Changes in Community Access to Forest Management In Java, Indonesia

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Abstract. The change in the social forestry scheme since 2017 in Perum Perhutani is part of increasing community opportunities in fulfilling their livelihoods. Changes in access obtained by the community related to changes in the social forestry scheme in Perhutani are not yet known. This study aims to determine changes in community access before and after the new social forestry program. This study aims to determine changes in community access before and after the social forestry program. The research was conducted at KPH Ciamis Perum Perhutani in May-June 2021. Data was collected through field observations and interviews with 15 participants. The access theory of Ribot and Peluso is used in this analysis. The results showed that community access to social forestry programs increased. The level of access increases with the intensity of legal activities such as planting seasonal crops and timber and non-timber forest products.

Keywords: social forestry program, access, community, Perhutani, Java

1 Introduction

Diverse scales of time and place are appropriated by industrial, local people, tourism, and environmental actors relating to the usage of forests (Rytteri and Sawatzky, 2013). This is what makes forests worldwide the targets of multiple, conflicting, and complementary desires and demands from different sources, which make forests and all decisions related to their use ultimately political [2]. For a long time, governments, communities, non-governmental organizations (NGOs) and scientists have paid attention to the role of forests in global environmental change. There is lots of evidence from various studies in the area of tropical climates that human exploitation of forests is unsustainable.

There has been an increase in interest in creating and implementing social forestry policies worldwide [3]. This has been especially true in developing countries where community forestry in its various forms is used as a strategy to address the dual issues of severe poverty and forest loss [4],[5].

Indonesia's social forestry strategy became official in 2007 and has since developed into a formal bureaucracy [6]. Since 2015, Indonesia's social forestry has advanced quickly, at least regarding the quantity and size of authorized licenses. By mid-2021, local people and traditional groups will have access to more than 4 million hectares of the state's woods [7]. The programs of Indonesia are among the most ambitious in terms of increasing social forestry's percentage and area. They are also geared at rural development and poverty reduction in methods that limit deforestation and forest degradation. The future of Indonesia's social forestry initiatives has been in doubt since the significant drive to develop social forestry in 2014 as research continues to assess whether policies live up to their intended promises of rights, livelihood, and conservation [8].

Involving and providing access to communities around the forest is essential. Forest management was favorably impacted by indigenous populations directly and indirectly through non-private land ownership [9]. Community access to forests is essential because it is linked to their livelihoods [10]. This makes the role of Perhutani very important as an institution that provides access to communities around the forest. The role of institutions, organizations, and policies in mediating access to livelihood resources and determining the opportunities and restrictions of various livelihood strategies is a crucial but frequently overlooked aspect of livelihoods frameworks and analyses [11].

The change in the social forestry scheme since 2017 in Perum Perhutani is part of increasing community opportunities in fulfilling their livelihoods. Changes in access obtained by the community related to changes in the social forestry scheme in Perhutani are not yet known. This study aims to determine changes in community access before and after the new social forestry program. Hopefully, this research can provide an overview of the community's understanding of their activities in the new social forestry program.

2 Method

The research was conducted at KPH Ciamis Perum Perhutani, West Java, Indonesia, in May-June 2021. Data was collected through field observations and interviews with 15 participants. Interviews with key informants such as Perhutani officers (two persons), village officials (two persons), forestry service branch officers (one person), farmer group management (three persons), and community leaders (seven persons).

Interviews used a specific questionnaire to assess community access before and after the social forestry program. Respondents were asked related to activities currently in forest management, such as planting seasonal crops; taking grass (for livestock); taking firewood; taking Non Timber Forest Product (NTFP) such as fruits, latex, rattan, bamboo, etc; planting NTFP such as coffee, cardamom, etc; planting wood such as *Paraserianthes falcataria* (sengon); hunting animals are not protected; taking wood and transfer of arable land. Then these activities are compared before and after the social forestry program so that changes in access.

The access theory of Ribot and Peluso is used in this analysis. [12] define access as "the ability to derive benefits from things," extending the traditional notion of property as "the right to benefit from things". Access that can be given includes; access to technology, access to capital,

access to markets, access to knowledge, access to labor, access to authority, access through social identity, and access via the negotiation of other social relations. In the context of state forests, community access has clear borders. In this case, the forest is the property of the state [12] said that they focused on more complex perspectives of how actors obtain, manage, and govern access rather than rights-based methods. However, other opinions state that access and property overlap partly because one may or may not be able to benefit from one's possessions. However, property access may not result from property [13]. The data was analyzed qualitatively.

3 Result and Discussion

3.1 Community Forest Management in Perhutani Areas

Forest resources in Indonesia are controlled by the state, which has the authority to regulate and manage them. Communities around the forest usually have limited land, while the land is the primary resource for farmers. This condition often causes conflicts in forest management.

Communities on the island of Java have long had access to forests in production forest areas managed by Perhutani. Access is obtained through various social forestry schemes implemented for a long time and continuously updated.

Because of the state forest business (SFC) Perum Perhutani's long-standing dominance, the management of the forestry industry in Java has been and continues to be unique. The SFC has been given the only authority to continue managing all state-owned production and protection forests in Java under Government Regulations 15/1972 and 72/2010. In Java, the SFC continues to hold the status of sole state forest manager, unlike other regions of Indonesia where regional state organizations, such as the Provincial and District Forest Authorities, were legally impacted by the implementation of various decentralization legislation [14].

To manage the state forests in Java, the state forestry corporation (Perhutani) established a joint-management partnership with a number of the local communities called Collaborative Forest Management (*Pengelolaan Hutan Bersama Masyarakat* (PHBM) (Maryudi *et al.*, 2022). According to a decision of the executive board of Perhutani (136/KPTS/DIR/2001), A forest resource management system known as PHBM is put into place by the Perhutani and a forest village community, or by the Perhutani and a forest village community working together with stakeholders in a cooperative spirit to achieve the best, most equitable, and sustainable use of forest resources. [15].

To address social issues, Perum Perhutani has integrated social approaches into forest management since the 1970s. Taungya system (agroforestry) and intensified taungya system in 1972, forest village community development in 1983, social forestry in 1986, and integrated forest village community development in 1994–2001 are examples of social approach (also known as prosperity approach) programs that have been implemented and improved over time [16], and since 2001-2016 Perum Perhutani develops collaborative forest management (PHBM) and Social Forestry (SF) programs in Perhutani areas from 2016 until now [17].

The philosophy underlying the various schemes of community involvement programs in forest management in Perhutani from 1972 to the present is that natural resources state-controlled

forests in Java should be able to provide welfare to the communities around the forest through the provision of job opportunities and opportunities for work for the people.

According to [17]), the lesson that can be drawn from implementing PHBM for \pm 15 years is the necessity to improve the PHBM concept to provide independence for farmers through strong institutional guidance facilitated by NGOs and or the government. Furthermore, [17] stated that the new regulation related to Social Forestry, namely (Regulation Nr 39/ 2017) concerning Social Forestry in the Perum Perhutani Area, already understood the problems of realizing the previous program, such as the addition of arable land for farmers who they have lived with less than 0.2 ha of agricultural land and wants to ensure that the number of rural residents around the forest is decreasing, living below the poverty line, etc.

3.2 Access to Forest Management in Perhutani Areas

Access to forest management can be obtained by the community both legally and illegally. Legal access is the ability to benefit from something that comes from the ownership of attributes by law, custom, or convention. In contrast, illegal access is carried out through coercion, force, or threats and clandestinely. This illegal access shows that although communities do not have rights to forest resources, they have substantial power. This illegal access is less secure and relatively unstable because the power can weaken when the other party's power strengthens ([19],[20].

Limited land and the need for land to meet the needs of life encourage communities around the forest to cultivate land in forest areas [21] states that the cultivation of land in forest areas by the community is a form of community access to forest resources. However, it is considered an illegal act by the government (Ministry of Environment and Forestry) or the company (Perhutani).

Following MoEF directive No. 39/2017, the ministry of environment and forestry (MoEF) announced a social forestry program in June 2017 for implementation in Java on state forest land managed by Perum Perhutani . They are licensing schemes in the Perhutani Area (IPHPS) and recognition and protection of partnership(KULIN KK). The initiative attempts to restructure and rejuvenate the prior Collaborative Forest Management (*Pengelolaan Hutan Bersama Masyarakat* (PHBM) program with a focus on forest regions with fewer than 10% tree cover and or forest land that is used mainly by non-locals. The IPHPS was created to grant locals access rights to state forests. According to claims, locals would receive greater rights and benefits under the IPHPS program than the preceding PHBM program [16].

The community recognized the activity of cultivating land in the forest area as an act of violating the rights of other parties (Ministry of Environment and Forestry or Perhutani). For people who currently have obtained a social forestry permit in the Perhutani Area, either the licensing scheme in Perhutani Area (IPHPS) or recognition and protection of partnership(KULIN KK) scheme, they have obtained legal access to forest management.

From the political economy aspect, it is crucial when dividing activities in social relations into users (gain), access control (control access), and maintain access (maintain access). [19] explain that access control is the ability to mediate access owned by other parties, while access control checks, regulates, and moves activities.

The role of stakeholders based on the mechanism of access to forest management in Perhutani is presented in Table 1.

Table 1. The role of stakeholders based on the mechanism of access to forest management in Perhutani

No.	Stakeholders	Access mechanism		
		Gain	Control	Maintain
1	Perhutani		х	х
2	Ministry of Environment and Forestry		х	х
	c.q Director General of Social Forestry and			
	Environmental Partnership, Director General			
	of Forestry Planning and Environmental			
	Management			
3	Province Forestry Service		Х	
4	Sub-district and District		х	
5	Village	Х		х
6	Farmer/LMDH	х		х
7	University		Х	
8	Non Government Organization		х	

Perhutani and the Ministry of Environment and Forestry are the authority holders, especially to control and maintain access to social forestry management in Java at the policy level, including arrangements for granting forest management permits. Based on Article 14 of [22] concerning Regional Government, the Affairs of The government in the forestry sector are only divided between the Central and Provincial governments, except those relating to the management of district or city forest parks, which are under the authority of the district or city governments. The provincial authority is limited to implementing and utilizing forest utilization management except for conservation forests. So, in this case, the role of the Provincial Forestry Service is only to supervise. Likewise, with the role of sub-districts and districts.

Villages in the administrative process are involved in forest management at the site level, in addition to having a supervisory role. Farmers who are members of forest village community institutions (LMDH) are directly involved in forest management and beneficiaries. The existence of LMDH is very important for internal farmers because it can mobilize and control what can and cannot be done in forest management, such as cutting down trees, transferring arable land, and so on, through regulation in the statutes and bylaws group. Control from the Perhutani regarding the transfer of arable land from one individual to another is still very weak, so control is needed from LMDH to prevent ownership of licenses from being centered on rich and wealthy individuals outside the village.

Activities for transferring social forestry perm(KULIN KK) from individuals to other individuals happens often and seems to be normal and actually breaks the rules from the government, including LMDH regulations themselves. In this case, actually LMDH provide tolerance in which the activity must receive consideration/permission from LMDH with the consideration that the permit transfer activities social forestry is carried out between fellow communities in one village and communities that need land to prevent the concentration of land on communities that sufficient from an economic point of view.

.LMDH plays a role when dealing with outside parties such as Perhutani, the government, NGOs, universities, etc. Other stakeholders that should not be ignored in forest management in Java are academics and NGOs, who have a strategic role as controllers outside the existing system who can provide critical input on the condition of forest management in Java and can also play a role in mentoring, facilitation, and capacity building for LMDH.

The existence of LMDH is essential because it can mobilize and control what its members do by enforcing the rules in LMDH's AD/ART, such as not cutting down trees, transferring arable land, and so on. Transferring social forestry permits from one individual to another often occurs but must obtain approval from LMDH.

3.3 Comparison of access before and after The Kulin KK scheme

Communities around the forest are dependent on the surrounding forest due to limited land. This condition encourages communities around the forest to cultivate land in forest areas illegally. In general, the act of cultivating forest areas without a permit from the relevant parties (government, Perhutani) is recognized by the community as an act of violating the rights of another party (the government, Perhutani).

According to [19], access is the ability to get something through objects, services, knowledge, or others through individuals, organizations, communities, farmers' groups, and so on. The comparison of community access to forest resources before and after the Kulin KK scheme is presented in Table 2.

Table 2. The comparison of community access to forest resources before and after the Kulin KK scheme

	Description	Before KULIN KK			After KULIN KK			Change
No		Legality		Actual	Legality		Actual	of access to forest resource
		Legal	Ilegal		Legal	Ilegal		S
1	Planting seasonal crops		х		x		x	+ (types allowed to be planted)
2	Taking grass (for livestock)	х		x	х		x	Do not change
3	Taking firewood	х		x	х		x	Do not change
4	Taking NTFP (fruits, latex, rattan, bamboo, etc)		x			х		Do not change
5	Planting NTFP (coffee, cardamom, etc)		Х	х	х		х	+ (types that can

							be planted)
6	Planting wood (sengon)	х		х		х	+ (types allowed to be planted)
7	Hunting animals are not protected	Х	х		х		
8	Taking wood	Х			х		Do not change
9	Transfer of arable land	х			х	х	+ (done secretly)

Table 2 shows that community access to forest resources has increased after the Kulin KK scheme. There are also activities in forest management that have not changed both before and after the KULIN KK program. This increase in access levels occurs in the intensity of legal activities, such as planting seasonal crops (common ginger, aromatic ginger, chili, cassava, cucumber), planting non-timber forest products (NTFPs) (coffee, cardamom), and planting timber trees (sengon). It shows that the community's knowledge and awareness regarding the legality of activities in the Perhutani forest area are relatively high. It is in line with the previous explanation that at the beginning of community involvement in the SF program, many refused because of concerns that the SF program in the Perhutani area was illegal [23] states that knowledge and clarity of the program to be implemented affect community initiatives and involvement in a program.

Prior to obtaining a forest management permit, either through the PHBM program or social forestry, most of the communities living around the forest had obtained de facto ownership of clearing their own forest area, then received social recognition from other communities, so that access is also owned based on ownership whose validity is recognized based on social relations.

From a policy perspective, involved the community in forest management by signing the Cooperation Agreement (*Perjanjian Kerjasama*/ PKS)-based PHBM program with Perhutani long before the program transformed into the Kulin KK scheme. The Kulin KK scheme permits were issued directly from the President (MoEF) for 35 years, while PHBM permits were issued from Perhutani for 1-2 years. The difference is also related to the method of profit sharing. The profit-sharing in the Kulin KK scheme is paid through KTH, while PHBM is paid through the Perhutani foreman. With a licensing system, it is given to community groups on a regular basis directly by the Minister of Environment and Forestry. The status of licensing of social forestry is very clear and its legal force is the same as the permit owned by the corporation or company. The Kulin KK scheme in Perhutani opens more complete access for the community to obtain assistance, financing, and marketing because of the involvement of new actors other than Perhutani and villages, such as KTH/LMDH, NGOs, SF working group, and MoEF through the Directorate General of Social Forestry and Environment Partnership (*Perhutanan Sosial dan Kemitraan Lingkungan*/ PSKL) rather than PHBM.

MoEF through the Directorate General of Social Forestry and Environment Partnership (*Perhutanan Sosial dan Kemitraan Lingkungan*/PSKL) rather than PHBM [24]. Since 2019, the government has formally involved civil society organizations (CSOs)/non-government organizations (NGOs) and other parties, such as local champions, in SF extension [25]. [24] mention that many LMDHs have participated in the PHBM program and have established good cooperation with Perhutani, continuing the collaboration by proposing the Kulin KK scheme, including those found in Sumenep Regency [26], Tulungagung Regency [27], Jember Regency [28], Garut Regency [24], and Bandung Regency [29]. LMDH and Perhutani need each other, so good collaboration is needed in the partnership process. Partnerships the community and Perhutani can carry out include: 1) Partnerships for community services such as repairing roads to the forest, 2) Partnerships for forest security such as preventing theft and fires, 3) Partnerships for logging such as inventory and transport, and 4) Agroforestry partnership, including community involvement in tree and understorey planting [30].

It is in line with the previous explanation that at the beginning of community involvement in the SF program, many refused because of concerns that the SF program in the Perhutani area was illegal. Knowledge and clarity of the program to be implemented affect community initiatives and involvement in a program. From a policy perspective, the community was involved in forest management by signing the Cooperation Agreement (*Perjanjian Kerjasama*/ PKS) based PHBM program with Perhutani long before the program transformed into the Kulin KK scheme.

4 Conclusion

The social forestry program licensing system is published by the Minister of Environment and Forestry with a period of 35 years, which can be extended to provide legal certainty for PS permit holders. Community involvement in forest management through social forestry aims to increase community access to forest management, increase community welfare and maintain forests. This is evident where there is an increase in community access to forest management through the KULIN KK scheme. The level of access increases with the intensity of legal activities such as planting seasonal crops (common ginger, aromatic ginger, chili, cassava, cucumber), planting timber (*Paraserianthes falcataria*) and non-timber forest products (coffee, cardamom). Increased access is expected to increase the convenience of farmers in doing business so they can focus on increasing their income and welfare.

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