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Social forestry for sustainable forest management (SFM)

A case study in Tongod District, Sabah

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Key messages

- In Sabah, social forestry (SF) is part of the state's sustainable forest management (SFM) strategy to achieve environmental, economic and social objectives.
- SF and SFM can be compatible because both recognize the importance of community participation in achieving sustainable use of forest resources.
- However, there is a gap in translating the SF concept to activities within the SFM approach and a lack of continuity.
- To strengthen the role of local communities in SFM through SF, there is a need for a platform enabling open discussion among relevant stakeholders, increasing awareness about the benefits of SF and securing adequate funding to conduct SF activities.
- This brief examines social forestry within four local communities of Tongod District.

Introduction

Like many other forested tropical countries, Sabah's forests are under threat. Intensive logging in the 1990s depleted forest resources and large forest areas were converted to agriculture plantations. To address such threats and following global trends, Sabah shifted its forest management policies from maximizing yield to sustainable harvesting (BFD 2011) and from government-driven management toward more participatory management systems (Biswas and Choudhury 2007). The sustainable forest management (SFM) approach was introduced as part of the new Sabah Forest Policy in 1997. SFM was first piloted in Deramakot Forest Reserve. It was considered a success as it obtained a Forest Stewardship Council (FSC) award for being a 'well managed' forest in 1997. It was the first natural forest reserve in Southeast Asia that was managed in accordance with sustainable forestry principles. The certification provided easier market access and evidence of legality, stakeholder involvement, biodiversity conservation and best forest management practices, particularly as regards reduced-impact logging.

Earlier in 1984, the Sabah Forestry Department (SFD) had introduced social forestry (SF), also referred to as community forestry, which aimed to improve the livelihoods of communities living in and around forest areas, while at the same time addressing the issues of deforestation in forest reserves (Toh and Grace 2005). In 1997 when the state adopted and implemented SFM, SF was redefined and reintroduced partly in response to the recognition of a local community's role in achieving effective SFM.

However, can SFM and SF really complement each other in balancing forest conservation and forest resource for sustainable use and at the same time meet the cultural and livelihood needs of forest-dependent communities? We conducted a study in four villages in *Mukim Kopisanangan*

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(not a real name), Tongod District, Sabah, to investigate how the community was involved in SF and to what degree SFM implemented by the Sabah Forestry Department integrated SF. Data were collected using gender-disaggregated focus group discussions (FGDs), household surveys and key informant interviews. The guideline and questioners were adopted from a wider research project called ASEAN-Swiss Partnership on Social Forestry and Climate Change (ASFCC) carried out by the Center for International Forestry Research (CIFOR 2020).

In this brief, we first explain the basic concepts of SFM and SF and their implementation in Sabah. Then we provide a brief description of the study site. We then explore three SF practices: 1) the Social Forestry Committee (SFC) established by the Sabah Forestry Department (Deramakot Forest Reserve Management Team), 2) the civil society organization-initiated Community Learning Center (CLC), and 3) an introduction of cocoa as part of the government agricultural development project. Lastly, we conclude and propose some recommendations

Sustainable forest management (SFM) and social forestry (SF)

SFM is defined as "the process of managing forest to achieve one or more clearly specified objectives of management with regards to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment" (ITTO 2020). Therefore, SFM also requires effective and accountable governance and the safeguarding of the rights of forest-dependent peoples (ITTO 2015). The objectives of

SFM are to sustainably produce goods and environmental services from forests; to ensure conservation of biodiversity but also of forest soils, water and carbon stocks; and to support the food-security, cultural and livelihood needs of forest-dependent communities; and to ensure an equitable sharing of responsibilities and benefits from managing the forest (ITTO 2015).

In Sabah, SFM was first adopted state wide in 1997 following the successful SFM model implemented in Deramakot Forest Reserve (certified by Forest Steward Council), which demonstrated that SFM with a logging component is compatible with wildlife management (Tongkul et al. 2013; Lintangah and Weber 2015). SFM is implemented in Forest Management Unit (FMU) areas managed by private companies that have acquired a Sustainable Forest Management License Agreement (SFMLA) license or by the state government for forest reserves (Figure 1).

Social forestry includes a variety of forest management strategies that focus on the involvement of local communities in forest and tree resources management and how the communities use these resources in meeting their daily needs, including food, fodder, timber, employment and income, and those of the environment (Agbor 2002). According to Agbogidi and Okonta (2003), SF is centered on the concept of local control and decision-making in the management of forests. Forests play an important role in climate change mitigation and adaptation. Local communities living within and near the forest reserve are the most vulnerable to the negative effects of climate change. SF has thus great potential in reducing the vulnerability to climate change and will sequester carbon when effectively established.

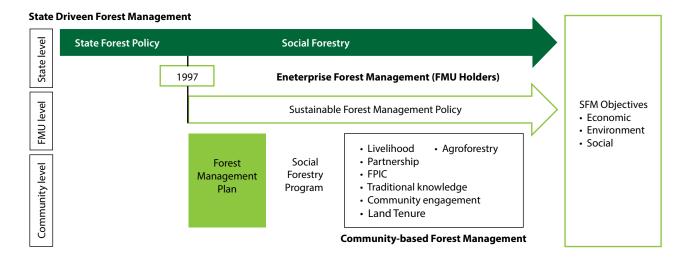


Figure 1. Social forestry and Sustainable Forest Management Policy in Sabah.

The SF concept was introduced in 1984 and applied state wide in 1997 when the guideline for SF planning was placed under the responsibility of the District Forest Officer (Sinajin 1997). The Social Forestry Unit in the SFD is now responsible for the SF programs, which are included in the Forest Management Plan (FMP) (SFD 2008).

The SFMLA license holders have to follow SFM principles to address community issues and implement SF projects within their respective FMUs, if there are communities present within their forest boundaries. The planning process and designs of projects are done by the respective SFMLA license holders, although the management and operational plans are subject to SFD approvals. SFD is also responsible in monitoring all activities of the SFMLA license holders.

In practice, SF was initiated by the government mainly to achieve SFM. Forest management with or by local communities is very important to address social equity and achieve sustainable use of forest resources. According to ITTO (2020), SF might be the only way of achieving SFM, but it is quite difficult to implement. One main issue would be the lack of locally based tenure rights over forest lands. Local communities might not see the benefits of investing the

time, labor and other resources essential for SFM without long-term rights. Most of the successful SF initiatives are those that included tenure reforms benefitting the local community. Sustainable management of forest resources is neither possible nor practical through government efforts alone, as it requires the collective effort of all the people in the country (HMG/N 1976).

Site description

The four villages in this study are located in *Mukim* (subdistrict) *Kopisanangan*, Tongod district. Tongod is part of the Heart of Borneo (HoB) of Sabah. The villages are situated on the fringe of a State Forest Reserve (Figure 2) and connected by the Kinabatangan River. The local communities are made up of indigenous people and mostly *Orang Sungai* (The River People), descendants of the Bayan, Manau, Selikumut, Manahu and Kalabuan groups. In terms of land ownership, most of the community do not have grants for their land, or are still in the process of making land applications. Those who have grants for their land had inherited them from their parents.

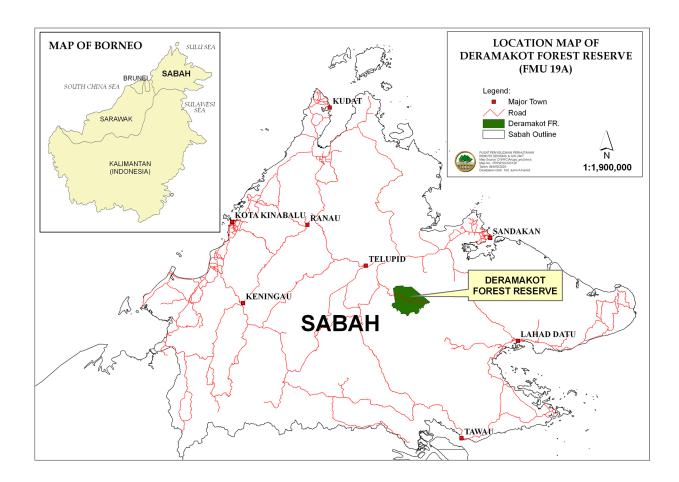


Figure 2. Location map of Deramakot Forest Reserve. The study villages are located around the forest reserve.

Social forestry in *Mukim Kopisanangan*, Sabah

Three SF activities are discussed: a government-initiated Social Forestry Committee (SFC) as part of SFM, a Civil Society Organization(CSO)-initiated Community Learning Center (CLC) and the introduction of cacao.

Social Forestry Committee (SFC)

The SFC was established by the Sabah Forestry Department, specifically by the Deramakot Forest Reserve Management Team as part of SFM and FSC certification. Members of the committee include community members from six main villages located at the fringe of the Deramakot Forest Reserve (represented by the leaders of the villages), government organizations such as the Water Department, the Drainage and Irrigation Department and the Wildlife Department, and nongovernment organizations (NGOs). Meetings were held once every three months to discuss issues related to the area and activities that can be conducted in the area. The management team acknowledged and recognizes the vital role that the local communities play in managing the forest in reducing poverty and environmental sustainability. Since the establishment of the SFC, illegal logging had steadily decreased and ceased to exist by 2003, especially in the southern part of the Deramakot Forest Reserve (SFD 2017).

SFC activities include the assessment of boundary demarcations, building maintenance work including repairing the village church and mosque and the clearing of forest reserve boundaries. Some community members worked with the boundary demarcation team clearing boundaries as contract workers. The SFC had also provided water tanks and maintenance of the mosque and church. Although the community was grateful, they mentioned that their main problem is limited land areas that they can use. They can cultivate only small pieces of land around their houses and cannot expand by clearing forest. There is also no road access within the forest reserve. All forest in the area was designated as State Forest Reserve.

Some people were also employed in tree replanting projects in degraded forest, funded by private companies as part of their corporate social responsibility (CSR) projects in the Deramakot Forest Reserve. The projects were organized by the SFC in 2008 and 2009. Among the companies were Hong Kong and Shanghai Banking Corporation (HSBC) and Sabah Development Corridor (SDC). The local community received maintenance contracts as part of the management's commitment in enhancing the local communities' economic well-being. The payment rate for each maintenance round is MYR 210/ha (approximately USD 48/ha per March 2020).

The Deramakot Forest Reserve is managed by the SFD under SFM principles that require social elements to be included in management planning. As stated earlier, the FMU license holders were required to set aside land within forest reserves for the communities and to develop SF projects. The SFD then introduced Occupation Permits (OPs) which cost MYR 250/ha/year for the communities within the forest reserves. A community with a steady income may be able to afford the permit fee, but those that depend on subsistence agriculture and forest resources with limited income-generating activities, particularly in remote areas with poor market access, might not be able to afford it. In the case of Mukim Kopisanangan, the villages are located outside of the forest reserve and are not suitable for OPs. There is land available within the village, but it is considered State Land. The community has submitted a land application but has not yet received any response or approval from the Land and Survey Department.

The communities were involved in the SFC-related discussions and are members of the SEC. The establishment of the SFC and every activity was preceded by a process of consultation and discussion. However, some respondents mentioned that they were not aware of the SFC, and were not involved in or ever invited to SFC meetings. This indicates that there was a problem in the distribution and sharing of information, not only between the SFC and the communities, but also because the community representatives only informed their closest acquaintances. Distribution of information needs to be further improved to prevent elite capture, and Free, Prior and Informed, Consent (FPIC) principles need to be applied and referred to. FPIC is a standard that is protected by international human rights law, particularly by International Labour Organization (ILO) Convention 169 and the UN Declaration on the Rights of Indigenous Peoples. The government was obligated to consult communities before the commencement of any developments affecting their lands and resources (CSQ 2012).

Community Learning Center

PACOS Trust, an NGO, had worked with communities in many aspects including education, economy (handicrafts) and forest management. In *Mukim Kopisanangan*, PACOS established a Community Learning Center (CLC), initially to provide education for young children and then expanding also to all ages of the community. Apart from teaching kindergarten students, the CLC also provides handicraft workshops for those interested. Related to forest management, PACOS assisted the community to do community mapping and establish home gardens. The community mapping includes identification of traditional land use practices such as paddy field farming, rotational planting, and durian plantations, and discussions on land rights issues. To date the community is still employing the

traditional practices, especially those related to farming activities. Community members do not have the luxury of using modern farming machinery as they could not afford it. Available agricultural land is insufficient as it is limited to areas outside the forest reserve.

Introduction of cacao

Respondents are engaged in a variety of activities to make a living, including farming, fishing, making boats, managing a mini market, gardening and other economic activities. One important source of income is the smallscale agroforestry (kebun campuran) established near their houses. In 2012, cocoa was introduced by the Malaysian Cocoa Board (MCB) as part of a government project to improve the community's livelihood, as well as to support Malaysia's national cocoa export sector which aims to gain revenue amounting to MYR 6 billion (approximately USD 1.4 billion as at March 2020) per year (Abilah 2019). Cacao was integrated into the existing home gardens, intercropped with fruit trees such as durian, langsat and rambutan. The MCB provided cocoa seedling, fertilizers, insecticides and herbicides. Training on how to plant cocoa, and to maintain and harvest it were given to the community. The MCB collected the harvested cocoa and paid the community directly. Because of this, cocoa was widely adopted (Figure 3). People liked the project because marketing was ensured. In general, marketing in

the villages is constrained by lack of infrastructure. Products have to be transported to the nearby town by boat, making transaction costs too high.

The majority of the respondents also mentioned they had tried to plant rubber and oil palm in the past, but were not successful. This was due to a lack of knowledge about harvesting and maintenance techniques. Some respondents had burned their rubber trees and replaced them with cocoa. However, a few oil palm and rubber trees could still be observed around the village.

SF for sustainable forest management

Our findings show that while the SF activities have, to different degrees, taken into account the community needs, outcomes vary. Through the SFC, some community members had the chance to gain income by working in boundary demarcation; however, the work was on a contract basis that ended when the contract expired. This did not provide a sustainable source of income for the community involved. Apart from that, the community expressed gratitude for the provision of water tanks and maintenance of the church and mosque, but the SFC activities did not address community concerns related to their livelihood.



Figure 3. Raw cocoa fruit (Photos by Elne Betrece Johnlee)





Figure 4. Processed cocoa dried under the sun (Photos by Elne Betrece Johnlee)

In the case of the CLC, the community understands its demarcated boundaries and rights better. But the CLC too was short-lived due to lack of funding. The CLC is no longer active but the network formed between PACOS, other NGOs, agencies and institutions involved in the activities, and the community remains close and strong. Using this network and facilitated by PACOS, discussion and the field study, the stakeholders involved were able to gain insights on the current livelihood situation and aspirations that can further assist in constructing a better plan for SF activity that would benefit the community.

Among all the initiatives conducted in the village, the introduction of cacao is still active and ongoing. Most community members gave positive feedback on the cacao program. One community member was working with the MCB and he was the one who introduced cacao to the village. The MCB understands the situation and the issues faced by the community, which include difficulties in delivering goods to the market, and in transportation in and out of the village, absence of a steady source of income, lack of knowledge on planting and maintenance techniques and lack of large land areas. These concerns

were addressed by the MCB by providing free seedlings, pesticides and herbicides, and training. MCB staff traveled to and from the village, collected the yield, and payment was made directly to the community. This had been ongoing for quite some time and more communities are now involved in the cacao planting program.

SFM and SF can be compatible as, principally, they place both people's and forest interests at the core of forest management. At our study sites, SF is adopted as part of SFM; however, there are disconnections in translating the SF concept into practice. SF emphasizes the role of local communities in forest management. Yet, as explained above, community participation in the SF activities conducted by the SFC was limited. The SF activities focus merely on building infrastructure and maintenance, far from providing forest management. Lessons can be drawn from the other two SF examples: the CLC, which emphasized building community capacity and awareness about the community's land and rights, as well as establishing good relationships with the community, and the cocoa project, which addresses community concerns and needs.

Gender roles

Men's and women's roles differ in their daily lives, including in activities related to forest use and management. Yet, most activities were conducted together regardless of gender. Coleman and Mwangi (2013) highlight that gender roles are important and complement one another, mainly in agriculture, but also in how forests are managed. At our site, although men and women were both involved in agricultural activities, their priorities were different. Men were more interested in agricultural and economic activities, hoping for larger-scale plantations, while women were concerned more with fulfilling daily needs, ensuring a sufficient food supply for the family. Women focused more on mini home gardens where they plant vegetables for their own home consumption.

Only a few women respondents in *Mukim Kopisanangan* were actively involved in forest management activities conducted by the SFC such as the planting of trees, boundary demarcation and workshops. Yet, many expressed interest in participating. Although the women were involved, they were not given significant roles in the activities. Ensuring gender equity, particularly the meaningful participation of women, in forest management can enhance both the socioeconomic conditions of women and the effectiveness of natural resource management (Aguilar et al. 2011) as well as ensuring the food security of the household. However, these positive effects are yet to be achieved in the case of SFM in *Mukim Kopisanangan*.

Conclusion and recommendations

Most of the community members are farmers and fishers but they are also forest-dependent people who collect forest resources for their domestic use. SFM, when properly implemented, can increase social and environmental benefits and contribute to people's livelihoods, employment and income generation. Participation of local communities in forest management is crucial in achieving SFM objectives. Local communities know the forest best and can identify problems related to forest management. They are also those most affected by any activities related to the management of their surrounding forest, particularly if it is in relation to their livelihoods. Thus, the design of projects or activities should take into account the needs, economic opportunities, priorities and limitations of the people and be adapted to their socioeconomic conditions. Based on our findings, to further strengthen the role of the local community in SFM through SF, there is a need: to ensure that need assessment and capacity building are included in the planning of activities; to provide incentives to broaden community involvement; to ensure gender equity is supported, particularly as regards women's role in decision making, improving communication and providing a platform for open discussion among relevant

stakeholders; to increase awareness about the benefits of SF; to secure adequate funding to conduct SF activities; and to obtain FPIC before any activity is implemented.

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