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# Social forestry development in East Kalimantan: challenges and opportunities

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**Abstract.** Social forestry (SF) is a strategic government program with the primary goal of enhancing the well-being of communities living around forested areas. This study aims to evaluate institutional governance and performance of social forestry holders in East Kalimantan, Indonesia. This research also analyses challenges and opportunities of social forestry development in the region. The research findings indicate that in April 2023, there were 123 social forestry permit holders in East Kalimantan, managing a total area of 271,113 hectares. Among these permit holders, 51 (42%) demonstrated good institutional governance and performance, while 19 (15.45%) had good governance but weak performance. Furthermore, 15 (12.20%) permit holders had weak governance but good performance, and there were 38 (30.9%) permit holders with both weak institutional governance and performance. The social forestry program in East Kalimantan still faces several challenges, including institutional capacity, funding and institutional issues, and policies. Strategies that can be implemented include: integrating the social forestry program with village planning (Integrated Area Development/IAD), strengthening institutions through mentoring and building a center of excellence, accessing markets for commodities, and providing funding and financing access for the social forestry holders.

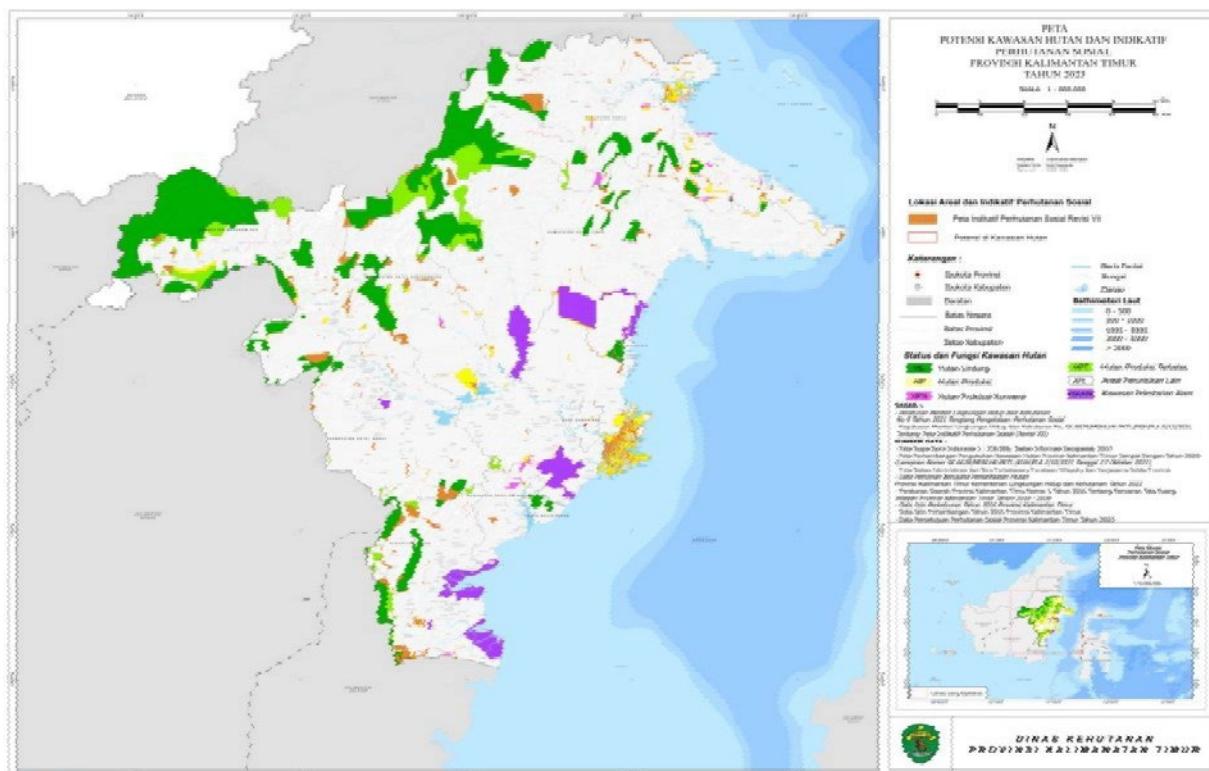
## 1. Introduction

Along with community welfare, social forestry embodies efforts to evolve sustainable forest management which prioritizes ecosystems and emphasizes the balance of ecological, social, and economic aspects in its utilization[1]. Social forestry also plays an important role in supporting Indonesia's strategic commitment to reducing greenhouse gas emissions through a nationally determined emission reduction contribution target (NDC) or a voluntary contribution set in 2030 of 31.89 percent and with international support of 43 percent[2].



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The Provincial Government of East Kalimantan is committed to achieving its Regional Medium-Term Development Plan goal (RPJMD) of establishing a social forestry area of 160,000 hectares, which equates to an average annual target of 32,000 hectares. However, this target has been revised down to 20,000 hectares per year. As at February 2023, the total social forestry area in East Kalimantan for the current period was recorded at 135,447 hectares or approximately 85% of the RPJMD's target. Additionally, if we take into account the preceding period (RPJMD 2014-2018), the cumulative social forestry area now stands at an impressive figure of over 212,815.47 hectares that were granted through issuance of decree of the minister of environment and forestry involving more than 11,828 families and covering around 423,704 hectares within the Indicative Map of Social Forestry Areas (PIAPS) [3].



**Figure 1.** Forest area potential and indicative map social forestry for the province of East Kalimantan 2023

Despite making progress in terms of expanding the area of Social Forestry, the Province of East Kalimantan still has much work to do in order to achieve ideal conditions and fully realize its potential impact. Social forestry still encounters problems in the permit application process, such as complicated procedures and limited information for the community around the forest. Whereas in community groups that already have permits or post-permits, the issue of institutionality and the ability to manage forests by the community is still very low, as a result, forest product commodities they have not been utilized optimally [4].

## 2. Approach and Methods

The approach in this research uses a qualitative descriptive. The analytical method is the construction of a narrative that describes experiences at the site level in the form of the dynamics of Social Forestry development before and after the issuance of social forestry permits. The main phase of development of Social Forestry in East Kalimantan be marked by the implementation of the Minister of Forestry Regulation number 83/MENLHK/SETJEN/KUM.1/10/2016 until the issuance of the The Job Creation Act (Indonesian: UU Cipta Kerja), Omnibus Law officially Number 11/2020 that following

with the Minister of Environment and Forestry Regulation Number 8/2001 and the Regulation of the Minister of Environment and Forestry No. 9/2001. The data used in this study were obtained from a variety of relevant sources. Field data sources are from the Forestry Service/KPH (extension workers) and Social Forestry Assistance Development Partners which were carried out through several focus group discussions (FGD). The information obtained is used to complete the matrix of Social Forestry Potential in East Kalimantan which then will be analyzed using the matrix and quadran of opportunities and challenges of social forestry indicators in East Kalimantan.

The index of challenges and opportunities from the criteria and indicators in the form of institutional governance and performance is processed using Excel to Power BI (desktop & online) and Online Analytical Processing (OLAP) data cubes using Quick Connect the principle of calculation that modifying from the strengths, weaknesses, opportunities, threats (SWOT) approach [5]. Opportunity and strength analysis is carried out by setting criteria and indicators related to administrative completeness as institutional governance and as progress as institutional performance. each of these criteria then explained with supporting indicators. Governance criteria refer to the administrative completeness of documents that show the development and strengthening of social forestry group institutions, while performance shows the development of economic value in the management of social forestry business group and the contribution of social forestry to improving the condition of forest cover.

**Table 1** Criteria and Indicators of the strengths and opportunities of the social forestry holder in East Kalimantan.

Criteria Measured	Indicator	Description
Institutional Governance	Gender	Female Manager KPS ( <i>kelompok perhutanan sosial</i> )
	SK ( <i>surat keputusan</i> )	existence social forestry approval decrees
	SHP (shapefile)	existence of maps in shp format
	RKPS ( <i>rencana kerja perhutanan sosial</i> )	existence of social forestry work plans,
	RKT ( <i>rencana kerja tahunan</i> )	existence of annual work plans
	AD/ART ( <i>anggaran dasar/anggaran rumah tangga</i> )	Existence of Memorandum of Association/ Articles of Association
	Access	Ease of Access from Village to Approval Location
	GESI (Gender Equality and Social Inclusion) assistance	Women's involvement in the social forestry business group
	market	Availability of Non-KPH Extension Workers
	product	Show social forestry business group: Gold and Platinum Status
Institutional Performance	KUPS ( <i>kelompok usaha perhutanan sosial</i> )	Show social forestry business group: Silver Status
	Business Plan	Show social forestry business group: Blue Status
	Land Cover	Availability of Business Plan
	Annual Report	Changes in forest cover during permit issuance
		Availability of Annual Report.

Source: Focus Group Discussion of East Kalimantan Social Forestry Working Group, 2023

Subsequent analysis was carried out to determine the level of governance and performance of each social forestry holder in East Kalimantan. Institutional governance criteria more emphasis on fulfilling administrative aspects and umbrella issues with the seven indicators as above while performance on aspects of improving institutional quality and the ability to improving the economic people around the forest. The results of the scoring process will show the location of the social forestry holder in one of the four quadrants that have been made. The four quadrants in question are:

- Quadrant 1, Top Right, Good governance – Good performance
- Quadrant 2, Bottom Right, Good Governance – Poor Performance
- Quadrant 3, Top Left, Poor Governance – Good Performance
- Quadrant 4, Lower Left, Poor Governance – Poor Performance

Analysis of strengths and opportunities is used to formulating strategies in order to accelerating social forestry as well as formulating indications program in action plans.

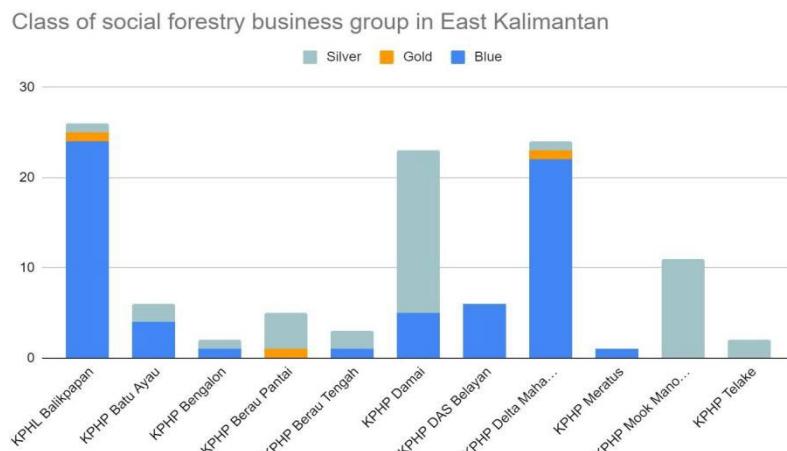
### 3. Results and Discussion

Until 2023, social forestry reach an area of around 259,323 hectares consisting of 123 units of social forestry approval holders and spread over 16 forest management unit in East Kalimantan [6]. Social forestry schemes are categorized in five (5) schemes of village forest (*hutan desa/HD*), the forest areas that have not been subject to permits, which are managed by the village and used for the welfare of the village, partnership forest (*kemitraan*) the cooperation between communities around the forest and forest management, community forest (*hutan kemasyarakatan/HKm*) which is the state forests whose main use is aimed at empowering local communities, community forest plantation (*hutan tanaman rakyat/HTR*) and customary forest (*hutan adat/HA*) is the forests located within the territory of Indigenous Peoples as the main actor to improve their welfare. And the village forest scheme is the most chosen in Social Forestry following with community forest [7].

**Table 2** Number of social forestry development recapitulation permit holder up to February 2023.

Regency/ city	Schemes (Unit)					Total	
	FV/ HD	CF/ HKm	CFP/ HTR	FP/ Kemitraan	CLF/ HA	Unit	Ha
Balikpapan	0	11	0	0	0	11	1.897
Berau	15	0	1	3	0	19	97.602
Kutai Timur	5	3	10	1	0	19	38.606
Kutai	16	30	4	0	0	50	67.153
Kertanegara							
Kutai Barat	5	0	3	0	1	9	20.744
Mahulu	11	0	0	1	0	12	35.839
Paser	2	0	0	0	1	3	9.272
	<b>54</b>	<b>44</b>	<b>18</b>	<b>5</b>	<b>2</b>	<b>123</b>	<b>271.113</b>

Furthermore, each existing social forestry approval holder formed a social forestry business group (KUPS) as a business unit, to date the KUPS that have been formed from 123 existing permits total 109 units originating from Village Forest and Community Forest schemes [8].



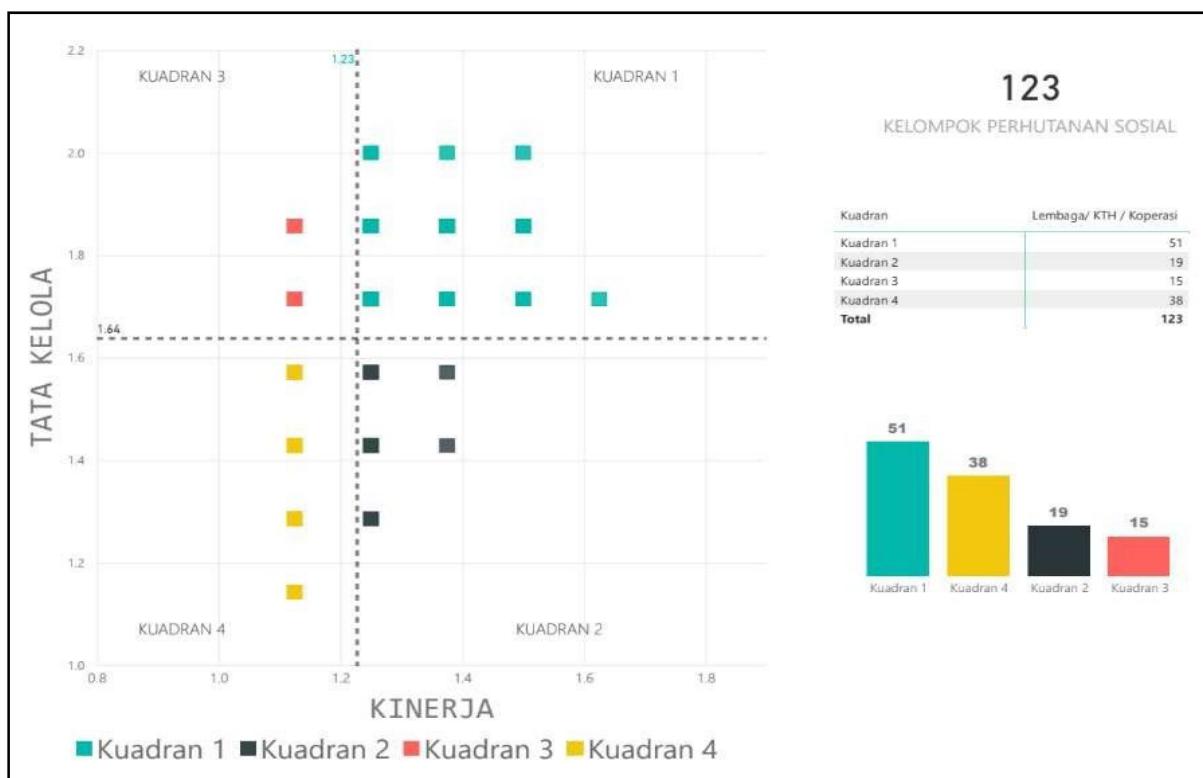
**Figure 2** Status of KUPS Permit Holders in forest management unit/KPH.

The results of social forestry agreements that have been issued in East Kalimantan which were made based on the above criteria and indicators based on an administrative approach, in this case districts/cities, will produce groups of approval holders. The selection of administrative boundaries was chosen by considering the SF development plan with the support of the local government from various sectors at the district to village levels, as well as strengthening commodity networks through supply chains and markets as well as support.

Social Forestry business unit from 123 KPS consisting of 51 KPS in Quadrant I, 19 KPS in Quadrants 2 and 15 and 38 KPS in quadrants 3 and 4. If we look closely at the 123 KPS there are 51 KPS that are already in quadrant I, then 42% of KPS are in the category of having good governance and performance. Most of the KPS in East Kalimantan have fulfilled administrative requirements, such as a decree from the ministry, the formation of a management institution and its completeness. It's just that administrative completeness does not necessarily indicate significant performance from the social forestry group. So that the program interventions that are built can focus more on efforts to improve social forestry performance through indicators, such as increasing GESI, preparing annual reports and increasing commodities.

The strengthening of KPS management in East Kalimantan faces challenges in the availability of extension workers and assistants like other provinces [5], where currently there are still very limited numbers of extension workers or social forestry assistants. Social Forestry Assistance comes from 3 elements, namely the Government (Forestry Extensionist, Non-Governmental Forestry Extension Officer, Forestry Technical Personnel, and Forester Service), with a percentage of 55%, assistance from Non-Governmental Organizations (Yayasan Bumi, Yayasan Konservasi Nusantara, Kawal Borneo Community Foundation, MENAPAK, YBMN, Forclime FC, PADI) has a percentage of 32.5%, and 12.5% from the Local Champion (Local Community) [9][10].

Even though the institutional capacity of social forestry managers still needs support and requires intervention to increase the capacity of its human resources [11]. These internal factors will greatly affect the ability of KPS to develop products and also access funding and financing for the development of its social forestry.



**Figure 3** Quadrant of social forestry business unit in East Kalimantan

Opportunities for development when considering the area of PIAPS and forest areas that can be proposed as areas to be managed for social forestry are still very large, currently the East Kalimantan forestry service is targeting 20,000 ha per year, and it is still very potential to develop based on overlay the map. The range of existing social forestry potentials consists of Non-Timber Forest Products (HHBK), Timber Forest Products, environmental services (nature tourism, carbon stocks, climate, clean water, culture etc.) as well as protection of the biodiversity of flora and fauna. East Kalimantan Social Forestry is also expected to be able to accommodate the interests of preparing East Kalimantan as part of the preparation of the Nusantara Capital City, such as in the food security sector, especially in forest areas located in and around Nusantara Capital City (IKN).

This social forestry strategy takes into account various directions from existing development strategies at the central, provincial, district/city levels as well as the potential of each social forestry development site. The strategy for accelerating target achievement before the licensing and submission process is carried out through the following policy directions: (1) conducted studies on the potential of PIAPS that have the potential to submit a licensing procedure, (2) Increased dissemination of procedures for submitting licensing systems to communities residing in potential PIAPS areas, (3) assistance (Coaching clinic/CC) in the licensing application system, especially for people who have limited access and capacity, (4) Improving the communication and coordination system as well as the division of roles in accordance with the duties and responsibilities of the parties in the social forestry application system.

After the approval or recognition is determined, its need the strengthening of supply chain for sustainable commodities in social forestry businesses, such as non-timber business results and

ecosystem services (water, carbon, tourism), the policy directions are: (1) Increasing the planning capacity, (2) human resources and institutions of social forestry and (3) access to finance and funding.

#### 4. Conclusion

The development of social forestry in East Kalimantan shows the success in achieving performance targets in terms of area and number of permits issued by the environmental and forestry ministry that shows the achievement of the performance of social forestry management institutions. Meanwhile the status of social forestry business units in East Kalimantan is almost entirely in quadrant one, indicating that social forestry is fundamentally strong enough. Follow-up strategies require a wider and stronger network to reach commodity markets, strengthen human capacity and access to finance and funding. Moreover, it is supported by the potential for forests that can be offered to be managed in social forestry schemes which are also still very extensive, especially production forests that can be managed in partnership schemes and protected forests in community forest schemes.

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