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## Collaborative Forest Management in Indonesia: A Review

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### Abstract

The recurrence of forestry-related conflict in Indonesia urgently needs a breakthrough for solution after the failure of the regional autonomy in protecting the forest. The failure rooted on the unequal power relations and the discourse applied in governing the forest area, thus what it called "collaboration" only exist on the surface instead of more substantive as should be. The ongoing narration shows that the management of forest resources became the arena of contestation, not for collaboration. This conclusion appears on the review on ten implementations on ten national parks in Indonesia where respective narration from bureaucracy, corporation and community is diametrically negating and compete to dominate each other, resulting the practice of "legal not legitimate" and "illegal but authentic" on the other side. Starting with that issue, the concept and scheme of Collaborative Management's effectiveness should be levelled up through devolution based on local-user in the poliocentric system. These three steps of the policy development are: 1) the formulation of collective narration based on local knowledge and multi stakeholders discourse; 2) the creation of local actors web as authentic resource users, and 3) institutionalization of forest resources management and the local resource mobilization.

**Keywords:** collaborative management; forestry; institutional development; policy.

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## **1. Introduction**

After succession for the presidential of Soeharto of "Reformation 1998" forestry conflicts in Indonesia do not indicate a decrease in both quantitative and qualitative. Based on Forest Watch Indonesia (FWI) and the Center for International Forestry Research (CIFOR) data, since 1997-2003, 359 cases of forest conflict occurred, most cases in East Kalimantan, followed by Central Java, North Sumatra and West Java [1] In the post reform period, forestry conflict rose eleven times increase compared to 1997, from 14 cases to 53 cases in 2000. Of the total conflict, 39% were in HTI (Industrial Plantation Forest), 27% in the concessions area (HPH) and 34% in the conservation area. HuMa (2012) recorded a total of 349 cases of conflict over natural resources, 95 cases (27.22%) were cases of forestry. In 2015, The Agrarian Reform Consortium (KPA) recorded forestry conflict reached 52.176 ha, second largest after plantation conflict which reached 302.526 ha [2].

The amount of conflicts is a legacy of forest management discourse that never changes. There is a constellation and informal web uses the formal instruments of the state to run the practice of control over resources called "Legal Not Legitimate" (LTL) or insecure property rights, which means the right is legal by rules and formal procedures but not acknowledged by the local community, this situation rises the dispute and conflict in the field[3]. Meanwhile, from the public perspective, practice "Not Legal, but Real" exists and considered legitimate by policymakers. Therefore a breakthrough needed in forest management within the framework to restore the policy narrative of forest resource management to ensures its sustainability in the long term period ecologically, economically, and socially for by putting revolution on the institutional aspects of Collaborative Forest Management[4]. The collaborative approach itself is not new because it has been practiced in Indonesia since the 1970s, but observing the numbers of forestry conflict to present days, the researcher found it is necessary to conduct a study on the evaluation of the implementation of collaborative management that have been conducted in Indonesia. The focus from this research is how effective the current collaborative forest management implementation in Indonesia and in which part of the effectiveness of collaborative forest management can be improved? The purpose of this study is to provide input for policy makers and advocates of community-based forest management as well as grass-roots agencies as forest resources user in the form of conceptual analysis of lesson-learnt from the implementation of collaborative forest management.

## **2. Material and Method**

This study uses literature study based on cases of forestry collaboration that have been published. There are ten cases of collaborative forest management used in this review which are: the management of Bantimurung National Park at 2011 in South Sulawesi, Halimun Salak National Park in West Java, Sentarum Lake National Park in West Kalimantan, RawaopaWatumohai National Park in Southeast Sulawesi, Bantimurung National Park at 2015 in South Sulawesi, Kutai National Park in East Kalimantan, Katingan production forest in Central Kalimantan, Communal Forest of Kuningan and Majalengka in West Java, Ujung Kulon National Park in Banten, Cenderawasih Bay National Park in Papua, and Kayan Mentarang National Park in East Kalimantan. Prior to the review it is needed to convey the analytical approach used in approaching those cases, and to measure the achievement of the indicators. This research used two descriptive analytic tools as comparative material on the achievement, the tools are decribed below.

## **2.1 Collaborative Forest Management Policy in Indonesia**

The emergence of policy on forest resources starting with Law No. 5 of 1960 on the Basic Regulation of Agraria, Law No. 41 of 1999 on Forestry and Forestry Minister Regulation P.19/Menhut-II/2004 on collaborative management of Natural Reserve and Conservation Area. Law No. 5 of 1960 declared the state's relationship with the resources through the concept of Rights to control over resources<sup>a</sup>. The state receives the mandate to make policy, make arrangements, maintenance, management, and supervision over resources for the purpose of the people's prosperity. However, in 1967 (Law No. 5 of 1967 on Basic Principles of Forestry, Article 2) the government included a justification where the state can own the land that used for state revenues, based on property rights as the basis for the statement of state ownership. With this tool, state can claim the area and exclude local communities from their communal forests which had been taken as their common-property which is not based on formal property rights.

Law of 41 of 1999 on Forestry is a second step for territorialization phase where the state defines the zonation, create maps, and put boundary and get rid of those considered does not have the right[5]. Just in 2004 through the Forestry Ministry Law No P.19/Menhut-II/2004 on Collaborative Management of Natural Reserve and Conservation Areas, the term "collaboration" is defined as the process of cooperation undertaken by the parties to the agreement on the basis of principles of mutual respect, mutual trust and mutual benefit. However the "collaboration" in this regulation intrinsically only an "add-on" or additional argument for conservation by the state. Definition of "collaboration" does not include the indicator of a collaboration itself, even the "collaboration" narrated merely as attachment for program implementation within a certain time limit.

## **2.2 Adaptive Co-Management Approach**

Using Berkes view "co-management"[6] has many faces that can be used as indicators of collaborative management achievement in Indonesia. The faces are: the division of power/authority, institutional development, as social capital and the trust maintenance, as a process, as a problem solver, and as governance. When these six faces have been achieved in implementation in Indonesia it means that all parties were ready to undertake collaborative forest management. In addition, there are criteria and indicators to evaluate the implementation of forest management in Indonesia. These criteria were developed by the Center for International Forestry Research (CIFOR) in 2003, as three categories of a sustainable forest management [7]:

1. The social process, shows the extent to which the quality of articulation and communication, as well as the level of integration and collaborative action.
2. Management of natural resources in an adaptive way, this indicates the level of planning, implementation, monitoring and adjustments made in managing forest resources. Included here is a personal, ecological, technical and finance capacity to carry out sustainable management.
3. Impact of /condition of collaboration and adaptive management of resources, it shows the expected

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<sup>a</sup> Law No. 5 Year 1967 on Principles of Forestry. Jakarta: Government of The Republic of Indonesia; Law No 41 Year 1999 on Forestry. Jakarta: Government of The Republic of Indonesia; Ministry of Forestry. 2004. Act No. P.19/Menhut-II/2004 on Collaboration of Management of Nature Preservation and Conservation Area. Jakarta: Ministry of Forestry

impact of collaborative and adaptive management and how collaborative and adaptive management is applied.

### **3. Result and Discussion**

#### ***3.1 Between Collaboration and Participation***

“Collaboration” by Gray is defined as the process by which many people looking at a problem with a lot of diverse perspectives so that they can be used constructively to solve existing problems, which go beyond the limitations of each party's vision[8]. In “collaboration” there is the division of responsibility and interdependence[9] so that many people can work together, share information and perceptions, authority and responsibility to improve the quality of planning and decision-making[10]. Thus “collaboration” is not limited to the participation as frequently occurs in a program implementation, a collaboration requires the high level of participation of diverse social groups and institutions in an equal position to share information, authority and responsibility by face to face, so that a form called “collaboration” actually is a network, working groups or partnerships, not in the relation between patron-client or donor-implementing that can be said only as “participation”. Nevertheless, participation is a ladder toward collaboration which at least consist of four levels starting from the lowest type namely a network, the type of dialogue or forum of communication group, type of working group, and the strongest are partnership [11].

Forest collaborative management has a lot of definitions that depart from the need for restrictions on bureaucratic control [12] as well as the involvement of science [13] or the distribution of rights and responsibilities between the government and society [14]. According to Berkes collaborative management can be applied in the form of integration between conservation and development, management of resources in a participatory manner, participatory studies, decentralization and devolution, community-based natural resource management, and joint management by the public and the government, which in finally got the formal position within the relation of state and public institutions [15].

#### ***3.2 Evolution of Collaborative Forest Management in Indonesia***

Conception of collaborative forest management in Indonesia has lasted for more than thirty years since formulated in about the year 70's where the government started to involve communities in forest management in the form of social forestry. Although initially the form of community involvement is merely by invitation, the evolution process of collaborative management then levelled up through the provision of a number of decision making [16]. In the 1970s model of social forestry is oriented to improve the socio-economic conditions of local communities by granting community to plant the non-timber crops between teakwood planted by Perhutani (state company for forestry management), access is the point that emerged in this era. In the next era of the evolution of the participation came in the form of Forest Village Community Development (PMDH) or Community Forest (HKM) where community can use the forests that have been degraded even though the state has authority to revoke the use rights back to government hands. The forest use rights fully titled by community just in in 1998 which finally recognized indigenous peoples to manage and get the right to use/withdraw the

forest, this occurs in Krui, West Lampung [17]. This stage is the second stage in the evolution of collaborative forest management where the focus of forest management began to be given to community-based forest management. The third stage of evolution of collaborative management is delegating authority for the community in decision-making in forest management as well as the involvement of other stakeholders. Still it is rising another challenge namely fragmentation of interest groups in the forest and on the other hand the remaining centralized property rights-based authority oftenly strengthens the position of official state manager and private instead of the community (see [16]).

Another issue, the policy on collaborative forest management in Indonesia is still limited for the natural reserve and conservation areas while at the Natural Forest Production category this practice is not accommodated as a collaborative model despite the opportunities for collaboration practices is opened [17]. This condition still indicates that there is no full-trust of the government for the institutional collaboration with the public and still remained of the strong perspective that welfare is a tool to prevent (poor) community from damaging the protected areas and not become the goal of the collaborative forest management itself. This conception is in accordance with *environmental orthodox* term by Forsyth (2003) which considers that community frequently pointed as the factors that damage the ecology, particularly the poor [18].

The critical point of the collaborative management issues in Indonesia namely the inherited colonial tradition syndrome where the resource management experiencing massive politicization. In the conception of the *Third World Political Ecology*, there is no prevailing neutral in the orientation of the management of natural resources because it always a result of a politicized environment that involves many actors with their own interests at local, regional, and global. In particular in the context of the third world there is a tendency that the ecological policy could not be separated from the unequal relationship between state, society and the environment itself [19]. In third world countries, the forest resource is viewed from two aspects: *First*, conservation is part of the economic growth trade off but on the other hand override aspects of social justice; *Second*, the use of categorization as "owner" and "user" within the framework of property rights automatically creates gaps because differentiating institutions based on rights and no-rights on other side would hinder the emergence of equal power, as consequence, the meaning of the collaboration will be reduced as "participation" or only as "attending."

### ***3.3 Review of the Implementation of Collaborative Forest Management***

From a study conducted on ten journals regarding the case of collaborative forest management there are some indications that can be used to look up to which level the achievement of collaborative forest management in Indonesia and by the analytical adaptive co-management framework (see [6] and [7]) it can be identified feedback to improve the effectiveness of Collaborative Forest Management in Indonesia.

In the case of National Parks Bantimurung Bulusaraung (TN Babul) in Makassar, South Sulawesi, the problems encountered in the collaborative management practice is the disfunction of organizational networks among stakeholders, especially among community near TN Babul[20]. Moreover, there is highly potential for conflict because the TN Babul took the land previously managed as farming and residential areas by community. The

solutions conducted merely inviting the community in events or special occasions, or just do personal communications instead of building institutional trust and engagement. The problem of conflict of interest that leads to a diametrically conflicts also occur between Cenderawasih Bay National Park (TNTC), West Papua with the communities around national parks [21].

In the Halimun Salak Mountain National Park (TNGHS), West Java, collaboration is more advanced in practice, characterized by the existence of community organizations who participate in co-management in terms of ecotourism development. The division of powers is applied but there are still problems remaining, the collaboration is still limited in implementation phase, while monitoring and evaluation process never been conducted, so in the process of implementation in the field, there are no lessons to be drawn. Community institutions are still weak and coupled with the lack of adequate understanding of its role in the collaborative management of national park staff are adding the list of issues there. Community groups are expecting the agreement review conducted between TNGHS with the community by involving more stakeholders, strengthen institutional capacities in the community and create a legal justification to accommodate existing agreements so that it can be a binding all parties in governance [22]. The problem of the absence of mechanism for mutual learning among stakeholders occurred in Sentarum National Park (TNDS), West Kalimantan, this rise caused by the low willingness and motivation among its stakeholders, there is no sharing of information, cost and time because the communication among stakeholders itself is rare indeed. Communication is done merely informal and not institutionalized [23]. Institutional problems also occur in the National Park area Rawaopa Watumohai (TNRW) Southeast Sulawesi, there are problems that a commitment or agreement that has been agreed upon by the district government, provincial government, NGOs, the National Park Authority and community organizations -both that has stated on the MoU or without MoU- was not effective, the support of stakeholders is not effective, neither in monitoring and patrolling, and even no institutions responded toward the complaint and the violation of the agreement [24]. In Kutai National Park (TNK), East Kalimantan and Ujung Kulon National Park (TNUK), Banten there is emergence the issues of program-dependency. In TNK community involved in program as participants of corporation's program [25] while in TNUK community involve merely as a participant in program under TNUK's office [26]. Besides institutional issue that has not appeared in this location, also identified that the community participation is limited and not being encouraged in institutional building process. Implementation of the collaboration that has the potential achievement of collaboration in the future appear in PHAPL (Management of Natural Production Forest) Katingan, Central Kalimantan where the community and the forest department manages certified wood together in a production forest (see [17]). In TN Kayan Mentarang (TNKM) East Kalimantan they make innovation by combining the management of national parks with traditional institutions (adat) and arrangement of boundaries together [27] while in PHBM (Community Based Forest Management) Kuningan and Majalengka, West Java shows the level of implementation is quite high but at the level of planning and monitoring still reaching on a medium level scale[28]. Amidst the ten cases taken as lesson learn on the practice of collaboration there is the trend: the implementation of the collaboration in the area of the National Park does not show the achievement as effective collaboration except in Kayan Mentarang National Park (TNKM), East Kalimantan while the practice of collaboration that are implemented outside the region categorized as protected areas relatively succeed in resulting behaviors toward potential collaborations. When all cases being summarized based on the achievement

of indicators according to the conception of the policy of national legislation (Minister P.19 2004), adaptive co-management approach by Berkes (2009) as well as categories and indicators of sustainability from Pokorny and his colleagues (2003) results can be seen in the following table:

**Table 1:** Achievement of collaboration based on indicators

Location	Forestry Ministry Law P.19/2004	ACM Berkes and his colleagues 2009	Sustainability Pokorny and his colleagues 2003	Indicators
TN Bantimurung 2015	+	-	-	
TN G Halimun Salak	+	-	-	
TN Danau Sentarum	-	-	-	
TN Rawaopa Watumohai	-	-	-	
TN Bantimurung 2011	-	-	-	
TN Kutai	-	-	-	
PHAPL Katingan	+	-/+	+	
TN Ujung Kulon	+	-	-	
TN Teluk Cenderawasih	-	-	-	
TN Kayan Mentarang	+	+	-/+	
PHBMKuningan/Majalengka	+	+	+	

Source: Processed Data

Information:

- Not found

+ Found indication of collaboration

- / + Found some elements of collaboration and potential for development

The table indicating that the output of the collaboration when even using indicators of Forestry Ministry Law P.19 2004 still many project unable to achieve “collaboration” due to the difficulty on creating a relationship that based on trust and shared benefits. In indicator of achievement from the six faces of collaboration from Berkes (2009) the issues that make the achievement of collaboration was not visible is the absence of power sharing and lack of contribution to the development of local institutions. Meanwhile, on indicators of sustainability, the challenge rises from the weak articulation of communication and integration, lack of technical capacity and governance as yet it seems a significant positive impact on the long-term collaboration.

#### 4. Conclusion

There is a correspondence between conceptual analysis with the conclusion of the review on lesson learn for

collaborative management cases in Indonesia. In general, achievement of ideal collaborative management did not show effective and sustainable impact on the social, economic and ecological. Learning from good practices in forestry and fisheries from other countries [29,30,31,32,33,34], there are some points that can be a good lesson to improve the quality of collaborative management in Indonesia. These points are: a) Although the state is an institution that holds the authority of forest tenure but devolution does not mean reducing the power of the state in managing forest [see30]. Basically, the legitimation over tenure is the result of negotiations and bargaining of power, thus the diversity of stakeholders in the collaboration are not in a subordinate position but a continuous negotiations and the balance of power [35] and see [29 and [32]; b) It is a good lesson to distribute authority for every stakeholder to access the forests and recognize the community tenure right as a common-property, while the terms and agreement on controls are at the level of collaboration norm see [33]. Resources can be better managed when the local beneficiaries and other stakeholders are fully involved in resource management and use rights are recognized individually and collectively [36]; c) Implementation of the management of collaborative forest must run consistently from beginning through the handover of responsibility and power of forest use such as Community Forestry in Nepal [37] and Community-based Forest Management in Phillipine (see[32]).

Furthermore but related, the implementation of the collaboration must applies as a social learning process so the community has a space of learning in managing forests; d) Recognizing that communities are diverse and not homogeneous, therefore the management of multi-stakeholder thorough and detailed agenda should be applied so that all interest groups can be met within the framework of ecological balance and the effective collaboration[38] ; and e) A general partnership characterized by a more polycentric provide guarantees for long-term partnerships and decision-making than the dominant-subordinated partnership both from the state and the private rights owner. Polycentric partnership itself is defined by Ostrom[ (1972)[39] as an organizational structure with a variety of independent actors cooperate in a specific order under a general nature of working system[40].

## **5. Recommendation**

For forestry policy makers, the crucial point in the collaborative management is a balance of power and providing wide access to the collective resource utilization in a pattern of non-subordinate partnership. So as a suggestion, the points related to power over forest resources as defined in the Basic Agrarian Law must be reffered back into forest policy narrative which is institutionally formalized in a model of collaborative-based forest governance. It is crucial to avoid conflicts between actors narrative that would preclude any form of collaboration, to avoid the emergence of free riders who benefit from forest products without the responsibility of restoration, and provide space legitimacy for the implementation of forest management by local communities. The second suggestion is to create a model of polycentric partnership that centered on local level including community, the private sector, non-governmental organizations and governments at the local level (web of local-based actors) as well as avoiding the concentration of authority in both non-place-based government institutions or private in order to avoid generalizations and discontinuity of communication in collaborative work. While the third suggestion is the institutionalization of collaborative forest management and resource mobilization at the local level yet formally received the legality and legitimacy actually on all stakeholders.



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