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From Timber-Oriented Forest to Multi-Business Forestry: Lesson from Indonesian Collaborative Forest Governance

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Abstract

This study investigates Indonesia's transition from a timber-oriented forest regime to a multi-business forestry (Mb-F) framework through the lens of collaborative governance. Centered on Riau Province, the research explores how collaborative governance mechanisms comprising multi-stakeholder engagement, institutional adaptation, and normative transformation facilitate the diversification of forest use beyond timber to include non-timber products, ecotourism, agroforestry, and conservation. Employing a qualitative, multiple-case approach and guided by Agrawal's concept of environmental subject formation and Bryson et al.'s collaborative governance theory, this study reveals that the Mb-F initiative redefines local actors from passive beneficiaries to active co-managers. Despite increased inclusivity, the implementation faces persistent challenges: regulatory fragmentation, elite dominance, and latent resistance among indigenous groups. These findings underscore that collaboration is not inherently equitable; it must be intentionally designed and iteratively adapted. This research contributes a novel analytical framework blending ecological subjectivity with governance dynamics, offering critical insights for forest policy reforms in other decentralized and ecologically complex contexts. The Indonesian Mb-F experience serves as a model for integrating socio-economic equity and environmental sustainability through pluralistic governance.

Keywords: *Multi-Business Forestry, Collaborative Governance, Forest Policy, Indigenous Participation, Ecological Subjectivity.*

Introduction

Forests play a multifaceted role in sustaining ecological balance for human well-being by providing a broad spectrum of ecosystem services (Winkel et al., 2022). The balance of the forest ecosystem is essential to sustaining food security (FAO, 2017), keeping freshwater (Fasona et al., 2019; Banaś et al., 2025), conserving renewable energy, achieving carbon neutrality, and maintaining biodiversity (Akpanke et al., 2023; De La Peña et al., 2022; Nebasifu et al., 2025). Given these important roles of the forest for human well-being, forest governance is required to promote equality and equity at all levels of society. Yet, besides these equality and equity tasks, the forest governance also needs to realize the sustainability principle within its process for its longevity management (De La Mora et al., 2023). The government, as the official ruler of the forest, is commonly expected to play a pivotal role in fulfilling the needs of the indigenous community around the forest area on the one hand (Reddy et al., 2024; Nikolakis & Hotte, 2020), but on the other hand, they are also expected to promote sustainable forest management, for instance under the UN strategic plan for forest 2017-2030 or REDD+ programs (Lord, 2025).

This strategic role sometimes becomes a particular challenge for the government, especially in developing countries where limited capacity and social intervention are frequently higher (Birhan et al., 2021). Hence, as a developing country in Southeast Asia, Indonesia has the largest forest area in this region with more than 64,1% of its total land territory (Suyanto et al., 2024). In this country, forests have genuinely become inseparable from society's life, ecosystem, and biodiversity, and they consider

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forests as a common-pool resource to fulfill daily needs (Boedhihartono, 2017). However, from a practical perspective, access to the forest and land is frequently vulnerable to social injustice or conflict where current governance arrangements have failed to facilitate fair equity and justice (Fasona et al., 2019; Hermawan et al., 2025). In most cases, these phenomena have led to the dominant access by timber-oriented companies, where 590 permit papers have been issued to manage 29.750.416 hectares of forest land from 2014 to 2021.

In Riau province, the timber industry has led to dominant control over forest benefits, resulting in massive forest exploitation with an insignificant contribution to the national GDP. According to Banaś et al (2025), the timber harvesting process from the forest can be counterproductive for various ecosystem services. Furthermore, other studies, such as Fielding et al. (2022), Ferraz et al. (2024) and Hume et al (2018), confirm that wood harvesting may generate a negative impact on water resources, erosion, and soil nutrients. To tackle this problem, the government of Indonesia managed to launch a multi-business forestry (Mb-F) program, aiming to transform timber-oriented forests into a socially productive forest. The Mb-F program is designed to enable a forest to serve various environmental products and services, such as timber, non-timber forest products (NTFPs), water conservation, food, or ecotourism (Suyanto et al., 2024; Wenda et al., 2024).

However, during the transformation process, the Mb-F program has faced various challenges in attaining its policy goals. First, the internal conflict among the indigenous people regarding land access, which existed even before the implementation of the Mb-F program. In this case, the wide and fair access to the forest for multiple purposes even fueled this social conflict, with many newcomers participating in the forest land. Second, the emergence of new livestock and horticulture business units creates imperfect competition. Third, the lack of capacity of indigenous people to participate in specific partnership programs. Finally, the administrative barrier from another regulation beyond the Mb-F, for example, the environmental impact analysis (EIA) standard, or existing concession rules. At this point, these problems seem too complex to be handled by the government alone.

Collaborative governance (CG) has emerged as a viable alternative, especially when the government faces a wicked problem (Dentoni et al., 2018; Beeton et al., 2024). It has become a common mechanism under forest governance to facilitate various forest-related problems, particularly when the government cannot manage them solely and requires multi-stakeholder partnerships (Sackey et al., 2025). In this Mb-F case, the government has attempted to apply the CG approach through multiple policy layers within the frame of forest governance (Wenda et al., 2024). However, there are no clear assessments specifically measuring the impact of CG that have been conducted to ensure its effectiveness. Therefore, this research is addressed to investigate the extent to which CG's implementation under the forest governance system facilitates the transformation from timber-oriented forest to the Mb-F in the Riau Province forest area.

Literature Review

Collaborative Governance Concept and Features

The fundamental principle of CG suggests a process to steer decisions and actions where public officials, private entities, and civil society are involved to perform a collective movement (Ruijer, 2021). These actions could be implemented in various ways across multiple sectors with specific adjustments to their collaborative structures. In the forestry field, the emergence of the collaborative mechanism rose in the mid-1980s (Sackey et al., 2025). It has marked the shifting orientation to manage the forest territories from centralized control forestry to a more collaborative alternative, where the role of local actors is primarily emphasized to promote equitable outcomes (Asumang-Yeboah et al., 2022; Beeton et al., 2022; Sackey et al., 2025).

However, although the CG concept often offers ideal features, such as shared tasks and responsibilities (Provan & Kenis, 2008; Hermawan et al., 2025), democratic process (Koschmann et al, 2012) or the pursuit of a win-win solution for all parties (Emerson et al, 2011), in practice, the journey to achieve these outcomes is rarely straightforward. One of the major challenges of CG implementation lies in its inconsistent concept, where the structure of CG is relatively amorphous (Ansel & Gash, 2008; Hermawan et al, 2025; Emerson, 2011). Therefore, the structure of CG should be adjusted following the need for collaboration, which ensures the most beneficial ratio between action and advantage for all stakeholders (Doberstein, 2016). In this section, we will compare the developing CG theory along with each of its features to be performed as an interpretative lens to evaluate the role of CG in facilitating the transformation process from timber-oriented forest to Mb-F by the following table 1.

Table 1. Summary of CG's Frameworks

Variable assessment	Bryson et al., (2006)	Thompson and Perry (2006)	Provan and Kenis (2008)	Ansel and Gash (2008)	Emerson et al., (2011)	Agranoff and McGuire (2012)	Koschman, Kuhn and Pfarer (2012)
Theoretical Base	Diverse, organization theory, public administration, leadership, strategic management.	Diverse, organization theory, public organization, strategic management theory.	Network Theory.	Diverse, organization theory, public administration, policy studies, planning and environmental management studies.	Diverse, organization theory, public administration, conflict management theory, planning, and environmental studies.	Diverse, organization theory, public administration, strategic management theory.	Communication theory.
Main Feature (s)	Initial conditions-formal and informal process; Formal and Informal Structures; Contingency and constrain; Outcome and accountability	Antecedents; Outcomes.	Ideal types of governance; Critical contingencies; Persistence tension; Evolution of governance system overtime.	Starting condition; Collaborative process.	System context; Collaborative Governance regimes; collaboration dynamics; action; impacts; Adaption.	Decision, and non-decision network	Communication practices Developing of authoritative text Trajectory of authoritative text Communication practices to assess over-all cross-sector partnership value
Particular highlight (s)	Cross sector collaboration, institutional logics, planning, contingencies, remedying power imbalances, alignment across components	Learning, organizational autonomyleadership, administration	Governance Structures	Face to face dialogues, incentive, remedying power imbalances	Collaborative regimes, what makes CG works, capacity building	Leadership roles, process, structures, public value, capacity building, and learning	Authoritative texts and their effect on activities and partners

Source: Bryson et al., (2006); Bryson et al., (2015); Thompson and Perry (2006); Provan and Kenis (2008); Ansel and Gash (2008); Agranoff and McGuire (2012); Emerson et al., (2011); and Koschmann, Kuhn and Pfarer (2012)/ Source Modified

Indeed, there is no doubt that many scholars define the CG concept by various interpretations, but it also cannot be neglected that most of them are retrieved from the diversification aspect of organizational theories, for instance, particular highlights on learning process within organizational autonomy (Thompson & Perry, 2006); planning mechanism and power imbalances across components (Bryson et al., 2006); incentives based negotiation and remedying power imbalances (Ansel & Gash., 2007); structure and dimension under collaborative Governance Regimes (CGR) (Emerson et al., 2011); or authoritative texts their effect on particular activities (Agranoff & McGuire.,2012). Thus, it can be inferred that most of these scholars have a similar exposure to the concept of the CG, albeit with different interpretations.

This shared perspective enables other scholars to modify the CG concept by applying or omitting a specific CG's feature interchangeably as needed to find the best practices, because each feature has different concerns and serves different organizational objectives (Bodin, 2017). This research has highlighted several seminal works on CG theories, which underpin the current applications of CG in various social and ecological contexts, such as Ansell & Gash (2007) and Bryson et al. (2008), with their specific concern for the early phase of CG. In this case, either Ansell's or Bryson's perspective agrees that the initial condition and starting points often serve as key motivation for multiple stakeholders to engage in collaboration. Furthermore, Provan & Kenis (2008) and Emerson et al. (2011) argue that systems and contextual mechanisms that sustain the process collaboration process are critical determinants of its overall success. In Provan and Kenis's thought, the collaboration process should be supported by strong networking and ideal types of governance, while from Emerson's perspective, the governance mechanism requires strong and resilient characteristics that can be adapted over the dynamic process of a collaborative environment. Therefore, the sustainability and effectiveness of the collaborative process are influenced by the broader institutional and political context in which they operated as CGR.

Building on the discourse of CG's feature, Agranoff & McGuire (2012) highlight the importance of both decision and non-decision aspects, where the former pertains to the consensus-oriented choices, while the latter refers to the failure to reach consensus for some reasons, such as maintaining the status quo or preserving an imbalanced benefit. In addition to this highlight, Koshmann, Kuhn & Pfarrer (2012) add the communication practices to inject the cross-sector partnership value among diverse stakeholders. Hence, the communication is not merely connecting the participating parties but also forming the partnership itself. Last but not least, Thompson and Perry (2006) emphasize the role of antecedents such as incentives, power, and leadership to shape the organizational outcomes, including trust, shared understanding, equity, or legitimacy.

Analytical Framework: Manifestation of the Forest as A Common-Pool Resource

The fundamental principle of democratic governance theories advocates for rethinking the equitable principle rather than an authoritative or sovereign approach for public goods utilities (Hourdequin et al., 2012). This perspective has served as a foundation for contemporary forest governance practices, wherein forest area is considered a common good that provides a wide range of benefits and values for various parties (Fasona et al., 2019). However, the application of this democratic approach has attracted considerable attention from political ecology scholars, as broader participation often introduces a multiplicity of interests, thereby complicating governance processes (Eckersley, 2020). It creates a demand for a specific subject to understand how the participation emerged, formed, and evolved by the dynamic of the policy environment (Sackey et al., 2025).

Recognizing this, the Agrawal's seminal work provides a lens for understanding that shows how comprehensive ecological collaborative assessment requires unpacking at least three of the aforementioned key components, including the nature of subjects, the mechanism reinforcing their formation, and their continuous evolution (Agrawal, 2005). This principle has commonly been applied as an analytical backbone sustaining the CG's discussion, either in a common or specific ecological context (Ulibarri et al., 2020; Sackey et al., 2025). According to Agrawal (2005), the first key component of ecological collaborative is the nature of the subject, which refers to the active agents who both define and are defined by their environments and governance systems. In the context of forest governance, this component refers to individuals who actively participate in governance mechanisms while

perceiving the forest not merely as an ecological asset but as a vital resource that sustains their livelihoods.

Second, the mechanism reinforcing the formation of ecological collaboration includes the blend of governmentality and environmentality, both of which contribute to shaping the overall forest governance framework. This component is heavily influenced by Foucault's model, with significant emphasis on the ways power is exercised through decentralized, often subtle forms of control that govern individual and collective behavior (Agrawal, 2005; Sackey et al, 2025). It concerns how environmental subjects are produced through the internalization of conservation norms and practices (Haugaard, 2022). Consequently, this section emphasizes the normative and legitimate dimensions of forest governance, including rules and regulations governing forest use, mechanisms for continuous participation, decision-making, and knowledge production related to forest management.

Finally, the last essential component is continuous evolution, which recognizes that both the subject and the collaboration process are dynamic rather than static and demand robust adaptability mechanisms. To fully evaluate this component, the CG framework must conduct multiple assessments across different policy layers and successive policy decisions so that adaptability can be measured iteratively and comprehensively. In this paper, we employ Agrawal's perspective as an analytical framework facilitating the discussion and supporting the CG's features aforementioned in the previous theoretical section. From this analytical framework, we maintain that the CG's role in this study should not be viewed solely as a mechanism for enhancing livelihoods or conserving biodiversity, but also as an instrument for shaping individuals into governable subjects.

Method

Research Design

This research is a descriptive study that is implemented through a qualitative approach. It aims to review the current implementation of multi-forestry businesses in Indonesia and explore the best practices for forest governance to increase the benefits of the forests around Riau province. To do so, this research design combines multiple-case method as expressed in Yin (2003) and a forestry policy evaluation model built on Nebasifu et al. (2025). The multiple-case method is expected to provide multiple layers of policy intervention and, therefore, enable better exposure to observe the forest governance implementation with particular emphasis on the collaborative.

The following figure 1 explains the research design facilitating the interplay between policy intervention, situational change, policy impact, and learning process as the first layer of our analysis framework that is served by Nebasifu's theory. Then, we attempt to explore our further analysis through the second layer of analysis where the collaborative governance is assessed and evaluated its impact toward the policy outcomes through the lens of Agrawal's theoretical framework.

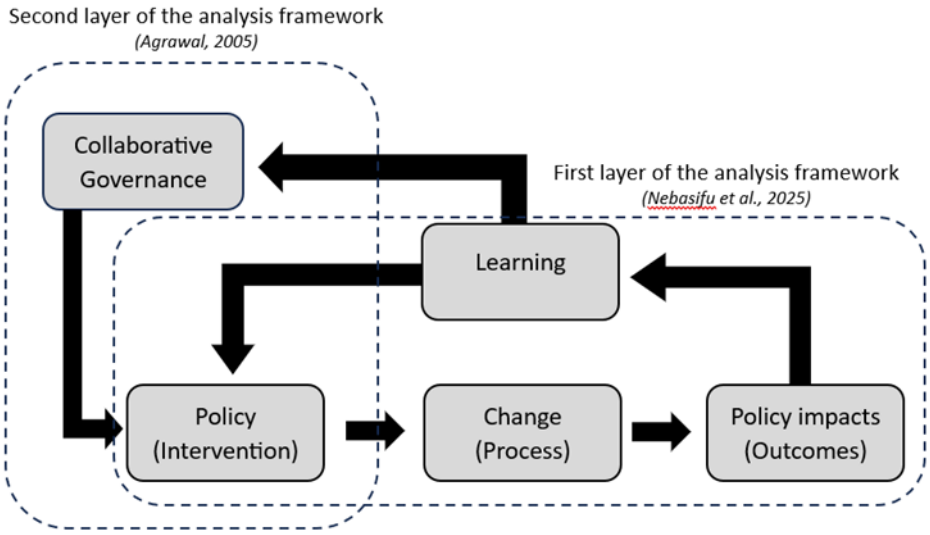

Fig. 1. Multiple Case Method of Analysis Framework

Source: Agwaral (2005), Weible's (2023), and Nebasifu et al., (2025)

This multiple-layer assessment is intended to minimize the implementation bias since there are multiple programs and policies implemented within the overall forest governance system in Riau province. Besides that, the forest governance also frequently intersected with other kinds of policy, for instance, agricultural policy (Smith & Zhao, 2020), omnibus law (Beeton et al., 2024), land tenure reform (Garcia & Patel, 2019), or regional development policy (Hwang et al., 2021; Dobšinská et al., 2024), thus it susceptible to biases arising from broader policy outcomes. The Nebasifu's perspective prevents this bias by bordering various stages within the policy implementation process (*see Figure 1*).

Data Collection

The dataset applied in this study was filtered from 32 key informants who were considered knowledgeable and capable of interpreting the Mb-F policy context and its implementation, particularly in the case of Riau Province. Our key informants are comprised of the experts, experienced, and knowledgeable actors from government entities in the forestry department, private firms affiliated with the forestry business, non-governmental organizations on ecological conservation, the local community with plenty of participation under the forest program, and other stakeholders from academic and cultural organizations. The interview format in this research consists of two models, which are in-depth interviews and focus group discussions (FGDs). Our in-depth interviews highlight the need to explore the information regarding CG's role under the Mb-F concept and implementation in Riau Province. During this interview process, we employed a semi-structured interview designed to open the potential for the snowball sampling effect, which could lead to additional interviews with other key informants. We settled our indicators and limits of this interview until theoretical saturation has been fulfilled, and further activities are not gaining any further information.

The Focus Group Discussion (FGD) sessions consisted of three separate discussions involving local government representatives, private sector actors, academics, cultural activists, and indigenous communities residing near the forest area. It was conducted using both Indonesian and the local dialect to ensure inclusive participation. While the use of multiple languages may introduce a degree of information bias, it enabled some local participants to express their views more comfortably and confidently. These FGD sessions offered two key benefits to this study. First, they provided a space to validate findings from earlier in-depth research. Second, they facilitated triangulation among participants, enabling a broader and more nuanced exploration of relevant information.

Moreover, the diverse composition of FGD participants allowed for the emergence of contrasting perspectives, particularly between institutional actors and indigenous community members. Local wisdom and traditional ecological knowledge shared by indigenous participants provided critical insights into sustainable forest practices that are often overlooked in formal policy processes. These perspectives not only enriched the empirical depth of the study but also highlighted the importance of culturally grounded approaches in forest governance. The interactive format of the FGDs encouraged mutual learning and exposed areas of consensus and contention, revealing governance gaps and opportunities for more inclusive policy design under the Multi-business Forestry (Mb-F) framework.

Result

Early portrait of Mb-F Policy and Collaborative Governance Implementation

This section presents the study's results and findings, focusing on describing the initial representation of the Mb-F policy in relation to the implementation of collaborative governance. Hence, our findings confirm that the government initiates the implementation of the Mb-F policy in mid-2022 as a result of dissatisfaction regarding previous inefficient forest governance mechanisms, where it mainly focused on timber production. Some ecological indicators have confirmed that timber-based forest governance has led to asymmetric forest benefits that tend to favor large-scale private firms over the indigenous local community. Furthermore, it also cultivates a semi-illegal logging culture among the local community, where some of them have specific permits from the local authority, but at the same time, it violates the national logging rules. This information has been confirmed by Mr. Mahendra as one of our key informants from local indigenous representative.

"…*forest is our home, our environment, then we can't just let the outsider company cut our trees but they wont allow us to do so. So we need to negotiate with our local authority, and of course, by giving them an offer*…(Interview from Mr. Mahendra, 9 Nov 2024)"

In the following figure 2(a), it can be seen that the previous timber-based forest has been subjected to massive logging in the Riau Province area.

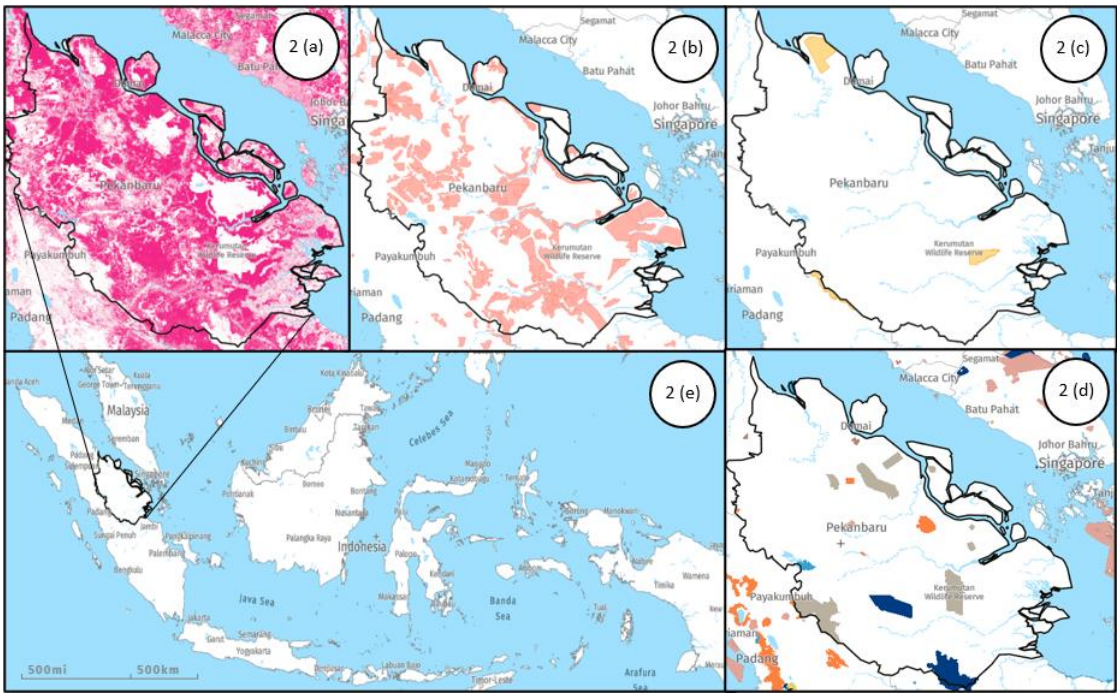

Fig.2 (a) Tree cover loss, (b) NTFPs concession, (c) Logging concession (after 5 years of Mb-F),

(d) Conservation of biodiversity areas, (e) Spatial position of Riau Province in Indonesian territory.

Source: globalforestwatch.org (2024)

In this case, it can be inferred that the implementation of Mb-F policy shifts from the mono-commodity into the diversified model encompassing timber, NTFPs, agroforestry, and ecotourism services. In the aforementioned figures 2(b) and (d), it can be seen that the trend of land concession for NTFP products and conservation for biodiversity is significantly growing rather than forest concession for timber production, as shown in figure 2(c). This phenomenon indicates a higher degree of societal acceptance for the Mb-F program, as evidenced by the numerous participants involved during its implementation.

The design of the Mb-F policy highlights the importance of social forestry, which enables equal access for all stakeholders. The interview with Dr. Rahmat, as head of the sub-directorate of business control for forest utilization of Indonesia, confirms.

"…This policy is very strategic and crucial, I mean, it involves many important components, and some of them need to change the old traditions inherited from Dutch colonialism, where the forest was considered a benefit for the ruler. But now the Mb-F policy attempts to shift this principle, where equity should be promoted…(Interview from the Dr. Rahmat/ head of the sub-directorate of business control for forest utilization of Indonesia, 12 Dec 2024)*"*

Although promoting equity in forest access appears to be a commendable goal, the implementation of the Multi-business Forestry (Mb-F) policy entails complex adjustments that cannot be resolved through a single policy paper. Instead, it gives rise to wicked problems, particularly as the number of stakeholders increases. This situation necessitates the application of CG among the involved stakeholders. Collaborative processes emerge both in the political arena, where bargaining among competing interests takes place, and in the policy design stage, where the Mb-F policy requires alignment and modification of cross-sectoral regulatory frameworks. Additionally, in the implementation stage, the demand for CG is even greater to tackle asymmetric knowledge among stakeholders at the grassroots level.

In the Political Stage

In the political stage, two distinct interests can be identified between national and local (provincial and municipal) levels. The national interest, represented by the central government, prioritizes forest governance aligned with the UN principles of sustainable forest management and the REDD+ framework. In contrast, local governments focus primarily on maximizing local revenue by capitalizing

on the forest's economic potential. The implementation of the Mb-F policy may reduce local government revenue in the short term, as existing timber companies may relinquish their logging concessions. Simultaneously, new concessions for NTFPs have not generated significant local revenue due to imperfect competition among existing and incoming stakeholders. In this context, the collaborative process is emerging to establish a fair and transparent competitive environment that promotes equitable benefit-sharing among all involved stakeholders.

In the Policy Framework and Design Stage

In previous discourse, this paper has briefly mentioned that the Mb-F policy entails complex adjustments that cannot be resolved through a single policy paper. Accordingly, this section will elaborate on the policy design with specific adjustments as derivative rules correlated to the Mb-F implementation. The initial framework of the Mb-F policy has been formulated by the Ministry of Environment and Forestry (MoEF) with significant aspirations from forest farmers' groups, NGOs, and environmentalists, with the support of academia. Therefore, the framework of this policy is bottom-up interest with communal needs that is aimed at attaining benefits for the grassroots level community.

At least, we found three pieces of evidence as the consequences of the Mb-F policy that require derivative rules adjustment. First, the Mb-F policy may attract more new participants, and thus it requires a flexible human resource management. Then, the government ought to adjust the labor and employment mechanism.

"…*Indeed, we should gear this Mb-F policy with another following regulation such as omnibus law* (employment rules)*, or environmental protection standards, because otherwise it would stagnate and fails on its implementation, and later maybe it would benefit another rent-seeker*…(Interview from Dr. Rahmat – 12 Dec 2024)"

Then, as conveyed by Dr. Rahmat, the second derivative of the regulation refers to the alteration of environmental protection standards, wherein several newly established companies have begun to demand more flexible compliance measures to accommodate their operational needs. In this context, their demands are not necessarily aimed at lowering environmental standards, but rather at streamlining the procedural requirements to enhance administrative efficiency and regulatory responsiveness. Finally, the last derivative regulation is the simplification of concession rules, which enable the local indigenous civilians to make a semi-partnership and collaboration.

In the Program Implementation Stage

The program implementation stage, perhaps, is the most crucial phase from all stages of the policy cycle for fostering the CG's principle because in this phase, the unhealthy competition and field-level infringement in forest exploitation most frequently occur. In this phase, we have seen that the policy procedure and framework have been applied by various models of implementation. Mr. Ali Teddy, Head of the forest area utilization of the Riau provincial forestry agency, argues.

"…*The forest utilization has a long story to sustain the community livelihoods, it existed even long before the government issued the formal rule of forest governance. But we have to know that forest-dependent communities are culturally and ethnically diverse and their engagement with the forest reflects a wide range of purposes*… (Interview from Mr. Ali – 8 Jan 2025)".

According to the information conveyed by Mr. Ali, it can be inferred that enforcing a uniform approach to policy implementation is inherently challenging. Our investigation did not reveal any overt protests from within the indigenous community. However, the policy appears to have generated a hidden transcript that reflects forms of silent resistance, unspoken discontent, or subtle opposition that emerge when subordinate groups lack the space to express dissent openly during the implementation process.

Aside from those various applications, the previous model of forest governance left a culture of domination, particularly regarding forest benefits sharing. This condition gives rise to an unspoken rule that mirrors a Foucauldian Panopticon within forest management, wherein those who hold power are granted greater operational freedom, while marginalized actors are subjected to intensified scrutiny. As a result, the policy environment contributes to the production of self-regulating subjects who internalize surveillance and discipline, aligning their behavior with dominant governance norms.

Discussion

Nature of Subject

The initial part of this sub-section highlights and interprets our findings, situating the subject from our analysis within the broader literature of CGs. The transformation from timber-oriented forest governance to a multi-business forestry (Mb-F) framework redefines the subject of governance in significant ways. In this context, the subject is not merely a passive recipient of state policies but an active agent constituted through participatory engagement, shaped by the ecological, social, and institutional dynamics of collaborative governance. Anchored in Agrawal's (2005) notion of environmental subjectivity, actors—particularly local indigenous communities—reorient their identities and practices around the Mb-F agenda. This shift is evident in how local actors internalize new norms of ecological conservation, diversification of forest use, and equitable benefit-sharing, despite their marginal historical positioning under prior governance regimes.

From the perspective of Bryson et al. (2006) and Thompson and Perry (2006), this reconstitution of subjecthood stems from early conditions and incentives which motivated diverse actors to enter into collaboration. Trust-building, shared goals, and perceived benefits are crucial antecedents. The participatory practices evident in FGD data and local interviews signal the emergence of a shared identity among forest actors, as facilitated by inclusive communication (Koschmann et al., 2012) and institutional redesign aimed at power rebalancing. However, this process is not without contradiction. As Provan and Kenis (2008) argue, ideal governance structures are difficult to achieve under conditions of asymmetrical power and knowledge. In the Mb-F implementation, while participation was formally encouraged, latent tensions and hidden transcripts (e.g., silent dissent or covert resistance among indigenous actors) reveal that the collaborative ethos has not been fully realized in practice.

Mechanism Underpinning Their Formation

The mechanisms facilitating the formation of collaborative governance subjects in this context are inherently hybrid—combining formal regulatory structures with informal norms, discourses, and practices. Drawing from Emerson et al. (2011), the emergence of a collaborative governance regime (CGR) in the Mb-F program illustrates a blend of system context (historical injustice and ecological degradation), principled engagement (stakeholder dialogues), and capacity for joint action (policy co-creation, field-level partnerships).

Ansell and Gash (2008) emphasize the importance of face-to-face dialogue and power-balancing processes in early collaboration phases. In Riau, these mechanisms manifest in structured FGDs and multi-stakeholder consultations. Nevertheless, the fragmented regulatory environment and competition between national and sub-national interests (as shown in the political and policy design stages) complicate efforts toward mutual accountability. Agranoff and McGuire's (2012) differentiation between decision and non-decision processes is salient here: while some consensual decisions were made (e.g., shared access to NTFP zones), several contentious issues—such as environmental impact assessments and labor arrangements—remained unresolved, reflecting strategic non-decisions that preserve elite advantages.

Moreover, power asymmetries are subtly reproduced through what Foucault would describe as disciplinary mechanisms, producing "governable subjects" who self-regulate in accordance with dominant discourses. This is exemplified by the Panopticon-like surveillance structure within forest management institutions, where local actors conform to governance norms to gain legitimacy and avoid punitive scrutiny.

Their Evolution Over Time

The evolution of collaborative governance in the Mb-F context is best understood as a non-linear, adaptive process. According to Provan and Kenis (2008), governance networks undergo transformation in structure and function over time based on internal tensions and external pressures. Similarly, Emerson et al. (2011) argue that successful CG regimes must possess dynamic capabilities for adaptation. This resonates with the findings in Riau, where Mb-F shifted from a top-down timber regime to a more participatory, multi-stakeholder framework.

Initially, the CG mechanisms were fragile characterized by limited capacity and skepticism among local actors. However, as Mb-F implementation unfolded, local actors began to exercise greater agency, not only in ecological conservation but also in economic ventures like ecotourism and agroforestry. The expansion of NTFP concessions and the growing role of indigenous knowledge in biodiversity

conservation suggest an evolving institutional logic, where collaboration is increasingly normalized. Koschmann et al. (2012) stress the importance of communicative practices and authoritative texts in shaping cross-sector partnerships. In Riau, shifts in discourse—from "timber rights" to "forest stewardship" and the institutionalization of new terminologies in policy texts and implementation manuals reflect a discursive evolution that undergirds practical change.

Yet, unresolved regulatory contradictions, administrative inertia, and uneven resource distribution continue to constrain deeper evolution. Without continuous iterative assessments and robust feedback mechanisms, as suggested by Agranoff and McGuire (2012), the evolution risks stagnation or reversal. Thus, the Mb-F case underscores the need for both structural reforms and cultural transformations within the collaborative governance apparatus.

Conclusion

This study demonstrates that Indonesia's transformation from a timber-oriented forest governance model to a multi-business forestry (Mb-F) regime reflects a significant yet complex evolution of collaborative governance in practice. The Mb-F initiative, particularly in Riau Province, represents a shift in both the subject and substance of forest policy recasting local actors not merely as beneficiaries but as active agents in co-managing ecological resources. The study finds that the formation and evolution of collaborative governance are shaped by hybrid mechanisms blending institutional design, regulatory adaptation, participatory dialogue, and informal power dynamics.

While the collaborative governance model employed under the Mb-F policy has enabled broader stakeholder engagement and diversified forest use including non-timber products, ecotourism, and agroforestry, it remains hindered by regulatory fragmentation, elite capture, and latent resistance among indigenous groups. These challenges underscore that collaboration is not inherently democratic or equitable; it must be carefully cultivated through inclusive structures, adaptive institutions, and recognition of embedded power relations.

A key contribution of this research lies in its analytical framework that blends Agrawal's environmental subject formation with the collaborative governance theories of Bryson et al., Emerson et al., and others. This integrated perspective reveals that CG in forest governance should not only be seen as a coordination mechanism but also as a site of subject-making and normative transformation. The study offers empirical insight into how forest governance in Indonesia can be more responsive, adaptive, and inclusive, especially in contexts marked by ecological complexity and socio-political fragmentation. Ultimately, this paper provides a nuanced understanding of how multi-layered governance, cultural legitimacy, and institutional flexibility must converge to support sustainable forest management. As global forest regimes continue to move toward decentralization and pluralism, the Indonesian Mb-F experience offers valuable lessons for countries seeking to reconcile ecological sustainability with socio-economic equity through collaborative means.

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