Unbalanced partnership scheme between community plantation forest and company: study case in West Kotawaringin, Central Kalimantan, Indonesia

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Abstract. The changing regulation for community plantation forest (CPF) from social forestry point of view into a business-oriented context has no significant effects on its capital strengthening. Limited capital becomes an obstacle for farmers to develop the CPF area. It encourages the CPF to conduct a partnership scheme with the nearest company in its working area. The objectives of the research are to evaluate the partnership scheme and to make improvements from the evaluation results. The research method used is descriptive analysis and quantitative approach. The results show that many problems have been raised during the partnership implementation as farmers have no bargaining position, the company’s log price is not feasible, and no explanation on how the price is determined. The profit margin of the CPF is the lowest (Rp98,000/ton wood) or 11.8% among the parties involved in the wood plantation businesses. Therefore, the partnership scheme must be improved for better prosperity of CPF farmers through shifting from partnership CPF to self-sufficient CPF. This shifting provides a high bargaining position and better revenue for the CPF farmers.

1. Introduction
Community Plantation Forest (CPF) is a plantation forest built by a community group in a production forest area. It aims to increase the potency and quality of production forest with silviculture implementation to guarantee sustainable forest resources. Recently, the CPF has shifted its regulation from a social forestry point of view (Environment and Forestry Minister Regulation (EFMR) No: P.83/Menlhk/Setjen/Kum.1/10/2016 regarding Social Forestry) to forest business view (EMFR No: P.11//Menlhk/Setjen/Kum.1/5/2020 regarding Community Plantation Forest).

The changes occur particularly in obtaining CPF locations, approvals, and the period of permits. The previous regulation stated that the location of the CPF must comply with the Indicative Map of Social Forestry Areas (PIAPS) or can be out of PIAPS. However, in the new regulation, PIAPS is no longer used. In addition, changes also occur in the authority of the permit issuer. The previous law stated that the Minister must issue the CPF permit or could be delegated to the Governor. Recently, the permit could be conducted by the Director-General of Sustainable Forest Management on behalf of the Minister. Furthermore, there is an addition to the permit period, which initially was 35 years, and now is 60 years. Moreover, both regulations mention the partnership. However, there is a difference between the two regulations. The EFMR No. 83/2016 encourages the partnership whenever the CPF cannot be
self-sufficient CPF, whereas the EFMR No. P.11/2020 has strong encouragement to conduct a partnership scheme for the CPF because of its business-oriented view and of support the wood industry raw material supply.

The changing policy, market, and civil society trigger private company partnerships with communities or individuals to produce forest products and services[1]. In Indonesia’s case, the partnership scheme is pushed by the Forestry Minister Regulation (FMR) No. P.55/Menhut-II/2011 regarding Procedures for Business Permit for Timber Forest Products Utilization at CPF in Plantation Forest. The regulation encourages the three CPF patterns, are (1) self-sufficient CPF (built by the CPF holder), (2) partnership (built by the CPF holder with its business partner, and (3) developer (built by state or private business companies after that it is delivered to the CPF applicants). The most successful of the three CPF patterns is the partnership scheme as it occurs in Bumi Beringin Village, Luwuk Sub-district, Banggai District due to the transfer of knowledge from CPF partner to CPF farmers [2].

Supriyanto (2020) explains that up to July 29th, 2020, Indonesia's CPF development had achieved 354,202.68 ha[3]. This CPF achievement is the lowest if it is compared to other social forestry schemes. To explore deeper the problems that cause the lower development of the CPF scheme, the research on CPF partnership is conducted in Central Kalimantan Province, specifically in West Kotawaringin District. This district has implemented a partnership scheme between the CPF farmer groups and PT Korintiga Inhutani (KI). PT KI, a company that holds a business permit for timber forest products utilization-plantation forest (IUPHHK-HT), is located in two districts, i.e., in West Kotawaringin and Lamandau Districts, with a total concession area is 94,384 ha as is stated in the Decree Letter of the Forestry Minister No: 201/Menhut-II/2011, dated on April 8th, 2011[4]. The presence of PT KI with its wood industry has become a good market and attracted communities living in the industry surrounding area. They want to plant the eucalyptus trees both in their own (private) land and state-owned forest that has already been given access to the community through CPF.

At present, the CPF farmer group at West Kotawaringin District planted eucalyptus trees at the beginning of the year 2018. It plans to sell the wood to PT KI and other wood industries with notice of high selling price. This price would make a good profit for compensating their hard works. There are limited data and information on the utilization of eucalyptus wood as an industrial raw material and its feasible wood price so that the business of the CPF could not be justified as to whether or not it is feasible to be developed.

The sustainability of the CPF depends mainly on the demand of the produced wood, wood quality, wood price, destination market, implementation of timber legality verification system (SVLK), and transaction cost. The research objectives are to identify problems in the partnership scheme between the CPF and company, to evaluate the performance-based of the CPF, and to improve the CPF partnership scheme. The Government and the Central Kalimantan Government would use this result to improve the CPF performance, especially the CPF partnership scheme.

2. Research method
2.1. Research framework
The partnership approach is used as the framework of this research. As the information, the CPF farmers have no capital to build plantations in their CPF area. Therefore, to overcome the lack of capital, the farmers need partners to manage their land optimally. These opportunities include partnering with companies that are close in distance. They find the nearest company with the same business in plantation forest. They conduct a partnership scheme (Figure 1).

Figure 1 shows that CPF farmer has a partnership scheme with an industrial plantation forest company through a memorandum of understanding (MoU). The MoU is agreed upon and approved by the two parties. Moreover, the parties used the MoU as the guidance for partnership scheme implementation. Further, an evaluation of partnership scheme implementation is conducted through problem identification and partnership performance assessment. Thereafter, the evaluation results are used to make a recommendation to improve the partnership CPF scheme.
2.2. Time and location of the research
The research was conducted in Kotawaringin Barat District, Central Kalimantan Province, for 2 (two) months from September-October 2020. The district is selected as the research location because the area is the center of E. Pelita wood production from the CPFs to supply various wood industry types.

2.3. Data collection
The study uses primary and secondary data. The primary data consist of total area, harvesting period, yearly wood production, marketing distribution, and profit margin. Data collection is conducted through survey, observation, questioner, and in-depth interviews with relevant respondents. The Respondents are individual farmers, the management of E.Pelita farmer group (7 persons), the owner of the wood industry (3 persons), government officers (2 persons), an officer of forest management unit (1 person), FORDA researchers (2 persons) related to the SVLK at farmer group. The respondents are selected with purposive sampling and a snowball approach based on the previous respondents who are interviewed. Furthermore, the secondary data consist of the number of units, the wood industry’s original and actual capacity, and the selling products. The secondary data are collected by browsing on the internet for the research report and annual reports of relevant government institutions, i.e., forestry service, industrial and trade service, statistical bureau of Central Kalimantan Province, and West Kotawaringin district.

2.4. Data analysis
The study implements a descriptive qualitative approach and a quantitative method to analyze the data. The descriptive qualitative approach is applied to explore a partnership scheme that aims to catch the fact and conditions and variables during the observation [5]. The evaluation of the CPF and wood industry performance uses a quantitative method [6] for analyzing the efficiency and profitability levels of the CPF.

2.4.1. Profitability of eucalyptus planting

$$\pi_{Pbe} = (vol_{Ke} \times Har_{Ke}) - Bit_{Ke}$$

Where: $\pi_{Pbe}$ = Profitability of eucalyptus planting (Rp/ha)
Vol Ke = Volume of eucalyptus stand (m$^3$/ha)
Har Ke = Price of eucalyptus log (Rp/m$^3$)
Bit Ke = Total cost of eucalyptus log production (Rp/m$^3$)

2.4.2. Profitability of the wood processing industry

$$\pi_{Pie} = (\text{Vol Pke} \times \text{Har Pke}) - \text{Bit Pke}$$

Where: $\pi_{Pie} =$ Profitability of eucalyptus wood processing industry

Vol Pke = Volume of eucalyptus wood product (m$^3$/month)
Har Pke = Price of eucalyptus wood product (Rp/m$^3$)
Bit Pke = Total cost of eucalyptus wood production (Rp/m$^3$)

3. Result and discussion

3.1. Partnership scheme between the CPF and company

Partnerships are defined as the span of relationships built by the companies and communities for mutual benefit expectation. The connection can be formal or informal actions and sometimes may engage third parties in various roles [1] include collaboration[7]. The partnership scheme for the CPF is mentioned in Article 23 (EFMR) No: P.11/ 2020. The CPF farmer can collaborate in providing raw material for the wood industry or the CPF can build its wood industry for integrating its business entity. The last option is challenging to be implemented by the CPF due to its capital handicaps.

3.1.1. The CPF permit process. Business permit for timber forest products utilization-CPF (IUPHHK-HTR) is a business permit for the community group to utilize forest products such as wood and other forest products at production forest and to implement suitable silviculture system to assure sustainable forest resources. The permit process complies with the EFMR No. 83/2016, where the responsible agency for the permit is the Directorate General of Social Forest and Environment Partnership due to its permit issuance before the year 2020.

According to the provincial spatial plan, the CPF area's location at West Kotawaringin District is in the production forest area. When the verification team conducts field checking, the result shows no concession permits in that area either for natural or plantation forest concessions. Afterward, the forest farmer group is allowed to propose the free-concession area as the CPF area. The total CPF permit in North Arut Sub-district is ten permits with a total area of 8,754 ha, with the total number of farmers involved being 676 people (Table 1). The benefits of the CPF obtained by the farmer are that the area could be managed for 35 years; a small business program can be applied, and an opportunity for conducting a partnership scheme. Table 1 indicates that the total area and number of the farmer of CPF varies per permit. The highest area per farmer is 21.8 ha, and the lowest area is 3.3 ha per permit. The average area per permit is 875.4 ha, and the average area per farmer is 14.4 ha. This value is approaching an area of 15 ha per individual CPF holder as stated in FMR No. P.55/2011 on Article 10.

Table 1. The CPF permit was issued in North Arut Sub-district, West Kotawaringin.

| No. | Name of the CPF holder | Decree letter of CPF P | Total area (ha) | No of the farmers involved | Total area/Farmer | location |
|-----|------------------------|------------------------|-----------------|---------------------------|-------------------|----------|
| 1.  | Koperasi Anugrah Alam Pemai | 522.1/226/1.3/IV/2009 | 1,744           | 80                        | 21.80             | Kerabu Village, North Arut |
| 2.  | KTH Satay Jaya          | 522.1/449/1.3/XI/2012 | 330.96          | 24                        | 13.79             | Pangkut Village, North Arut |
| 3.  | KTH Sungai Impa         | 522.1/539/1.3/XII/2014 | 240             | 16                        | 15.00             | Sukarami Village, North Arut |
A period to harvest their wood. For example, tree planting has good such as pulp and paper. Around 90% of pulp and paper material in areas Nusa Tenggara. Eucalyptus species grow 7° North Latitude is a native species found by both parties. CPF (KI) 3.1.2. Planting of E. Pellita growing in 2019 will be cut in 2025. The system causes farm approximately 150 tonnes per ha. CPF farmers manage their land by planting trees in different years. From other CPFs. The CPF gathered its land in 2020. The area harvested is 50 ha with a total wood of farmers the new permit is 3, stated in the Memorandum of Understanding (MoU). For example, the management of Dayak Misik Mulyajadi Farmer Group (KTDMM) has proposed that CPF farmer CPF farmer for transportation, accommodation, and administration (Rp80 million). Some of the cost is financed by the Forestry Service of Central Kalimantan Province. The farmers are satisfied with the short time license process and with the help of their companion. According to the respondent’s statement, the community cultivates the land by planting E. Pellita with a six-year harvest period. Information regarding the volume of timber that is harvested is obtained from other CPFs. The CPF gathered its land in 2020. The area harvested is 50 ha with a total wood of approximately 150 tonnes per ha. CPF farmers manage their land by planting trees in different years. The system causes farmers to have a certain period to harvest their wood. For example, tree planting was in 2014, it was harvested in 2020, and the planting in 2017 will gather the harvest in 2023, and growing in 2019 will be cut in 2025.

3.1.2. Planting of E. Pellita trees. The partnership between the CPF farmers and PT Korintiga Inhutani (KI) is stated in the Memorandum of Understanding (MoU). The MoU covers tree species planted in the CPF namely Eucalyptus pellita with a harvesting period of six years. The MoU involves and is signed by both parties. The Eucalyptus pellita is an important tree species for plantation forests in Indonesia. It is a native species found in Papua New Guinea, Irian Jaya, and North Queensland [9]. This tree is categorized as fast-growing species and [10] it is stated that it is highly tolerant to a wide range of environmental grades. Furthermore, the species has a nature distribution at the east Wallace line from 7° North Latitude to 43°39’ South Latitude. Most grow in Australia and the surrounding islands. Some grow in Papua New Guinea and certain species are found in Sulawesi, Papua, Seram, Philipina, East Nusa Tenggara. Eucalyptus species can also grow in thin soil, stony soil, humid soil, swamp area, and in areas that periodically are covered with water, and in the area with a big variation of soil fertility[11]. Industry plantation forest companies plant eucalyptus trees to support domestic fiber wood industries such as pulp and paper. Around 90% of pulp and paper material are coming from fiber wood because it has good characteristics, such as a high recovery rate, relatively low lignin content, and high strength of pulp and paper products[12]. Eucalyptus wood has lignin (22.53%), hemicellulose (26.86%), cellulose (56.97%), and holocellulose (83.83%) [13]. [14] points out that eucalyptus wood has an average fiber
length of 1.103.53 \mu, the diameter of fiber 282.4\mu, and lumen of 188 \mu, and wall thickness of 47.2\mu. The Eucalyptus biomass stem with a diameter of more than 5 cm can be the main biomass (86-90\%) and could be utilized as raw material for the pulp industry [15].

In West Kotawaringin, one of the CPF groups already harvested eucalyptus plantation in 2020 with a total area of 153 ha, and the wood weight is 150 tons per ha. Noor in 2019 found the total volume of *Eucalyptus pellita* at five years old at Kutai Kertanegara, East Kalimantan Province was 156.53 m$^3$ per ha with the price of Rp620,000 per m$^3$[16]. This volume is different from the total volume found at Sintang District, West Kalimantan. The average volume is 122.7 m$^3$ per ha with a specific gravity of 0.86 g/cm$^3$[17]. Using the same specific gravity, the total volume of *Eucalyptus pellita* at West Kotawaringin is 174.4 m$^3$ per ha (conversion from the wood weight of 150 tons). If it is compared to the other two districts, West Kotawaringin is the best location for growing *E. pellita*.

The respondents in West Kotawaringin have a different reason for planting *E. Pellita*; the reasons are that: (i) farmers have signed a contract with PT KI; (ii) this species is suitable for their land (PT KI’s successful example); (iii) PT KI offers 4 species, but farmers choose *E.Pellita* due to its good growth in the company concession area; (iv) there is a close-range market for *E.pellita*; (v) there is no choice because the farmers do not have the capital to plant other tree species (balsa wood); and (vi) they will obtain lesson learned or experiences from the contract with PT. KI.

3.1.3 *PT Korintiga Inhutani*. PT KI has 94,384 hectares of forest concession with main plantations of *Eucalyptus pellita* (red mahogany), *Acasia mangium* (manguni), and *Hibiscus spp* (waru). Recently, the PT KI plantation enters the second rotation with a tree harvesting period of five years. PT KI obtained sustainable production forest management certification from PT Mutuagung Lestari with a good category for the period of May 24th, 2014- May 24th, 2019[18]. PT KI uses the wood for its wood industry to produce chipwood and wood pellets. The distance from the community plantation to the PT KI concession is around 5-15 km away. The industry is located at Natai Peramuan with approximately 50 km from PT KI’s base camp. Its chipwood product is generally sold to Japan and wood pellet product is sold to Korea. This company also supplies eucalyptus wood to PT. Korindo Ariabima Sari (KAS) is one of the corporate company groups that has a plywood industry. PT KAS buy eucalyptus logs from PT KI and another supplier with the price of Rp900,000 per m$^3$ or Rp774,000 per ton (converted by the specific gravity 0.86).

Wood supply for the PT KI industry comes from its plantation forest and the CPF with a harvesting period from 2014 to 2021. The first harvesting (in 2014) was acacia trees, and the second rotation (in 2021) is dominated by eucalyptus wood. The data show that log supply from the CPF is approximately 10\% of the total raw material needed, and the average annual log production is 1.14 million m$^3$ per year (2015-2020). The log price from the CPF farmer is US$ 7 per ton, as stated in the MoU. This collaboration is conducted by a scheme where farmers only provide their CPF area to PT KI, and PT KI will do the whole activities from land clearing up to harvesting activities and payment of forest provision fee (PSDH) for the harvested wood.

PT KI also has chip wood and wood pellet industries with different wood supply chains for its sector or selling to pulp and paper industries, such as PT Riau Andalan Pulp and Paper and PT Tanjung Enim Lestari. PT KI successfully optimizes its raw material utilization with a good log allocation for fulfilling its own need and its selling quota.

3.2. *Problems in the partnership scheme*

The complaints from the CPF farmers indicate the partnership scheme problems. The main complaint is dealing with the price of *E. Pellita* log. The farmers feel that the log price is undervalued. Furthermore, other farmers’ complaints are that: (1) At present, farmers of partnership CPF obtain revenue only US$ 7.0 per ton or Rp98,000 per ton (Exchange rate 1 USD = Rp14,000,-) as it is stated in the MoU. Farmers accept the price due to the activities (seedling, land clearing, planting, and tree maintaining) are conducted by PT KI; (2) Log price that is determined by PT KI for the self-sufficient CPF is US$ 35.0 per ton or Rp490,000 per ton. It is because the farmers accomplish all CPF activities. The price also
reflects that E. Pellita's production costs for self-sufficiency in CPF are US $ 28.0 (the US $ 35.0-US $ 7.0) or Rp392,000 per tonne; (3) Partnership CPF farmers consider the price of logs is not feasible. They compare it with the price of Sengon (Rp800,000 per ton) and Acacia (Rp800,000 per ton). However, some of the farmers accept the price because they do not have any other choices. For example, Dayak Misik Mulyajadi Farmer Group agree and approve the price in the MoU; (5) Some of the farmers from partnership CPF point out that the log price can change by the market price at the harvesting time; (6) Farmers feel that there is an error in the log balance tool made by PT KI. They found that there are variations in tonnage, which varies between 150-200 tons; (7) Some the farmers from partnership CPF want to increase the log price up to US$ 10.0 per ton or Rp140,000 per ton. They assume that the increased price can improve the community welfare; (8) Some of the farmers from the CPF want to establish an association of the CPF farmer group to increase their bargaining position, especially in determining the wood price. The association has a plan to meet local parliament or head of the district to support its association to increase the log price; and (9) Some of the farmers from the partnership CPF accept the log price because their CPF areas are untapped yet and they do not have sufficient capital. Moreover, after the MoU is signed, they are eager to plant the trees using their own money to get a better price (US$ 35.0 per ton).

3.3. Performance-based on the CPF and wood industry

Ministry of Forestry develops fast-growing species plantations such as Eucalyptus spp., Acacia mangium, Acacia crassicarpa, Falcataria mollucana, and Gmelina arborea with a harvesting cycle of 8-9 years due to the suitability for pulp material and safety for the environment (nutrient balance)[19]. PT KI had produced logs from Eucalyptus, Acacia, and Waru for the last six years (2015-2020), with approximately 1,141,732 m$^3$ per year as is shown in Table 2.

Table 2. Log production of PT KI for the last 6 years (2015-2020).

| Nu. | Year | Wood volume (m$^3$) | Volume |
|-----|------|---------------------|--------|
|     |      | Eucalyptus | Acacia | Hibiscus | Total (m$^3$) |
| 1.  | 2015 | 940,918.66 | 412,170.80 | 990.86 | 1,354,080.32 |
| 2.  | 2016 | 386,335.14 | 831,917.90 | 0 | 1,218,253.04 |
| 3.  | 2017 | 368,471.28 | 796,315.33 | 0 | 1,164,786.61 |
| 4.  | 2018 | 487,360.83 | 727,950.03 | 0 | 1,215,310.86 |
| 5.  | 2019 | 428,621.61 | 754,796.47 | 4,840.97 | 1,188,259.05 |
| 6.  | 2020 | 64,515.61 | 643,532.97 | 1,651.85 | 709,700.43 |
|     | Total | 2,676,223.13 | 4,166,683.50 | 7,843.68 | 6,850,390.31 |
|     | Average | 446,037.19 | 694,447.25 | 1,247.28 | 1,141,731.72 |

Source: PT KI (2020)

Table 2 indicates that eucalyptus log average production is around 446,037 m$^3$ or 39.1% of its total log production. This eucalyptus is less than 1.5 times from acacia log production volume. The lowest log production is hibiscus log with an average production of 1,247 m$^3$ or 0.1% from the total log production.

PT KI sells the timber to the outside of the West Kotawaringin area with a volume of 6,881,983.60 m$^3$. The volume of these sales is more than its log production (6,850,390.31 m$^3$) so that the imbalance of log supply is 5,266 m$^3$ per year (Table 3). It should find its solution to fill the gap. Furthermore, the CPF can sell logs to the local market, but the Eucalypt wood sells to PT KI. Additionally, several companies want to buy the log from the CPF especially in Sampit (East Kotawaringin District) and Kumai (West Kotawaringin District) with the requirement that the wood comes from legal sources.
The profit margin in Table 4 states that most PF companies are still maintaining their business, without the presence of wood industry activities in their concession area and supported by a research and development facility, high seedling quality, and fertilizing technologies. The good example of FP company is PT ITCI Manunggal Hutani located in Sepaku Sub-district, Kutai Kartanegara District, East Kalimantan.

Table 3 indicates that log sold by PT KI to Riau Andalan Pulp and Paper (RAPP) and Tanjung Enim Lestari companies exceeds its log production volume, i.e. (-) 30,735 m³ (2015), (-) 21,461 m³ (2017), dan (-) 10,243 m³ (2019) with the average balance of (-) 5,266 m³. This log shortage can be fulfilled with high local market competition because many companies want to buy the log from the CPF especially in Sampit (East Kowaringin District) and Kumai (West Kotawaringin District) with the note the clear wood source or wood legality assurance. In the year 2020, log production and log selling reduced. This reduction might be caused by the situation (lockdown) of Covid 19 that affects all business activities, including the wood industry business.

The profit margin from the parties involved in the Eucalyptus business is shown in Table 4. The PT KI buys eucalyptus from the self-sufficient CPF with the price of Rp490,000 per ton and sold to PT KAS at the price of Rp774,000 per ton. The production cost of partnership CPF is not available because PT KI pays all costs, and the CPF has revenue of Rp98,000 per ton. The production cost of self-sufficient CPF uses an assumption of 40% from its selling price (Rp490,000 per ton). The cost of chip wood is Rp325,227, and its selling price is Rp360,000 per ton[20]. The cost of a wood pellet is Rp1.412 million per ton and its selling price is Rp1.5 million [21] as is shown in Table 4.

Table 4. The profit margin for each wood business for trading eucalypt wood

| Nu. | Business entity | Production cost (Rp/ton) | Selling (Rp/ton) | Profit (Rp/ton) | Percentage of profit (%) |
|-----|-----------------|--------------------------|-----------------|----------------|----------------------|
| 1.  | PT KI           | 490,000                  | 774,000         | 284,000        | 34.31                |
| 2.  | Partnership CPF Farmer | -                | 98,000          | 98,000         | 11.84                |
| 3.  | Self-sufficient CPF Farmer | 196,000 | 490,000         | 294,000        | 35.51                |
| 4.  | Chipwood Industry | 325,227                 | 360,000         | 53,621*        | 6.48                 |
| 5.  | Wood Pellet Industry | 1,412,000       | 1,500,000       | 98,221*        | 11.86                |
|     | Total           |                          |                 | 827,842        | 100                  |

Source: Primary and Secondary Data; processed
Note: *) value has been compounded to present value with the inflation rate

Table 4 elaborates the margin profit for each business entity from the wood supply chain. The highest profit obtained from self-sufficient CPF is Rp294,000 per ton or 35.5%, which is followed by PT KI with Rp284,000 per ton or 34.3%, and partnership CPF with Rp98,000 per ton or 11.8%. The lowest profit margin obtained by the wood pellet industry is Rp98,221 per ton or 11.9%, and the chipwood industry is Rp34,773 or 6.5% from the total profit of eucalyptus wood utilization (Rp798,773 per ton).

The profit margin distribution in table 4 states that PT KI has a 34.3% profit percentage, for the chipwood industry (6.5%) and wood pellet industry (11.9%). These indicate that Plantation Forest (PF) Company, without the presence of the wood industry, still has enough profit. This profit encounters the statement that most PF companies are closed due to the lower price of their log production. According to the data in Table 4, the statement is not valid. The crucial matters for PF company are planting more trees in their concession area and supported by a research and development facility, high seedling quality, and fertilizing technologies. The good example of FP company is PT ITCI Manunggal Hutani located in Sepaku Sub-district, Kutai Kartanegara District, East Kalimantan.
The burning issue is the lowest revenue attained by partnership CPF. It means that the partnership CPF should be moved into a self-sufficient CPF. The capital handicap faced by the partnership CPF can be assisted through a loan scheme from the Center for Forest Development Finance (CFDF), the MoEF (now it has moved to the Ministry of Finance), or Micro Financing Institution. This loan is lower interest (6.5% per year) compared to community business credit (KUR) and it is paid after the farmers harvest the trees. The CPF would get a small grant from the local government and the DG of Social Forestry and Environment Partnership for developing plantation and Social Forestry Business Plan (RUPS) through Bang PeSoNa (National Social Forestry Development) program, where every CPF group would receive Rp50 million.

With the lowest profit margin, the partnership CPF still has to pay for getting a wood legality verification system (SVLK) certification for timber harvesting as is stated in the MoU. Therefore, this matter should be viewed as an excellent solution. Astana et al. in 2014 points out that SVLK implementation is more responded to by the industrial business actors than by small and medium scale (SMS) actors. The big business has export market orientation and can cover its certification and other costs. In contrast, the SMS management cannot respond to the SVLK due to its problem fulfilling the SVLK standard. SMS management has not received benefits yet either in market access or premium price in SVLK implementation[23]. Suryandari et al. in 2017 also find that SVLK policy is not effective in the wood industry and private forest view [23]. The micro-industry and private forest have the most significant negative impact from SVLK implementation.

The high cost of the SVLK process has been protested by furniture business entities for SVLK mandatory implementation. The complaint of the furniture industry has been responded to by the government. The SVLK implementation has been omitted and elimination of V-Legal in wood industry trading as it is stated in Trade Minister Regulation (Permendag) No.15/2020 regarding the Export Procedure of Forestry Industry Products. This policy should not be eliminated, even though there are complaints from SMS in the furniture business. Many parties regret this unpredictable policy due to the reduction of the international market trust and the strengthening of competitiveness in the international market[24]. The presence of SVLK has improved export performance in plywood, woodworking, pulp, paper, and pre-fabricated building products. The information indicates that the export value of the product achieved US$5.17 billion in 2013. In the years 2014 and 2015, the export values became US$6.43 billion and US$9.6 billion respectively. However, the export increase is dominated by big industries[25].

Finally, the Minister of Trade Regulation No.15/2020 was replaced by the Minister of Trade Regulation No.45/2020, returning to the SVLK implementation. The important point is that the government should give an incentive system to SMS management for obtaining SVLK. The system would assist SMS and guarantee its business sustainability. Subarudi in 2012 also criticizes the “mandatory” implementation for private forest farmers because this would be disincentives for planting trees in their land[26]. The legality problem (wood origin) in the private forest is addressed by its wood origin letter from the head of its farmer group. Gultom et al in 2014 suggest that SVLK needs improvement in regulation synchronization, coordination, socialization, financial support, and capacity building for small industries[27].

3.4. The CPF partnership scheme improvement

The improvements of the CPF partnership scheme can be conducted by several programs and actions by relevant stakeholders. Some of the improvements are: (1) CPF farmers learn from the CPF’s experience in partnership scheme; (2) The company conducts socialization of the partnership scheme before signing the MoU; (3) The company explains the determination of the log price; (4) The Center for Forest Development Finance provides loan with lower interest; and (5) Forest management unit would encourage investment for the wood industry in its working area.

The CPF farmers who are conducting partnership schemes for the first time should learn from other CPF farmers who have already undertaken the partnership either with the same company or with different companies. Is the partnership scheme beneficial to the farmer? What are the advantages or
disadvantages of the partnership scheme? It will not be achieved if the CPF farmers have no option for looking for another partnership scheme. The farmers would accept the scheme. Otherwise, they lose a good opportunity to earn income by managing unproductive CPF areas.

The company should conduct the socialization of the partnership scheme to the CPF farmers before signing the MoU. However, there is an assumption that the company conducts socialization, but the farmers do not care about the explanation. The farmers conclude that it is a good opportunity to get revenue from their land. For example, there is an assumption if the farmer who rents the 10 ha of his CPF area to PT KI will obtain Rp147 million (10 ha x 150 ton/ha x Rp98,000/ton). Even afterward, they complain regarding the log price set in the MoU. The farmers should understand that the log price is not fixed. The price would change by the time when harvesting is done.

The complaining of log price can be avoided by more explanation regarding how the company set the price. If the farmers accept this explanation, the company would forget about the farmers’ complaints. Subarudi in 2014 suggests that the price-setting for CPF can adopt the price determined in oil palm plantation scheme where all parties who are involved (big company, oil palm industry, officers from the crop-estate services, and the head of a farmer group) in the oil palm business sit together and make a cost calculation[28]. To finally agree and approve the price of a fresh fruit bundle of oil palm trees.

The Center for Forest Development Finance (CFDF) has already provided a loan with lower interest to the CPF. For example, the CPF located in Dompu District, West Nusa Tenggara, obtained the loan from the CFDF with a fixed interest rate of 7.25% per year and could be paid when the trees are harvested [29]. However, in the current condition, the CFDF moves from the Ministry of Environment and Forestry to the Ministry of Finance with the same business. Furthermore, it is hoped that the CFDF still provides loans for the CPF farmers.

The forest management unit (KPH) would encourage investment for the wood industry in its working area. This investment would attract the CPF farmers to collaborate with the wood industry to supply its raw wood material and guarantee the sustainability of the CPF. In this situation, the forest management unit facilitates and builds a short-distant market for logs produced from the nearest CPF area. The role would improve the performance of the forest management unit it’s self and at the same time, this will also increase the revenue of the CPF farmers.

4. Conclusion and recommendation

4.1. Conclusion

The partnership scheme between PT KI and the CPF Farmers in West Kotawaringin is legal and legitimate. The legality of the scheme is supported by the EFMR No. 11/2020 and legitimation of the schemes is related to the acknowledgment of the farmers and other communities toward the signed MoU.

The problem raised in the partnership scheme is farmers’ dissatisfaction with the log price determined by PT KI. However, PT KI would continuously run the partnership scheme by its signed MoU. PT KI states that the log price is not fixed and would change depending on the log price at the harvesting period. This condition depends on the business atmosphere for 5-6 years ahead.

Its profit margin indicates the economic performance of the CPF in the wood trading system. The partnership CPF has the lowest profit margin. This profit margin is coming from the rent of the land without the active participation of the CPF farmers. The partnership CPF farmers should find a loan with lower interest either from the CFDF or micro-financing institution for shifting its condition from partnership scheme to self-sufficient CPF.

Six improvement steps of the partnership scheme should be implemented for relevant stakeholders for best partnership implementation in the future. The principle of the partnership is that every party involved has its benefits based on its role and responsibility in the partnership implementation.

4.2. Recommendation

Both self-sufficient CPF and partnership CPF hope that the local government can interfere with the improvement of log price that supplies PT KI. In this situation, the local government can adopt the price-
determining scheme done in the palm oil business for setting the log price in West Kotawaringin District. The local government should change the mindset and behavior of partnership CPF farmers to be self-sufficient CPF due to its high return compared to partnership CPF farmers that only rent their CPF land.

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