

The Social Forestry in Forest Farmer Group Gunung Gajah Lestari, Pematang, Indonesia: Encouragement Hope beyond the Limited Choice

Dicky Rachmawan¹, Francisia Saveria Sika Ery Seda², Robert Siburian³

{dickylipi@gmail.com¹, Saveria09@gmail.com², robert.siburian@lipi.go.id³}

Graduate Student of Sociology Department¹ & Sociology Departemen FISIP UI, University of Indonesia, Kampus Baru UI Depok Jawa Barat, 16424², Pusat Penelitian Masyarakat dan Budaya, LIPI, Jl. Jenderal Gatot Subroto, DKI Jakarta, 12710³

Abstract. Social forestry program is one of Indonesia's program in preserving forest area. This study focused on Forest Farmer Group Gunung Gajah Lestari that has received a certificate of social forestry program. Using qualitative method, 35 informants were interviewed and participate in FGDs to examine Social Forestry Program implementation. The result shows the social forestry program gives serenity for members based on legal certainty at once it improves income. Members who have access to manage their forest areas lack the capital to plant corn, so many of them borrow it from Juragan. This relation between members and juragan leads to member dependency on Juragan and further limits member's chance and options to develop because overshadowed by falling prices at harvest time. Based on that fact, it is important to understand the reasons how members still want to plant corn and what the alternative commodity by management and members.

Keywords: Poverty, Social Forestry, Forest Farmer Group

1 Introduction

Forest management has been changed around the world in several decades [15;18; 31] from the top-down or centralistic pattern which affects deforestation and reducing people access to forest resource [8; 15; 31] becomes forest management by people or bottom-up for sustainability [18;31]. This shift of forest management paradigm also happens in Indonesia context [25] which started in early 1980s by "Pembinaan Masyarakat Desa Hutan" (PMDH) project [15] and it developed by several regulation such as ministry decree about forest community (SK.622/1995), the replacement of forest law from no.5/1967 to no.41/1999, until the emerge of five schemes of social forestry by Ministry of Environment and Forest (MoEF) decree no.83/2016 [5;6;25; 29].

The five schemes of forest management in Indonesia well-known as Social Forestry Program (SFP) which implemented and intensified in Jokowi President Era [2]. The five schemes of SFP in Indonesia are village forests (*hutan desa*), community forests (*hutan kemasyarakatan*),

community plantation forests (*hutan tanaman rakyat*) or forest management permit (IPHPS), forestry partnerships (*kemitraan kehutanan*), and customary forests (*hutan adat*) [12;13;20;24] Furthermore, Rakatama & Pandit (2020) said only the customary forest which has the transfers forest ownership rights from the Indonesian's Government to the customary group, so the others schemes only give the permits for the people who must follow the rule of the game to use it.

The SFP is an ambitious and confident national priority program by the Indonesia Government which has target to distribute 12,7 million hectares forest area for people to alleviate poverty in rural areas that estimates ±48 million poor people from ±100 million people live nearby forest area and at once to preserve forest area [1;13;15;16;20;24;25;26;32]. Unfortunately until 2021 the forest area which are distributed for people just reach 3,9 million hectares [10], but it is better if we compare the data from 2014 which just only distributed 449.104,24 hectare forest area for people in the whole Indonesia [5].

For five years (2014-2019) MoEF has published around 6.411 certificates groups in SFP [4] and just several group are categorized as model group where one model of the forest farmers group is Forest Farmer Group Gunung Gajah Lestari (FFG GGL) in Pematang Siantar [23]. Different with previous studies which emphasize to reveal the problem or examine the factor of SFP's implementation [1;6;14;19;20;21;24;25;27;28;33], this paper focus on social-economic aspect to reveal the situation and the benefit of SFP implementation in members level groups of FFG GGL and it complement with social context explanation by appraisal value chain analysis.

2 Method

Qualitative methodology is used in this paper to describe and explain social-economic aspect of SFP implementation in Gunung Gajah Lestari Forest Farmer Group, especially in Gongseng Village, Kabupaten Pematang Siantar as case study. Depth interview is used to get the data from seven key informants which contained by three informants management of Gunung Gajah Lestari Forest Farmer, three informants of Gongseng Village apparatus, and one informant of Perum Perhutani (Forest State Owned Enterprise) apparatus. Then semi-structure interview is used to 23 members of FFG GGL and five *Juragan*¹.

The VCA is used to identify who is getting the benefit and to understand how the value chain of the corn as a commodity in Gongseng Village works [3;17]. Where the corn as the non-forest timber product (NFTP) could has potency which maybe give the benefit for the farmers [7;22]. Because there just some of previous studies which explain how the value chain is formed, continue, and develop [30]. For the value chain analysis (VCA) especially in corn commodity as the main commodity in Gongseng Village we interviewed five informants as middleman which called "*Juragan*" and two informants from the private sector who buy the corn from *Juragan*.

The focus group discussion (FGD) has been used as one of technique to gather the data at once to observe interaction between members and management of the FFG GGL. Different informants from several groups were used to validate the data (triangulation) where these research activities to gather the data had been done in Januari 2021 and Mei 2021. This paper

¹ People who giving capital to the farmers and buy the harvest from farmers to sell it to corporate in the city

could not represent the people of Gongseng Village or FFG GGL, but at least it could give a slightly overview of the FFG GGL as a part of Gongseng Village people.

2.1 Limited Land to The Emergence of Social Forestry Certificate as the Context of Forest Farmers Group Gunung Gajah Lestari (FFG GGL)

It is important to understand the context of FFG GGL which located in Gongseng Village, Pemalang District. First, owning the land is the basic need for the people who work as farmer because owning the land relate with survival and welfare [11]. Based on data that writer gathered that only 29% informants who have arable land outside of the forest area $\pm 0,016$ until 1,25 hectares, while 57% of them have not it. So, the need of the land to cultivate is an inevitable phenomenon in Gongseng Village that makes most of the member of FFG GGL cultivate in the forest area $\pm 0,25$ until 3 hectares.

Before the the SFP, many villagers, who not have a land, planted their corn to get some income in forest area if they got “permission” by Perum Perhutani (PHT) officer. Although villager allowed to plant their corn, they just allowed it only more or less two years to plant and must find another location if Perum Perhutani started to plant their teak trees. Farmers only could accept this chance as a better option than not allowed to plant even the new location more far from their home or have different condition from the old location. This rule was burdensome for farmers which complemented by uncertainty output, because the location determined the harvest of their corn by several aspects such as ground slope, water availability, pest, or etc.

The next context in Gongseng Village is “forest looting”. The worst condition of the forest area near Gongseng Village happen because of forest looting in 1998-1999. This event become turning point when the villager started to plant their corn in forest areas, even some of informants returned to village to plant corn than work in big cities. In the other side, Perum Perhutani tried to restore their forest areas by replanting activities which replanted several kinds of trees such as *acacia*, *teak* or *jabon*. Unfortunately, this effort did not give good result or tend to failed. The stagnant condition of replanting activities that called failed replanting activity by several informants in forest areas near Gongseng Village made several people in community had seen the forest area as arid area which sometimes potentially could cause fire. Along with time this condition became an attention especially in for youth organization (YO) in 2015 that pushed them due their money for replanting activity.

In contrary, the idea and seeds which bought by YO for replanting activity was rejected by Perum Perhutani, although YO initiative was supported by Department of Agriculture who has given around 2.000 seeds. The strength prohibition of YO replanting activity by Perum Perhutani made this activity stop between 2015-2017. The bright spot for YO came when they got information about SFP through Non-Government Organization (NGO) that named is GEMA. The discussion between YO, GEMA, and Village apparatus generated the agreement to try and to submit the application for SFP in social forestry forest management permit/ *Izin Pemanfaatan Hutan Perhutanan Sosial (IPHPS scheme)*. Evidently, when YO tried to gather all the requirements for applying the IPHPS scheme, Perum Perhutani did the requirement too that made farmers confused. In the submit application stage, MoEF received two similar data application which submitted by Perum Perhutani and YO from Gongseng Village. So, MoEF mediated and synced the data between YO and Perum Perhutani, soon after that the IPHPS scheme certificate published in same years where YO was transformed into FFG GGL to manage ± 295 hectares [9]. In addition, many of the wanderers from Gongseng Village in Depok

City (West Java) came back to the village when they heard about the IPHPS, because they have more freedom and opportunity to cultivate in forest area.

After the IPHPS certificate was published, the relation between FFG GGL management and PHT officer in a tenuous relationship with decrease interaction than before. This relationship was worsened because “one person” of the PHT officer provoke farmers with cultivated area size issues that made a conflict between farmers in FFG GGL. In recent times, the problem subsides, and “person” of the PHT does not really get involved while interaction between FFG GGL and PHT slightly emerge and tend to be more positive attitude although PHT attitude is slightly passive to FFG GGL.

2.2 The Dependency as the Limited Choice: The Corn and the *Juragan* as the Buffer Sector for Agriculture Industry

After MoEF permit or certificate of IPHPS has published in 2017, the FFG GGL have their freedom to cultivate the forest land where it was distributed to their members. Afterward the FFG GGL have received assistance from Agriculture Department who give aid such as avocado, mango, jackfruit, *jengkol*, or other trees to replant the forest areas, where in reality just mango trees which can survive until now. Another aid that is given to FFG GGL by Agriculture Department in several years from 2017 is “corn seed” that alleviate cost production for the farmers.

In other side the management of FFG GGL see the corn commodity as less prosperous for community that need to be changed. All of the informants from the management of FFG GGL said that plant the corn maybe give the farmers money which not calculate their time and energy. Based from our observation activity the farmers go to their field in the morning (6 or 7 A.M) and back to their home in evening (17 or 18 P.M), further they tend to overnight on the field to protect their corn harvest from pest in harvest time.

Contrary with the management of FFG GGL view, there are 91.7% of the informants as the member of FFG GGL tends still to plant the corn that just earns between Rp.2-3 million (USD² \$136,2 – \$204,4) /planting³. This is the average amount of money that informant farmer could borrow for their family to survive until next harvest, further the number has been reduced by the cost of production that determined by *Juragan*.

On the surface there is an essential role of *Juragan* who bridges the farmers and the buyer from cities, in addition, *Juragan* has a role to fulfill the farmers needed for planting activity and they can lend some money without the interest loan. Beyond of these facts, there is the gap of the planting needs price if the farmers borrow it from *Juragan*. In our calculation, the farmers have burdened by *Juragan*, while in the same time the *Juragan* has taken the profit from lending their money through fulfill farmers’ planting need around Rp.864.000,- (USD\$ 58)/hectare.

In the specific planting need for the farmers, the *Juragan* get their profit from the farmers through different prices between if they buy it direct to the pesticide or fertilizer shop or borrowing it from *Juragan*, the data can be seemed in the following table below:

² Dollar rate to Rupiah in 23 July 2021, \$1 = Rp.14.675,-

³ The planting time of the corn is 100 days (3 months and 8-9 days)

Table 1. The Different Prices of the Corn planting needs for the Farmers between buying and borrowing from *Juragan* / hectares

The Farmer Need	Unit	The price when they buy by themselves	The price when farmer borrow it from <i>Juragan</i>	The profit for the <i>Juragan</i>
Seed	20 kg	Rp. 1.300.000,-	Rp. 1.720.000,-	Rp. 420.000,-
Pesticide:				
1. <i>Round Up</i>	12 bottles	Rp. 876.000,-	Rp. 1.020.000,-	Rp. 144.000,-
2. <i>Gramason</i>	5 bottles	Rp. 315.000,-	Rp. 375.000,-	Rp. 60.000,-
3. <i>Compe</i>	3 bottles	Rp. 840.000,-	Rp. 930.000,-	Rp. 90.000,-
Fertilizer:				
1. Urea	2 quintals	Rp. 500.000,-	Rp. 560.000,-	Rp. 60.000,-
2. Poska	2 quintals	Rp. 500.000,-	Rp. 560.000,-	Rp. 60.000,-
3. TS	1 quintal	Rp. 250.000,-	Rp. 280.000,-	Rp. 30.000,-
Total		Rp. 4.581.000,-	Rp. 5.445.000,-	Rp. 864.000,-

Source: based on primary data that processed by authors (2021)

From the Table.1, we can see that the *Juragan* take the highest profit from the seed which reach until Rp.420.000,-/hectares (48,61%), where the profit from pesticide take the second place that reach 34,03% of the profit as same as Rp.294.000,-. The fertilizer takes the third places of the *Juragan*'s profit that reach more or less Rp.150.000,- (17,36%).

Based on this reality, we can see the profit of the farmer has reduced by the *Juragan* as the profit for them. This situation directly reduces farmers income and the same time improve *Juragan*'s well-being, where one of the *Juragan* could shade minimum 10 farmers or the maximum until one hundred of farmers in Gongseng Village context. The interesting part is "how the farmer" still want to plant the corn beside they know about the gap of the planting need price if they borrow it from *Juragan*. The answer is "the farmers dependency" to *Juragan* to sell their corn in marketing aspect.

Beyond the marketing aspect and the planting need fulfilment as the surface reason (91,7%), the convenience to borrow money for fulfilling life cost is the essential reason of the farmers to plant corn (79,2% from 91,7%). The field corn become a strong reason for farmers to plant although it not really gives them enough profit, but with it the farmers get esier access to borrow the money from the *Juragan* for unplanned or planned incident such as the education or health cost. When we asked about alternative commodity, most of them want to try plant the ginger but they could not to buy the ginger seed (30,8%). This is the dependency between the farmers (include members of the FFG GGL) and the *Juragan* that makes the famers have less profit furhter it limits their choice to develop their well-being.

In the value chain analysis (VCA), this dependency *patron-client* relationship is the sub-chian of value chain of the corn commodity, where *Juragan* or company get more profit from selling activities to the other party in value chain than the farmers. The price is determined by the buyer in cities as the information circulation before the transcation that happen between the company to the *Juragan* and the *Juragan* to farmers. The company and the *juragan* become a distribution point who makes the gap of the price as the profit for both of parties. We ca see in detail the VCA between farmers, *Juragan*, Depot, and Factory in the Figure 1 below

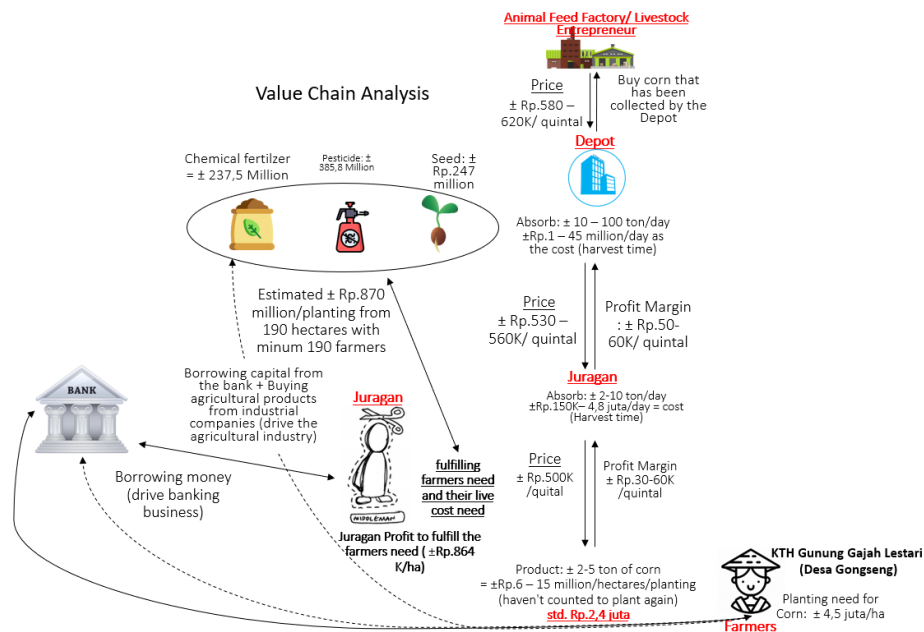


Fig.1. Value Chain Analysis of The Corn Commodity in FFG GGL

Source: Based on primary data that processed by Authors (2021)

In our calculation, there are probability that farmers can take gross profit between ±Rp.6-15 millions/hectares/planting, but the gross profit not include the cost for replanting activity that need around Rp.4,5 million/hectares. In the end many of our informants said as the members of KTH GGL could take the money after they sold their corn harvest between ± 2-3 million/planting for their family. So, if they want to replanting the corn the tendency is the must take/borrowing the planting need from *Juragan* again.

In figure 1, we can see the *Juragan* could take twice profit, first they take the profit for the buying the corn harvest from farmers. The profit margin between Rp.30-60k/quintal of corn commodity, but if we see *Juragan* capacity to absorb the corn commodity from the farmers. *Juragan* could absorb ± 2-10 ton/day which cost between Rp.150k until Rp.4,8 million/day. So if we calculated the minimum profit for juragan with 2 ton same as 20 quintal that can reach Rp.600k/day that decrease of the Rp.150k cost, so minimum the *Juragan* could take Rp.450k/day. While the maximum probability of profit *Juragan* could take 100 quintals with the price Rp.60k/quintal, so the *Juragan* could take Rp.6 million/day with cost Rp.4,8 millions/day. In the end of the maximum probability the profit of *Juragan* could get Rp.1,2 million/day in the harvest time where the harvest time could have length more or less 2 weeks. In this rough calculation, *Juragan* could get minimum probability profit between ± Rp.6,3 million (minimum profit margin) until Rp.16,8 million in 2 weeks when the harvest time for only selling the corn.

The second profit of *Juragan* is the profit that take when they decrease of farmers profit by borrowing mechanism based on the fulfilling farmers need. From this mechanism *Juragan* decrease their cost to buy the corn from the farmers, and if we see from the beginning of the planting activities. Borrowing mechanism can be used by *Juragan* to fulfill the planting need

not only for the farmers, but also to fulfill their need to plant the corn too. If the minimum *Juragan* could shade 10 farmers that manage one hectare, in same time the *Juragan* could have profit ±Rp.8,46 million. Where, the cost for planting corn just only needs Rp.4,5 million/hectare because the *Juragan* directly buy it from pesticide or fertilizer shop.

In the other side, the borrowing mechanism not only give the *Juragan* positive output, but also give them negative output when the farmers did not sell their corn or just sell little of their corn harvest to them. The reason for the farmers just sell a little or not sell their corn harvest is because their debt is too high, or because of the failed harvest. In this situation, the *Juragan* still remember the “debt” for all the farmers who are shaded, furthermore *the Juragan* still give access of borrowing mechanism to support the farmers to fulfill their debt. From this fact, we can see one side of the domination of *Juragan* that exploits the farmers, and the other side the debt is the “bargaining position” of the farmers that makes *Juragan* need them.

Furthermore, there are other parties who get benefit or profit directly and indirectly from farmers activities beyond the VCA in Gongseng Village activity that plant the corn. The parties who get direct benefit are chemical medical, chemical fertilizer, seed company and bank. In our rough calculation if there are minimum 190 hectares forest areas that is planted by corn, so minimum the cost of planting activity probably reach Rp.870 million (USD \$59.284,5)/planting. Around Rp.385,8 million (USD \$26.235) going to chemical medical company, Rp. 237,5 million (USD \$16.149) going to chemical fertilizer company, and Rp.247 million (USD \$16.831) going to see company. After that, the corn planting activities in Gongseng Village has an indirect benefit for financial sector especially bank who lend the money and get the loan interest from the *Juragan*. In short corn planting activities near the forest in the Gongseng Village become a buffer sector who support formal industry in the cities such agriculture industry (direct effect) and financial industry (indirect effect).

Then, what is the solution for the members of FFG GGL to improve their well-being as the transformation through social forestry implementation? Our curiosity is answered through a focus group discussion activity which met between one representation of FFG GGL management and several members. Maybe it does not really represent the group as one entity, but at least we tried to support them to communicate and to process for finding the solution as the hope for the FFG GGL.

2.3 The Hope and The Problem from The Sharing Mechanism

The FGD was organized on 16th February 2021, based on this activity we got the agreement that needs to be more discussed later by the FFG GGL. The agreement as the solution idea to escape from corn commodity dependency is to plant the ginger through joint fund between the management and members of the FFG GGL. The idea is several members and several management of the FFG GGL gather some money to buy the ginger seeds then it is distributed to one or several members/management who pay contribution. After the ginger seeds are planted and come the harvest season, so part of the harvest of the ginger joint fund will be distributed to other members especially who pays contribution, and so on.

This sharing mechanism is a good idea that will bring new commodity for the farmers in the Gongseng Village context especially to members of FFG GGL. Unfortunately, the implementation would be not easy as the idea, because this mechanism is run and does not really work in goat donation that is given by BUPSHA, KLHK. Based on our observation the goat donation that must distribute to other member of FFG GGL after a goat has had birth did not really happen. Several of the members see the management monopolize aid and just distribute

it to people who close with them. The others members said the management has less accountable attitude such as ask for contribution of corn harvest without group formal latter. Furthermore when we asked about this levy activity that happens to several member informants, on the contrary, the informant of the management said that there is no activity to collect the corn harvest from the members.

Moreover, based on our interview and observation activity we get one more fact about the problem of sharing mechanism in FFG GGL. That is “the lack of information distribution” from management to the members. Many of the informant members are less likely to know how the main activity running and still asking about the activity such as the Solomon teak tree planting program that is canceled because of a third-party error. Until the question about that program emerged by one of the members and was answered by an informant of the management on FGD activity.

If the two paragraph before explains about the problem of sharing mekanisme in FFG GGL that emerges from internal gorup, the other potential problem maybe emerges from external group especially from *Juragan*. When the members of FFG GGL success to plant the ginger as the commodity, then who will sell it to the buyer? This role can be fulfilled by the *Juragan* again same as the corn commodity. If it happens, the new commodity and the effort of the sharing mechanism become a useless process because the *Juragan* still has the key of distribution the commodity and take the profit.

3 Conculsion

There is the hope that is realized by the management and members of FFG GGL to get out from *Juragan*'s grip to change the commodity from corn to ginger through concept of joint venture seed and harvest sharing. Where the challenge of this concept is come from the internal of FFG GGL itself in the implementation, because there is the trust issue between the members and the management especially on accountability and information sharing. In the other side, the possibility of the external problem could came from *Juragan* where they follow the shift the commodity from corn to ginger.

Based on that facts, the management of FFG GGL must improve their communication and accountability to makes the members trust them as one entity or group that wants to improve their well-being. Then the discussion about the new commodity needs to cope until the marketing phase not only in FFG GGL group, but also discuss with stakeholders such as BUPSHA (MoEF), trade, forestry and agriculture department from local governement in regency or province level. Even, the group could discuss the ginger market place with Foreign and Trade Ministry to reach and connect with the international market that can give more profit than the price of local market.

Acknowledgement. This research is sponsored by Social Science and Humaniora Deputy of Indosian Institute of Science (IPSK LIPI) based on approvement by Forest Research Team Leader and Head of Research Center for Society and Culture of Indonesian Institute of Science (P2MB LIPI) – from Priority National Research III IPSK LIPI Research Team. Thank you very much for Dr. Robert Siburian, Prof. Dr. Ahmad Nadjib, Prof. Dr. Nuke, Mr. Tjetjep, Mr. Radi, Mr. Khotib, dan Mrs. Budi for the intructions and helps that given to writter.

References

- [1] Asmin, F., Darusman, D., Ichwandi, I., & Suharjo, D.: Mainstreaming community-based forest management in west sumatra: Social forestry arguments, support, and implementation. *Forest and Society*, 3(1), 77–96 (2019). <https://doi.org/10.24259/fs.v3i1.4047>
- [2] Bakar, S. N.: *Kebijakan perhutanan sosial untuk kesejahteraan rakyat*. [\(https://www.sitinurbaya.com/artikelku/997-kebijakan-perhutanan-sosial-untuk-kesejahteraan-rakyat#:~:text=Kebijakan perhutanan sosial saat ini, dan HA \(Hutan Adat\)](https://www.sitinurbaya.com/artikelku/997-kebijakan-perhutanan-sosial-untuk-kesejahteraan-rakyat#:~:text=Kebijakan%20perhutanan%20sosial%20saat%20ini,%20dan%20HA%20(Hutan%20Adat)) (2018).
- [3] Clay, P. Mac, & Feeney, R.: Analyzing agribusiness value chains: A literature review. *International Food and Agribusiness Management Review*, 22 (1), 31–46 (2019). <https://doi.org/10.22434/IFAMR2018.0089>
- [4] DS, P.: *Kualitas Perhutanan Sosial*. Agroindonesia. <http://agroindonesia.co.id/2020/04/kualitas-perhutanan-sosial/> (2020).
- [5] Firdaus, Y. A.: *Panduan Praktis Penerapan Kebijakan Perhutanan Sosial*. Panduan Praktis Penerapan Kebijakan Perhutanan Sosial (2018). <https://doi.org/10.17528/cifor/006856>
- [6] Fisher, M. R., Moeliono, M., Mulyana, A., Yuliani, E. L., Adriadi, A., Kamaluddin, Judda, J., & Sahide, M. A. K.: Assessing the New Social Forestry Project in Indonesia: Recognition, Livelihood and Conservation? *International Forestry Review*, 20 (3), 346–361 (2018). <https://doi.org/10.1505/146554818824063014>
- [7] Harbi, J., Erbaugh, J. T., Sidiq, M., Haasler, B., & Nurrochmat, D. R.: Making a bridge between livelihoods and forest conservation: Lessons from non timber forest products' utilization in South Sumatera, Indonesia. *Forest Policy and Economics*, 94 (February), 1–10 (2018). <https://doi.org/10.1016/j.forpol.2018.05.011>
- [8] Kaskoyo, H., Mohammed, A. J., & Inoue, M.: Impact of community forest program in protection forest on livelihood outcomes: A case study of Lampung Province, Indonesia. *Journal of Sustainable Forestry*, 36(3), 250–263 (2017). <https://doi.org/10.1080/10549811.2017.1296774>
- [9] KLHK.: *Profil kelompok kth gunung gajah lestari* (2017)
- [10] KLHK.: *Statistik Perhutanan Sosial* (2021). <http://pkps.menlhk.go.id/>
- [11] Kolers, A.: *Land, Conflict, and Justice A Political Theory of Territory*. Cambridge University Press (2009)
- [12] Kominfo. *Perhutanan Sosial, Kini Masyarakat Legal Mengelola Hutan* (2017). https://www.kominfo.go.id/content/detail/10564/perhutanan-sosial-kini-masyarakat-legal-mengelola-hutan/0/artikel_gpr
- [13] Kuncoro, M., & Cahyani, D. Performance of social forestry on farmers' revenues: lessons from Yogyakarta and Lampung, Indonesia. *The Business & Management Review*, 9(4), 275–289 (2018)
- [14] Mahdi, Shivakoti, G. P., & Inoue, M.: Decentralization of forest management, local institutional capacity, and its effect on access of local people to forest resources: The case of West Sumatra, Indonesia. In *Redefining Diversity and Dynamics of Natural Resources Management in Asia*. Vol. 1, No 22 (2017). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-805454-3.00016-5>
- [15] Moeliono, M., Thuy, P. T., Bong, I. W., Wong, G. Y., & Brockhaus, M.: Social forestry-why and for whom? A comparison of policies in vietnam and Indonesia. *Forest and Society*, Vol 1 No 2, 78–97 (2017). <https://doi.org/10.24259/fs.v1i2.2484>
- [16] Murti, H. A.: *Perhutanan sosial bagi akses keadilan masyarakat dan pengurangan kemiskinan*. *Jurnal Analisis Kebijakan*. Vol 2, No 2, 62–75 (2018)
- [17] Nangole, E., Mithöfer, D., Franzel, S., & Nang, E.: Review of guidelines and manuals for value chain analysis for agricultural and forest products. ICRAF Occasional Paper No. 17 (2011). <http://hdl.handle.net/10535/7718>
- [18] Nath, T. K., Jashimuddin, M., & Inoue, M.: *Community-Based Forest Management (CBFM) in Bangladesh*. In *World Forests* (Vol. 22, Issue August) (2016). <https://www.tandfonline.com/doi/full/10.1080/10549811.2016.1231615>
- [19] Nurrochmat, D. R., Massijaya, M. Y., Jaya, I. N. S., Abdulah, L., Ekayani, M., Astuti, E. W., & Erbaugh, J. T.: Promoting community forestry to reduce deforestation surrounding Gunung Rinjani

- National Park in Central Lombok, Indonesia. IOP Conference Series: Earth and Environmental Science, 285(1) (2019). <https://doi.org/10.1088/1755-1315/285/1/012014>
- [20] Pambudi, A. S.: The Development of Social Forestry in Indonesia: The Journal of Indonesia Sustainable Development Planning, 1(1), 57–66 (2020). <https://doi.org/10.46456/jisdep.v1i1.11>
- [21] Pujo, Sofhani, T. F., Gunawan, B., & Syamsudin, T. S.: Community capacity building in social forestry development: A review. Journal of Regional and City Planning, 29(2), 113–126 (2018). <https://doi.org/10.5614/jrcp.2018.29.2.3>
- [22] Pyakurel, D.: *Value Chain Analysis of Selected Forest Based Products of Rapti. June 2014*, 1–23 (2016).
- [23] Rachmawan, D.: *Focus Group Discussion dengan KLHK* (2020).
- [24] Rakatama, A., & Pandit, R. Reviewing social forestry schemes in Indonesia: Opportunities and challenges.: Forest Policy and Economics, 111(1), 102052 (2020). <https://doi.org/10.1016/j.forpol.2019.102052>
- [25] Royer, S. De, Noordwijk, M. Van, & Roshetko, J. M.: Does community-based forest management in Indonesia devolve social justice or social costs? International Forestry Review, 20(2), 167–180 (2018). <https://doi.org/10.1505/146554818823767609>
- [26] Santika, T., Wilson, K. A., Budiharta, S., Kusworo, A., Meijaard, E., Law, E. A., Friedman, R., Hutabarat, J. A., Indrawan, T. P., St. John, F. A. V., & Struebig, M. J.: Heterogeneous impacts of community forestry on forest conservation and poverty alleviation: Evidence from Indonesia. People and Nature, 1(2), 204–219 (2019). <https://doi.org/10.1002/pan3.25>
- [27] Sardjono, M. A., & Inoue, M.: Collaborative Governance of Forest Resources in Indonesia: Giving Over Managerial Authority to Decision Makers on the Sites. In *Redefining Diversity and Dynamics of Natural Resources Management in Asia* (Vol. 1, 2017). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-805454-3.00011-6>
- [28] Setiajiati, F., Karyaatmadja, B., Sutedja, I., Kuswondho, H., Satria, P., Sejati, & Maharani, R. S.: Lesson Learned from Social Forestry Practice in a Forest and Climate Change Project in Kalimantan, Indonesia. IOP Conference Series: Earth and Environmental Science, 363(1) (2019). <https://doi.org/10.1088/1755-1315/363/1/012001>
- [29] Susilo, Y. S., & Nairobi.: Dampak Perhutanan Sosial Terhadap Pendapatan Masyarakat (The Impact of Social Forestry on Community Incomes). Jurnal ISEI Economic Review, III(1), 16–27 (2019).
- [30] Vanni, M. B. S.: Brazilian Açai Berry and Non-Timber Forest Product value chains as determinants of development from a global perspective. December 2017, 249 (2018). <http://etheses.lse.ac.uk/3815/>
- [31] Wright, G. D., Andersson, K. P., Gibson, C. C., & Evans, T. P.: Decentralization can help reduce deforestation when user groups engage with local government. Proceedings of the National Academy of Sciences of the United States of America, 113(52), 14958–14963 (2016). <https://doi.org/10.1073/pnas.1610650114>
- [32] Wright, G. W., & Paris, S. P.: Indigenous People and Customary Land Ownership Under Domestic REDD+ Frameworks A Case Study of Indonesia. *Law*, 7(2), 117–131 (2011).
- [33] Wulandari, C., & Kurniasih, H.: Community preferences for social forestry facilitation programming in lampung, Indonesia. *Forest and Society*, 3(1), 114–132 (2019). <https://doi.org/10.24259/fs.v3i1.6026>