Institutional evaluation of the community plantation forest (CPF) permit holders in Langkat District

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Abstract. CPF in Langkat District has been permitted since 2012 and most commercial productions of forest resources, both timber (charcoal) and non-timber, are in place. This study aims to analyse the institutional, economic and social conditions of HTR permit holders in Langkat Regency. The research was using the descriptive analysis method, a scoring method based on the Regulation of the Director General of PSKL Number 9 of 2019 concerning Guidelines for Evaluating Social Forestry Permits. Data was obtained from interviews and Focus Group Discussion (FGD) on group institutional aspect and scoring analysis on social and economic aspect. The result showed that Bahagia Keluarga Bahari Cooperative, Rakyat Pantai and Wahana Hijau had a decent institutional, while Tunas Baru had poor institutional due to lack of member found in the location. The economic aspect shows that the Rakyat Pantai Cooperative are good (100%), Wahana Hijau are medium (80%), Bahagia Keluarga Bahari are not good (56%), and Tunas Baru are not good (40%). The social aspect shows that the Rakyat Pantai Cooperative are good (86%), Wahana Hijau are medium (76%), Bahagia Keluarga Bahari are medium (72%), and Tunas Baru are not good (55%).

1. Introduction
In accordance with the Nine-point Development Priorities (Nawacita), which is to develop Indonesia from periphery by strengthening the regions and villages within a framework of unitary state (third point) and to achieve economic independence by activating strategic sectors of the domestic economy (seventh point), it is mandatory for the government to organize the legal access of forest management for the communities through the SF program Suhardjito [1].

According to the Ministry of Environmental and Forestry Decree 83/2016 article 2 clause (2), SF Program is able to achieve three aspects namely: (1) Economical, to increase the prosperity of communities inside and around the forests; (2) Social, behaviour change of SF holders to maintain the sustainability of forest functions; (3) Technical/Ecological, to manage forest resources sustainably. Suhardjito [2] and Hardiyanto et.al [3] described the challenges on achieving the SF targets, namely insufficient supporting regulations, the lack of political and financial support from regional government, low of community capacity, incomplete proposals (map and name list of applicants should be attached), overlapping regulations, proposed area is outside the forests, the lack of human resources to process SF permits, and unoptimized assist/facilitation for SF holders. Nugroho [4] stated that the implementation of SF program has yet to success due to the institutional failure (regulation and organization) of forest management. First, the imperfect regulation fails to solve the problems,
generates high cost, uncontrollable behaviour of the actors, the property rights are not well defined, the internalization of externalities is unsuccessful. Second, the failure of organization capacity to implement predetermined policies.

The province of North Sumatera is one of provinces in Indonesia which has large forest area. According to Ministerial of Forestry Decree number SK.579/Menhut-II/2014 regarding Forest Area of North Sumatera Province, there are 3,055,794 hectares of forest area in the province, covering about 42.63% from total area (around 7,168,068 hectares). Based on its functions detailed as follows: (a) Nature Reserve (NR)/Nature Conservation Area (NCA)/Buru Park (BP) covering an area of $427,008$ hectares, (b) Protected Forest (PF) covering an area of $1,206,881$ hectares, (c) Limited Production Forest (LPF) covering an area of $641,769$ hectares, (d) Production Forest (PF) covering an area of $704,452$ hectares, and (e) Converted Production Forest (CPF) covering an area of $75,684$ hectares.

Langkat District is one of the provinces with the most permits to access forest management through SF scheme. To date, the Office of Social Forestry and Environmental Partnership for Sumatera region has recorded a total of 25 SF permits namely 17 FP scheme permits, four CPF scheme permits and four CF scheme permits, covering an area of 1,754 hectares. There are four CPF in Langkat District which has been operated since 2012. Most of CPF holders has implemented the management of forest resources sustainably, while the others have yet to utilize their forest potentials. The institutional pattern on these locations is interesting to be researched.

The research aimed to analyse the group institutional and its social influence on each CPF holders in Langkat District. The result study is expected can describe the impact of CPF permits to environment, income raise of the groups and the social influence to the surrounding community. The information should be relayed to CPF holders, stakeholders and related parties. Also, to show the institutional depiction and social behaviour of CPF group holders which has long benefit the state’s forest area to increase and change the group’s behaviour characteristics.

2. Methods

2.1. Study area

The study was conducted for six months in the villages of Perlis (West Brandan Sub-District), Pangkalan Siata and Pulau Kampai (Pangkalan Susu Sub-District) in Langkat District, North Sumatera Province (Fig. 1). The Social Forestry Business Group (SFBG) in Langkat District was processing the analysis using census method, involving 175 respondents.

2.2. Data collection

The collected primary and secondary data were including information about institutional data, permit base of SF schemes data, social data, economic data, group facilitation data, group obligation data and assistance data.

The qualitative and quantitative methods, or mix method, were used to collect data. We were conducting document study and analysis, interviews and Focus Group Discussions (FGD). The focus of discussion and interview with the management of CPF-SFBG referred to the Directorate General of Social Forestry and Environmental Partnership Number 9/2019 regarding the Evaluation Guidelines of Social Forestry Permit. The economic aspect indicators according to Directorate General of Social Forestry and Environmental Partnership Number 9/2019 regarding the Evaluation Guidelines of Social Forestry Permit are: Forest resource management, timber forest product management, non-timber forest products and environmental services, forest product administration. And The social aspect indicators according to Directorate General of Social Forestry and Environmental Partnership Number 9/2019 regarding the Evaluation Guidelines of Social Forestry Permit are: increasing the welfare of groups / communities / villages, strengthening institutions, changing the behaviour of administrators and members who hold permits / management rights, conflict resolution, gender, and the contribution of forest management to the village / community.
To analyse the social aspect indicators according to Directorate General of Social Forestry and Environmental Partnership Number 9/2019 regarding the Evaluation Guidelines of Social Forestry Permit behaviour, we collected primary data (FGD) by assessing the increase of social capital (trust, mutual cooperation etc), perception, role and changes in the community of SF holders in maintaining forest sustainability. The indicators for social impacts are: community perception regarding social forestry, institutional that exist after the issuance of CPF permit, community’s behaviour change after CPF permit being issued and challenges in managing the CPF.

Validation was conducted by sorting the data obtained from the field and determining the valid and usable data. Necessary data was then being developed and improved according to the focus of research. The relationship patterns on validated data then being organized for easy understanding on presentation. The next stage of the research was the conclusion. Statistical method was used to search the respondent’s profiles to explore social behaviours.

The result of the scoring was used to determine the categories of economic and social aspect assessment. The categories are as follow:

- **Good**: 81-100%
- **Medium**: 60-80%
- **Bad**: <60%

The assessment percentage was calculated using this formula:

$$\text{Assessment Result} / \text{Highest Value} \times 100\%$$  \hspace{1cm} (1)

**Description:**
- **Assessment Result**: total value of all aspect indicators or criteria of evaluation result
Highest Value: maximum value of all aspect indicators or criteria

3. Results and discussion
The SF program as CBFM practice on state forest will be well-implemented if strengthened by institutional factors such as: (1) the assurance of land ownership by community so the regulation can be formulated and other parties are limited; (2) a number of rules that can be understood and implemented by the community and institutions, including the imposition of sanctions and conflict resolution; (3) an accountability mechanism [5].

3.1. Correspondent data
Correspondence data is used to seek information or information from a source through observation and interviews. Then the data obtained can then have to be processed so that it becomes a conclusion. The data obtained can be seen in the following graphical form

3.2. Group institutional aspect
Group institutional assessment was done by assessing criteria that can reflect the institutional conditions of a group. The criteria are as follow: (1) stability of management, (2) stability of administration, (3) stability of permitted location, (4) success of business governance, (5) planning, (6) structuring managed area, (7) protection zone quality of permitted location and (8) forest protection.

3.2.1. The institutional of Keluarga Bahari Cooperative. In the criteria of management stability, Keluarga Bahari Cooperative was categorized as moderate. They have management structure which in active condition. However, the group do not have guest book, no cash book keeping and not holding a year-end meeting. Thus, they categorized as bad on administration stability. The group assessed as good on planning criteria, because their Business Planning Documents and Annual Workplan have been completed. Both documents are in the process of legalization. There were almost no function changes on land coverage and has good condition of mangrove ecosystem. In 2016, the group successfully convinced an oil-palm entrepreneur not to expand his palm oil plantation because CPF permit has been issued on the location. To these, the group was excellent on the stability of permitted location, protection zone quality of permitted location and forest protection criterias. However, due to no business activity, the category of structuring managed area criteria was bad. The main problem was the absence of Technical Supervisor of Sustainable Production Forest Management (TS-SPFM). The group did not have sufficient capital to obtain the certificate, which was priced 25-30 million per person.

3.2.2. The institutional of Rakyat Pantai Cooperative. On all group institutional criteria, the Rakyat Pantai Cooperative had an excellent score. They have a tidy financial accounting and their own office. The office also functioned as a shelter and a place for packing mangrove charcoals. Their Business Planning Documents and Annual Work Plan have been legalized, and they have been paying the annual Forest Resources Provision (FRP) to Indonesian Government since 2016. All members were empowered and were given identification. The members were categorized to field officers (timber harvester, collector and timber burner), packaging officers and administration officers. Three members have obtained the TS-SPFM on 2016 and have implemented silviculture system by dividing the permitted location into three cutting blocks. Our field checking recorded clear boundaries with boards containing location information. Every furnace has a serial number, which functioned as a guarantee that the product was not processed from stolen raw materials or mangrove species. The group practiced environmental-friendly harvest technique, which only harvest branches without harming the root, so the tree would be able to regenerate by itself. Therefore, no additional cost for seedling procurement and replanting.
3.2.3. *The institutional of Tunas Baru Cooperative.* Compared to the other cooperatives, the institutional of *Tunas Baru* had the lowest score due to the unclear management structure, no Business Plan, being abandoned by its members and land cultivation by many migrants. Since obtaining the permit, the group was constrained by the TS-SPFM requirement before being allowed to harvest timber. With zero activity, migrants were using the permitted area for their personal use. The area protection, which was should be done by this group, was also very minimum.

3.2.4. *The institutional of Wahana Hijau Cooperative.* The *Wahana Hijau* Cooperative categorized as good on all group institutional assessment criteria. The management is active and the members are still managing businesses according to their Business Planning Documents and Annual Work Plan. However, since the TS-SPFM has yet to obtain, their business is limited to timber gathering. The gathered timbers then sold to *Rakyat Pantai* Cooperative. To protect the forest, the members share patrol schedules among them. Nipa palm was abundant in the area but not yet fully utilized.

Prijono [6] stated that institutionally the managerial ability of SF holders is varied. Therefore, the assistance and monitoring by forestry agencies on the site are needed. The type of assistance is adjusted to group capacity, such as marketing facilitation, access to loans, to form a cooperative and to open partnership network. After the business management permit issued, the holders then faced big challenges in managing their SF scheme business. It is expected that the holder builds a business which aims mutual independence, so the economic benefits will be enjoyed not only by the permit holders but also the surrounding communities and regional development. The independency of permit holders is vital to compete with rent hunters in the market of SF commodity.

3.3. *Economy aspect*

Economic analysis determines possible plants poor the allocation of resources. this aspect of the economy will need to be investigated because to establish and improve future management policies. Economy analysis is therefore viewed as important for conducting studies to establish major policies for the management of the mangrove forest resources. With the potential for economic activity recognized, development on the basis of efforts to increase economic growth could be achieve, with the development of the economic sector by performing equality sector identification or potential for the local economy. Economic development planning requires variety of statistical as a basis for determining strategy policy, in order for development goals to be properly reached can thus be the basis for prioritizing scale policies to optimize local economic potential roasters to accelerate economic growth. Alternative management could be applied to the mangrove ecosystem by taking into account the ecological characteristics and priorities of development, the technical, political dan social aspects of society in the communities the mangrove area.

Category of economic aspect assessment in all cooperatives where the percentage of the *Bahagia Keluarga Bahari* Cooperative is 64% (medium), the *Rakyat Pantai* Cooperative is 100% (Good), the *Tunas Baru* Cooperative is 40% (not good), and the *Wahana Hijau* Cooperative is 80% (medium). With this data analysis, it becomes a reference and evaluation of the economic aspects of social forestry in terms of general assessments based on the Regulation of the Director General of PSKL Number 9 of 2019.

There are several factors of the low value of the economic aspect of the *Bahagia Keluarga Bahari* Cooperative, namely: the potential for mangrove wood that has been planted for a long time has not been utilized since the issuance of the permit due to a lack of capital to establish a charcoal processing factory. Unlike the case with the *Tunas Baru* Cooperative, the low value of the economic aspect is dominated by the fact that there are no more groups in the permit location. People who use the permit location actually come from cultivators from outside the permit location.

3.4. *Social aspect*

Social aspect aims to find a complete of the actual situation, problems and actual social reality, so that with social aspect we can see various problems that occur the output is to get public awareness and
better changes going forward. Social aspect is closely related to the position of a person, group, institutions in society relating to others, and their rights and obligations in relation to resources. Therefore, we need an effort to obtain a complete of the real situation/social reality or social problems objectively-critically by examining the historical, structural, cultural and consequences of the problems through the collection of data and information presented.

The category of social aspect assessment in all cooperatives where the percentage of the Bahagia Keluarga Bahari Cooperative is 72% (medium), the Rakyat Pantai Cooperative is 86% (Good), the Tunas Baru Cooperative is 68% (not good), and the Wahana Hijau Cooperative is 76% (medium). The social aspect assessment category is carried out to see the problems and the level of success that has been achieved by social forestry.

There are several dominant factors in the value of the social aspects of the Rakyat Pantai Cooperative, namely: Rakyat Pantai Cooperative has a good planning document and is according to its implementation in managing the potential of mangrove wood in accordance with the principles of good silviculture. In addition, this cooperative not only empowers group members but also involves outsiders around the permit location in managing charcoal. Since 2012 (permit issuance) up to now there has never been any conflict, both internal and external to the group. The main factor for the low social value of the Tunas Baru Cooperative is that since the issuance of the permit, there has been a conflict of interest over land tenure between the community holding the permit and tenants from outside the permit location who are still in conflict and have yet to find a bright spot from the relevant stakeholders.

![Figure 2. Packing briquette activities by members of Rakyat Pantai Cooperative](image)

After obtaining the legality of access and rights to the forest area, the SF holders are required to optimize the forest management through the preservation of forest areas and utilization of forest areas economically, socially, and environmentally. Activities that can be done include: the preparation of management workplans, rehabilitation activities, development of the commodity of both timber and non-timber, development of SF land through the agroforestry, area protection activities and the preparation of business work plan Haryanto et al [7]; Affandi et al [8].

To increase the value of the management of the regional management, the SF scheme permit holders can perform the development of the resource-based industry with various types of forest products commodities such as timber, not timber, environmental services (ecotourism, clean water, micro hydro), agriculture, or farm. The SF scheme permit holders may form an organization of the Association of the SF Permit Holders (ASFPH) in order to develop, improve, and protect the members’ businesses. The establishment of this organization has also been done by forest
entrepreneurs who established the Association of Indonesian Forest Entrepreneurs (AIFE). ASFPH as the associations and partners of the Parties can serve as a communication means, source of information, consultation, facilitation and advocacy on matters related to SF business so accountable, transparent and professional business activities can be achieved.

4. Conclusions
Based on the results of the assessment shows that the Bahagia Keluarga Bahari Cooperative from the institutional aspect is in the medium category, the economic aspect is in the bad category and the social aspect is in the medium category. Rakyat Pantai Cooperative from the institutional aspect is in good category, economic aspect is in good category and social aspect is in good category. The Tunas Baru Cooperative from the institutional aspect is in the bad category, the economic aspect is in the bad category and the social aspect is in the bad category. Wana Hijau Cooperative from institutional aspect is in good category, economic aspect is in medium category and social aspect is in medium category. Efforts that can be made to improve all aspects in the future are for the Bahagia Keluarga Bahari Cooperative to prepare a technical assistant as one of the requirements for managing the potential of mangrove wood. The Rakyat Pantai Cooperative needs the attention of the central government, especially in terms of drafting regulations related to charcoal export. Similarly, with the Wana Hijau Cooperative, which so far still depends on the Rakyat Pantai Cooperative so that the Stake Holders can provide assistance and provide government assistance so that they have sufficient capital to build their own charcoal factory. New budding cooperative need to be resolved from prolonged conflicts and take firm legal action against encroachers who already control the land.

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