed to be able to address social-economic pressures by the community towards forest resources as there are several similarities between India and Java [8]. Test on PHBM concept is conducted during a workshop at Perhutani Central of Education. In discussing PHBM concept, there were arguments and debates such as issues on the definition of With Community which is substantially different from Community-based [6].

The formation of community participation from planning to implementation, the formula for profit sharing between Perhutani and community defined as 75 percent and 25 percent, Relationship patterns between Perhutani, community, and interest groups. The workshop resulted in agreement on a strategy for change and action agenda in implementing PHBM to promote change in forest resources management in Java [9].

Internal debate about PHBM concept in Perhutani increases as two opposing groups emerge. During power vacuum due to change in executive directorship, the Red-White group managed to introduce PHBM policy through a Decision signed by the Advisory Board of Perhutani. The policy issued by Decision of the Advisory Board of Perhutani on Co-Management of Forest Resources with the Community [6].

In this case, PHBM is not used as entry point to obtain strategic positions. PHBM decision brings significant ramification; conducted through such mechanisms as planning, organization format, information dissemination, and technical policies as operational guidelines on the field. All of the steps require speed and seriousness by Perhutani officials in executing them.

There are doubts about Perhutani seriousness to promote changes in forest resources management. It leads to opinions that Perhutani is inconsistent in PHBM implementation, while forest degradation continues due to timber theft and lack of management reform. In reality, the biggest barriers and resistance are coming from within Perhutani.

Rejection of PHBM concept conducted by proposing an argument. PHBM is merely the idea to divide forest land to the village communities. PHBM reduce the authority of Perhutani officials at Administrator level and below. PHBM also reduce the income opportunity of Perhutani staff who often obtain such income when doing special assignments in all areas. The argument caused sharp frictions between the proponents and oppositions to PHBM programs. Not all staff within Perhutani agree with the concept, particularly at the unit level, i.e., Business Units level such as the group based on the watershed (known as KPH), smallest management units, and Village-level forest unit. Debates about PHBM take much energy and time among the staffs of Perhutani. It

is, therefore, understandable that the implementation process is dependent on the courage of KPH administrators in engaging with innovations.

## II. MATERIAL AND METHOD

# A. Deforestation and Degradation Forest Land.

Land and forest degradation in Indonesia which is not accompanied by land protection, in the long term would adversely affect the ground and environment quality. Deforestation triggered by government's forest management policies that do not favor the indigenous people and forest [10]. The current issues about it of Perhutani as follows [11]:

- The dilemma involving high-level of operational management costs associated with inefficiency
- The lack of policy reform to respond to changes in national forestry policy
- The weak functions of KPH as an institution with artificial authority to manage forestry business
- New conflicts with communities which result from opportunistic policies
- Perhutani authority overlaps regional governments.

One of the above five issues that the conflicts with a community, needs opportunistic policies of the solution. Another critical issue is the weak function of KPH as an institution with artificial authority in managing forestry business. Conflicts with communities in many areas emerge following forest takeover by the community, timber theft, destruction of plants, cattle raising in forested areas, and forest fires [11].

These problems can explain [12] by a theory which describes that the use of forest resources are always related to the institutional economy which consists of governance, forest resources potentials, and property rights. Forest resource management cannot detach from the bundle rights of right holders. Some these reasons relate to tenure and access that will produce economic values. Conflicts emerge when a marginalization process occurs as a result of an attempt to meet those rights.

The Perhutani position is to represent the state, property rights as decision makers and operator in state forest management, to generate state revenue and to gain optimum benefits for the company and the community in particular, and for national economic development in general. The mandate was given by state as articulated on Public Forestry Company (Perum). In this context, Perhutani has a duty to act as profitable institutions and at the same time to protect and preserve the forests, to prevent degradation, and address socio-economic issues, in particular relating to local communities living around the forests. There are situations where one function, in fact, undermines other duties, depending on the synergy between mandate and tasks in given situation [6].

The Decision Letter on PHBM which based on land, space and time as integral parts of forest development, strategy to solve conflicts and deforestation. The decision letter also serves as the social language of Perhutani when executing its mandate in managing forest resources in Java. The policy is expected to change the views of Perhutani officials regarding village community involvement. The implementation is very progressive in the first five years,

regarding opening real access for community involvement. There are barriers to implementation which potentially could create new conflicts.

Success in PHBM implementation regarding opening access for community-managed activities is an achievement of Perhutani, which is known as PHBM Stage I. There is a need for improvement in many aspects through relevant policies known as PHBM Stage II [11].

The potentials for new conflicts are wide open although PHBM is considered a form of conflict resolution to address deforestation. Communication problems associated with perception differences about the content of PHBM agreement is the critical issue. Each party i.e. community, Perhutani, regional governments, and other parties have different expectations and capacities in understanding policies, and it results in conflicts and stagnation.

There are ten core principles for PHBM implementation: justice and democracy policy, openness and togetherness, mutual learning and understanding. The principle of clarity of rights and duties, people's economic empowerment principle, mutual institutional cooperation principle, participatory planning law, the simplicity of system and procedure principle, company-as-facilitator principle, and the fit between management and are characters principle. In reality, not all basic principles implemented in a proper manner.

In 2011, research conducted on the implementation of PHBM in three Perhutani units in Central Java (four KPHs), East Java (three KPHs), and West Java (two KPHs) has done. In each KPH, the research selected one Forest Village Community Institution (known as LMDH) which already implemented a program based on mutual understanding and agreement with Perhutani to implement a collaborative management model of PHBM [13].

The research reveals that Perhutani seems to be halfhearted in implementing PHBM program because of capacity shortage and of restrictions placed by sustainability issue. In this context, communities looked upon as objects, so there is hardly any partnership in the program. People's aspirations not fully considered when defining program policies so unable to address existing social problems. PHBM program becomes a tool for Perhutani to deal with public demands for Perhutani to play greater roles in improving people's welfare, although it is not seriously committing to it. This lack of commitment is evident in forest planning. Perhutani does not have proper preparation for the tools of program implementation, for example, full social inventory and forest resource inventory, to get data for planning in respective KPH, technical implementation guidelines, and sufficient budget allocation. The program becomes the additional (supplementary) program to Forest Sustainability Management Plan by KPH, whose policies and rules should not be departed from existing current plans when there is no synchronization of the two [13].

Research on social capital in PHBM in East Java conducted in 2012. The study reveals that PHBM is not able to generate high social capital of stakeholders which involve LMDH, Perhutani, and district governments. Such social

capital, based on social bonds that promote linkage social ties are not affected by the implementation of PHBM. Weak social capital cause ineffective PHBM in addressing deforestation. Little trust amongst stakeholders and lack of obedience to norms developed through the memorandum of understanding occur in narrow networking that would otherwise be necessary for the success of PHBM implementation. These disconcerting, as PHBM potentially creates conflicts over forest resources. The latter focuses on the strategic plan of PHBM, security, and sustainability of forests as well as what happens to land after the end of the contract [6]. The others, success factor implementing new approach depend on a social capital factor. Social capital described the close interpersonal connection among individuals. It is a significant concept for organizational and promotes relationships that work towards successful collective action [14].

The social capital of LMDH tends to bounded social capital (closed type social capital), which relies on trusts (particularly to the elders or elites of the village), therefore difficult to build relations with outsiders when there are no urgent needs. According to [15], social capital sourced from the dynamics of socio-religious groups. The traditional organization based on high social capital allegedly able to contribute to the development of rural development.

Moreover, if there is a history of conflicts with outsiders, then it will take some times to rebuild trusts. In implementing PHBM, social capital within LMDH cannot fully help to build trust with Perhutani. Latent conflicts based on issues such as access rights and land, contract termination, use of firewood, and forest takeover by the community are the main barriers to building trust with Perhutani. Despite its modern organization and permanent structure, Perhutani as forest resources management instrument is a mandate of the government. Perhutani also has a social capital that categorized as bonding social capital. Kinship within the work setting in Perhutani indirectly establish primordial bonds, as evidenced by structured obedience to leaders. Hence, social transformation process must start amongst the leaders with responsibilities to meet company targets, including shifts in the management system

Changes in performance within Perhutani related to the implementation of PHBM is rather difficult when the latter are executed by staff without leadership capacity, although the proposed concepts may be realistic and progressive. The proposed ideas may include initiatives to encourage implementation of PBHM from Perhutani field staff which may not gain any attention from the leaders [6].

The information obtained from the research on PHBM give a realistic illustration that PHBM is in stagnant situation after ten years of policy implementation. This stagnation results from perception gaps between Perhutani and LMDH on fundamental issues relating to access rights, which includes the management plan, areas to be managed, time, and spatial issues that should include in PHBM. The perception gaps are shown in Table 1.

TABLE I
PERCEPTION GAP BETWEEN LMDH AND PERHUTANI

Perception Gap	LMDH	Perhutani	
Management Plan	To make joint plan based on capacities and needs	By Forest Sustainability Management Plan, Annual	
		Technical Plan, and Operational Plan already	
		formulated by the Company for the running budget	
		year	
Areas	All plots within the defined areas	Vacant plots and former cut areas of Annual	
		Technical Plan.	
Time	Throughout main plant cycle	Per contract mixed planting can be extended as long	
		as within the prescribed rules	
Spatial Issues	Managing types of plant: fill plants, mixing	Changes in plants form for fill-plant, mixing plant,	
	plants, periphery plants, and agricultural plants as	boundary must be proposed to Forest Planning	
	needed	Bureau	

The differences in perception illustrate that PHBM program implementation in the last ten years does not use the predefined basic principles. In other words, there are fundamental problems in internalization of PHBM within Perhutani, particularly at decision-maker level within KPH.

#### B. Methods

The qualitative study using a phenomenological approach to understanding social action in collaborative forest management. Phenomenology is used to explain a social phenomenon with more focused on the complete picture of the phenomenon under study. The study of constructing a social reality in the management of forest resources, and the impact of the social capital in the construction of the conflict in response to the implementation of policies Perhutani office on Community-Based Forest Management. Data to be collected must meet the principles of phenomenology, namely the importance of the depth of information from data sources that can explain social phenomena, deforestation, PHBM, and conflict.

The study conducted in Ngawi Regency by taking some location samples in LMDH which represent KPH Ngawi area, KPH Saradan, KPH Lawu Ds, and Ngawi Plantation and Forest Office. Primary data obtained by survey method through in-depth interviewing technique, FGD, and field observation. Secondary data include research material taken from some documents of respondent's. The analysis used in the research is descriptive analysis method, which allows data elaboration to explain the problem. The respondent's answers of the questioners with analyzed sample approach is an institutional unit which observes the phenomenon, how perception gaps among LMDH institution with Perhutani in implementing PHBM.

## III. RESULT AND DISCUSSION

Collaborative management of co-management in forestry sector can have huge impacts if it is abiding by right principles and practices. In India, more than 63,000 groups registered in a joint forest management program for reforestation of 14 million hectares of forests. In Nepal, 9,000 groups, who are drawing benefits from the forests, try to grow 700,000 Hectares of forests. In Brazil, peasants help manage 2.2 million ha of forests as a reserve for extraction purposes. Half of the districts in Zimbabwe participate in a collaborative scheme that allows local communities to share profits from nature tourism. This activity helps protect the

forests and increase community access to forest resources, which potentially improve people's livelihood [16].

Based on theory, collaborative management defined as means to define roles, rights, and responsibilities, particular groups with different interests [17]. Collaborative forest management is expected to increase regular access for village communities (around the forests). Use of forest resources in a collaborative manner help communities meet subsistence needs and offers local security against famine. Such collaboration does not include commercially valuable wood products but instead remains limited [18]. Agriculture production areas as a limited natural resource system modified by man for productive and its behavior and performance as s system is assessed of the systems properties (productivity, stability, sustainability, equitability, and autonomy) [19].

Collaborative management requires organizational rules that would have a significant influence on the actions of forestry agencies in controlling forest resources management and profit sharing with local communities [20]. The forestry company performs more control on decisions such as selecting plant species, choosing methods of harvest, sales, consumption, and distribution of benefits. In such context, the interests of forestry agency in timber production, income, and environmental protection often come before the community interests [21].

The involvement of stakeholders in collaborative management is essential. PHBM, as one variant, defines stakeholders' participation in a flexible manner. The stakeholders are those who can play roles in forest resources management. Their contributions can be most modest, such as human labor to manage the forests, to capital investments. Observation informs that the most prominent stakeholders in the implementation of PHBM are regional governments and NGOs

Analysis of the position and roles of stakeholders in the implementation of PHBM as collaborative policy may use deliberative process approach. The latter means an explanation towards evaluation that relates to facts, arguments, and opinions that contribute to decision making, with particular reference to government roles and functions within the public interests context. It also considers the latter's contributions to policy making, which is the preserve of government.

In general, deliberation process requires time because it must involve many parties in information and fact collection to support decision-making. One of the requirements for deliberation process is multi-stakeholder involvement in building first genuine dialogue, by taking specific attention to participation issues, community networking, social assets, and government networks [22].

In deliberative process, actual dialogue used as the means to make a decision that emphasizes deliberation and multistakeholder dialogue and sharing to identify problems and interdependent, collaborative networking. Citizen participation is indispensable in genuine dialogue. Deliberation process is often juxtaposed with instant information dissemination.

In genuine dialogue, the decision about participants must consider some issues such as differences and level of dependence, interests, representation, and legitimacy of representative. Differences amongst participants in the genuine dialogue process may reflect the degree of relationship and interests in forest resources management. Other issues to consider are means of defining representation and legitimacy of participants who have differences, high level of dependence, and interests on forest resources. These will affect equality guides the dialogue process as the latter, domination free, honesty and mutual understanding amongst participants. The genuine dialogue, therefore, should promote principles such as justice and local wisdom.

To understand the position and involvement of stakeholders in the implementation of PHBM as collaborative policy through genuine dialogue, refer to Table 2 below.

 ${\bf TABLE~II}\\ {\bf POSITION~AND~INVOLVEMENT~Of~MULTI-STAKEHOLDERS~IN~GENUINE~PHBM~DIALOGUE}$ 

Substance	Indicator	Positions of Stakeholders/Actors Involved			
		LMDH	Perhutani	District Government	
Participants	Diversity and Dependence	High diversity, high dependence	Low diversity, high dependence	Low diversity and dependence	
	Interests	Broader access right	Guarantee of forest security	Political Supports	
	Representativeness	Not clear	Clear	Clear	
	Legitimacy	Weak, requires notary document	Strong	Strong	
Process	Equality	Equality in a broad sense	Equality with district government limited to LMDH.	Equality based on interest and context	
	Free of domination	Not free from domination by others	Free	Free	
	Honest and understandable	Honest and understandable	Honest depends on interests	Honest depends on interests	
Content of Dialogue	Justice Principle	Justice defines as sharing spaces and profits	Justice defined as sharing spaces and roles	Justice defined as balance between rights and duties	
	Local wisdom	Respect local wisdom	Tend to ignore local wisdom	Only as slogan and discourse in dialogue	
Agreement and New Approach	Diversity of stakeholders	Limited diversity	Limited diversity	Limited diversity involving LMDH and Perhutani.	
	Interdependence	High dependence to execute agreement	Low dependence to execute agreement	Deal depends on agreed budget	
PHBM system adaptations	Internalization	Not fully understand PHBM, only regarding struggle for access	Barriers to internalization of PHBM in management system	Internalization limited to support for budget policy	
	Information	Access to forest resources planning information limited	Holder of access to forest resources planning information	Access to forest resources planning information limited.	
	Inovation	Hindered by capacity of organisation's board.	Restricted by rigid planning system within document of sustainable forest yiled.	Hindered by sectoral ego and operational procedures of respective agencies	
Authority	Shift in authority	No authority	Single and absolute authority	Limited authority	
	Actor Domain	Human Resources Land based	Policy Planning Budget	Policy Budget	
	Shift in authority	No authority	Single and absolut authority	Limited authority	

Given the position and involvement of stakeholders in the dialogue above, there is a clear difference in the interest and capacity of stakeholders at the PHBM. Hence, it would be difficult to implement PHBM as a variant of collaborative

management through deliberation perspective when focusing more on deliberation. These relate to characteristics of stakeholders involved in planning and implementation of PHBM. Table 3 illustrates the process.

TABLE III
DELIBERATION PROCESS IN IMPLEMENTATION OF PHBM

PHBM-related characteristics	Perhutani	LMDH	District Government
Interests	Guarantee of forest resources sustainability     Increase in company income     Community are allowed to use anything in the forest areas as long as they observe the rules	Require lands to meet daily needs.     Improve welfare through access rights to forest resources management	Supports community empowerment programs. Indirectly generate local revenue (PAD) for district government.
Mutual Dependence	None	Given opportunities to be involved in forest management and makes benefits to them	Supports from district government is critical in strengthening community participation in PHBM.      The district government supports each community plan

The deliberation process in the implementation of PHBM is not working because negotiations and agreement for implementing PHBM are not going well. Co-responsibility and institutional relations within PHBM scheme, such as cooperation agreements are not thoroughly observed and executed by all involving parties. Each party uses its logic, and this created misunderstanding about problems associated with PHBM. For example, in strengthening synergy in empowerment program, there are fundamental differences in accompaniment methods between Perhutani and regional governments. Likewise when addressing conflicts arising from differences in perceptions about forest use and ways to secure standing trees between LMDH, which weaken mutual trusts.

For the community, PHBM is becoming a learning process that changes the attitude and thought and therefore, awareness. Once engaged in timber theft, the community now becomes the board of LMDH and no longer stealing wood. They can make plans to manage allocated lands in the village and this, in turn, strengthens capacity, although Perhutani may never sanction the plans.



Fig. 1 Skets deliberation process of PHBM

In many issues related to PHBM, Perhutani performs controls on individuals and groups. They do this by forming a local organization of LMDH that is accountable to Perhutani than to other stakeholders, by writing standard cooperation agreement and regulations that impose limits the community in many ways. Indirectly, Perhutani understands the co-management concept and is reluctant to share profit

with the community. The community must fulfill their obligations to access benefit, responsibilities, and benefits between them and Perhutani in a controlled manner.

Deliberative process delineation compared with the topdown process in the implementation of PHBM policy, presented in Fig. 1. If it showed in 5 aspects of the deliberative process, namely: participants, process, authority, adaptation and dialogue content, the deliberative scope is smaller than top down. It means that the deliberative process has not implemented the CBFM policy running.

The bureaucratic approach in PHBM does not solve the complex issues that result from different needs. It is hard for a centralized Perhutani bureaucracy to accommodate local interests and groups (LMDH) who `are voiceless in decision-making. In the light of past experiences during the reform and the increasing complexity of demands by different interest groups, the collaborative management paradigm is shifting. Co-management implemented by Perhutani puts less emphasis on community and regional government participation, nor other stakeholders and actors who have interests in forest resources, claiming that they cause overlaps in the management system.

PHBM puts emphasis on the political will and the organizational design. PHBM management only focuses on negotiations and framework that emphasizes community duties when participation in forest resources management and to fulfill the requirement for community representation in negotiations. These shows substantial changes from collaborative management to co-optation management.

# IV. CONCLUSION

There are evidently many problems that emerge during the implementation on the field. The barriers are still the unconsolidated collaborative multi-stakeholder PHMB institution, the absence of strategic planning document that serves as a reference for implementation of PHBM, the lack of synergy amongst stakeholders, and technical issues such as contract termination, forest security and disturbances, the distribution mechanism for profit sharing, and so on. In essence, these barriers can substantially classify into access rights, institution, the participation of stakeholders, collaboration agreement, profit sharing, and internalization of PHBM.

PHBM is perceived differently by Perhutani, regional governments, and community. These various perceptions result from differences in individual stakeholder understanding, depending on the interests when defining PHBM. It is therefore highly possible that conflicts and tensions emerge between Perhutani and the community in the forms of resistance to PHBM policies.

It is important in this context to understand the social conditions that would help address deforestation and forest resources conflict through PHBM. Deforestation and conflicts always involve interactions between community, Perhutani roles, and regional government policies. Community dependence on forest resources, justice, and welfare are essential to corporate resource management. There is one fundamental question to answer: does PHBM only serve as the Perhutani universal language in addressing deforestation and forest resources conflicts in Java?

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