Hutan Nagari and the Negotiations of Indigenous-State Relations in Minangkabau

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ABSTRACT

Forest management in Indonesia often presents a tension between state-driven conservation objectives and the socio-economic interests of indigenous communities. This study explores how the Hutan Nagari (village forest) scheme serves as a conflict resolution mechanism between indigenous communities and the state, with a focus on Sungai Buluah in West Sumatra. Employing a qualitative case study approach, data were collected through in-depth interviews, field observations, and document analysis involving community members, the Village Forest Management Institution (LPHN), and the provincial forestry agency. The findings reveal a dual pattern of conflict: prior to 2019, vertical and macro-level disputes predominated, rooted in top-down state forestry policies that marginalized local customary rights. Following the implementation of the Hutan Nagari scheme, conflicts shifted to a horizontal and micro-level, involving intra-community negotiations over resource access. Conflict resolution strategies evolved accordingly, from institutional strengthening and enhanced community participation to more nuanced approaches, including problem-solving, yielding, and inaction. These strategies align with sustainable development goals, integrating economic welfare and conservation objectives. This research contributes to the discourse on community-based forest management by highlighting the adaptive nature of conflict resolution mechanisms in pluralistic indigenous settings

A. INTRODUCTION

Forests in Indonesia represent more than ecological or economic assets (Simarmata, 2024); they embody deeply rooted social, cultural, and political dimensions that have long shaped the livelihoods and identities of indigenous communities. Historically, forest governance in Indonesia has been dominated by state-centric models, rooted in colonial legacies that imposed rigid classifications of forest zones and centralized control over vast forested areas (Rohmy et al., 2024). These policies often marginalized customary rights (*adat*), leading to widespread conflicts between the state and indigenous communities who maintained longstanding claims over forest territories (Sopaheluwakan et al., 2023)

In response to these tensions, Indonesia has embarked on an ambitious program of decentralized forest governance, most notably through Social Forestry (Erbaugh 2019). This framework grants legal recognition and access rights to communities, enabling them to manage forests sustainably while promoting environmental conservation and economic development (Sahide et al., 2020). Social Forestry schemes, including Community Forests (HKm), People's Plantation Forests (HTR), Forestry Partnerships, Customary Forests, and Village Forests (*Hutan Nagari*), have been implemented across Indonesia with varying degrees of success (Ari Rakatama, 2020).

West Sumatra is a traditional Minangkabau government unit that adheres to the Nagari system. The Nagari system offers a distinctive institutional framework for forest co-management by fusing contemporary administrative frameworks with customary law (adat). In

contrast to Java's more formalized methods, Hutan Nagari is based on customary institutions, with customary elders, or *Ninik Mamak*, playing a crucial role in decision-making (Syofiarti et al., 2023). Local communities are acknowledged as important stakeholders in forest governance under Community-Based Forest Management (CBFM) (Lindayati, 2000), which is reflected in this model.

CBFM has gained popularity worldwide as a successful method for managing forests (Jenke, 2024), particularly in areas where state governance structures have been unable to meet local needs. For instance, in Tanzania (Henriksen et al., 2023) and Namibia (Fenny et al., 2025), where community conservancies and cooperative forest management agreements have been established to strike a balance between conservation and livelihood needs, comanagement arrangements have emerged between governments and local communities.

The potential of community-led forest governance to improve conservation outcomes and economic resilience has also been shown by community forestry enterprises in Guatemala and Mexico in Latin America (Cole et al., 2024) (Agrawal, 2001).

Although CBFM models are based on similar ideas, such as resource sustainability, local empowerment, and participatory governance, their efficacy varies significantly depending on institutional settings, power relationships, and cultural systems (Abdul Aziz et al., 2024). According to comparative research, the success of CBFM is largely influenced by inclusive decision-making procedures, adaptive governance mechanisms, and the official recognition of customary institutions (Maryudi et al., 2022).

The Hutan Nagari scheme in Indonesia provides a unique opportunity to study these dynamics. In contrast to other Social Forestry models in Java or eastern Indonesia, the Minangkabau socio-political structure, which is defined by matrilineal clans (suku) and adat governance, introduces intricate layers of internal negotiation (Sumanto, 2009).

Because intra-community conflicts over resource access, benefit-sharing, and institutional authority arise alongside state-community conflicts, these internal dynamics not only impact forest management practices but also conflict resolution tactics.

This complexity is best illustrated by the situation in Nagari Sungai Buluah, West Sumatra. Before Hutan Nagari was adopted, the community and the state had ongoing disagreements over conflicting claims to the forest. Greater community involvement in forest governance resulted from the 2013 galodo (flash flood), which raised local awareness of the forest's ecological roles. With the formal establishment of *Hutan Nagari* in 2019, these vertical conflicts with the state were largely mitigated, but horizontal conflicts within the community intensified, particularly around resource allocation and decision-making roles among different clans and social groups.

The objective of this study is to examine how the establishment of *Hutan Nagari* in Sungai Buluah functions as a local governance innovation that transforms conflicts between indigenous communities and the state into cooperative forest management. By analyzing the institutional dynamics between state forestry policy and local customary norms, this research explores how hybrid arrangements between adat leaders, village government, and community groups generate a new form of commons governance. This study addresses a significant research gap in the literature, which has predominantly emphasized *vertical conflicts* between communities and state institutions in Indonesia's social forestry programs. In contrast, this research focuses on *horizontal conflicts* within the indigenous community—conflicts over access, authority, and legitimacy—that have received limited scholarly attention. By foregrounding these horizontal dimensions, the study contributes to a deeper understanding of how hybrid governance can reconcile internal social tensions while also bridging the relationship between local communities and the state in forest management.

B. METHOD

This research was conducted in Nagari Sungai Buluah, located in Padang Pariaman Regency, West Sumatra Province, Indonesia. The region is characterized by a mixed landscape of lowland forests and hilly areas, which form an essential part of the watershed ecosystem that supplies clean water for surrounding communities, including the Minangkabau International Airport and regional water utilities (PDAM). The forested area in question, previously designated as a protected state forest, overlaps with the customary territory (hutan ulayat) of the Sungai Buluah indigenous community.

Following the 2013 flood disaster (*Galodo*), local awareness of the forest's ecological function significantly increased, leading to the adoption of the *Hutan Nagari* scheme in the area. This scheme formally acknowledges the community's role in forest management while upholding the conservation standards required by the state.

This study employs a qualitative case study approach to explore the dynamics of forest conflict and resolution mechanisms within the *Hutan Nagari* framework. The case study method was chosen to capture the complexity of interactions between the state, indigenous communities, and other stakeholders in forest governance (Yin, 2015)

The study employed several complementary approaches. First, in-depth interviews were carried out with key informants, including members of the Village Forest Management Institution (LPHN) of Sungai Buluah, representatives from the West Sumatra Provincial Forestry Office, local community leaders, and customary authorities (Ninik Mamak), as well as facilitators from non-governmental organizations (NGOs), particularly those from WARSI.

Second, participant observation was undertaken during community meetings, forest patrols, and conservation activities. This approach enabled the researcher to closely observe the practical aspects of Hutan Nagari management and the ways in which conflict resolution practices were implemented in daily interactions.

Figure 1. Land cover map of Nagari Sungai Buluah Timur. A. Slope map of Nagari Sungai Buluah Timur and b. Land cover map of Nagari Sungai Buluah Timur
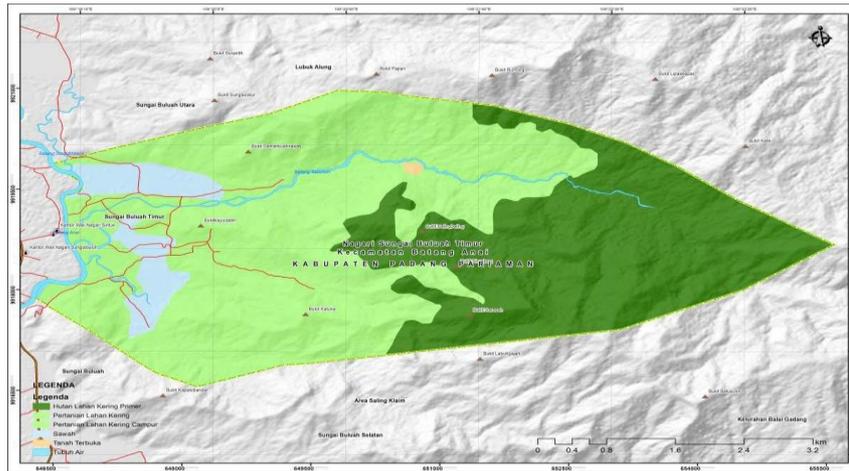
Finally, document analysis was performed by reviewing legal documents, forest management plans, meeting minutes, and policy frameworks related to Social Forestry and the Hutan Nagari scheme. This provided a clearer understanding of the formal structures and regulatory environment shaping local forest governance.

To ensure the reliability of the data, this research applied triangulation techniques (Meydan & Akkaş, 2024), which involved cross-checking information obtained from interviews, observations, and document reviews. Member checking was also conducted by sharing preliminary findings with key informants, allowing them to verify the interpretations and confirm their accuracy.

In terms of data analysis, the study employed thematic analysis to categorize and interpret information related to the forms of conflict—both vertical (macro-level) and horizontal (micro-level)—as well as the conflict resolution strategies practiced within the Hutan Nagari scheme. Data coding was carried out manually, guided by key themes derived from the theoretical framework on Social Forestry and conflict resolution, as well as issues that emerged during fieldwork. The analysis aimed to understand how the Hutan Nagari system responds to evolving conflict dynamics and supports mechanisms for sustainable forest management

RESULTS AND DISCUSSION

1. Transformation of Forest Conflict Dynamics in Sungai Buluah

The pattern of forest conflict in Nagari Sungai Buluah shows a dramatic change, moving from horizontal, micro-level conflicts within the community to vertical, macro-level conflicts between the state and the indigenous community. This evolution reflects both the changing institutional landscape of forest governance and the adaptive capacity of local actors to navigate complex socio-political terrains.

a. Vertical and Macro-Level Conflicts (Before 2019)

Prior to the formal implementation of the Hutan Nagari scheme, the conflict between the state and the Sungai Buluah community was marked by institutional

exclusion and state dominance. The government classified the forested area as a protected forest, subject to centralized

regulations that prioritized conservation objectives without taking into account customary claims. Because community members persisted in using forest resources in accordance with ancestral rights (*hutan ulayat*), this exclusion was demonstrated by enforcement actions, such as arrests for illegal logging (Afrizal 2023)

The inability to recognize ownership and secure community rights in forest ownership, as well as the weakness of forest ownership as a form of ownership based on customary land inheritance, are the root causes of the conflict over forest management in Sungai Buluah village. This is in line with Bromley (Bromley 1991) which differentiates ownership as a source of conflict, including; (1) state property,; (2) joint property,; (3) private property, and; (4) not owned by anyone. State property is obtained through power, joint property is property rights that are inherited from generation to generation, such as customary land. The weakness of joint property is that it cannot be used by certain people or groups only, this weakness of joint property is overcome through private ownership which is regulated by state regulations.

The management of the nagari forest in Sungai Buluah is led by prominent traditional leaders, including Datuk Rajo Batuah as the 11th descendant of the first generation of Nagari Sungai Buluah forest managers, the Satu Datuk Sungai Berantai. The basis of ownership made by this first generation is based on the breadth of views carried out by the Satu Datuk Sungai Berantai, as explained by the Head of LPHN Nagari Sungai Buluah(Azwar, n.d.a)

After reciting the pantun, the gaze is directed to the north along the border of Mount Pasaman, to the east along the border of Solok, to the south along the border of the coast, and to the west along the border of the "*ombak badabua*" (crashing waves).

The pattern of determining forest ownership based on forests was changed to a form of state ownership carried out by the Dutch colonial government.The Dutch East Indies colonial government established a forestry organization as the first colonial organization to have full

power over forest resource management, with limited access that determined forest ownership rights. This forestry organization was complemented by other organizations, such as Houtvester (Head of Forestry Unit) and Boshwezen (Forest Police). The power of the Dutch East Indies government or control of the forest ended in 1942 with the entry of the Japanese colonial government. The transfer of power from the Dutch government to the Japanese government ended the Dutch colonial government's control over Dutch forestry management. The end of Japanese colonial rule in 1945 led to the management of the Nagari Sungai Buluah forest being transferred from the Japanese government to the Indonesian government.

This change in the forest management system occurred in accordance with changes in regulations made by the government, including Law No. 1 and Law No. 5 of 1967 and Law No. 6 of 1968 which were made by the government to manage forests as an effort to obtain foreign exchange for national development purposes, this effort was made by the government through the export of round wood (logs). Population growth from 1969 to the 1990s encouraged residents to utilize forest resources as a source of livelihood. The utilization of these resources by the residents created conflict between the community and the state in the struggle for access to the forest resources.

The community has been able to access the use of protected forests for 20 years to meet their short-term living needs, such as cultivating galangal, turmeric, and jengkol plants, which have been planted by the community. However, this use is limited by the community's sense of insecurity, who are always being watched and chased by Forest Police, who are considered to be violating government regulations, which prohibit the community from entering protected forest locations. The Minangkabau customary system, with its matrilineal clan structures (suku) and Ninik Mamak leadership, was systematically marginalized in formal decision-making.

The state's top-down approach, grounded in colonial-era forestry laws, failed to recognize local governance institutions, thereby intensifying the conflict. The community's resistance was not only a response to material deprivation but also an assertion of cultural identity and territorial sovereignty. There is a shift in resource management from local to national governments, and it requires the development of new relationships with nationally appointed community resource managers. This shift in the broader political economy may render some types of access obsolete, as it creates new social relationships that necessitate the development of alternative access mechanisms to gain, maintain, or control resources.

The values, customs, and norms of society are inherent in the ownership of high-ranking heirlooms; the function of these societal values, customs, and norms is to maintain and preserve high-ranking heirlooms. Efforts to change the status of high-ranking heirlooms to low-ranking heirlooms are one way to eliminate the authority of society in influencing the form of government permits for the management of natural resources, as explained by the Head of LPHN Nagari Sungai Buluah(Azwar n.d).

"In 2011 there was a public protest submitted to the police office (*Polres*) of Nagari Sungai Buluah against the C mining permit that had been issued by the Regent of Padang Pariaman and the Mining Service of Padang Pariaman Regency, the issuance of the permit was based on the statement that there were no high-ranking heirlooms in Nagari Sungai Buluah, this government statement was protested by the community through several community leaders who stated that the mining permit would damage the natural structure by erosion (abrasion) of cliffs which would disrupt the management of nature for the economic welfare of the community (children and grandchildren) in the future. This mining permit is valid until 2014

Determination of the upstream river area as the Nagari Sungai Buluah forest work area was initially opposed by community members who used this area as a source of livelihood, but this community members' resistance could be overcome through WARSI's role as a non-governmental organization (NGO), Indonesian Conservation Community (KKI), which accompanies the community. The change in attitude occurred over a certain period of time through a series of discussions and deliberations. There are benefits to deliberative decision-making in increasing social innovation in social forestry management, as explained by Nugroho regarding the use of protected forests controlled by the state(Nugroho et al. 2021).

This phase of conflict exemplifies the political ecology framework, where power asymmetries between the state and indigenous communities generate contestations over resource control (Adger et al., 2005; Blaikie, 1999). The macro-level nature of these disputes involved negotiations between institutional actors—government agencies, NGOs, and customary leaders—reflecting the broader challenges of decentralized forest governance in Indonesia

b. Horizontal and Micro-Level Conflicts (After 2019)

The establishment of Hutan Nagari in 2019 significantly altered the conflict landscape. With the formal recognition of community management rights, macro-level disputes with the state diminished. However, this shift revealed latent intra-community tensions, leading to the emergence of horizontal and micro-level conflicts. These conflicts revolved around resource allocation, benefit-sharing, and decision-making authority among different clans (suku) and social groups within the community. The Village Forest Management Institution (LPHN), although formally mandated to govern forest management, faced challenges in balancing the interests of diverse stakeholders, including Ninik Mamak, youth groups, and farmers' cooperatives.

One prominent source of tension involved the distribution of agroforestry plots and access to non-timber forest products (NTFPs). Disagreements arose over the criteria for allocating resources, with some clans perceiving favoritism or inequity in the decision-making processes. These disputes were further complicated by intergenerational dynamics, as younger community members sought greater participation in forest

governance, challenging the authority of customary elders.

The form of use of traditional institutions as a means of distributing state goods and services can be explained from the case of the conflict between the Wali Nagari Sungai Buluah Timur and the Chair of the LPHN regarding the aim of managing the Nagari Forest in Jorong Kuliek, the idea of the Wali Nagari in the Pilwana campaign (Election of the Wali Nagari) to remove wood from the nagari forest for the purpose of improving the economic welfare of the community was opposed by the Chair of the LPHN who explained that this idea undermined the aim of managing the nagari forest as a means of nature conservation.

This form of opposition was carried out by siding with the former Wali Nagari, who was nominated as Wali Nagari in Pilwana. The implementation of the Pilwana was won by a candidate from the military (TNI), who received the support of the people's votes, who supported the vision and mission of the economic development goals of the new Wali Nagari. The defeat of the old Nagari Mayor candidate who came from the police encouraged the LPHN Chair to play various roles for each party to achieve Nagari's economic development goals, as explained by the LPHN Chair(Azwar n.d).

"Uda (my elder brother), because you have been elected as the Village Head, it would be better to call the defeated Village Head (Sahar) to join together to build the village economy. There are two forms of village economic development management tasks, including those undertaken through the village government and those related to village forests. The suggestion was accepted, but its implementation was not realized. Even as the Head of LPHN, I was told to ask for a replacement."

This fragmentation of internal governance reflects findings from other CBFM contexts, where decentralization can inadvertently reproduce power asymmetries at the local level, leading to elite capture or exclusion of marginalized groups (Sirimorok et al., 2024). In Sungai Buluah, these dynamics necessitated adaptive conflict resolution mechanisms to sustain community cohesion.

2. Conflict Resolution Strategies in the Hutan Nagari Scheme

The adaptive conflict resolution mechanisms employed in Sungai Buluah reflect a synthesis of customary practices, formal governance structures, and external facilitation. These mechanisms evolved in response to the changing nature of conflicts, addressing both state-community and intra-community disputes.

a. Institutional Strengthening and Participatory Governance

At the macro-level, the formation of the LPHN was instrumental in bridging the gap between the state and community. The institutional design of the LPHN integrated adat (customary) leadership (Ninik Mamak) with formal administrative structures, creating a hybrid governance model that facilitated dialogue, negotiation,

and trust-building. Through participatory management planning, the LPHN ensured that customary norms were incorporated into forest management strategies, aligning state conservation goals with local socio-economic priorities (Kurniawarman et al., 2022)

Capacity-building initiatives, supported by NGOs like WARSI, further enhanced the governance capacity of the LPHN. These programs provided training on legal frameworks, resource management, and conflict mediation, empowering community members to assert their rights while fulfilling conservation obligations. The role of mentoring carried out by KKI Warsi towards the community in this socialization process has changed the form of community participation from the form of co-option as the subject of activities designed by the government to the form of cooperative participation (Co-operation).

This form of cooperative participation contains incentives for local communities, but the project is more designed by an external party that determines the entire agenda and ongoing process. The role of the local community in this form of participation is that of an employee or subordinate. Although social forestry activities are often initiated by external entities, such as the government, the form of community participation in managing social forestry has increased to become an implementer or subordinate of government activities that provide incentives for social and economic welfare benefits through their implementation. The incentives promised by the government reduce rejection as a form of conflict between the community and the state in determining protected forests as Hutan Nagari

b. Aligning Economic Incentivization with Conservation Synergy

To address the underlying economic drivers of conflict, the Hutan Nagari scheme incorporated sustainable livelihood strategies that balanced economic welfare with environmental stewardship. The community engaged in agroforestry, NTFP harvesting, and ecotourism, generating income while maintaining the ecological integrity of the forest. The utilization of nature conservation objectives in village forest management as a means of conflict resolution can be explained in the form of community participation in planning, managing, and evaluating work programs jointly determined by the community through LPHN. The 35-year access contracts provided legal certainty, allowing community members to invest in long-term resource management. Revenue-sharing mechanisms were established to ensure that benefits were distributed equitably, with portions allocated to clan-based initiatives, community projects, and conservation funds. This integrated approach mitigated livelihood-driven conflicts and reinforced collective responsibility for forest conservation

The level of community participation in village forest management is influenced by the institutional climate (atmosphere), which can be explained from several levels involving partnerships between the community, government, and supporting institutions, regulated by

Table 1. Mapping of Forestry Conflicts in Hutan Nagari Sungai Buluah Between Indigenous Peoples and the State

Potential Conflict	Forms Of Conflict	Approach	Forms Of Conflict	Form Of Conflict	Benefits Of Conflict	Conflict Issue	Conflict Resolution
Joint property	Objective conflict	Structural changes	Vertical conflict	Prominent and real	Positive	Right	Increased participation and institutional strengthening
Lack of protection of community rights	Subjective conflict	Change of perception	Horizontal Conflict	Latent	Negative	Power	Problem solving, competing, giving in, and remaining silent

Governor Regulation No. 52 of 2018 concerning the

implementation of Social Forestry facilitation. The regulation of rights and obligations for the community who are members of LPHN changes the form of cooperative participation (Co-Operation) carried out by the community with the government into a form of consultation participation (Consultation), this type of participation is the presence of questions about community opinion but external parties analyze the information and decide on their own form of action.

After the establishment of the management institution, the stage of proposing the Forest Work Determination Area is continued to the stage of repeating the proposal document. Compiling a proposal document that includes a map of the area, management plan, and justification for the need for social forestry. This document usually involves data on forest conditions, economic potential, and management and conservation activity plans. There are roles of the community, government, KKI Warsi NGO and the Nagari government in compiling this proposal document. The role of the community in compiling this proposal document changes the form of community participation from the form of consultation participation (Consultation) to the form of partnership participation (Collaboration). The community becomes a partner of the government and other stakeholders in submitting the proposal document for the formation of the Sungai Buluah Nagari Forest. This type of Collaboration (partnership) participation is a collaboration between local communities and external parties to determine priorities, and external parties are directly responsible for the process; the community acts as a partner (collaborator).

c. **Adaptive Resolution of Horizontal Conflicts**

At the micro-level, the community employed customary conflict resolution mechanisms that were adapted to the new governance context. These mechanisms include:

- Contending: Public deliberations mediated by Ninik Mamak, where conflicting parties articulate their positions and seek consensus through *musyawarah-mufakat* (deliberation and consensus).
- Problem Solving: Technical disputes, such as resource allocation criteria or benefit-sharing formulas, are addressed through facilitated negotiations, often involving NGOs or external mediators.

- Yielding: Voluntary concessions made by parties to preserve social harmony, reflecting adat values that prioritize community cohesion over individual interests.
- naction: Temporary disengagement from disputes, allowing emotions to de-escalate and providing space for reflection before re-engaging in negotiations.

These adaptive mechanisms are culturally resonant (Lutz & Lindez, 2004), enabling the community to manage internal fragmentation without resorting to formal legal avenues, which may be perceived as alien or disruptive to social relations

d. **Multi-Stakeholder Collaboration**

Finally, external facilitation and multi-stakeholder collaboration played a pivotal role throughout the conflict resolution process:

- NGOs such as WARSI not only facilitated capacity building but also served as mediators in disputes between the community and government agencies or within the community itself.
- The West Sumatra Forestry Agency provided technical support and regulatory oversight, ensuring that state objectives were aligned with community actions without imposing undue control.
- This networked approach reflects co-management principles, wherein state actors, communities, and civil society share responsibilities and benefits in forest governance (Kailey Kornhauser 2024)

3. Comparative Insights

The implementation of the Hutan Nagari scheme in Sungai Buluah provides a unique model within Indonesia's broader social forestry landscape. Community Forests (HKm), People's Plantation Forests (HTR), Forestry Partnerships, Customary Forests, and Village Forests (Hutan Nagari) are just a few of the schemes that fall under the broad policy framework of social forestry. Each scheme operates under distinct premises and covers distinct sociopolitical contexts.

Schemes like HKm and HTR are primarily focused on increasing economic productivity and lowering land tenure disputes in areas with less prominent traditional systems, such as Java. These models typically focus on granting communities official access rights to manage production forests, with a particular emphasis on the outputs of agroforestry and timber (Prabawani et al., 2024). State-driven frameworks typically shape the institutional structures in these fields, where local communities are still subject to formalized oversight mechanisms imposed by the federal or provincial governments, despite being granted some degree of authority.

On the other hand, the Hutan Nagari scheme incorporates traditional governance systems into the official forest management apparatus in outer island regions, such as West Sumatra, where customary institutions (adat) continue to have a significant influence. A pre-existing structure of leadership through Ninik Mamak (customary leaders) is provided by the nagari, a sociopolitical unit exclusive to Minangkabau society, allowing for more culturally sensitive management of forest resources. The Hutan Nagari framework enhances legitimacy and community buy-in by building upon existing social hierarchies and decision-making processes, in contrast to HKm or HTR, which often require the creation of entirely new community groups or cooperatives. There are advantages and disadvantages to Hutan Nagari's combination of traditional and state governance.

On the one hand, it enables co-management agreements that uphold regional customs while fulfilling state conservation goals, thereby encouraging shared accountability for forest care. The concept of collaborative resource governance (Beeton et al., 2024), in which state and non-state actors discuss roles, responsibilities, and benefits, aligns with this merging of institutional arrangements.

However, the Minangkabau context also brings with it unique dynamics, particularly in terms of internal conflicts within the community. Due to the pluralistic structure of Minangkabau society, which is based on matrilineal clan structures (suku), conflicting demands for decision-making power and forest benefits may emerge within the community. In contrast, internal conflicts occur in Java-based Social Forestry models' more uniform village structures.

The incorporation of state and customary governance within Hutan Nagari presents both opportunities and challenges. On the one hand, it enables co-management arrangements that respect local traditions while meeting state conservation targets, promoting shared responsibility over forest stewardship. This blending of institutional arrangements aligns with the concept of collaborative resource governance (Beeton et al., 2024), where both state and non-state actors negotiate roles, responsibilities, and benefits

However, the Minangkabau context also introduces unique dynamics, particularly in relation to internal community conflicts. The pluralistic nature of Minangkabau society, organized along matrilineal clan structures (suku), means that competing claims over forest

benefits and decision-making authority can arise within the community itself. This contrasts with the more homogenous village structures in Java-based Social Forestry models, where internal disputes are often less complex.

Furthermore, the adaptive conflict resolution mechanisms employed in Sungai Buluah, such as contending, problem solving, yielding, and inaction, reflect deep-rooted cultural values and social norms unique to Minangkabau society. These mechanisms differ significantly from formal legal avenues or arbitration processes common in other Social Forestry contexts (Brietzke et al., 2025), highlighting the importance of cultural sensitivity in forest governance

In essence, while HKm and HTR prioritize economic empowerment and conflict mitigation through formalized access rights, Hutan Nagari emphasizes cultural integration and adaptive governance within a customary legal framework. This distinctiveness underscores the need for context-specific models in Social Forestry, recognizing that one-size-fits-all solutions are inadequate for Indonesia's diverse socio-cultural landscapes (Kurniawarman et al., 2022).

The Sungai Buluah case thus provides valuable insights into the broader discourse on Community-Based Forest Management (CBFM), demonstrating that sustainable forest governance is not merely a function of decentralization, but requires continuous negotiation, capacity building, and institutional adaptability to align state objectives with local realities.

D. CONCLUSIONS

The experience of Hutan Nagari in Sungai Buluah illustrates how locally grounded forest governance can transform long-standing tensions between the state and indigenous communities. The establishment of the LPHN, which integrates Minangkabau customary leadership into formal management, shifted conflict dynamics from rigid, top-down disputes to more negotiable, community-based processes while restoring community rights and participation. Economic incentives, such as long-term access rights and alternative livelihoods, further align conservation goals with local welfare. Although decentralization reduced macro-level conflicts, it also generated new horizontal tensions within the community regarding access, benefits, and authority. However, these were effectively addressed through adat (custom)-based mechanisms that emphasized negotiation, consensus, and social cohesion. Supported by NGOs and responsive institutional arrangements, the Hutan Nagari model demonstrates that effective forest governance requires more than transferring authority, it demands flexible, culturally embedded systems capable of managing evolving conflicts.

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