

Regular Research Article

# Implementation of Social Forestry Policy: Analysis of Community Access

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**Abstract:** The issuance of social forestry licenses and programs to benefits communities post-licensing still present obstacles and difficulties for communities demanding access to land in Indonesia. This research analyzes community access for social forestry license holders during the pre-license and post-licensing phases. The research is conducted through qualitative field studies in a community forestry (HKm) scheme in Beringin Jaya Lampung and a people's forest plantation (HTR) scheme in Hajran Jambi. In the pre-license phase, the two license-holding communities had the same access for all members involved, including access to information, facilitators, and government authorities. In the post-licensing phase, however, the HKm in Beringin Jaya community obtained greater access across all members in terms of facilitators, knowledge and information, government authorities, financial capital, technology, programs or activities of agencies, and local markets. Access to these aspects is carried out by the community themselves, supported by a facilitator linking the community to external actors that can control access—which were not adequately provided through the social forestry policy. Successful facilitation to increase access of community members requires a networked capacity across community members and with other stakeholders outside the community. The high level of access and networking capacity among a community determines how they obtain benefits from the implementation of social forestry policy, which is also influenced by the accuracy of the broader plan prepared by the community for the license area, which helps to grant supporting services and facilities.

**Keywords:** Social forestry license; forest management; Social networks; Social capital

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## 1. Introduction

To arrive at the issuance of social forestry licenses at the pre-license phase, a community is required to fulfill various conditions listed in the social forestry regulations. In the post-licensing phase, however, communities must have an ability to utilize and or manage the license area plans through productive economic conditions to produce goods or environmental services in order to obtain the intended benefits. Access—as Ribot and Peluso (2003) define as the ability to benefit from *something* (material objects, people, institutions, and symbols)—is the broader philosophy for which social forestry policy implementation aims to deliver. Access, however, is also determined by who actually gets the benefits of something and through what mechanisms they are able to benefit, determined by broader processes and social relationships.

Access is akin to power, which Ribot and Peluso (2003) describe in two ways: first, is the capacity of some actors to affect the practices and ideas of others; and second, are the powers emergent from, though not always attached to, people. Power is inherent in certain kinds of relationships and can emerge from or flow through the intended and unintended consequences or effects of social relationships. In the context of *something* material, such as a natural resource, power is manifested and implemented through a variety of mechanisms, processes and social relations that affects the ability of people to benefit from the resource. The power generates material, cultural and political economic links in the form of bundles and networks of powers (webs of powers) to obtain, control and maintain access to resources. Some people and institutions control

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access to resources while others maintain their access through those which control the resource (Ribot and Peluso, 2003).

Research on access has been applied in numerous contexts, and as recently reviewed by Myers and Hansen (2019), explains that the characteristics of the material resource also influence the actors, their relations and overall access. Dyke's (2006) study, for example, showed how land use changes involving road construction affect access to non-timber forest products so that they can be accessed in remote areas. Milgroom (2012), on the other hand, showed how geographical distance is very important for access. Cardozo (2013) showed how accessibility barriers in the Amazon are not only related to geographical distance but also to the topographic challenges of entering the market. Besta (2013) showed how nature, variations in tides due to the moon and wind movements are related to gender-based access to marine resources. Myers (2015) explored access to rattan in Indonesia and found that the biogeophysical characteristics of rattan shape those who have the ability to benefit from rattan. Ellis (2016) stated that the development of urban areas affects the ability of the Wabanaki people to benefit from the use of seaweed for spiritual needs. These examples highlight the diversity of applications on the study of access.

Social forestry policy in Indonesia, is unique as it serves as a broader policy mechanism that seeks to confer access in various contexts. Study of Anugrahsari et al. (2020) which highlights social contracts in community conservation partnership showed that the initiative is not optimal, not only due to programs implemented with a conventional approach but also limited resources and access to information, involvement of local stakeholders was not maximal, the absence of finalized arrangements on boundaries, and past bad experiences in resolving tenure and social conflicts. Study of Sirimorok and Rusdianto (2020) showed that the success of community based forestry conservation initiatives is influenced by triggering moments (such as crises related to land right and commodity booms) and accompanied with encouragement of catalytic elements (new networks and partnerships, funding, capacity building, leadership, and incentives) in the implementation of the initiative. Bong et al. (2019) showed that local institutions and social arrangements are key enabling factors to achieve social forestry outcomes. Furthermore, Bong et al. (2019) stated that the formalization of social forestry in Indonesia have required new bureaucratic processes, only accessible to those who have connections to formal institutions. Local knowledge of forest management is rarely transferable into the necessary paperwork and in the worst of cases can even undermine the informal institutions that have been critical to effective resource management. Cummins and Yamaji (2019) highlight how the issuance of formal titles may be difficult for small communities which require phases and processes from lower level institutions to national level and requires skilled technical work such as mapping and socioeconomic analysis before being approved. The study of Fisher et al. (2019) which showed about the problems and challenges of the implementation of social forestry in Indonesia that have not been largely answered by the formal social forestry policies that have been established. The importance of facilitation and capacity building for the communities and communities facilitators in the social forestry program is the main concern of Galudra (2019). Study of Sahide et al. (2020) showed the access-exclusion framework from the pre-license phase to after obtaining a social forestry license, which then determine who can benefit and who is excluded from the social forestry program.

Previous studies on social forestry schemes show various difficulties and obstacles experienced by the community in establishing institutional aspects to ensure access, especially when viewed across temporal dimensions of the pre-license phase and the post-licensing phase (Syafitri, 2010; Kartodihardjo et al., 2011; Ardi, 2011; de Royer et al., 2015; de Royer and Juita, 2016; Moeliono, 2017; Salampessy, 2017; Fisher et al., 2018; Bong et al., 2019; Cummins and Yamaji, 2019; Galudra, 2019; Fisher et al., 2019; and Sahide et al., 2020). With the current expansion of social forestry institutions and mechanism, the difficulties and obstacles in the pre-license phase are relatively understood, and interventions have been introduced to address them. Testament to this are the numerous land areas that have been granted under the social forestry licensing scheme. Starting

from 0.31 million ha in 2016 (MoEF, 2017), social forestry area licenses have steadily increased to 2.007 million ha in October 2018 (Agung et al., 2018), 2.23 million ha in April 2019 (Santoso, 2019), and 4.048 million ha in December 2019<sup>1</sup>. The significant acceleration of areas licensed was also supported by other policy instruments, among them the formation of social the forest acceleration support team (TP2PS) and the use of internet technology with the application of integration and navigation systems (SINAV) (Supriyanto, 2019).

Basrin (2017) stated that although the current social forestry institutions are being established, additional obstacles are being experienced by license holding communities, particularly related to anticipated achievements of improvements to income through productive economic ventures in the post-licensing phase. Data presented in December 2019<sup>2</sup> showed that as many as 59% of social forestry business groups (*Kelompok Usaha Perhutanan Sosial/KUPS*) are categorized in the initial phase of the 5,873 community groups or farmers holding social forestry license (538 have not formed any KUPS), consisting of a total of 818,457 households, or approximately 3.2 million people throughout Indonesia.

This research aims to analyze the overall opportunities at access afforded among community holders of social forestry licenses in the pre-license phase and post-licensing phases of a community forest (HKm) scheme and a people's forest plantation (HTR) schemes, two of the more common forestry licensing being issued.

## 2. Framework of Analysis

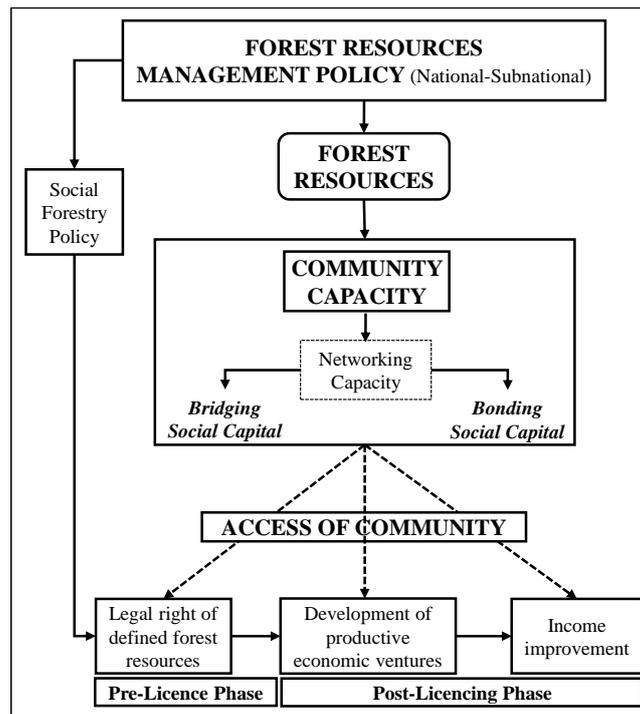
Previous research (Agrawal and Chhatre, 2006; Charnley and Poe, 2007; Pagdee et al., 2006; Larson et al. 2010) associated with the utilization and management of state forests by communities (such as in the form of passive participation, decentralization or devolution) showed that the use of the concept of property rights regimes (Schlager and Ostrom, 1992) and well-defined property rights (Pagdee et al., 2006) are identified as key to achieving successful management of state forests by communities. In Indonesia, the management of state forests by communities is regulated under the social forestry policy. The property rights regime over state forest that is implemented in this policy is to position the community as proprietor who have rights to access, withdrawal, management and exclusion over state forests, while also establishing the right to sell and lease (alienation) state forest areas (Schlager and Ostrom, 1992). These bundles of rights are granted to communities to manage state forests through a licensing scheme consisting of five social forestry license schemes in Indonesia. In all the licensing scheme, there are two main phases, namely the pre-license and post-license phase. The pre-license phase ends by the issuance of a social forestry license, while the post-license phase is indicated by obtaining the intended benefits by the community from the management of the social forestry licensed area. To obtain a social forestry license, the community must have access to resources related to fulfilling the requirements for obtaining a license according to regulations. After obtaining a social forestry license, in order to obtain benefits from the licensed area, the license holder of the community must have access to resources related to utilization and or management of the license area so that goods or environmental services are produced, incomes are improved and other benefits are obtained by license holding communities.

Both phases require the license holder community to have access. The capacity possessed by the community in relation to forest resource management is to generate power for the community as stated by Ostrom and Ahn (2009) as social capital. Social capital is a concept that helps synthesize cultural, social and community aspects together in ways that affects the broader capacity of the community with regard to the problems of collective action (Ostrom and Ahn, 2009). Gorriz-Mifsud et al. (2016) stated that the concept of social capital in forest governance encompasses networks,

<sup>1</sup> Achievement of the area reached only 31.87% of the 12.7 million ha targeted in 2015

<sup>2</sup> Social Forestry Review: Milestones, Figures and Images, downloaded on 9 January 2019, noted at <https://www.facebook.com/bambang.supriyanto.1048/posts/10216010171747607> by Supriyanto 2019, unpublished.

norms and values of local communities that determine cooperation and contribute to community development. In community forestry, Baynes et al. (2015) stated that to generate power related to forest management, people must network among community members (bonding social capital) and networking with parties outside of their community (bridging social capital). In the context of implementation of social forestry policy, community access to resources assist in obtaining social forestry licenses and support their efforts to manage licensed areas so as to produce intended benefits, which must be upheld by community networking capacity. By using the theory of access and social capital concepts, the analytical framework used in this study is shown in Figure 1.



**Figure 1.** Framework analysis of community access (modified from Kartodihardjo, 2017a)

### 3. Materials and Methods

#### 3.1. Material and Methods

Community Forest (*Hutan Kemasyarakatan/HKm*) and People’s Forest Plantation (*Hutan Tanaman Rakyat/HTR*) schemes are selected purposively by considering: (1) the contextual historical of HKm and HTR schemes in the past referring to previous regulations: (a) the HKm tends to empower the community by utilizing and or managing state forest areas, non-timber forest products as the main product, timber forest products are possible to be cultivated in HKm in the production forest state area, and individually or in groups, (b) the HTR scheme tends to increase the productivity of the state forest area by cultivating timber forest products as the main product, non-timber forest products are possible to be cultivated, and individually or in groups; and (2) the resources availability during the study.

The research selected HKm Beringin Jaya community in Tanggamus Regency of Lampung Province and HTR Hajran community in Batanghari Regency of Jambi Province. The two communities were determined purposively with the following criteria: (1) it was recommended by key informants at national level, (2) had obtained a social forestry license, (3) had produced timber or non-timber

forest products, (4) had received forest development loans from MoEF and other financial agencies, and (5) has undertaken primary or secondary productive economic activities.

Research uses qualitative constructivist-interpretivist approach (Schwandt, 1997). The research was conducted through documents describing the proposed licenses in the pre-license phase, the issuance of licenses and the implementation of social Forestry policy at the study site. Field data collection took place in August to December 2018 through in-depth interviews with key informants<sup>3</sup> and participatory field observations<sup>4</sup>. Document analysis was carried out with qualitative content analysis (Titscher et al., 2009). The variety of access mechanism of license holders in the field considered the summary made by Milgroom et al. (2014) to see the bundle of rights and web of power as stated by Ribot and Peluso (2003). Analysis of all data (document and field data) was carried out by qualitative analysis (Creswell, 2014). Variables, field data and community access indicators in the field are shown in Table 1.

**Table 1.** Variables, Field Data and Community Access Indicators

Variable	Field Data	Access Indicators <sup>a</sup>
Access of the license holder community in the implementation of social forestry policy.	Community access in the pre-license phase and the post-licensing phase of HKm and HTR scheme	Obtained benefits from: information, social identity, authority (government), social relations, capital, markets, knowledge, technology, companion (facilitator), or others, controlled by other parties

<sup>a</sup>The More Access Indicators the Benefits Received, the Higher the Community Access.

### 3.2. License History of HKm Beringin Jaya and HTR Hajran

Long before the issuance of the HKm Beringin Jaya license, the Javanese, Semendo, Sundanese and other ethnic groups had used part of the protected forest area of Mount Tanggamus by cultivating annual agricultural crops, vegetables and switching to the form of mixed coffee plantations<sup>5</sup> (Priyono, 2017) or known as agroforest coffee. The dynamics of using state forest land occurred, although those communities were prohibited by the local government from cultivating state forest land. In 1963 a reforestation program was conducted and local government provided a transmigration program, although many of them were unsuccessful and returned back to cultivate state forest land. From 1997 to 1998 there was massive illegal logging took place alongside large scale economic and political crises unfolding in Indonesia, and agroforest coffee were cultivated clandestinely. The HKm license proposal began in 2009, based on the Minister of Forestry Regulation Number P.88/Menhut-II/2014, proposed to the forestry district office, followed up by the Ministry of Forestry's issuance on the determination of work area of HKm (*Penetapan Areal Kerja/PAK*) in 2013. In 2014 the Head of Tanggamus district issued the HKm license in Mount Tanggamus to register 30 of the protected forest areas covering 871 ha (5.8% of the total area of Mount Tanggamus). This consists of a corresponding 840 parcels (Persil) with 8 forest farmer groups. All farmer groups are members of the Beringin Jaya farmer group union, consisting of 551 household

<sup>3</sup> In Lampung Province include: UPT BPDAS-HL, provincial Pokja, KPHL Kota Agung Utara, NGOs KORUT, Head of Margoyoso Village, Gapoktan Beringin Jaya Management, Head of forest farmer group (KTH) Lestari Jaya 1 to 8, KTH Lestari Jaya 1 to 8 members elected, Pokdarwis and KWT Himawari. In Jambi province, namely: UPT Jambi BPHP, provincial perhutanan sosial working group, Batanghari KPHP, AMPHAL NGO, Hajran Village Head, Head of Hajran HTR Cooperative (Serengam Betuah, Mpang Gagah, Bagan Rajo, Khayangan Tinggi), selected members of the Serengam Betuah Cooperative, Head and Production Director of PT Sanak Rimba Sejahtera (partner company).

<sup>4</sup> Collection field data with mixed methodology (Tashakori and Teddlie 2010), modified according to the context of the research location, as a triangulation technique (Creswell, 2014) to achieve the research objectives.

<sup>5</sup> Described by KORUT (2017) in its report titled Pengembangan Sistem Pengelolaan Informasi Pengelola Hutan Kemasyarakatan (HKm) di Kabupaten Tanggamus Lampung. Collaboration between KORUT, TFCA Sumatra and Lampung University.

from Margoyoso Village of Sumberejo subdistrict and Talang Beringin Village of Pulau Panggung subdistrict in Tanggamus District of Lampung Province. The process of proposing the HKm Beringin Jaya license was facilitated by the NGO LCW Lampung, while the post-licensing phase was facilitated by the NGO Konsorsium Kota Agung Utara (KORUT).

The Hajran HTR license proposal began when the natural resource-based community development activities in Hajran Village had ended. These activities are the clone rubber plantation initiative as a demonstration plot by the district agricultural office, promotion of clone rubber tapping by Head of Batanghari District, Jabon nursery and liquid organic fertilizer by Finnish Embassy, Yogyakarta Forestry Research Center, Anak Khampung and AMPHAL, and the forest village license facilitated by the NGO KKI-Warsi. The proposed HTR license began in 2012 based on the Minister of Forestry Regulation Number P.31/Menhut-II/2013. It was proposed to the district forestry office, followed by the issuance of the license area for Hajran HTR (Pencadangan Areal Kerja) reserved by the Ministry of Forestry in 2014. The transition period of authority in the forestry sector from district to province interrupted the HTR proposal, which was then re-submitted to the forestry province office. The HTR license was issued by the Provincial Integrated Investment and Licensing Services Board in 2016 for 4 notary-acting cooperatives, in a production forest area of 1,272.59 ha for 161 members, bordering the Bukit Duabelas National Park. Facilitation at the pre-license phase was carried out by the NGO AMPHAL (Aliansi Masyarakat Peduli Hutan dan Lahan) and Anak Khampung, while in the post-license phase, HTR Hajran worked with PT. Sanak Rimba Sejahtera as the Partner Company in a partnership scheme.

Development of the license area of HTR Hajran consisted of old tree stands that can be harvested and sold, which was predicted to provide initial profits for the HTR Hajran cooperative. Serengam Betuah is the first cooperative of HTR Hajran who worked with the Partner Company to develop a license area of 2500 hectares. The activities carried out include constructions of roads, bridges, temporary building for place to work, forest inventory, timber logging, transporting and selling logged timber, land preparation for planting, transporting seeds and planting activities. Financial capital to fund those activities derived from private financing owned by the partner company, loans from MoEF and revenue from selling logged timber. Initial development activities only lasted for one year (early 2017 to 2018). At the beginning of 2018, the partner company went bankrupt because of its inability to manage the HTR development business, the financial capital that they have were used to harvest timber and other activities, while the Jabon (*Anthocephalus cadamba*) as the main crop had just begun to be cultivated and discontinued.

## 4. Results and Discussion

### 4.1. Access of License Holders in the Pre-license Phase

To arrive at the issuance of HKm Beringin Jaya and HTR Hajran license, the community must have access to social forestry information, to all members who will be involved, facilitators, and government authorities (village, district, province, Ministry of Forestry and related technical implementation unit/UPT). Access to all members, facilitators and village government authorities is carried out by the community themselves, while access to those who control the information and authority of the licensor is facilitated by the facilitator (from NGOs) by connecting the community with those parties through mechanisms, processes, and social relations. Access of the community to those aspects is shown in Table 2.

Community access at the pre-license phase is not horizontal or vertical, but community must have ability to access to those aspects (Table 2) which were owned or controlled by stakeholders inside and outside of the community. Those stakeholders have direct or indirect relation to meet the requirement in proposing social forestry license. Community access to those aspects that are not facilitated by the facilitator is carried out by the community themselves, particularly regarding access to stakeholders within the community. Community access to stakeholders outside the

community were facilitated by facilitators, which requires solid and ongoing collaboration (bonding and bridging social capital) among the management of community license holder and all members who will be involved to obtain social forestry license. Both ways were carried out by the HKM Beringin Jaya and HTR Hajran communities until the issuance of the social forestry license.

**Table 2.** Access of HKM Beringin Jaya and HTR Hajran Communities in the Pre-license Phase

HKM Beringin Jaya	HTR Hajran
<ol style="list-style-type: none"> <li>1. Access to information of social forestry: regulations, type of scheme, how to propose license, license requirements, phase and process to propose license, until the issuance of license.</li> <li>2. Access to facilitator: to get information and fully facilitation to obtain license, connected to government authorities and other stakeholders.</li> <li>3. Access to all member of community who cultivated state forest area (social identity): delivering information, socialization, preparing and organizing them to involve, and establishing farmer groups.</li> <li>4. Access to village government: to get support, legalization for farmer groups and famer groups union, and agreement to propose license.</li> <li>5. Access to district government: to get administrative and technical assistance in proposing license, and agreement to propose license.</li> <li>6. Access to central government: to get issuance of indicative license area and issuance of HKM license.</li> </ol>	<ol style="list-style-type: none"> <li>1. Access to information of social forestry: regulations, type of scheme, how to propose license, license requirements, phase and process to propose license, until the issuance of license.</li> <li>2. Access to facilitator: to get information and fully facilitation to obtain license, connected to government authorities and other stakeholders.</li> <li>3. Access to all member of Hajran Village (social identity): delivering information, socialization, preparing and organizing them to involve, and establishing cooperative under notary act.</li> <li>4. Access to village government: to get support, legalization to establish cooperative under notary act, and agreement to propose license.</li> <li>5. Access to district government: to get administrative and technical assistance in proposing license, and agreement to propose license.</li> <li>6. Access to provincial and central government: to get issuance of indicative license area and issuance of HTR license.</li> </ol>

**4.2. Access of Community License Holders in the Post License Phase**

Based on the access indicators shown in Table 3, the HKM Beringin Jaya community has higher access than the Hajran HTR community. The higher access of HKM Beringin Jaya community resulted in various benefits to members of the community in implementing social forestry policy.

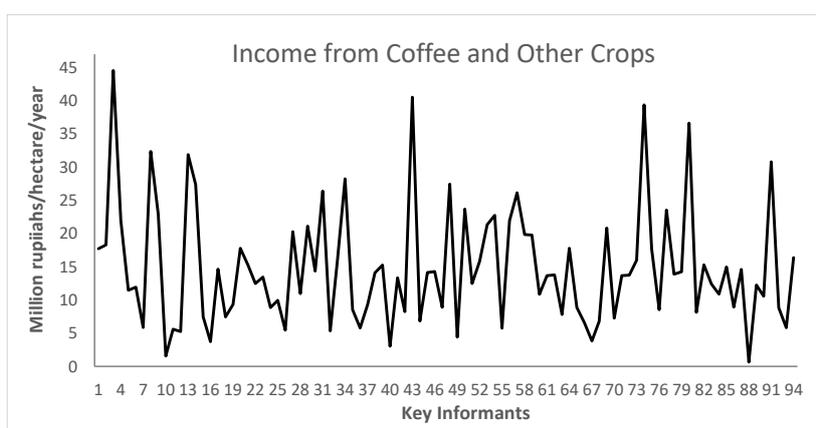
The HKM Beringin Jaya community continues and develops practices in the post-licensing phase that have been practiced at the pre-license phase, so that the benefits from implementing of social forestry policy are more widely obtained. Community access in the post-licensing phase is basically the same as in the pre-license phase. Community must have access to stakeholders inside and outside their community. Those stakeholders own and/or control resources, which is directly or indirectly related to primary productive economic activities in utilizing and or managing the license area, as well as secondary productive economic activities. Access to those resources are intended to improve income among community members in the longer term.

Sustainability of utilization and or management of the license area provides income from coffee and other crop<sup>6</sup> production, which has been obtained by members of HKM Beringin Jaya. Overall income generation is shown in Figure 2.

<sup>6</sup> Bananas, Avocados, Cloves, Hot Pepper, Palm Sugar, Eggplant, Taro, Water Guava, Chocolate, Pumpkin, Pepper, Nutmeg, Petai, Areca Palm, Papaya, Ginger, and Guava Crystal

**Table 3.** Access of HKm Beringin Jaya and HTR Hajran Communities in the post-licensing phase

HKm Beringin Jaya	HTR Hajran
<ol style="list-style-type: none"> <li>1. Access to all members (social identity): organizing members of HKm to establish primary cooperative under notary act, woman farmer group, and ecotourism farmer group, proposing loans to financial agency, proposing program or activities to government and other stakeholders,</li> <li>2. Access to knowledge and technology related to agroforest coffee cultivated at state forest area from government and others stakeholders, facilitated by NGOs.</li> <li>3. Access to financial capital: loans from Bank BRI district level with total 1.76 billion, BLU-P3H MoEF with total 3.37 billion, and Bank BRI sub-district level at 10-15 million per year for HKm member who is proposing.</li> <li>4. Access to local markets or village traders: to sell coffee beans and other crop production.</li> <li>5. Access to government programs (social relations):               <ol style="list-style-type: none"> <li>(a) Roaster and grinder Coffee from Indonesian Bank and Ministry of Village, Development of Disadvantaged Regions and Transmigration</li> <li>(b) Program from Head of Tanggamus District seedling of multipurpose tree species</li> <li>(c) Program watershed and protected forest management office in making absorption wells, gully plugs and community nursery</li> <li>(d) Selected member of HKm to be FMU official partner</li> </ol> </li> <li>6. Access to activities or events (social relations): The first champion of Wana Lestari event in 2016 at provincial forestry office and MoEF, the place for learning and sharing experience held by MoEF, FMU, provincial forestry office, NGOs and other farmer groups inside and outside of province, and selected members of HKm participated in internship and training held by government and other stakeholders.</li> </ol>	<ol style="list-style-type: none"> <li>1. Access to all members: agreement to work with Partner Company to develop license area, agreement to get loans from MoEF proposed by Partner Company On Behalf Of HTR Hajran.</li> <li>2. Access to partner company: agreement to work together, MoU on activities, financial support and profit sharing, member of HTR involved in development activities of HTR license area by Partner Company.</li> <li>3. Access to government authorities: political support from Minister of MoEF and The Governor of Jambi by visiting HTR license area, The Minister supported HTR Hajran to propose loans to MoEF, and other visitations from MoEF, provincial and district officials.</li> <li>4. Access to financial capital: soft loans from BLU-P3H MoEF at 8.5 billion, (already received ± 800 million) for initial development of HTR license area.</li> <li>5. Access to primary industry: selling 700-800 m3 of logged timber (revenue from selling logged timber is used by Partner Company to fund initial development of HTR license area).</li> </ol>



**Figure 2.** Income<sup>7</sup> of HKm Beringin Jaya members from the HKm license area

<sup>7</sup> The income calculated in this study is income for the last year of cultivation, calculated from July 2017 to August 2018. The income variation among key informants also shows the access of farmers' households in the field.

Other benefits obtained by HKm Beringin Jaya members, include: (1) each HKm member feels safe to use allocated state forest areas, because: (a) it is legal according to the law and regulation, (b) clarity of the cultivated parcels for every member, (c) the parcels are known and recognized among adjacent members, (d) forest farmer group and farmer group union as formal organizations serve as guardians for every member when undesirable situations may arise, (e) clarity of rights and obligations, and (f) parcels are easy to visit at any time<sup>8</sup>; (2) a sense of security that makes every member more willing to invest in: (a) maintaining coffee plants, (b) enriching and maintaining other plants, (c) participating to propose loans for agroforest coffee and household businesses from financial agency; (3) security of investments that have implications for: (a) production of coffee beans better than before, even though this is also affected by high rainfall or long dry seasons, (b) other crop production opportunities are also obtained, and (c) emergence of other economic activities involving other community members; and (4) production of coffee beans and other crops are safer after HKm license is obtained.

Those benefits are obtained by members of HKm Beringin Jaya because the HKm Beringin Jaya community has access to all HKm members, information, facilitator, knowledge, government authority, capital, technology, program or activities of the agency, and local markets and their networks<sup>9</sup>. Access to all community members, village government authorities, facilitator, local markets and their networks is carried out by the community themselves, while access to information, licensing authorities, financial capital, technology, and programs or activities of agencies is facilitated by non-governmental organizations as the facilitator. Both are realized and implemented through mechanisms, processes and social relations (Ribot and Peluso, 2003) among community members and with parties outside their community. Facilitation of access is carried out by linking or connecting the community to those who control information, knowledge, licensing authorities, financial capital, technology, and agency who has programs or activities, which are not adequately provided by social forestry policy. It was also revealed by Sunderlin et al. (2008), that forestry tenure reform, despite political will, will fail if it is not implemented with adequate administrative support, budgets, expertise and policy instruments.

Facilitation of community access has become a real function and success in achieving some of the intended benefits because in the HKm Beringin Jaya community they have the capacity to organize their members, interact and cooperate among them and work with other parties outside their community (bonding and bridging social capital) (Baynes et al. 2015). This empirical finding also shows that access, according to Ribot and Peluso (2003), must be supported by the networked capacity of actors to access *something* inside and outside of the community. Aside from access and networking capacity, the benefits obtained by the HKm Beringin Jaya community are also influenced by the accuracy between subject (license holder community) and object (state forest resources) in granting social forestry license and the availability of supporting services and facilities. Early indication to obtain the accuracy between subject and object in granting a social forestry license can be identified in the pre-license phase situation that the community is extremely depending on the state forest resources, the community have been cultivated or managed the state forest before a social forestry license is issued, and the community live inside and around state forest area. This information should be well noted earlier by the government before issuance of social forestry licenses in order to obtain the right kind of buy-in with the community who will obtain the license to manage state forests. Supporting infrastructure also affects access of license holding

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<sup>8</sup> HKm Beringin Jaya has approached to situation of well-defined property rights which is identified as one of the key variables in the success of community forest management (Pagdee et al., 2006).

<sup>9</sup> What is not yet accessible is increasing the capacity of HKm members to run formal organization independently, to run business institutions and access to large markets or big companies to improve the selling price of coffee beans and other crops production.

communities, connected by roads that are managed by villages to provincial institutions that can be passed at any time (Dyke, 2006) equipped with public transportation, local markets and its networks (Cardozo, 2013) connected to large markets (conventional or modern), and adequate communications and internet networks as stated by Ellis (2016).

The access of HTR Hajran community at the post-licensing phase was considered low. It is indicated by the absence of sustainable utilization and or management of license areas that provide income for HTR Hajran members. The utilization and or management of license areas by partner companies lasted only one year, before bankruptcy was experienced by the partner company. In that year, the community worked together with the partner company to obtain access to all members, information, financial capital, licensing authorities, technology, and primary industries at local markets. Most of the people of the Hajran Village are local resident/people who have kinship with one another. These form social relations among members of the community, including with the management of HTR Hajran and the partner company. Thus, in one year of the initial HTR development activities, the benefits from utilization and or management of the HTR license area were achieved only by members of the Hajran Village who were working with Partner Company. Good social relations and experience in working at previous community development activities in Hajran Village, formally and informally, resulted in only certain members of the Hajran Village to have the opportunity to engage with the partner company. Other than that, due to the limited number of people needed to work with the partner company, members of the Hajran Village who can work with the partner company is also influenced by the management of HTR Hajran that can exclude other community members. Local elite capture occurred, which is represented by the management of HTR Hajran. Syafitri (2010) also identified this situation in HKm Langkawana in Lampung Province.

The HTR Hajran community were facing a bad situation after getting their HTR license and the partner company discontinued their activities. This situation led to bad social relations among members and members with the management of HTR Hajran, which affected their capacity in networking within the community. Several factors that caused the Hajran HTR community networked capacity to be weak included: (1) the area of the HTR license is managed communally, while most of the decisions to manage license areas are decided by the management of the HTR Hajran with the partner company, causing low participation from all members<sup>10</sup>, (2) members of HTR Hajran tend to be passive, only accepting decisions made by HTR management, (3) there is no land use or cultivation activities before license is obtained, individually or in groups that provided direct or indirect benefits, (4) the distance between community settlements to the HTR license area is about 20 km which is also difficult to pass, particularly during the rainy season, (5) most of the members of the Hajran community still own private land that has not been optimally managed, and (6) most of the members of the Hajran village do not depend directly on the license area by cultivating, as they preferred to pursue timber or non-timber forest products that can be directly harvested.

In accordance with regulations, the development of HTR which is managed communally with a partnership scheme and development activities are carried out entirely by the partner company to produce timber. This has some similarities with the development of industrial timber plantations (HTI) by private companies. A partner company with sufficient capacity and resources may produce plantation development achievements close to those achieved by HTI companies. The partner company who worked with HTR Hajran is a company that was just established shortly after the Hajran HTR license area is obtained. The limited capacity and resources by the partner company to

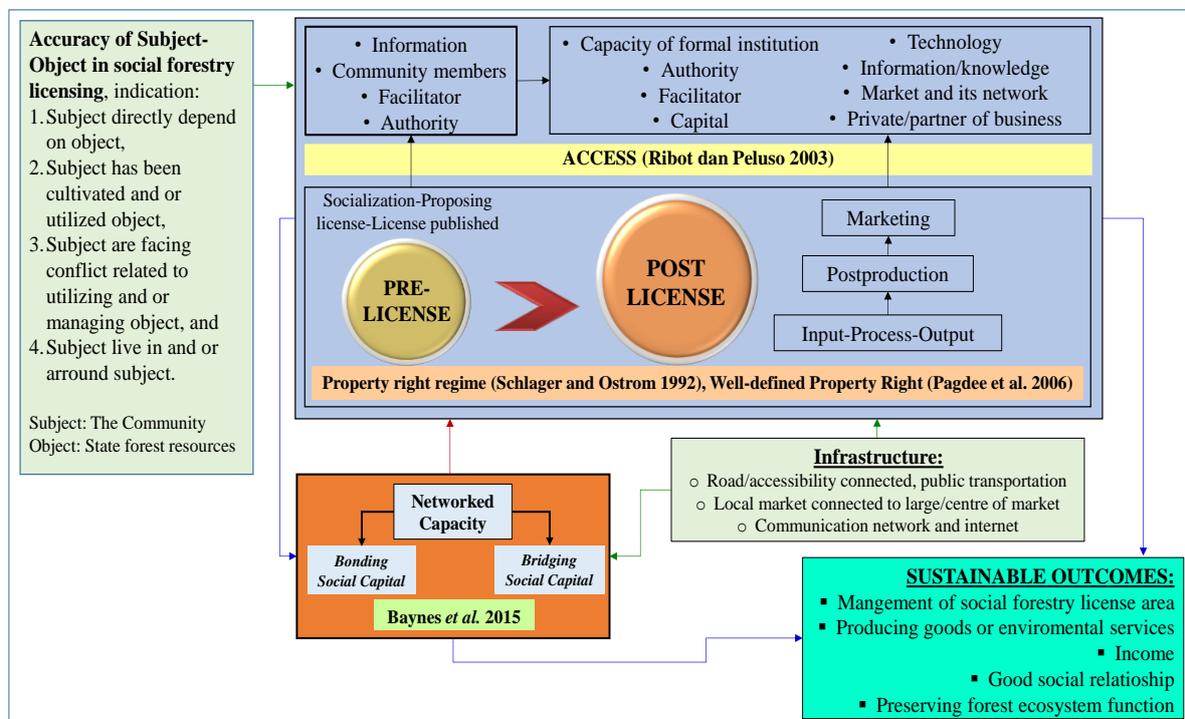
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<sup>10</sup> This empirical finding is in line with the findings of Ostrom and Nagendra (2006), that people are more likely to follow the rules and monitor the behavior of others when they are included, in the true sense, in making decisions regarding these rules and when their livelihoods are guaranteed. This has made the HTR members were not so interested actively participating in the utilization and or management of the HTR license area.

manage HTR license areas was expected to create productive economic businesses involving Hajran village community did not occur.

The unsustainable management of the HTR Hajran license area is caused by: (a) the problem of the accuracy between subject and object in granting HTR license, which showed that the Hajran community does not depend directly on the license area so all members were not stimulated to invest, (b) problems in social relations among members and members with the management of the HTR affected the low community networked capacity, (c) decisions and information related to license areas do not fully involve and deliver to all members (local elite capture occurred), and (d) management of license area which is oriented to produce timber by the community in a partnership scheme with a partner company requires adequate capacity and resources. Further implication are: (1) there were no regular meetings of HTR Hajran members, as well as no cooperative membership fees, or other features that generated buy-in of continued activities to manage the license area, (2) incomplete information from management of HTR to all members, (3) the license area is in an open access situation, triggering illegal logging and occupation of land for gardening, potentially threatening the remaining forest ecosystem in the license area and Bukit Duabelas National Park.

The HTR Hajran community still requires intensive facilitation and assistance from government, NGOs and other stakeholders that can provide support in managing their license area. Government or NGOs can be a companion or facilitator for the HTR Hajran community, or might be able to connect them to a prospective new partner company. Management of the HTR Hajran license area can then also be conducted by dividing the license area into household members unit or parcels under a primary framework of management for the entirety of the license area. The household management unit can produce timber or non-timber forest products by applying methods commonly practiced by community on their private lands, which comply to the regulation. Applying new methods to produce new products derived from outside of the community is also possible, which can be conducted through comprehensive assistance from government or NGOs.



**Figure 3.** Relation between community access and other factors in the implementation of social forestry policy

Considering the empirical findings and the description about HKm Beringin Jaya and HTR Hajran communities, a diagram is presented below (Figure 3), which synthesizes community access in social forestry policy implementation relative to other factors that influence the achievement of the objective of social forestry policy.

To achieve sustainable outcomes as shown in Figure 3, handing over legal access (power) to the community is still insufficient if it is not supported by the availability of other factors, which must be done through a combination of support by various stakeholders, including government (national-subnational) and involvement of NGOs, financial agencies, private sector or business partners, markets and its networks, educational institutions, donor institutions, research and development institutions. Accuracy in granting social forestry license to the right community becomes the work of MoEF along with the technical implementation unit (*Unit Pelaksana Teknis/UPT*) and related technical offices at the subnational level. The availability of supporting infrastructure becomes the work of other ministries or institutions at national and subnational levels. The social forestry policy gives legal access (power) to community in managing state forest areas in defined areas stipulated in a social forestry license area. At the implementation level, social forestry policy challenges the community and government, whether to implement or not, the rules of the game as outlined in the social forestry regulations. Previously work by Kartodihardjo (2017b) stated that social forestry policy contains policy instruments that direct community behavior by providing certainty of rights to forest resources, which are expected to encourage community awareness of the destruction of natural resources. This is also depends on the effectiveness of regulations and or norms and wisdom that can support community behavior.

## 5. Conclusions

In order for a social forestry license to be issued, in the pre-license phase, communities must have access to social forestry information, agreement about all community members who will be involved, and support through facilitators and government authorities. In the post-licensing phase, however, the HKm Beringin Jaya community experienced a higher level of access among all members, facilitators, knowledge and information, technology, government authority, financial capital, programs or activities of government and non-government institution, and local market and its networks. Access to the increase in member capacity to run formal organizations and business institutions also requires corresponding access to larger markets or companies, which had not been achieved by the HKm Beringin Jaya community. Benefits were obtained by the HKm Beringin Jaya in terms of longer term sustainability in the form of: (a) managing the license area, (b) production of goods, (c) income, (d) improved social relations, and (e) preservation of forest ecosystem functions.

Access in both phases is carried out by the community and facilitated through various mechanisms, processes and social relations. Facilitating access to information, authority, financial capital, markets, technology, programs/agencies, and potential support for productive economic opportunities is not adequately provided by social forestry policy, which are the features that support longer term success. The high access of the HKm Beringin Jaya community is supported by the high community capacity in networking (bonding and bridging social capital). The high access and networked capacity of HKm Beringin Jaya community to achieve benefits from implementation of social forestry policy is also influenced by the overall relationships between subject and object in granting the HKm license and the availability of supporting infrastructure.

Three overall recommendations emerged from this research include: (1) Research on community access is helpful for understanding social forestry schemes, and should be applied to other schemes beyond HKm and HTR, (2) Improvement of access to license holding communities by government or other stakeholders should be preceded by exploring issues related to community networked capacity, and (3) Improvement of community access and their networked capacity by

the government through policies must lead to increased community access and networked capacity, directly or indirectly.

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