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REGULAR RESEARCH ARTICLE

Emergent Institutional Issues from New Tenure Reforms and Social-Forestry Initiatives in Indonesia: Notes from The Field

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ABSTRACT

In Indonesia, land tenure reform has been approached as a policy priority by the government to address rural poverty and achieve distributive economic equity. It is instituted around allocation and consolidation of land ownership and access. Tenure reform policy promises over 21.7 million hectares (including 16.8 million hectares of forestland) to be distributed through two modes, i.e., land subject to agrarian reform and social forestry. Specifically for Java, the country's most populated island, the government has recently allocated 1.1 million hectares of state forests to be entrusted to local communities in a scheme called Kawasan Hutan Dengan Pengelolaan Khusus/KHDPK (Forest Zones for Special Management Purposes). Approximately three-quarters of the KHDPK-reserved forestland is pledged for SF licensing/permits to be completed by 2024. Currently, there is heightened activity to hand over social forestry permits. However, the KHDPK-designated forest is not an unoccupied resource that can simply be transferred/granted to local communities. From only four sites, we discovered that the forests have been guided by contrasting (often conflicting) principles, norms, and values that have shaped the existing tenure arrangements, how it is used and managed, and by whom. Such issues must be navigated prior to introducing the new policy and implementation regime. We conclude that while the policy rationales look perfect as a framework, KHDPK implementation exhibits impediments and potential failures. There is risk of altering it into a mere industry of policy rhetoric, sustaining major flaws from design to execution.

KEYWORDS

Forest tenure; Agrarian reform; Social forestry; Community forestry; KHDPK; Indonesia.

1. INTRODUCTION

Over the past few years, land tenure reform has been actualized as one of the main policy priorities of the Government of Indonesia (GoI), to not only address rural poverty but to also procure distributive economic equity. It is instituted around allocation and consolidation of land ownership and access as well as control of land. The tenure reform policy designates 21.7 million hectares of state land (including 16.8 million hectares of forestland), to be distributed to local communities through two main programs, i.e., land subject to agrarian reform (*Tanah Object Reforma Agraria*/TORA) and social forestry (Resosudarmo et al., 2019; Myers et al., 2022). The TORA program specifies distribution of state land in the form of land ownership to landless farmers or farmers with small landholdings. The TORA program in forest zones is regulated in the Presidential Regulation No. 88/2017 and is operationalized by the Decree of Minister of Environment & Forestry No. 698/2021. In contrast, through social forestry, GoI provides legal access rights, in the form of permits, to manage state forestland (Nurrochmat et al., 2020; Sahide et al., 2020). In general, SF policy is designed for improving the livelihood of the local people and ensuring productive forest

management (MoEF, 2020; Rakatama & Pandit, 2020).

Over the span of 10 years, the tenure reform (TORA and social forestry) has been implemented in mostly islands outside of Java, amounting to approximately 5 million hectares (Maryudi et al., 2022). In contrast, the forestland for tenure reform in Java, the country's most populated island, has been comparably negligible, with less than 100 thousand hectares assigned (MoEF, 2021). This is because most of Java's forests (more than 2 million hectares) have been administered and managed by Perhutani, a state forest company (Ragandhi et al., 2021). In 2022, nonetheless, the government has taken approximately 1.1 million hectares away from Perhutani to be entrusted to local communities in lieu of the broader tenure reform program in a self-titled scheme of *Kawasan Hutan Dengan Pengelolaan Khusus*/KHDPK (Forest Zones for Special Management Purposes) (MoEF, 2022a). More specifically, approximately three-quarters of the KHDPK-reserved forest land is pledged for social forestry licensing/permits. The GoI has indicated that social forestry licensing in the KHDPK-designated forests is targeted for completion by 2024. It is an ambitious goal considering social forestry licensing over the span of 15 years amounted to approximately 5 million hectares (Widyaningsih et al., 2021). At the time of writing, GoI is provisioning for the swift licensing on KHDPK-reserved forests. It is conducting numerous KHDPK-familiarization workshops and roadshows across regions. It also invites several agencies and institutions, such as nongovernmental organizations (NGOs) to assist local communities and equip them for social forestry licensing (Rahayu et al., 2020).

This paper provides snapshots and reports on the current implementation of social forestry licensing for KHDPK-reserved forests to forensically identify potential gaps, issues, as well as challenges for better understanding to enhance the overall licensing process. It specifically focuses on the institutional aspects. In this paper, institutions are broadly defined as shared concepts implemented by humans in recurring situations governed by rules, norms, and strategies (Ostrom, 2019). In addition, institutions are often associated with boundaries made in a political arena to profile patterns of social and political interaction between individuals/institutions that defines and determines the rules and procedures for actions (North, 1990; Ostrom, 1999). Therefore, institutions are usually translated into agreed rules that must be adhered (having the power of sanctions) to constitute regularity and certainty of social interaction (Maryudi, 2016). Institutions consist of both formal institutions (i.e., management regimes, rules) and informal institutions (i.e., incentives, culture) (North, 1990). They may evolve and are constantly contested (Cleaver, 2002; North, 1990). Furthermore, institutions are associated with knowledge, power, and control (Ingram et al., 2015). They profile the interests of individuals or social groups through social interaction and the formation of behavior in accordance with the rules, standards, and processes that govern interaction and action of the individuals (North, 1990).

2. SOCIAL FORESTRY IN THE KHDPK TENURE REFORM: HISTORICAL BACKGROUND

Despite the aforementioned limited social forestry permits in Java, the genesis of social forestry policy and program in Indonesia was first initiated and experimented in the highly populated island, more specifically in the state (production and protection) forests administered and managed by Perhutani. Social forestry on the island evolved into several phases/generations. From the 1970s till the end of the 1990s, the state company implemented several community development initiatives. The prevalent feature of the initiatives was a mere labor-for-land deal (Mayers & Vermeulen, 2002);

peasant farmers – organized into informal local farmer groups (*Kelompok Tani Hutan*/KTH) – were allowed to cultivate agricultural crops solely in the production forests, distinctly in postharvest compartments for up to 2–3 years after tree replanting (Bratamihardja et al., 2005; Kusdamayanti, 2008; Setiahadi, 2012; Simon, 2004). The competition for farming parcels was fierce; farmers were compelled to compensate them with some cash paid to field forestry rangers (Djamhuri, 2012). The practice of informal land-lease was prevalent not only between farmers and the forest rangers, but also among farmers themselves (ibid.) for over the next decades.

Escalating political tensions catalyzed the country's political upheaval at the end of the 1990s and forced the forest company to implement its joint/co-management model (Pengelolaan Hutan Bersama Masyarakat/PHBM), with a formally registered group at the village level (*Lembaga Masyarakat Desa Hutan*/LMDH) (Kusdamayanti, 2008; Maryudi, 2011; Setiahadi, 2012). In many cases, an LMDH establishes a transformed farmer group (KTH). In the joint management approach, LMDHs are entitled to so-called *bagi-hasil*, a shared (financial) benefit from Perhutani's profits while their farmer members are allowed to continue agricultural cropping in harvested compartments/parcels (Sahide et al., 2020). In many cases, the share of the profits was not as lucrative as initially envisaged due to the low forest (timber) potential (ibid.). Local farmers continued to only rely on short-term utilization of forestland for agricultural cropping. Long-term land occupation has hence been widespread across the island (Maryudi et al., 2016; Ragandhi et al., 2021).

Table 1. Operationalization of HTR, HD and HKm (as of MoEF Regulation No. 4/2023)

	HTR	HD	HKm
Designated Area	Production Forest Indicated in the PIAPS*	Production & Protection Forests Indicated in the PIAPS* Within the village area agreed upon or recognized by the adjoining villages	Production & Protection Forests
Permit holders	Cooperatives Forestry professionals	Village-administered institutions	Individuals (by forming groups) Farmer groups/association Cooperatives
Maximum limits of permit	Max 1,000 ha/permit, with max. 2 ha for each household member	Max 1,000 ha/permit	Max 1,000 ha/unit, with max. 2 ha for each household member
Planting arrangement	**Production Forest** Timber 50% Other trees 30% Annual crops 20%	**Production Forest** Timber 50% Other trees 30% Annual crops 20% **Protection Forest** Non-fast-growing timber 20% Other trees 80% Understory plants	**Production Forest** Timber 50% Other trees 30% Annual crops 20% **Protection Forest** Non-fast-growing timber 20% Other trees 80% Understory plants

Concurrently, the GoI also experimented with (permit-based) social forestry in state forests unencumbered with other rights (Table 1). In 2007, as regulated in the Government Regulation (GR) No. 6, it formally introduced three permit schemes, namely Community Plantation Forests (*Hutan Tanaman Rakyat*/HTR), Village Forests

(*Hutan Desa*/HD), and Community Forestry (*Hutan Kemasyarakatan*/HKm) (Maryudi et al., 2022). The objectives, scopes, conditions, activities, permit-duration, and procedures were regularly fine-tuned and last regulated in the GR No. 83/2016 (Fisher et al., 2019; Moeliono et al., 2017; Sahide et al., 2020). In general, an HTR is granted to either individuals or farmer groups with more emphasis on commercial purposes (Maryudi et al., 2022). In contrast, HD and HKm are more focused on improving the daily livelihood of local people. A HD permit is granted exclusively to a formal village-based institution (*Lembaga Pengelola Hutan Desa*/LPHD), with direct supervision of the village government and the membership usually designated exclusively for the residents, whereas a HKm permit is granted to a farmer group that provisions inter-village memberships.

The permit-based social forestry approach was not preordained to be implemented in Perhutani's forests. However, in 2017 GoI initiated to directly oversee social forestry in Perhutani-managed forests. As stipulated in the Regulation of the Minister of Environment (MoEF) No. 39/2017, it prospected two social forestry schemes: 1) Recognition and Protection of Forest Partnership (*Pengakuan Perlindungan Kemitraan Kehutanan*/Kulin KK) and 2) the Utilization Permit of Social Forestry (*Izin Pemanfaatan Hutan Perhutanan Sosial*/IPHPS). Kulin KK is essentially a protraction of Perhutani's co-management model, with a formal recognition by the government. In Kulin KK, obligations of reforestation and land taxes endured are on the state company. It enables the collaborating parties (Perhutani and LMDH) to establish several more detailed agreements (*Perjanjian Kerjasama*/PKS), such as establishment of natural tourism spots and replacement of main tree species. In contrast, the IPHPS (35-year) permit is directly granted by the government and bypasses the roles of Perhutani in the management of the forests. As such, it is considered to offer relatively more secure tenure rights, much greater than the co-management model (Ragandhi et al., 2021). The IPHPS was formally aimed to expedite forest rehabilitation, specifically designed for Perhutani's forest land with tree-cover less than 10% (Suharjito, 2018). Unlike the Kulin KK, the IPHPS directly obliges the permit holders (local people) to do replanting of forest species. In this scenario, at least half of the land must be covered with tree species. In addition, it specifies land-tax obligation to be borne by the permit holders. Despite initial praise, particularly on the secured tenure system, it has been noted that local farmers were not fully convinced whether the IPHPS represented what they aspired (Ragandhi et al., 2021).

The legal permit granted to local communities also sparked controversies. It was said to contradict the Indonesian legal framework which restricts the dual permit (overlapping permit) systems (Ragandhi et al., 2021). The IPHPS social forestry was even brought into a judicial review at the Supreme Court, who eventually ruled in favor of the social forestry continuation (Ragandhi et al., 2021; Rahayu et al., 2022). The IPHPS licensing was limited, nonetheless. By April 2022, it only progressed as little as 34 thousand hectares (PSKL, 2022). In 2023, MoEF eventually annulled the Regulation No. 39/2017 by issuing the Regulation No. 4/2023 on the KHDPK. That the KHDPK-designated forest is not under the management of Perhutani aids in avoiding the aforementioned permit overlap. In the KHDPK policy, Kulin KK and IPHPS permits are to be invalidated; the government is to only implement the three schemes specified in the GR No. 83/2016, i.e., HTR, HD, and HKm in the designated forests. The government further specifies that KHDPK-designated forestland, taken off Perhutani, is unproductive forests. KHDPK is positioned as a strategic policy to expedite forest rehabilitation of unproductive forest land that Perhutani had failed to do and to help the state company only focus on the productive areas (MoEF, 2022b, 2023).

3. BRIEF KHDPK-CONTEXTUALIZATION IN THE REPORTED CASES

We conducted fieldwork in the Forest Management Unit (*Kesatuan Pemangkuan Hutan*/KPH) Blitar, a site-level operating arm of Perhutani, managing more than 50 thousand hectares of mostly teak (and a small extent of pine) forests at different age-classes and conditions spread across three regencies, Blitar, Tulungagung and Malang. KPH Blitar is a case of relevance as approximately half of its forest zones are designed for the KHDPK program (MoEF, 2022). In addition, KPH Blitar also has Kulin KK & IPHPS permit holders (MoEF, 2022). The forest managerial arm has also experienced persistent tenurial conflicts and extensive forestland claims by local people (Putri et al., 2020; Luthfi, 2012). Cases of extensive (illegal) investments capitalizing on forestland for boom crops (e.g., sugarcane) are not uncommon (Hudaya & Astuti, 2020). We specifically selected four villages (Figure 1) with distinct biophysical and socio-economic characteristics.

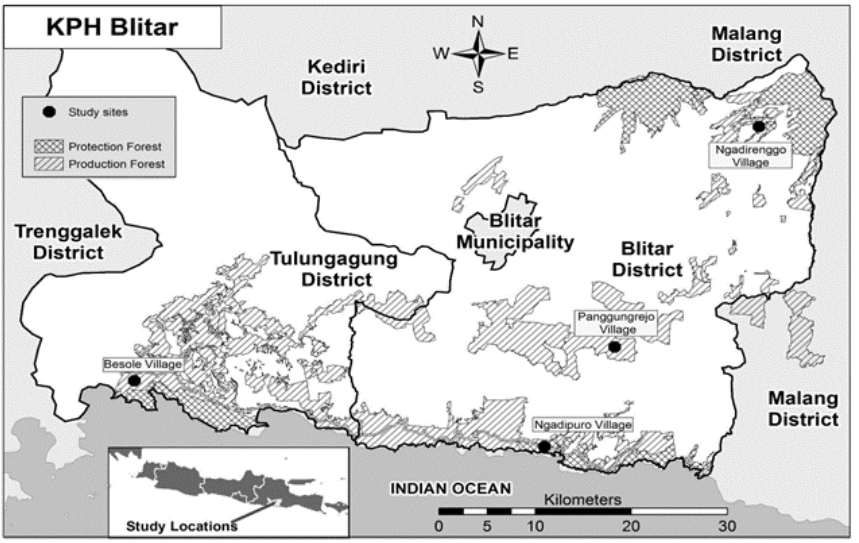


Figure 1. Study sites

3.1 Ngadirenggo

Three of 12 hamlets of the village are enclaved within Perhutani's forests, locally known as magersaren, which were temporary work huts located in the forest zones for forest laborers. Over time, these huts turned into permanent settlements (Figure 2). Despite this, the permanent settlements in the magersaren hamlets remain categorized as forest zones. Over the past few years, there have been legal attempts to propose land swap deals (*Tukar Menukar Kawasan Hutan*) for nearly two thousand hectares of magersaren. During our fieldwork, it was informed that the residents have paid up hundreds of millions of rupiah for successful land swaps. Although the legal/litigation process brought to the court ruled in favor of the community, the formal land handover remains unclear.

The lives of magersaren people have been a struggle. They are not employed by Perhutani. Even with sporadic forest employment/jobs that are made available by the company, they are still underpaid. Thus, many of the people initially joined the Ngadirenggo farmer group of LMDH Rimba Kawi with an expectation to receive agroforestry parcels in Perhutani's production forests in the village. The limited land

parcels have been controlled by the group committees; the committee leader was even said to utilize approximately 15 hectares of the land for his own benefit. In turn, many of the magersaren people encroached the protection forests, extended to approx. 2 thousand hectares within Ngadirenggo administrative borders but managed by LMDH Himatarian from the neighboring village (Resapombo) for a waterfall ecotourism destination (Sirahkencong). The magersaren people planted coffee and forage plants for their livestock in the protection forest. Their coffee is traded to intermediaries for export markets. In addition, they supply milk to PT. Greenfield, the largest dairy company in Blitar that later established a factory proximal to the area. The magersaren people later expanded the economic activities by selling water from the protection forests for the operation of the milk company. The new forest use clashed with the core economic activities of LMDH Himatarian, centered around environmental service under a formal agreement (*Perjanjian Kerjasama*/PKS) with Perhutani.

Figure 2. Permanent housing in forest zones

In 2019, the magersaren people succeeded in sponsoring a candidate to become the new village leader, who in return promised land titling of the margersaren land through the government's agrarian reform program. The people and the new village leader also aimed to rule over the whole forests within the village's administrative territory. Convinced about a new opportunity in the KHDPK policy by a local NGO called Pojok Desa, the new village leader exercised an application of a HD permit, which when granted will effectively oust LMDH Himatarian and its members as they are not the people of Ngadirenggo. For the HD permit, he unilaterally dissolved LMDH Rimba Kawi and created a new forest management institution with new members, including the magersaren people and village elites. Interestingly, none of the former members of LMDH Rimba Kawi were included in the HD application although they administratively live in Ngadirenggo. They were, as some local people said, considered as more inclined to Perhutani, which the village tried to oust with the expected HD social forestry. The new village leader exercised the plan to cut the productive tree stands, which according to the new social forestry designation remains the state forest company's assets. Furthermore, some of his people considered options to maximize their income with construction of a swimming pool and parking lots.

3.2 Ngadipuro

The village directly borders the Indian Ocean and has 11 potential beach spots that constitutes the Perhutani's forest zones. The village government has made investments and developed three beach spots with the forest company through a formal agreement.

It welcomed the KHPDK policy and aspired for HD permit, with which it does not require formal cooperation with Perhutani to develop the remaining beach spots moving forward. The HD permit, when granted, will enable the village to procure most of the generated incomes, instead of being shared with Perhutani. The village government created an institution, *Lembaga Pengelola Hutan Desa* (LPHD) Wono Segoro for the administrative requirements for the HD permit.

The HD permit itself, when granted, obliges the permit holder to maintain forest cover or revitalize it when it is already degraded. This could potentially lead to conflicts with many of the village inhabitants who since the early 2000s have occupied the majority of Perhutani's (bamboo) protection forest zones, extended to approximately 485 hectares in the region, and converted them into rice farms and recently sugarcane plantations. In many instances, the local people attempted to convert the protection forests into readily planted agricultural parcels to the greatest extent. Some farmers with vast land possession even leased out the land to other farmers, including from the neighboring villages. This tenure complex would be highly problematic in the aforementioned HD social forestry. If granted it would prohibit people from other villages from accessing/using the designated forests. The land raid in the protection forest zones was made possible for the following reasons. First, around the early 2000s -following the country's reform period, Perhutani was ineffectual to overcome such cases as it was forced not to deploy armed forest guards, in contrast to cases in the previous decades. In addition, Perhutani tolerated the land raid in the protection forests as it has for years focused its activity on production forests.

Figure 3. Sugarcane plantations in forest zones

The land appropriation for sugarcane plantations has recently extended into 155 hectares of less-vegetated even unvegetated land (*Tanah Kosong*/TK) in production forest compartments (Figure 3). In this region, sugarcane is flourishing due to establishment of new sugar factories that not only offer attractive prices but also provide subsidies to the farmers. Payments are also made almost instantly after harvests that suit the farmers' needs. Furthermore, the transport of sugarcane to the factories is heavily subsidized. The farmers are thus enticed to expand their plantations within the forest zones. This is also facilitated by the corrupt practices of Perhutani's field rangers, who illegally leased out the land to the local people to earn additional income. It was reported that they earned 1.5–2.5 million rupiah per hectare of the leased land annually. The leasing practice has contributed significantly to the repeated

planting of forest species (teak). In many cases, the farmers have intentionally uprooted the newly planted teak seedlings or burned them during sugarcane postharvest clearing.

The sugarcane plantations have further led to more complex local politics. Hundreds of load trucks transporting sugarcanes to the nearby factories have damaged the village roads. Sensing that Perhutani has limited contributions to road repairs, the village head urged the sugarcane farmers not to pay (informal) leasing payments to Perhutani's field rangers. This has further strengthened his considerations for an HD social forestry permit.

3.3 Besole

Sugarcane plantations are also being extended into unvegetated/unproductive Perhutani's production forestland located in Besole village. In contrast to the Ngadipuro case, approximately 640 hectares of production forests are to be planted under formally Pehutani in cooperation with the National Plantation Company PTPN X which operates the sugar company PG Modjopanggoong in Tulungalung Regency. The conceptualization of the plantation was floated around 2017. Most farmers organized within LMDH Karyo Wono Ardi Bangun opposed sugarcane plantations, which is practically to reappropriate the (forest) land they have occupied for years for agricultural cropping (Figure 4). Concerned about losing their livelihoods, farmers requested Perhutani to discontinue its plantation plan and insisted on utilizing the state company's forestland in the village for cultivating corn, a quick cash crop with two harvests a year. During some negotiations, the farmers were accompanied by a local NGO named PPLH Mangkubumi. The LMDH committee chair, who himself already occupied a vast area of Perhutani's land extending to approx. 15 hectares for various farming purposes, persuaded the farmers (LMDH members) to be more diplomatic in the negotiations with Perhutani. This was not well-received by the farmers and the NGO, who fiercely argued that sugarcane plantations within the forest zones is a clear violation of the law. In response, the LMDH chair tried to calm down the heated debate by suggesting that sugarcane is also part of the government's policy priorities. To some extent, this was interpreted as a support for the plantations.

Figure 4. Corn cropping in forest zones

With their interests in a precarious condition, the local people exercised other options that coincided with the implementation of the then IPHPS social forestry.

Assisted by PPLH Mangkubumi, they conducted the requisite strategies for the formal application, including regulating distribution of land of maximum 2 hectares/farmer. This, however, did not align with the interests of the committee chair, who controlled a vast area of Perhutani's land. Eventually, all farmers members opted out of LMDH Karyo Wono Ardi Bangun and created a new farmer group called KTH Argo Makmur Lestari.

Around early 2018, however, all LMDHs in KPH Blitar were included by Perhutani to proceed with the Kulin KK scheme. As LMDH Karyo Wono Ardi Bangun had no more members, Perhutani recruited new members to qualify for the application. On the other hand, the new farmer group of KTH Argo Makmur Lestari bypassed the company's initiative, and instead applied for an IPHPS permit for the entire village forests (both production and protection), amounting to 1,285 hectares. This means that there were two distinct applications for different schemes by different farmer groups over the same forests. In 2018, KTH Argo Makmur Lestari was granted by the government with an IPHPS permit to manage 845 hectares, approximately two-thirds of its initial proposal, signifying that the remaining 440 hectares remained under the old group of LMDH Karyo Wono Abdi Bangun for Kulin KK scheme.

The IPHPS permit granted to KTH Argo Makmur Lestari also covers approx. 225 hectares of protection forests (including Coro Beach) which is under a cooperative agreement (*Perjanjian Kerjasama*/PKS) of KPH Blitar, LMDH Karyo Wono Ardi Bangun, the village government (through its village-based enterprise), and a private investor. The collaborating parties, particularly the investor, strongly refute if their agreement is unilaterally terminated considering the massive investment (more than two billion rupiah) to construct the access road to the beach. In 2021, the investor renewed its beach agreement with Perhutani; the tenure complexity remain.

3.4 Panggungrejo

The village is located on the shoulder of a hill in the southern part of Blitar. The population predominantly constitutes poor farmers with inadequate land to sustain their daily livelihood. It is covered by productive and dense (mostly teak) forests at various age-classes, contrary to KHDPK designation of low-covered forests. The people have utilized the forests for many purposes. For years, especially during the dry season, the people have experienced water shortages. To overcome this, they have built pipelines from the forest's springs. The village's farmer organization of LMDH Usaha Tani Sejahtera, has been involved in Perhutani's PHBM (have recently been formalized as Kulin KK), which enables member farmers to plant seasonal crops during the formative stage (2–3 years after replanting) of forest stand.

Nonetheless, areas for agricultural cropping have been restricted as the heavy shaded land is not suitable for agricultural crops. As such, competition for access rights for the agricultural plots has been fierce. This was not helped by the elite capture practices that have taken place. The LMDH committee leaders used to monopolize the land distribution and procure more agricultural plots than ordinary group members. In addition, they often abused their position and seized the opportunity when the group received external assistance. This led to a power struggle within the group and the committee leader was ousted in 2018. The farmer group swiftly applied for a Kulin KK, the recognition scheme for Perhutani's joint management, which was granted in 2019. Its new leader was said to be more transparent with additional ability to mobilize more assistance and support from Perhutani to the group members including financial benefit sharing.

The LMDH appears to be content with the state forest company despite the attraction KHDPK has promised. It indeed learned about KHDPK policy and the associated social forestry scheme. They were occasionally informed by Perhutani's

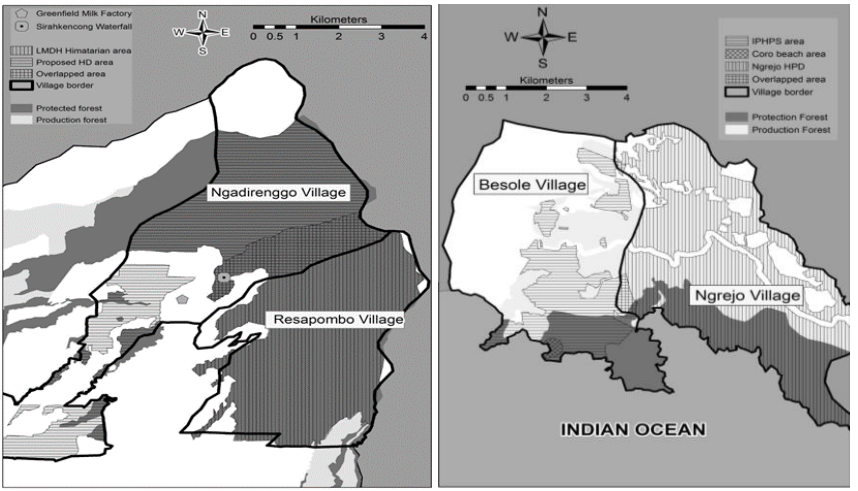
field-level forest guards. In addition, along with other LMDHs within KPH Blitar, in the early 2023 they were formally invited to a formal KHDPK-familiarization event and were persuaded to remain in close collaboration with the forest company. The village leader of Panggungrejo also reminded his people to respond to KPHPK policy in order to avoid potential adverse socio-economic impacts. Advised by field-level forest guards, he prevented any NGOs or other external actors from coming to the village to familiarize the people about KHDPK-social forestry and agrarian reform scheme; he was wary of the potential legal implications.

4. COMMON THEMES IN THE FIELD OBSERVATIONS

Across the four cases of the implementation of KHDPK-social forestry, we have observed several common institutional issues, as follows.

4.1 Inadequate information on KHDPK policy

As previously said, GoI is gearing up for a swift KHDPK-social forestry licensing program with the completion targeted by 2024. However, early observations from the research sites indicated that the implementation is ill-prepared. For instance, there has been inadequate program familiarization to not only the intended local people, but also other relevant stakeholders. This will lead to a complex mix-up and potential conflicts on the ground given the past experiences in these villages.



Figures 5 & 6. Situational maps of tenure overlap in Ngadirenggo & Besole

Across cases, KPHPK-social forestry is often understood as land distribution, i.e., the TORA program. This is evident in Ngadirenggo, where the magersaren people utilized KPHPK-social forestry as a carrier for the legalization of their current settlement in the forest zones as a private property. In Blitar, there has been a process to release magersaren land from the forest zone through the TORA program, which is entirely contrasting from KHDPK-social forestry. Their misunderstanding can be presumed as information on TORA and social forestry is simultaneously channeled through one single institution, be it by government agencies or local NGOs. The application processes for the two programs are also simultaneously rushed from administrative filing as well as land survey and mapping leading to overlaps of the designated forestlands.

Across the cases, we also discovered that many of the permit holders are unaware of their rights and responsibilities. In every village visited, we were advised they were unlikely to meet the numerous social-forestry obligations, such as land taxes and replanting responsibilities. Some of the farmers whose groups have applied for the social forestry permits further suggested that they would have refrained from applying for the permit given the complete information was provided. Similarly, other farmers who have already occupied vast land areas (such as in Ngadipuro and Besole) further indicated that they would not have participated in the new social forestry program when they were made aware of the maximum limit of the cropping plots (2 hectares) set for each of them. Furthermore, many farmers were not informed of the prohibition of the land-transfer that has been practiced for decades.

4.2 Territorial overlaps of different tenure systems

The existing proprietary contexts of forests could become a complex and thorny issue in KHDPK implementation, particularly when an HD permit is preferred. As displayed in Table 1, an HD permit is designed to cover the whole forest within the administrative territory of a specific village and to be managed by the village-administered institution. This specification features similar requirements to Perhutani's co-management model which also specifies a formally registered village-based institution (i.e., LMDH), under the so-called Village-Administered Forest (*Hutan Pangkuan Desa*). However, there are several practical discrepancies with the scope of the HD.

For instance, the co-management model allows farmers from other villages proximal to the forests to also engage in agroforestry practices during the replanting period. This was observed in all studied cases. Perhutani may formally co-manage the forests with LMDH from another (neighboring) village (Figures 5 & 6). This was found in Ngadirenggo whose village authority applied for an HD permit for the forests within its territorial administration, including those already managed by the neighboring LMDH (Himatarian). The tenure overlaps and territorial mismatch was further observed in Besole. The forests under the IPHPS permit granted to a farmer group are also under consideration by the village authority to be included in its HD application.

4.3 Escalation of tenure conflicts

In each of the studied cases, the HD aspirants, i.e., the village authority, attempted to capitalize on the new opportunities provided by the KHDPK policy. They do not want to lose their potential assets at the expense of the neighboring farmer groups. The village government of Besole is to appropriate the forests currently managed by its own inhabitants. The new HD-related institutions are composed of various farmers. This process enabled their superiors with legal power and authority, in comparison to a mere farmer group. On the other hand, the existing farmer groups also possess a legal permit to manage the forests. Similarly, many of the direct forest users (group members) are reluctant to relinquish access to forest land as they already leased it in the past, albeit without formal/legal evidence. In fact, the payment made in the lease has reinstated the sense of landownership among them. From the field, we observed various types of tenurial conflicts, intra as well as inter-villages, namely, among farmers within the same or different villages, conflicts involving neighboring government authorities, and conflicts between government authorities and its own people. The tenure conflicts become more complicated with different forest types (i.e., production and protection forests with different usage/utilization regimes such as the use of protection forests for ecotourism and non-timber products such as in Ngadirenggo and Besole (Figures 7 & 8). In fact, the conflicts involve external factors such as investors and the state forest company itself.


Figures 7 & 8. Physical altercations between members of KTH Argo Makmur Lestari dan the Coro Beach investor

4.4 Potential unplanned tree harvests (deforestation)

Besides improving the livelihood of local people, social forestry is in most cases aimed at improving forest conditions. Nonetheless, KHDPK-social forestry is potentially prompting unplanned tree cutting in the designated forest land, particularly in the productive areas. This stems from the constantly changing policies regulating social forestry. The regulation P.39/2017 initially ruled that only forests with tree-cover less than 10% to be included in the IPHPS social forestry, which is to be transformed in the KHDPK program. However, the minimal forest cover of forest land designated for the program is omitted in Regulation P.4/2023; forestland with higher tree cover is included in the government's indicative maps of social forestry and KHDPK. We found a similar case in our fieldwork, such as in Panggungrejo; Perhutani's forests in the village also comprises productive forests at various age classes, including mature stands (41–50 years and more). Such a forest is "strictly guarded" by the state forest company. In fact, KHDPK policies specify that all assets, including trees within the KHDPK-designated forests remain under the possession of the state company. Swift "tree rescue" is high on Perhutani's agenda before the valuable assets are claimed by local people. In fact, some local people and the village authorities plan to harvest the forests and convert it into more production activities. In either case, unplanned tree harvest is anticipated in the foreseeable future.

4.5 Influence of external actors and local elites

One notable issue observed from our fieldwork is the key roles of external actors, namely, NGOs, forest officials, and business actors, that intertwined with the interests of local elites in influencing land-use practices including the selection of a social forestry scheme. Partly driven by the aforementioned restricted information on the KHDPK policy, we rarely saw the direct forest users, i.e., farmers, decide what is best for them. They are only interested in continuing their farming practices. As observed in all studied cases, the direct forest users were rarely consulted adequately, only to supply the influential actors with their ID required for establishing a farmer group. Application of a certain social forestry permit was instead drafted to serve the interests of the powerful external actors. For instance, tempted by the potential economic gains from ecotourism and advised by a local NGO, the village elites of Ngadipuro bypassed its people (users of state forest land) and applied for HD permit. The presence/influence of NGOs in the selection of a social forestry permit is also visible in two Besole and Ngadirenggo. It was not only about NGOs but also market forces and private business actors such as sugar factories and investors of ecotourism influencing the preference

on a specific social forestry scheme.

5. TAKE-HOME MESSAGES

The current government administration has exhibited remarkable interest on social forestry, entrusting more state forests to local people. The intent is definitive. Over the past few years, areas pledged for the social forestry programs have expanded significantly. In the focal case of KHDPK policy, a large portion of the forests currently under the management of the state company of Perhutani has further been designated for social forestry. Formally, the government cites that social forestry offers a viable solution to enhance rural livelihood opportunities and support forest conservation, endorsing the rhetoric and promise of community-based management.

Recent years have experienced a heightened activity surrounding the handover of social forest licenses/permits, which some have called a "boom of social forestry" (Sahide et al., 2020). Nonetheless, our fieldwork confirmed the extensive literature (for instance, see Agrawal, 2001; Sikor et al., 2013; Baynes et al., 2015; Fortmann et al., 2017) on the significance of addressing key institutional challenges prior to granting the permits. In fact, the KHDPK-designated forest is not an unoccupied resource that can simply be transferred/granted to local communities. From only four sites, we discovered that the forests have been guided by various (often conflicting) principles, norms, and values that have shaped the existing tenure arrangements, its utilization, management, and involvement of concerned parties, that requires negotiation and/or navigation prior to the introduction to the new regime (KHDPK) (see also Fisher et al., 2018). The existing tenure arrangements have been shaped by various biophysical conditions, social systems, and external environments, including market forces.

We observed the incidence of conflicts between newly introduced social forestry plans and current tenure arrangements. Different groups within local communities distinctly articulated new rules thereby exhibiting various responses, either rejecting, adopting or adapting them accordingly to their respective interests. Several cases of rejection were mostly due to the diminishing access/restriction on specific land uses. Even within individual villages, there are different groups with distinct interests on the forest resources. In fact, the implementation of KHDPK-social forestry evokes an old question, namely, for whom it is it designed (Moeliono et al., 2017)? Although widely implemented in many parts of the world, critiques have flagged the restriction of social forestry when it does not sufficiently consider the local socio-economic concerns among diverse communities (Li, 2002).

It is evident that KHDPK policy represents a concerted intent from the government to provide improved livelihood options for local communities. The policy rationales seem impeccable. However, the early phase of KHDPK implementation displayed limitations and anticipated failures. It is likely to turn out to be a mere industry of policy rhetoric, enduring major flaws from design to execution. It is imperative to cautiously execute the KHDPK implementation considering the diverse local biophysical and socio-economic conditions and ensure the envisioned comprehensive goals of alleviating rural poverty and refining the forest conditions are met. The rules should be made practical for communities, empowering them to adopt standards and requirements (Arts & de Koning, 2017).

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REFERENCES

Agrawal, A. (2001). Common Property Institutions and Sustainable Governance of Resources. *World Development, 29*(10), 1649–1672. https://doi.org/10.1016/S0305-750X(01)00063-8

Arts, B. A. S., & Koning, J. D. E. (2017). Community Forest Management: An Assessment and Explanation of its Performance Through QCA. *World Development, 96,* 315–325. https://doi.org/10.1016/j.worlddev.2017.03.014

Baynes, J., Herbohn, J., Smith, C., Fisher, R., & Bray, D. (2015). Key factors which influence the success of community forestry in developing countries. *Global Environmental Change, 35,* 226–238. https://doi.org/10.1016/j.gloenvcha.2015.09.011

Bratamihardja, M., Sunito, S., & Kartasubrata, J. (2005). *Forest management in Java 1975-1999: Towards collaborative management.* ICRAFT Southeast Asia working paper No. 2005–1.

Cleaver, F. (2002). Reinventing institutions: Bricolage and the social embeddedness of natural resource management. *The European Journal of Development Research*, 14(2), 11-30. https://doi.org/10.1080/714000425

Djamhuri, T. L. (2012). The effect of incentive structure to community participation in a social forestry program on state forest land in Blora District, Indonesia. *Forest Policy and Economics, 25*, 10–18. https://doi.org/10.1016/j.forpol.2012.02.004

Fisher, M. R., Dhiaulhaq, A., & Sahide, M. A. K. (2019). The politics, economies, and ecologies of indonesia's third generation of social forestry: An introduction to the special section. *Forest and Society, 3*(1), 152–170. https://doi.org/10.24259/fs.v3i1.6348

Fisher, M. R., Moeliono, M., Mulyana, A., Yuliani, E. L., Adriadi, A., Kamaluddin, Judda, J., & Sahide, M. A. K. (2018). Assessing the New Social Forestry Project in Indonesia: Recognition, Livelihood and Conservation? *International Forestry Review, 20*(3), 346–361. https://doi.org/10.1505/146554818824063014

Fortmann, L., Sohngen, B., & Southgate, D. (2017). Assessing the role of group heterogeneity in community forest concessions in Guatemala's Maya Biosphere Reserve. *Land Economics, 93*(3), 503-526. https://doi.org/10.3368/le.93.3.503

Hudaya, M. R., & Astuti, E. Z. L. (2020). Pandanarum Village Community Empowerment to Actualize Sustainable Development Goals of the Terrestrial Ecosystem. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan, 17*(3), 153–164. https://doi.org/10.20886/jpsek.2020.17.3.153-164

Ingram, V., Ros-Tonen, M. A. F., & Dietz, T. (2015). A fine mess: bricolaged forest governance in Cameroon. *International Journal of the Commons, 9*(1), 41–64. https://doi.org/10.18352/ijc.516

Kusdamayanti. (2008). Peran Masyarakat dalam Penyusunan Kebijakan Pola Kemitraan Pengelolaan Hutan di Kabupaten Malang. *Jurnal Penelitian Sosial Dan Ekonomi Kehutanan, 5*(2), 111–124. https://doi.org/10.20886/jpsek.2008.5.2.111-124

Li, T. M. (2002). Engaging simplifications: community-based resource management, market processes and state agendas in upland Southeast Asia. *World Development, 30*(2), 265-283. https://doi.org/10.1016/S0305-750X(01)00103-6

Luthfi, A. M. (2012). *Kebijakan, Konlik, dan Perjuangan Agraria Indonesia Awal Abad 21 (Hasil Penelitian Sistematis STPN, 2012).* Sekolah Tinggi Pertanahan Nasional.

Maryudi, A. (2011). *The contesting aspirations in the forests: actors, interests and power*

in community forestry in Java, Indonesia [Doctoral Dissertation]. Universitätsverlag Göttingen.

Maryudi, A. (2016). Arah Tata Hubungan Kelembagaan Kesatuan Pengelolaan Hutan (KPH) di Indonesia. *Jurnal Ilmu Kehutanan, 10*(1), 57–64. https://doi.org/10.22146/jik.12632

Maryudi, A., Citraningtyas, E. R., Purwanto, R. H., Sadono, R., Suryanto, P., Riyanto, S., & Siswoko, B. D. (2016). The emerging power of peasant farmers in the tenurial conflicts over the uses of state forestland in Central Java, Indonesia. *Forest Policy and Economics, 67*, 70–75. https://doi.org/10.1016/j.forpol.2015.09.005

Maryudi, A., Sahide, M. A. K., Daulay, M. H., Yuniati, D., Syafitri, W., Sadiyo, S., & Fisher, M. R. (2022). Holding social forestry hostage in Indonesia: Contested bureaucracy mandates and potential escape pathways. *Environmental Science and Policy, 128*(1), 142–153. https://doi.org/10.1016/j.envsci.2021.11.013

Mayers, J., & Vermeulen, S. (2002). *Company-community forestry partnerships: From raw deals to mutual gains.* International Institute for Environment and Development (IIED).

MoEF. (2020). *The States of Indonesia's Forest 2020*. Ministry of Environment and Forestry.

MoEF. (2021). *Keputusan Menteri LHK No.SK.698/MENLHK/SETJEN/PLA.2/9/2021 tentang Peta Indikatif Penyelesaian Penguasaan Tanah dalam Rangka Penataan Kawasan Hutan.* Ministry of Environment and Forestry.

MoEF. (2022a). *Keputusan Menteri LHK No.SK.287/MENLHK/SETJEN/PLA.2/4/2022 tentang Penetapan Hutan dengan Pengelolaan Khusus pada Sebagian Hutan Negara yang berada pada Kawasan Hutan Produksi dan Hutan Lindung di Provinsi Jawa Tengah, Provinsi Jawa Timur, Provinsi Jawa Barat dan Provinsi Banten.* Ministry of Environment and Forestry.

MoEF. (2022b). *SIARAN PERS Nomor: SP. 202/HUMAS/PPIP/HMS.3/07/2022. KHDPK Upaya Penertiban Kerja Dan Penataan Hutan Jawa. Accessed on 24 July 2023*. Ministry of Environment and Forestry. Accessed from http://ppid.menlhk.go.id/berita/siaran-pers/6628/khdpk-upaya-penertiban-kerja-dan-penataan-hutan-jawa

MoEF. (2023). *SIARAN PERS Nomor: SP. 173/HUMAS/PPIP/HMS.3/05/2023. Menata Kembali Hutan Jawa Melalui KHDPK Untuk Kelestarian Hutan Dan Kesejahteraan Rakyat.* Ministry of Environment and Forestry. Accessed from http://ppid.menlhk.go.id/berita/siaran-pers/7205/menata-kembali-hutan-jawa-melalui-khdpk-untuk-kelestarian-hutan-dan-kesejahteraan-rakyat on 24 July 2023.

Moeliono, M., Thuy, P. T., Bong, I. W., Wong, G. Y., & Brockhaus, M. (2017). Social forestry-why and for whom? A comparison of policies in vietnam and Indonesia. *Forest and Society, 1*(2), 78–97. https://doi.org/10.24259/fs.v1i2.2484

Myers, R., Fisher, M., Monterroso, I., Liswanti, N., Maryudi, A., Larson, A. M., … & Herawati, T. (2022). Coordinating forest tenure reform: Objectives, resources and relations in Indonesia, Kenya, Nepal, Peru, and Uganda. *Forest Policy and Economics, 139,* 102718. https://doi.org/10.1016/j.forpol.2022.102718

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance.* Cambridge University Press. https://doi.org/10.1017/CBO9780511808678

Nurrochmat, D. R., Boer, R., Ardiansyah, M., Immanuel, G., & Purwawangsa, H. (2020). Policy forum: Reconciling palm oil targets and reduced deforestation: Landswap and agrarian reform in Indonesia. *Forest Policy and Economics, 119*, 102291. https://doi.org/10.1016/j.forpol.2020.102291

Ostrom, E. (1999). *Self-governance and forest resources*. CIFOR Occasional Paper No. 20. Center for International Forestry Research (CIFOR).

Ostrom, E. (2019). Institutional rational choice: An assessment of the institutional analysis and development framework. In Sabatier, P. (Ed.), *Theories of The Policy Process (Second Edition)* (pp. 21-64). Routledge.

PSKL. (2022). *Capaian Perhutanan Sosial Sampai Dengan 1 Oktober 2022*. Ditjen PSKL. Accessed from http://pskl.menlhk.go.id/berita/437-capaian-perhutanan-sosial-sampai-dengan-1-oktober-2022.html

Putri, D. F., Mindarti, L. I., & Shobaruddin, M. (2020). Perencanaan untuk Monitoring pada Skema "Izin Pemanfaatan Hutan Perhutanan Sosial" di Kabupaten Tulungagung. *Jurnal Ilmiah Administrasi Publik, 006*(02), 224–230. https://doi.org/10.21776/ub.jiap.2020.006.02.9

Ragandhi, A., Hadna, A. H., Setiadi, S., & Maryudi, A. (2021). Why do greater forest tenure rights not enthuse local communities? An early observation on the new community forestry scheme in state forests in Indonesia. *Forest and Society, 5*(1), 159–166. https://doi.org/10.24259/fs.v5i1.11723

Rahayu, S., Laraswati, D., Permadi, D. B., Sahide, M. A., & Maryudi, A. (2022). Only a Noise? The Role of Non-governmental Organizations in the Policy Processes of a New Social Forestry Model in Indonesia. *Small-scale Forestry,* 1-18. https://doi.org/10.1007/s11842-022-09525-9

Rahayu, S., Laraswati, D., Pratama, A. A., Sahide, M. A. K., Permadi, D. B., Wibowo, W., ... & Maryudi, A. (2020). Bureaucratizing non-government organizations as governmental forest extension services in social forestry policy in Indonesia. *Forests Trees and Livelihoods, 29*(2), 119–129. https://doi.org/10.1080/14728028.2020.1753585

Rakatama, A., & Pandit, R. (2020). Reviewing social forestry schemes in Indonesia: Opportunities and challenges. *Forest Policy and Economics, 111*(1), 102052. https://doi.org/10.1016/j.forpol.2019.102052

Resosudarmo, I. A. P., Tacconi, L., Sloan, S., Hamdani, F. A. U., Subarudi, Alviya, I., & Muttaqin, M. Z. (2019). Indonesia's land reform: Implications for local livelihoods and climate change. *Forest Policy and Economics, 108*, 101903. https://doi.org/10.1016/j.forpol.2019.04.007

Sahide, M. A. K., Fisher, M. R., Erbaugh, J. T., Intarini, D., Dharmiasih, W., Makmur, M., ... & Maryudi, A. (2020). The boom of social forestry policy and the bust of social forests in Indonesia: Developing and applying an access-exclusion framework to assess policy outcomes. *Forest Policy and Economics, 120*, 102290. https://doi.org/10.1016/j.forpol.2020.102290

Sahide, M. A. K., Fisher, M. R., Supratman, S., Yusran, Y., Pratama, A. A., Maryudi, A., ... & Kim, Y. S. (2020). Prophets and profits in Indonesia's social forestry partnership schemes: Introducing a sequential power analysis. *Forest Policy and Economics, 115*, 102160. https://doi.org/10.1016/j.forpol.2020.102160

Setiahadi, R. (2012). *Modal Sosial Dalam Pembangunan Hutan (Penyelesaian Deforestasi dan Konflik PHBM).* Universitas Gadjah Mada.

Sikor, T., Gritten, D., Atkinson, J., Huy, B., Dahal, G. R., Duangsathaporn, K., ... & Yaqiao, Z. (2013). *Community forestry in Asia and the Pacific: Pathway to inclusive development.* RECOFTC.

Simon, H. (2004). *Aspek Sosio-Teknis Pengelolaan Hutan Jati di Jawa*. Pustaka Pelajar.

Suharjito, D. (2018). Dramaturgy of agrarian reform in forestry sector in java Indonesia. *Earth and Environmental Science, 196*(1), 012046). https://doi.org/10.1088/1755-1315/196/1/012046

Widyaningsih, T. S., Darwin, M. M., Pangaribowo, E. H., & Maryudi, A. (2022). Harnessing social innovations and mobilizing networks for improving local livelihoods: cases of two community-managed forests from Indonesia. *Forests, Trees and Livelihoods, 31*(1), 27-44. https://doi.org/10.1080/14728028.2021.2018668