Lesson Learned from Social Forestry Practice in a Forest and Climate Change Project in Kalimantan, Indonesia

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Abstract. Social forestry is considered as one element to support the practices of sustainable forest management in private and state forests in Indonesia. Currently, the government is promoting the five schemes of social forestry: Village Forest, Community Forest, Community-Based Plantation Forest, Customary Forest, and Partnership. An explorative study of a forest and climate change project in Kalimantan was conducted for 5 years and the experiences should be shared to learn about the strengths, threats, and strategies related to social forestry implementation. After the government has issued the new social forestry policy in 2016, nine villages were facilitated by the project and has obtained the Village Forest Licence. Most villagers preferred to participate in the Village Forest Scheme because the concept was simple and perceived by the people as easily managed. Village boundary agreement, community participation, intensive community empowerment by government or NGO were the important components for having social forestry licence from the Minister. Participatory land use planning was necessary to support the practice of sustainable social forestry, as well as local champion, villagers and local government commitment.

1. Introduction

Basically, human activities in forest areas can have positive or negative effects for forest conservation. Not only contributing to conservation through their indigenous knowledge in enforcing customary law, but also treating the forest existence due to over exploitation [13]. The presence of communities who are living in, within or adjacent to forest areas, are often considered as challenging situations related to conservation efforts [10]. On the other hand, communities are important actors in natural resources management [1] and the most effective stewards in forest management if they were given the opportunity to be involved in decision making [4]. In response to these situations, social forestry was seen as a means to solve forest management problems [6, 9].

In Indonesia, social forestry has been initiated since late 1970s and has become a government policy by the late 1980s as a solution for poverty and local tenure conflict [7]. Rural people are often reputed as poor communities in Indonesia [14] and 1,500 villages of more than 11 million ha were located within the state forest areas, supporting the lives of 80 to 95 million people [8] and many more around the forests.

The government has developed various social forestry schemes through ministerial decrees, such as decrees enacted in the periods of 1991 – 1998 that regulate social forestry practices in concessions, within the special use zones and in the general forest area. Then, forestry law (Act No.41 of 1999)
regulates various schemes such as community forest, village forest, community plantation forest and collaborative management, with specific access and utilization rules. All these formal legal schemes are based on permits to be requested by the local communities and granted by the state. However, the progress was very slow with only few permits being requested and granted [9].

In the National Mid-Term Development Plan of 2015-2019, government merged the Ministry of Forestry with the Ministry of Environment in 2015, and formed a special Directorate General to manage social forestry. The government has committed to allocate at least 12.7 million hectares of forest area for Social Forestry schemes by 2019. In order to accelerate the progress, The Ministry of Environment and Forestry (MoEF) released Regulation Number 83 of 2016 on Social Forestry. Based on this regulation, schemes of social forestry consist of Community-Based Plantation Forest, Community Forest, Village Forest, Customary Forest, and Partnership. Social Forestry also has been framed as part of agrarian reform initiatives (Presidential Regulation 88 of 2017).

In response to this new regulation, a forestry project called Forest and Climate Change Programme – Financial Module (FORCLIME FC) supports social forestry as one of the potential exit strategies so that communities have legal access into the state forest to manage the forest sustainably. FORCLIME FC is one of the bilateral government cooperation between the Republic of Indonesia and the Federal Republic of Germany, distributed by a German government-owned development bank (KFW). It is a long-term project to support emission reduction from deforestation and forest degradation, sustainable forest management strategy practice and local community welfare improvement. The programme was initiated in the periods of 2011 – 2020, and was implemented in Kapuas Hulu District (West Kalimantan), Malinau (North Kalimantan) and Berau District (East Kalimantan) in the form of Demonstration Activities (DA) REDD+, consisted of 78 villages. The project has started the involvement of villages and forest areas since 2013 and has engaged the local communities through bottom up approach. Such project should be actively taken into consideration for future projects as well as policies, thus the experiences distilled from the project must be share with regards to its strengths, threats, and strategies related to social forestry implementation as lesson learned and reference for other stakeholders and projects.

2. Methodology

Data and information of the project in 2013 - 2018 were gathered through mixed methods of descriptive, participative, and explorative study based on semester reports, in-depth discussions with staffs and local communities, and field observations. Qualitative and descriptive analyses were used to synthesise the lessons learned of social forestry practice in 2013 – 2018 based on its strengths, threats, and strategies.

![Figure 1. Location of DA areas.](image-url)
3. Results and Discussion

Up to the year 2018, the project has implemented forest rehabilitation across a 4,203.06 ha of land consisted of 1,975,385 living plants; facilitation of village boundary agreement in 25 villages and completing participatory land use planning for 20 villages, community-based forest patrol that covered a total area of 380,694.9 ha, establishment of demonstration plot (agroforestry, silvo-fishery, horticulture, silvo-pastoral, and non-timber forest product (NTFP) management) through revolving fund scheme, and supporting sustainable forest management in forest concession of PT Sumalindo Jaya IV and PT Inhutani 1 Unit Labanan through supporting Reduce Impact Logging and HCV 5 and 6. These interventions could reduce 888,099.48 tCO2e (without considering DA#6 that has high threats due to land use for mining, palm oil plantation, housing) [5] as well as providing positive for socio-economic impacts [2].

FORCLIME FC has initiated to apply social forestry scheme in 2015, yet the progress was slow. After the Minister of MoEF released Regulation Number 83 of 2016 on Social Forestry, the progress performed better and the project has succeeded in facilitating nine villages in receiving the Village Forest licence. The number of licences granted is expected to increase since facilitation will be continued until the end of 2020.

As a follow-up to the license, Village Forest Management Institution (Lembaga Pengelola Hutan Desa/ LPHD) has set up the Village Forest Long-Term Management Plan (Rencana Pengelolaan Hutan Desa/ RPHD) and Annual Management Plan (Rencana Kerja Tahunan/ RKT) that was facilitated by FORCLIME FC and forestry extension officers from the Forest Management Unit. In general, LPHD required about 1 – 2 months to complete RPHD that was signed by the forestry extension officer. Process of RPHD preparation has been an effective way to transfer information and lessons among FORCLIME FC team members, forestry extension officer, and LPHD members. LPHD has also established the Working Group on Social Forestry (Kelompok Usaha Perhutanan Sosial/ KUPS) to implement activities and propose facilitation to the Directorate of Business Development of Social Forestry and Customary Forest (Direktorat Bina Usaha Perhutanan Sosial dan Hutan Adat/ Direktorat BUPSHA). The progress of Village Forest is presented in Table 1.

| No. | Village          | Forest Area (Ha) | Progress                                                                                      |
|-----|------------------|------------------|----------------------------------------------------------------------------------------------|
|     |                  | Production Forest| Protection Forest | Total                                      |
| **BERAU DISTRICT** |                  |                  |                                              |
| 1   | Long Ayap        | -                | 5,640            | 5,640                                      | Obtain licence in February 2017, LPHD has completed RPHD and Village Forest boundary officially. Establishment of KUPS is in process. |
| 2   | Punan Segah      | -                | 14,791           | 14,791                                     |
| **KAPUAS HULU DISTRICT** |              |                  |                                              |
| 3   | Bunut Hulu        | -                | 4,763            | 4,763                                      | Obtain licence in October 2017, RPHD, KUPS, and Village Forest boundary have already been officially completed. Mensiau Village has established a study centre on agroforestry and silvofishery, while, Tamao and Bunut Hulu Villages had developed honey business |
| 4   | Mensiau          | 4,112            | 6,826            | 10,938                                     |
| 5   | Tamao            | 2,742            | 3,562            | 6,304                                      |
| 6   | Sungai Abau      | -                | 1,570            | 1,570                                      | Obtain licence in Mid-2018, RPHD and KUPS have already been officially completed. These villages are proposing for a Village Forest Boundary and are developing environmental services and NTFP utilisation |
| 7   | Sungai Ajung     | 3,325            | -                | 3,325                                      |
| 8   | Sepandan         | 2,072            | 2,102            | 4,174                                      |
| 9   | Lanjak Deras     | 2,997            | 219              | 3,216                                      |

As time goes on, the facilitation process was more effective and easily conducted out in field. Most communities preferred Village Forest Scheme since the concept is simple and the management could be performed without difficulty. In average, the facilitation process from the earliest stage until obtaining
the licence took less than six months (see Figure 2). During application the license and setting up RPHD and RKTI, the project and local community continued other activities of forest management.

**Figure 2.** Step of social forestry application in FORCLIME FC.

In the periods of 2013 – 2018, the project has faced several strengths, threats, and strategies related to community-based forest management and social forestry practice, as follows:

**3.1. Strengths**

**3.1.1. Establishment of local institution in each village to stimulate community participation in sustainable forest management.** FORCLIME FC has established Community Empowerment Institution (Lembaga Pemberdayaan Masyarakat/ LPM) and Community Group on Forest Utilisation (Kelompok Masyarakat Pemanfaat Hutan/ KMHP) for managing fund distribution and practising bottom up approach. LPM, KMHP, and local community discussed and set up proposals facilitated by the Village Facilitator and Field Mentor. If the proposal fit with the project target, FORCLIME FC would distribute the fund to LPM directly and would be used by KMHP to implement the activities. This mechanism involved the participation of a number of community members as well as enhanced community participation in forest management. Furthermore, community capacity on project administration and sense of belonging of the project could be improved.

**3.1.2. Basically, the local community are willing to conserve the forest, but they need income for daily needs.** The local community have indigenous knowledge and respect their customary law. However, occasionally they carried out illegal activities such as illegal logging due to economic reasons. Similar situations were also found across local communities living in and around forest areas such as in Lombok island [13] and Sumbawa District [12]. The communities hoped that through social forestry, it could open up doors for them to develop their villages through the implementation of sustainable forest resources utilization.

**3.1.3. The local communities were knowledgeable about the potential resources of their villages but need supports and facilitations for improving their skills and capitals.** Most of the local communities realised the potentials of their villages and the surrounding resources that could be seen directly such as waterfall, NTFP, and fisheries. However, they have limited capabilities for developing these potentials due to lack of financial capital, networking, and skills. Therefore, communities have high motivation to
be involved in the project and participate in the social forestry scheme for developing their village potential resources.

3.1.4. New policy on social forestry is effective for accelerating social forestry permits. Two villages in Berau District, namely Long Ayap and Punan Segah Villages have prepared to apply for Village Forest Scheme since 2015, but the progress was low. After the Minister of MoEF released the new regulation in 2016, the application process was faster, the progress was better and the people finally obtained their licences. From this experience, the project continued to facilitate other villages on social forestry application. Currently, the process was more effective and quickly.

3.1.5. Local communities expected that social forestry is a strategy to avoid forestry concession in their forest area. The local communities of Malinau District practiced their customary law firmly and have for a long time been practising traditional forest management system based on indigenous knowledge. Deforestation and forest degradation in the area were relatively low. However, the concessions of forestry companies have caused insecurity to the local communities with regard to unsustainable forest management practices. Through social forestry scheme, the local communities have expectation that the forestry companies would not expand their concession areas deeper. For them, social forestry is a way to halt concession permits of forestry companies.

3.2. Threats
3.2.1. Lack of forest policies-related knowledge. Most local communities have no understanding on the definition/meaning and differences among forests, forest area, state forest, protection forest, production forest, conservation forest, customary forest and other social forestry schemes as well as location of state forest in the village. Similar condition was found in other areas such as those in Lampung Province [3] and Sumbawa District [12]. The community often questioned and showed some confusions over the terms social forestry and Land of Agrarian Reform (Tanah Objek Reforma Agraria/ TORA). Furthermore, incomplete and irresponsible information on customary forest and TORA policy that spread out in the village have slowed down the socialisation process. Local communities were also confused about the concept of social forestry and community land (tanah ulayat). Traditionally, local communities have managed communal land (tanah ulayat) in state forests and sometimes a communal property with individual rights to certain trees, such as Tembawang agroforestry in West Kalimantan [11]. Meanwhile, social forestry is defined as forest management that involve and allocate management to a group or communities.

3.2.2. Lack of policy on peat land utilisation in social forestry area. Currently, FORCLIME FC is awaiting the issuance of two Village Forest licences in Kapuas Hulu District, which are postponed since most of the areas are located on peat lands. Policy on peat land utilisation for social forestry is under formulation within the MoEF. As a consequent, villages with peat lands must postponed their application for social forestry scheme. MoEF is expected to release the ideal policy shortly.

3.3. Strategies
3.3.1. Preparation of a local Village Facilitator within organisation structure. FORCLIME FC has a complex organisational structure from national to site levels involving local community (Figure 3). The structure seemed to be ineffective and high-cost, but is ideal to involve local community as the key actor in decision making with regards to forest management. Village Facilitator is a member of the local community with good capability and influence within the community. The selection of Village Facilitator involved village leader and the facilitator existence is effective in facilitation process and a strategy to prepare local champion.
3.3.2. **Select villages that have completed village boundary agreement and participatory land use planning (PLUP).** Village boundary agreement is an important requirement for social forestry application. The application and facilitation process would be more effective and can be done quickly if facing little or no land tenure problem. PLUP activities also improved the knowledge and awareness of the community regarding the location of forest area in their villages as well as the motivation to manage their villages based on the plan. This strategy has also motivated other villages to complete village boundary agreement and PLUP. Furthermore, village boundary agreement and PLUP are also the requirements to propose village fund from the Ministry of Village, Underdeveloped Regions and Transmigration.

3.3.3. **Select villages with high commitments on sustainable forest management.** Prior to conducting social forestry facilitation, field mentors and experts observed the potentials of villages and commitments of the villagers and local champion on sustainable forest management. The readiness and commitment of local community is a crucial to guarantee the sustainability of the social forestry practice. Villages with good project progress and have started forest business in small scale was prioritised in social forestry facilitation. This aim is to accelerate social forestry development that would be expected as a model of sustainable social forestry management and can motivate other villages to do the same. In
addition, supports by the local government are also necessary to accelerate the development of social forestry.

4. Conclusion
Application of social forestry licence will be more effective and quickly if the village has already completed village boundary agreement and PLUP, local community has high participation and commitment for managing forest sustainably and there is active facilitation from government or NGO. It seems Village Forest is favourable scheme of local community due to simple way of management. Social forestry licence is not enough for local community, they also need more supporting and facilitation to practice and develop sustainable social forestry management.

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