

Dynamics and transformation of land tenure conflict in a village of Indonesia

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Abstract. *Ramadhan R, Titan A, Rahayu AB, Muttaqin T, Dharmawan AS. 2026. Dynamics and transformation of land tenure conflict in a village of Indonesia. Asian J For 10 (1): r100137. <https://doi.org/10.13057/asianjfor/r100137>. Land tenure conflicts remain a persistent challenge in Indonesia's social forestry programs, particularly in areas with overlapping historical claims and evolving governance frameworks. This study aims to analyse the dynamics and transformations of land tenure conflicts in Java, Indonesia, using the Rapid Land Tenure Assessment (RaTA) approach. A qualitative case study design was employed, combining in-depth interviews, participatory observation, and document analysis involving multiple stakeholders. The research findings indicate that land ownership conflicts are shaped by the history of land claims and divergent interests between communities and forest management authorities. Two contrasting conflict trajectories were identified: (i) long-standing conflicts with limited institutional resolution, and (ii) adaptive transformations driven by community engagement and policy shifts within social forestry schemes. This study proposes conflict-resolution mechanisms to reconfigure land governance structures through policy interventions and to reshape actor power dynamics that promote community participation within a framework of decentralized forest management. This study highlights the importance of participatory governance, strengthening local institutions, and adaptive policy frameworks in transforming land tenure conflicts. These findings contribute to a better understanding of conflict dynamics in social forestry and provide practical insights for improving land tenure governance in Indonesia.*

Keywords: Conflict transformation, forest tenure reform, Java, KHDPK, policy interventions

INTRODUCTION

The Social Forestry Program (SF) has undergone significant transformations, particularly in regulating rights and access to forest utilization (FAO 2002; Gilmour 2016). On the island of Java, the SF program has a long history; Community-Based Forest Management (PHBM) was the first program introduced following Indonesia's 1999 reforms under the authority of the State Forest Corporation (SFC)/Perhutani (Table 1). Although PHBM was promoted as a solution to forest conflicts, the program failed to achieve its objectives (Ferdaus et al. 2014; Rosyadi and Sobandi 2014; Ramadhan et al. 2023). Several obstacles, including bureaucratic fragmentation, administrative complexity, institutional capacity, and the decentralization of authority to local governments, have contributed to the failure to achieve the SF target (Sahide et al. 2020; Affandi et al. 2021; Rahayu et al. 2023; Ramadhan et al. 2023). However, it is worth noting that the SF program is part of the solution to forest tenure issues, including forest conflicts, through land legalization programs and forest rehabilitation efforts (Santoso and Purwanto 2021; Kusters et al. 2022). This study focuses on the failure of land tenure conflict management during the SF era in Java, which has resulted in socio-ecological conflicts. This study highlights the dynamic transformation of conflicts under the evolving

SF policy. Several studies explain the failure of conflict transformation due to historical factors that are deeply rooted and overlapping claims, the presence of elite capture in institutional forest governance, and accountability in community-based forest management (Rosyadi and Sobandi 2014; Setiahadi et al. 2017; Sahide et al. 2020; Ramadhan et al. 2023).

Currently, the government policy update on conflict resolution in Java is the issuance of Special Purpose Forest Areas (KHDPK) (Kusuma et al. 2023; Adib et al. 2024). A number of studies on SF in Java have been conducted in 2016. These studies have mainly focused on the performance of SF in terms of security of tenure, including escalation of resource conflicts, incomplete allocation of rights, inconsistencies between formal SF systems and local governance systems, and the actors involved (Rodd et al. 2022; Rustiadi and Veriasa 2022; Larson et al. 2023). Until 2025, tenure conflicts in several forest areas are still ongoing

The Rapid Land Tenure Assessment (RaTA) framework introduced by Galudra et al. (2013) is used to investigate conflicts through historical analysis of claims, actor interests, and policy analysis. These three aspects are then used to formulate mechanisms for resolving tenure conflicts by reviewing the implementation of SF that has been carried out.

Issues related to property rights and access to forest management are also major concerns in discussions of property rights conflicts in forest areas (Riggs et al. 2016; Doss and Meinzen-Dick 2020). Research on property rights conflicts in the implementation of the latest SF has been conducted by (Kusuma et al. 2023; Gunawan et al. 2024; Sunjaya et al. 2024). However, this research does not explicitly explain the dynamics and mechanisms for resolving conflicts in the ongoing implementation of the latest SF policy, which remains unresolved. Other studies on property rights conflicts have been conducted in customary forests and areas outside Java related to SF implementation (Golar et al. 2022; Kurnijanto et al. 2023; Ulma et al. 2023). This study was aimed to address the above challenges by examining the dynamics of land tenure conflicts in the SF era and proposing mechanisms for resolving land tenure conflicts, particularly in forest villages where land ownership conflicts remain unresolved.

MATERIALS AND METHODS

Study area

This research was conducted in two different locations that had experienced a long history of tenure conflicts until the time of this study (Figure 1). The first location was in Kaligrenjeng Village, Blitar District, East Java, Indonesia, where conflicts had arisen with SFC over land rights and crop sharing. The forest area was originally managed by SFC, and the community worked as casual laborers. Subsequently, because much of the land was not being cultivated, the community chose to cultivate and manage it for agriculture, leading to land conflicts. In 2005, a Forest Community Institution (*Lembaga Masyarakat Desa Hutan/LMDH*) was established to resolve conflicts through the PHBM program. However, over time, internal conflicts also arose with neighboring villages, which claimed that the managed forest area was privately owned by one of the village officials. The Kaligrenjeng Village location participated in the SF program in 2017 through the Kulin-KK and IPHPS schemes, but the community refused to participate because they were reluctant to cooperate with SFC again.

Table 1. Evolution of social forestry schemes in Java, Indonesia

| Scheme / Program | Period | Main actor | Key features | Tenure rights |
|--|--------------|---------------|--|---|
| PHBM (<i>Pengelolaan Hutan Bersama Masyarakat</i>) | ±2001-2016 | SFCSFC & LMDH | Community-Based Forest Management | Limited (access & benefit-sharing) |
| IPHPS (<i>Izin Pemanfaatan Hutan Perhutanan Sosial</i>) | ±2017-2022 | MoEF | Forest management in both production and protected forests, with communities as the managing entities | Secure tenure rights (±35 years) |
| Kulin-KK (<i>Pengakuan dan Perlindungan Kemitraan Kehutanan</i>) | ±2017-2022 | MoEF & SFCSFC | The SF Scheme, which continues the PHBM initiative and established cooperation with SFC | Cooperation agreement with a state-owned enterprise (PKS) |
| KHDPK (<i>Kawasan Hutan dengan Pengelolaan Khusus</i>) | 2022-present | MoEF | Policies for the rehabilitation of land and the resolution of land tenure conflicts outside SFC areas. | Secure tenure rights (±35 years) |

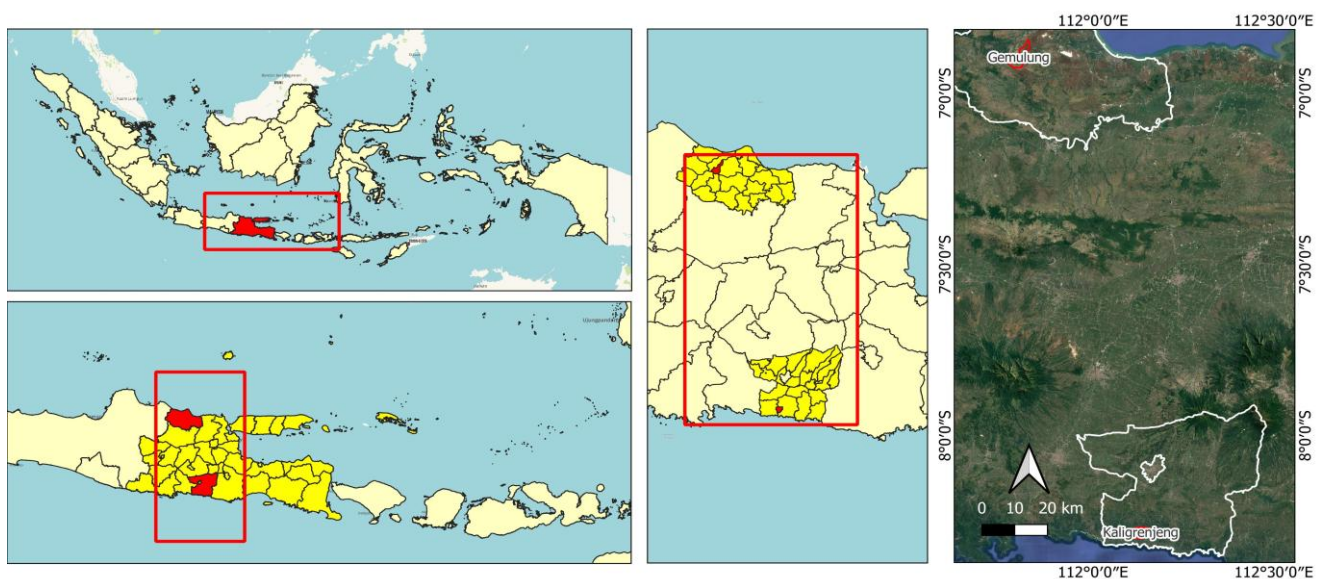


Figure 1. Research location in East Java, Indonesia

In contrast, the second location is in the Forest Management Resort/RPH Gandu, Forest Management Unit (FMU)/KPH Jatirogo, Tuban District, East Java. Conflicts in production forests have been ongoing since 1997, involving land disputes between the Gemulung Village community and SFC. The destruction of forests has made land unproductive due to the community's increased demand for land to plant secondary crops. The actions taken, including tree felling and chemical pruning, have caused tension and prolonged conflict with SFC. Although there has been a shift to the Kulin-KK scheme, due to the community's limited understanding of the SF program and the lack of facilities and infrastructure in the field, several conflicts remain.

Procedures

This study was conducted over a four-month period from January to April 2024, and was continued to obtain more detailed recent data, primarily in Kaligrenjeng Village, from October to December 2025. The study used a qualitative research design comprising two main activities. First, we reviewed government documents, including policy instruments, and conducted a literature review on land rights conflicts in the implementation of SF in Indonesia. This was done to analyze the regulatory and policy frameworks for SF, particularly in Java, where land ownership disputes often occur, and to propose mechanisms for resolving land rights conflicts through policy interventions. Second, we conducted field observations and interviews with key actors using purposive sampling. We chose semi-structured interviews, as they are based on a general list of questions that guide respondents while also allowing flexibility for follow-up questions.

Participatory observation was conducted at two locations within SFC's operational area: Kaligrenjeng Village in the Blitar Forest Management Unit (KPH) and the Gandu Forest Management Unit (RPH) in the Jatirogo Forest Management Unit (KPH). Observations in Kaligrenjeng Village were conducted through meetings with stakeholders, focusing on gathering general information about forest conditions and forest management. Further observations focused on ongoing conflicts. Participatory observation in RPH Gandu was conducted through meetings with SFC representatives at the RPH Gandu offices. These meetings focused on gathering information regarding conflicts with communities managing the land and their impact on the condition of teak forests. Data were recorded using an audio recorder, with the recordings subsequently transcribed into written documents. This study utilized qualitative data analyzed using a thematic coding approach, specifically open coding, axial coding, and selective coding, in which the coding categories were integrated with the three main dimensions of RaTA. During the open coding phase, interview transcripts and field notes were examined to identify the dynamics of SF management emerging from the data. This included claims of land ownership, a lack of information regarding SF policies, and

land conflicts between local communities and SFC. The narratives in these interview transcripts represent the raw empirical issues expressed by respondents without prior classification. In the axial coding stage, these initial codes were grouped into categories corresponding to the RaTA dimensions. Specifically, codes such as land occupation, land ownership claims, and tensions regarding land access and control were grouped under the historical dimension of land tenure conflicts. Codes regarding community resistance, the destruction of forest plants, elite dominance, and internal conflicts within institutions are grouped into the category of actors and interests. Furthermore, codes such as the variety of SF policies in conflict resolution, a lack of understanding of the program, and the ineffectiveness of the SF scheme are grouped under policy analysis. In the selective coding phase, data categories from all dimensions are integrated to describe conflict typologies and how conflicts evolve over time within the context of conflict transformation under SF policy.

In-depth interviews were conducted with key informants selected for their positions and knowledge of the region's land-ownership history. In the first phase, potential actors in land tenure conflicts were identified, particularly regarding forest management in Java, including Forest Farmers' Group Leaders, Village Heads, SFC, the Regional Forestry Office, NGOs, and the Ministry of Forestry (Ramadhan et al. 2023). Therefore, to understand the dynamics and land ownership conflicts occurring, we analyzed the names of the potential actors listed (Table 2).

The number of informants differed between the two research sites due to variations in the complexity of the conflicts and the depth of the information provided. In Kaligrenjeng Village, key actors were identified through participatory observation and interviews with four respondents, consisting of representatives from the KTH, the village government, the SFC, and the local Forestry Service. Additionally, 12 farmer members who were specifically involved in conflicts with communities outside the KTH were identified as key respondents. The sampling process identified key actors who understood the dynamics and were involved in land tenure conflicts. The data was considered sufficient and had reached saturation; no new information was available. In Gemulung Village, where respondents were from the same institutions, for example, the SFC, additional respondents were needed because field officers' information was insufficient; therefore, after data collection reached saturation, 12 informants were selected.

Table 2. Identification of selected actors based on category and number of actors found

| Study site | Actor categories | Actor interviewed |
|----------------------|--|-------------------|
| Kaligrenjeng village | Head of the Forest Farmers Group, Village Head, SFC, and Forestry Service Branch | 16 |
| Gemulung village | LMDH, village communities, SFC, Forestry Service branches | 12 |

Data analysis

This study analyzes land rights conflicts using the RaTA framework by examining the history of land tenure claims, the actors and their interests, and policy interventions to identify mechanisms for conflict resolution. The first stage of the RaTA analysis begins by identifying the locations where land rights conflicts occur. Both locations were selected because they have a long history of land rights conflicts, particularly with SFC, the authority that manages the forest area. The second stage of the RaTA framework explores the dimensions of the history of competing claims to produce a conflict explanation map. The history of land ownership claims in the context of SF in Java is further supported by a literature review of existing research.

The third stage involves questions aimed at identifying the conflicting parties and each party's interests. Questions for this purpose include, for example, "Who are the conflicting actors and what are the interests of each conflicting actor?" Key actors here are defined by Galudra et al. (2013) as those who claim large areas as their own and those most affected by the dispute over the claim. The motives behind these interests can be explored through field observations and in-depth interviews with the parties involved.

The fourth phase focuses on policy analysis, with an emphasis on questions regarding the effectiveness of SF policies in resolving conflicts. These questions are directed at local-level actors and focus on key issues, such as "Are previous SF programs like PHBM, Kulin-KK, and KHDPK currently effective in resolving land ownership conflicts?" Policy studies are necessary in this phase, given the diverse legal regulations in the forestry sector. To implement the RaTA framework, each stage of the analysis is linked to the qualitative data used as follows:

Stage 1 (Location identification): The selection of the location was based on historical information regarding land-tenure conflicts as well as the ongoing implementation of the SF.

Stage 2 (Historical analysis): Data from interviews and the literature were used to describe the history of land claims and the escalation of the conflict.

Stage 3 (Actor and interest analysis): The interview data was coded to identify the key actors, their roles, and their conflicting interests, which were then used to identify the conflict typology

Stage 4 (Policy analysis): Policy documents and the results of stakeholder interviews were analyzed to evaluate

the effectiveness of the SF schemes (PHBM, Kulin-KK, KHDPK) in conflict resolution.

This phase also examines conflict resolution mechanisms based on the various policies implemented at the study sites. The RaTA analysis is elaborated based on data obtained from participatory observation, in-depth interviews, and document and policy reviews. Table 3 outlines the phases of the RaTA analysis.

RESULTS AND DISCUSSION

History of land ownership claims and explanation of conflicts in Kaligrenjeng Village

The village of Kaligrenjeng, located in Wonotirto Sub-district, Blitar District, has a forest area of approximately 835 hectares, of which 386 hectares have been designated as a Community-Managed Forest (KHDPK). This forest area is managed under the jurisdiction of SFC through the Blitar Forest Management Unit (KPH), with the local community's livelihoods primarily dependent on teak, sugarcane, and corn. From a historical perspective, the emergence of conflicts in Kaligrenjeng can be traced to the occupation of forest land, particularly unproductive forests, and to land ownership disputes between villagers and SFC. The community claims land ownership has been passed down from generation to generation and stems from ambiguities in land ownership, ranging from land sales without legal status to land occupations, particularly between 2000 and 2005. Consequently, uncertainty regarding land ownership has become the primary driver of conflict between the local community and SFC.

Responding to these tensions, the establishment of the LMDH Rimba Mulya in 2005 under the PHBM scheme was intended to formalize community involvement and resolve boundary disputes. However, from the actors' perspective and their interests, the implementation of the PHBM revealed underlying tensions over perceived injustices in land allocation and benefit-sharing arrangements. Many community members were reluctant to accept the imposed boundaries and refused to comply with the profit-sharing mechanisms, as they considered the land to be rightfully theirs because it had been cultivated previously. This resistance indicates a lack of trust in forestry authorities and reflects the asymmetrical power relationship between the state and local communities.

Table 3. Stages of data analysis using RaTA

| Phase | Observed information |
|-------------------------------------|--|
| Identifying potential locations | Forest areas managed by SFC that have a history of implemented social forestry and still have issues related to tenure conflicts |
| Historical dimension | History of land ownership conflicts by periodic phases, with emphasis on the social forestry program phase |
| Typology conflict | Description of the conflict, actors involved, main interest |
| Policy analysis/policy alternatives | Various SF policies related to the resolution of tenure conflicts, conflict resolution mechanisms |

Although the conflict began to stabilize around 2006, it resurfaced in 2010 due to inter-village tensions between Kaligrenjeng and Tambakrejo. The decline in the number of LMDH members from 150 to approximately 60 reflects internal institutional problems, driven by issues of accountability in profit distribution. This fragmentation indicates a decline in community trust in SFC and contributes to non-compliance with the cooperation agreement.

From a policy perspective, subsequent social forestry schemes, including Kulin-KK and IPHPS, introduced in 2017, have not effectively resolved conflicts. Limited participation and low public interest indicate that these policies have failed to address the underlying issues of land tenure security and institutional trust. Consequently, informal and illegal land management practices persist, further exacerbated by external pressures such as the construction of the Southern Cross Road (JLS), which has displaced community-managed lands without compensation.

In 2023, the KHDPK policy was launched, and the KTH Rimba Mulya was established. This policy offered new hope to the community of securing land access and management rights for 35 years without having to deal with SFC. KTH Rimba Mulya itself proposed approximately 600 hectares, but only 386 hectares were designated as a KHDPK Area. However, as of the time this study was conducted, the KHDPK decree had not yet been issued, and the community had not yet understood the latest regulations regarding KHDPK in the context of land management and the resolution of tenure conflicts. One respondent stated that as long as the KHDPK decree had not been issued, they would continue to cultivate the land as usual. Although they do not yet understand the regulations under the KHDPK policy, some respondents, comprising KTH members, view the program positively because it can provide clarity on the legalization of the land they have been cultivating all along. Furthermore, despite this, the potential for conflict remains, particularly during the community-conducted land boundary demarcation phase, as they compete over land, thereby giving rise to new conflicts.

History of land ownership claims and explanation of conflicts, RPH Gandu, KPH Jatirogo

The Jatirogo Forest Management Unit, including the Gandu Forest Management Unit, has been managed by the Teak Plantation Company since 1932. However, this area has experienced declining forest productivity and repeated failures in teak reforestation, particularly reported in 1997, 2007, and 2017, with these teak reforestation failures indicating underlying social issues, namely pressure on forest land and the community's reliance on alternative land uses for seasonal crops. Historically, the conflict in the Gandu Forest Management Unit stems from limited access to land for communities living near the forest, leading them to damage SFC-owned teak trees. Additionally, in some forest areas, unproductive and unused land was found, prompting communities to seize it for agricultural or seasonal crops. The conflict has intensified as the

population continues to grow and its access to forest land becomes increasingly restricted.

From the perspective of actors and interests, the conflict is characterized by ongoing tensions not only between the community and SFC, but also within the community's institutions. Local communities prioritize the short-term economic benefits of crops such as corn, while SFC seeks to restore forest cover and enforce regulations. This difference in interests leads to ongoing resistance, including ignoring warnings from forestry authorities, damaging tree stands, and rejecting reforestation efforts. Conflict escalated again between 2013 and 2016 when SFC planned to plant eucalyptus trees with a dense planting spacing (1 m × 1 m), making it difficult for communities to grow corn between the main trees. A forestry official stated:

"The community of Gemulung Village objects to the planting of eucalyptus because they can no longer grow corn on the land they previously cultivated. The planting of teak trees previously carried out by SFC was unsuccessful, and the land became vacant, which the community used to plant corn. From the corn harvest, the community experienced improved welfare, education, and employment opportunities. The planting of eucalyptus will eliminate these sources of income and opportunities."

Furthermore, the establishment of the LMDH Lestari Jaya as an institution representing the interests of its farmer members has not always effectively accommodated the collective interests, particularly regarding the distribution of profits. Disputes over the distribution of corn crop proceeds between the LMDH management and SFC are perceived as lacking transparency and fairness. From a policy perspective, the 2017 revision of the SF policy, now known as Kulin-KK, has not yet led to conflict resolution in the study area. Limited land access, coupled with insufficient information and understanding of the program, has made resolving land conflicts even more difficult. The community continues to hold the perception that maintaining their land as a means of livelihood remains their primary goal. This indicates that the community's demands have not been fully accommodated in the new policy. Conversely, limited access to information actually makes resolving land conflicts even more difficult.

Identification of conflicting actors and conflict typology

Land ownership disputes often arise due to differences in perspectives and interpretations among individuals regarding their rights to land and forest resources (Siscawati et al. 2017). These differences in perspectives and interests stem from the various actors involved, who are referred to as the conflict's subjects. Conflict subjects, as described by Galudra et al. (2013), refer to actors involved in the land ownership system, either as influencers or as those influenced by it. The primary causes of land ownership conflicts often stem from the various claims made by the actors involved, which arise due to a lack of clarity, legitimacy, and legality in land ownership policies. In this subchapter, we summarize the typology of conflicts in the study location based on the form of conflict, actors, and interests of each party involved (see Table 4).

Table 4. Typology of tenure conflicts in the study area

| Location of conflict | Typology | Description of the conflict | Name of actors | Main interest |
|----------------------------------|--|---|--|--|
| Kaligrenjeng Village, KPH Blitar | Conflict between the community and SFC | The community demanded the right to manage forest areas from SFC and the village government, but their demands were ignored, resulting in the occupation of SFC land | SFC The community | Profits and maintains its legitimacy as a legal land control Access rights to cultivate unused land for subsistence economic purposes |
| | Conflict within LMDH | Conflict also arose because the LMDH covers communities from two villages, Kaligrenjeng and Tambakrejo. The LMDH management was perceived as unfair, including claims of land ownership | LMDH administrators Members of the LMDH | Land control and profits Land distribution and equal sharing |
| Gemulung Village, KPH Jatirogo | Conflict between the community and SFC | Conflicts over land cultivation claims by communities and conflicts over crop sharing in forest areas | SFC | Ensures forest growth for corporate revenue |
| | | | The community | Need land to support their livelihoods |

At the first location, Kaligrenjeng Village, the first type of conflict involved two main actors: SFC and the community. The primary conflict arose when the community demanded the right to manage the forest area from both SFC and the village authorities, but their demands were ignored, leading to the occupation of land within the forest. The resulting power imbalance has also kept the tenure conflict unresolved to this day. SFC's dominance has established it as the institution with access to and control over forest land. Its primary interests are to maximize profits from timber sales and maintain its legitimacy, as it holds a mandate from the Indonesian government to manage the forests. Conversely, population growth around the forests and the history of land cultivation within them have led to demands for access rights to cultivate the land, which is the community's primary interest. The second typology notes that internal conflicts within the LMDH also occur in this location. These conflicts stem from the LMDH forest area, which encompasses the two villages of Kaligrenjeng and Tambakrejo. In its management, the LMDH board was perceived as unfair in the distribution of proceeds, and there were also land ownership claims by individuals or influential figures from the past. The primary concern of LMDH members is ensuring fairness in their favor through transparent and equal distribution of harvest proceeds.

Meanwhile, in Gemulung Village, conflicts between the community and SFC had been occurring even before the PHBM was implemented and the Kulin-KK system was introduced. The main conflicts were triggered by two actors: SFC and the community. The primary conflicts arose from land cultivation claims by community members with limited access to forest land. The conflict also centered on the issue of sharing harvest proceeds from forest land. As in the first location, the community's interests, driven by demands for land to support its economy, were increasingly constrained. A clash of interests between two actors with unequal power dynamics emerged in a location exhibiting the same conflict characteristics during the SF era.

Findings from both locations reveal patterns in the dynamics of tenure conflicts during the evolution of SF policy in Java. Through the RaTA research phases, it was first found that, historically, the conflict stems from unresolved land ownership claims and land occupation, particularly following the 1999 Indonesian political reforms. Second, the persistence of the conflict is influenced by unequal power dynamics among the actors, particularly between local communities and SFC. Third, the effectiveness of conflict resolution depends heavily on open access and information within the framework of SF objectives. Policy interventions by a democratic and participatory government create opportunities for conflict transformation.

Discussion

This study employs a conflict perspective within the RaTA framework to analyze unresolved land rights conflicts within the SF policy trajectory, particularly in Java. The RaTA framework enables this study to develop a typology of conflicts emerging in the two study sites, thereby elucidating the effectiveness of SF policies in these locations. The study across the two locations reveals common issues that emerge when viewed through the lens of historical land tenure claims, conflicting interests among actors, and the implementation of the SF program at the sites. The root of the recurring land conflicts in the study areas lies in the limited access that communities living near forests have to forests. They actually cultivate land in unproductive areas of SFC forests, but are still considered to be in violation. de Royer et al. (2018), in a case study on SF implementation in Indonesia, argues that social equity in forest management has not been adequately addressed. Communities remain subject to land-use restrictions, which limit their opportunities.

Second, given the land's unclear status from the outset, the community argues that it has been cultivating the land for generations and is reluctant to transfer ownership again. Instead, they tend to want efforts to legalize the land assets they have been cultivating from the very beginning. Third,

regarding issues of transparency in land distribution and unfair profit-sharing, which have undermined the forest management organization's credibility among its members. This has also been a factor in internal conflicts within the organization.

The tenure conflict described above stems from conflicting interests among the disputing parties. The primary interests at stake involve SFC and the communities managing land within the forest area. These conflicting interests have, in fact, been addressed through the implementation of several community-based forest management programs. However, findings on the ground indicate that SF programs initiated since the 1999 reforms, such as PHBM, followed by Kulin-KK and IPHPS in 2017, have not yet resolved tenure conflicts. One contributing factor is the power imbalance, which leaves communities without the capacity to fight for their rights. Their weakened position often leads them to take actions without mediation, such as destroying company crops and occupying land they deem unproductive.

Based on the above findings, a comprehensive resolution strategy and structural changes to access governance and actor configuration are required. Several studies on tenure conflicts in SF areas indicate that deliberative processes (Setiahadi et al. 2017), policy governance interventions, and multi-stakeholder conflict resolution mechanisms are necessary to resolve tenure conflicts (Moeliono and Limberg 2012; Safitri 2022; Widiyanto et al. 2025). In the context of political ecology, changes in power structures and land governance are necessary to provide significant space for participation, particularly for communities that have long been marginalized (Mawutor and Hajjar 2022). Changes in power structures can be achieved institutionally through policy changes implemented in the IPHPS program, where community groups serve as the managing entities and corporations act as partners. Furthermore, long-standing land occupations by communities must be resolved through a transformation toward equitable forest governance. Safitri (2022) explains that the large-scale occupation of forest lands during the reform era has further complicated overlapping land own

In this study, the concept of conflict transformation is applied primarily to the SF case in Java. The concept of conflict transformation offers opportunities to foster constructive social change, reduce violence, and promote justice. The concept of conflict transformation in the study of SF tenure conflicts in Flores, Indonesia, by Maring (2022) is understood through a collaborative approach and conflict transformation, using three main perspectives: the multi-stakeholder approach; multi-stakeholder interests and multi-facilitation support; and, finally, policies integrated with stakeholder interests in SF management. In this study, the concept of conflict transformation, particularly in the context of SF in Jawa, employs two main approaches: First, SF policies that recognize land status (permit-based tenure access) and strengthen participatory community institutions; and second, the reconfiguration of power dynamics and actors in forest management in Java to reduce the imbalance of power among actors (Table 5).

First, we observed that conflict transformation in the study area requires policy intervention, particularly to achieve the third objective: promoting equity in forest land management and recognition of cultivated land. For example, the PHBM program was initially designed to improve well-being and build legitimacy for communities in collaborative forest management. The original concept of PHBM was to reduce conflict and poverty in villages surrounding forests by providing communities with access to land. However, the program has not yet succeeded in resolving ongoing land rights conflicts. The program faces several challenges, including power imbalances between SFC and local communities, unequal distribution of benefits, and incomplete land tenure (Rosyadi and Sobandi 2014; Erbaugh 2019). In Kaligrenjeng Village, the study's findings indicate that the current policy intervention through the KHDPK is currently awaiting an approval decree. The projected land area for the KHDPK is 386 hectares. The KHDPK enables the reconfiguration of land ownership and the legalization of land with stronger tenure security. Policies promoting legality and legitimacy are needed to encourage the recognition of legitimate land ownership (Hilhorst et al. 2021). On the other hand, in Gemulung Village, policy interventions such as the IPHPS and Kulin-KK programs have not yet led to any changes on the ground. However, new policies such as the KHDPK may create new conflicts, particularly during the land boundary demarcation phase. Safitri (2022) argues that accurate data and information regarding land ownership and use maps are key.

Second, a reconfiguration of power and actors in forest management in Java is necessary to reduce disparities among stakeholders. The main argument for this approach is the capacity building of community actors as managers and the delegation of greater authority to local institutions. Strengthening community institutions is a critical issue, particularly regarding accountability in forest management and transparency. Institutional strengthening can be achieved, among other things, through increased community participation, as demonstrated in the concept of decentralized forest management. Decentralization of management ultimately aims to enhance forest communities' participation in local decision-making. Analysis indicates that redistributing rights can achieve social justice only if the process acknowledges community members' aspirations and cultural values. The issue of participation is a concern because it is often insufficient and limited to elite actors in the village. Some literature also highlights the emergence of new actors in SF transformation who hold power outside the village elite (Ramadhan et al. 2023; Ismariana et al. 2024).

The presence of these free riders has also drawn attention because they have the potential to exploit opportunities to profit from land redistribution. The lack of participation excludes farmers from decision-making, thereby affecting their rights to manage forest land (Larson et al. 2023). Ultimately, efforts to increase participation must be based on institutional capacity building and the provision of adequate supporting facilities.

Table 5. Dynamics and mechanisms for resolving tenure conflicts in social forestry areas

| The dynamics of conflict in SF policy trajectories | Core issues | Mechanism of conflict transformation |
|---|---|--|
| Kaligrenjeng village / KTH Rimba Mulya <ul style="list-style-type: none"> • PHBM (2000-2005) Land conflict with SFC (2007) LMDH conflict • Kulin-KK and IPHPS (2017) Conflict continues, the community is reluctant to collaborative with SFC and continues to manage the land • KHDPK (2023) Awaiting the approval letter. Potential for land reconfiguration | Limited access to land <ul style="list-style-type: none"> • Uncertainty regarding land status • Weak internal institutional capacity • The issue of unfair distribution of forest proceeds • Lack of access to information regarding the SF scheme after PHBM | Policy interventions <ul style="list-style-type: none"> • Reconfigure land ownership and legalize land use with stronger tenure security. Data on land that has been cultivated will serve as the basis to ensure that programs such as KHDPK do not cause new conflicts. • The reconfiguration of power dynamics among stakeholders in forest management • Strengthening accountable and transparent community institutions • Participatory decentralization of forest management • Access to information and facilitation |
| Gemulung Village / LMDH Lestari Jaya <ul style="list-style-type: none"> • PHBM (1997-2000) Land conflict with Perhutani • Kulin-KK and IPHPS (2017) Conflict continues but escalation has decreased and internal conflict within LMDH • KHDPK (2023) Currently not implemented and no resolution to the conflict | | |

Field findings indicate that a lack of participation, coupled with the community's limited understanding of their rights and obligations, creates opportunities for land ownership conflicts. Access to training and both technical and non-technical assistance opens opportunities for community participation (Galudra 2019; Ramadhan et al. 2022). Overall, this study contributes to the literature on conflict resolution in Social Forestry areas by focusing on the dynamics and transformations that have emerged in the trajectory of SF policy to date, particularly in Java. The differences in claims and power imbalances that have arisen necessitate conflict transformation through the reconfiguration of land ownership and access for community groups, as well as the reconfiguration of power among actors where power imbalances have occurred.

In conclusion, this study shows that land tenure conflicts in forest areas managed by the SFC are shaped by the interplay between land claim history and land occupation, driven by conflicting interests among disputing actors. Analysis using the RaTA framework indicates that tenure conflicts remain unresolved within the trajectory of SF scheme changes, necessitating conflict transformation within community institutions and a reconfiguration of power structures between communities and state authorities responsible for forest management. This study proposes conflict transformation through two main approaches to resolving tenure conflicts in the study area. First, policy interventions prioritizing the reconfiguration of land power structures by providing legal certainty regarding land tenure to ensure tenure security. Second, reconfiguring the power dynamics of actors in SF management in Java to reduce power imbalances among stakeholders. Capacity building for community actors involves granting greater

authority to community groups as managing entities and strengthening institutional frameworks regarding accountability and transparency in management. Engaging group members is a particular focus to encourage their participation within the framework of decentralized forest management. This study makes a significant contribution to future SF management policies, which still face the challenge of resolving tenure conflicts. An institutional-bureaucratic and political ecology approach is employed to formulate solutions for tenure conflicts, particularly in Java. This research addresses a gap in the literature on SF policy, which has so far focused on economic targets through land optimization; however, field implementation indicates that tenure conflicts and tenure security remain persistent.

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