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Community Social Activities in Kapita Village in Supporting the Sustainability of the Community Forest Management Program

Suprianto [1*], Amal Said [2], Helda Ibramin [3]

[1-3] Agribusiness Study Program, Faculty of Agriculture, Universitas Islam Makassar, South Sulawesi Province.
* Corresponding Author: supriantonuntun@gmail.com

Abstract: Community Forest Management (PHKM) is one of the social forestry programs aimed at improving community welfare while maintaining forest sustainability. The sustainability of this program is greatly influenced by the level of community participation. This study aims to analyze the sustainability level of the Community Forest Management (HKM) program based on community participation. The research was conducted in Kapita Village, Bangkala District, Jeneponto Regency, reviewed from social, economic, and ecological aspects from July 24, 2025 to August 31, 2025, using a mixed methods approach. Data were collected through structured interviews with questionnaires involving 134 respondents who were members of forest farmer groups, in-depth interviews, and field observations. The data were analyzed using descriptive statistics, sustainability index calculation, and qualitative triangulation to strengthen the findings. The results show that the social aspect achieved a sustainability index of 63.7% or a score of 3.64, the economic aspect obtained an average score of 3.50, and the ecological aspect reached 3.69, all categorized as moderately sustainable. The Combined Sustainability Index (CSI) of the three aspects was 3.61, placing the PHKM program in the moderately sustainable category. This study concludes that PHKM has had a positive impact on social and economic life as well as environmental conservation.

Keywords: Community Participation; Ecological Sustainability**;** Social Forestry; Socio-Economic Aspects; Sustainability Index.

1. Introduction

Forests, as terrestrial ecosystems dominated by trees and other living things, have an important function in maintaining the groundwater cycle, providing economic, social, and cultural benefits for humans, protecting biodiversity, and contributing to global climate balance . According to the Law of the Republic of Indonesia Number 41 of 1999 concerning Forestry, forests are "an ecosystem unit in the form of a stretch of land containing biological natural resources dominated by trees in a natural environment association, one with another cannot be separated.

Global climate change, biodiversity loss, and environmental degradation are major challenges facing the world in sustainably managing natural resources . Data from *the Intergovernmental Panel on Climate Change* (IPCC, 2023) shows that deforestation and forest degradation contribute approximately 11% of total global greenhouse gas emissions, exacerbating the impacts of climate change.

Community-based forest management (CBFM) is considered a strategic approach capable of integrating social, economic, and ecological aspects in a sustainable manner (Ostrom, 1990; FAO, 2021). The concept of sustainability in forest management emphasizes not only ecological preservation but also improving the welfare of local communities as part of sustainable development (WCED, 1987). Therefore, implementing forest management based on sustainability principles is crucial in responding to global challenges while empowering local communities.

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In Indonesia, forest conservation efforts through the *Community Forest Management* (PHKM) scheme have become part of the national forestry policy, aiming to reduce pressure on state forests while improving the welfare of forest-dwelling communities . However, the implementation of this program still faces various challenges, ranging from weak local institutions, limited access to markets and capital, to low technical capacity among communities to manage forest resources sustainably (Directorate General of PSKL, Ministry of Environment and Forestry, 2022; Safitri et al., 2020; Maryudi & Krott, 2018).

In South Sulawesi Province, particularly in Jeneponto Regency, pressure on forest areas is quite high due to land conversion and a lack of alternative livelihoods. According to data from the Jeneponto Statistics Agency (BPS) (2023), the rate of forest cover decline in this region remains significant due to unsustainable land clearing for agriculture and timber harvesting. This situation is exacerbated by the socio-economic factors of communities surrounding the forest, who still rely on forest products for their daily needs (Lestari & Hamzah, 2021).

One interesting area to study is Kapita Village, which has the potential for community forests and community forest areas with a strong social role. The community in Kapita Village has been involved in various social activities such as mutual cooperation, forest farmer group management, and customary-based conservation activities that support environmental sustainability. However, the social, economic, and institutional dynamics of the community in supporting the sustainability of the PHKM program have not been studied in depth, particularly regarding the extent to which community social activities contribute to the program's effectiveness and sustainability.

Several previous studies have shown that the success of Community Forest Management programs is strongly influenced by active community involvement, local institutional support, and synergy between social, economic, and ecological aspects. For example, research by Nugroho et al. (2019) in Central Java found that strengthening local institutional capacity and direct community participation can improve household economic outcomes while reducing pressure on forest areas. Thus, community social activities are not only an integral part of community life but also a strategic factor in supporting sustainable forest management.

Based on this description, it is important to further examine how community social activities in Kapita Village contribute to the sustainability of the Community Forest Management program. This study is expected to provide an empirical overview of the forms, patterns, and impacts of community social activities on the successful implementation of PHKM, as well as serve as a basis for strengthening policies and empowering forest communities sustainably at the local level.

2. Literature Review or Related Research

2.1 *Forest* Resource Management Theory

The current understanding of *Sustainable Forest Management* (SFM) is shifting from a separate production - conservation paradigm to a landscape-based model (landscape approach) that simultaneously integrates production, conservation, and welfare functions. FAO (2022; 2023) emphasizes SFM as an adaptive process that links multi-stakeholder planning, outcome monitoring, and periodic policy adjustments. Within this framework, forests are positioned as part of a -broader socio-ecological system (watershed/landscape), so that economic targets (timber/NTFP value-added), social targets (decent work, inclusion), and ecological targets (cover, biodiversity, water/carbon ecosystem services) must be negotiated through collaborative governance. For PHKM, the implication is the development of management plans that link community management blocks with protected zones, agroforestry areas, and ecological corridors at the village-watershed scale, accompanied by cross-pillar performance indicators.

Under the pressure of the climate crisis, post- -2022 forest management theory positions climate resilience and Nature-based Solutions (NbS) as key approaches. IPCC AR6 (2022–2023) underscores the importance of adaptive silvicultural practices such as drought-tolerant

species selection, fire fuel management, and micro-water management integrated with NbS such as riparian restoration, degraded land rehabilitation, and multifunctional agroforestry. UNEP/UNEA (2022) formalizes the definition of NbS, providing scientific and policy legitimacy for using ecosystem-based interventions to achieve both social (livelihoods, food security) and ecological (biodiversity, carbon) objectives. In the context of the Capita, NTFP agroforestry (e.g., candlenut, honey, medicinal plants) and riparian restoration can be key strategies that reduce erosion risks and flow fluctuations while increasing incomes.

Another important development is Forest and Landscape Restoration (FLR) as a framework for restoring ecosystem function and well-being that emphasizes *participatory planning* , tenure rights, and *no- -regret measures* . Aligned with the UN Decade for Ecosystem Restoration (2021–2030), the latest guidelines position FLR as an -evidence-based, iterative "plan-action-monitor-reflect" process, with an emphasis on ecological outcome indicators (regeneration, species diversity, soil/water quality) and socioeconomic benefit indicators (income, market access, decent work). For PHKM, FLR directs the selection of priority locations (critical land, steep slopes), appropriate tree/additional plant species packages, and partnership schemes for financing and marketing restoration products.

In line with increasing demands for sustainable markets and finance, forest management theory is also being enriched by nature-based target and disclosure frameworks. *Science- -Based Targets for Nature* (SBTN, 2023/2024) expands corporate target-setting from emissions to freshwater and land domains, with *the Assess–Prioritize–Set–Act–Track steps* to prevent conversion, restore ecosystems, and improve water quality/quantity. Meanwhile, *the Taskforce on Nature- -related Financial Disclosures* (TNFD, 2023) introduced the LEAP (Locate–Evaluate–Assess–Prepare) approach for organizations to map dependencies and impacts on nature, and disclose risks/opportunities for investors. The combination of SBTN–TNFD promotes measurable, auditable, and bankable forest management, opening access to green financing/market partnerships for PHKM groups capable of presenting performance indicator data.

The rights and governance dimensions will also be strengthened post- -2022 through deforestation-free supply chain standards and policies (e.g., primary market regulations), certification, and jurisdictional approaches. The jurisdictional sustainability approach links administrative units (districts/provinces) with market commitments to reduce deforestation while improving the welfare of forest villages through performance-based incentive schemes. This framework emphasizes the importance of tenure security, recognition of management rights, and meaningful participation (including gender and youth) as prerequisites for effective management. For PHKM in Kapita, strengthening internal regulations (AD/ART, SOP for NTFP harvesting, phased sanctions), low-cost -, rapid conflict resolution mechanisms, and *memoranda of understanding* with government/market partners will increase compliance, reduce transaction costs, and strengthen conservation incentives.

Finally, digital transformation has brought data-driven management -as a new pillar. Recent guidelines recommend *Measurement, Reporting, and Verification* (MRV), which combines medium- -high resolution remote sensing, permanent plots, and participatory citizen monitoring to assess cover dynamics, biomass/carbon, and ecosystem health. Integrating local *dashboards* with socioeconomic indicators -(household engagement, NTFP business margins, credit/market access) enables transparent, adaptive management. In Kapita, this is achieved through mapping of PHKM areas, establishing monitoring plots, and quarterly reporting, which informs group decision-making and performance communication to stakeholders and potential financing partners.

2.2 Sustainability Theory

The concept of sustainability *refers* to resource management that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987). Sustainability has three main pillars: social, economic, and ecological (Goodland, 1995). In the context of forest management, these three must be balanced to ensure forest resources remain sustainable while providing long-term benefits to communities.

a. Social: includes community participation, strengthening local institutions, and fair access to resources.
b. Economic: includes income generation, livelihood diversification, and financial incentives for forest conservation.
c. Ecology: includes the conservation of biodiversity, land cover, and forest ecosystem functions.

Developments in sustainability theory in recent years have emphasized the integration of climate resilience, social justice, and biodiversity protection. The IPCC AR6 report (2022–2023) introduced the *Climate-Resilient Development* (CRD) framework, which integrates adaptation, mitigation, and equitable development within a single sustainable development trajectory (IPCC, 2023). The CRD emphasizes that sustainability depends not only on achieving mitigation and adaptation targets, but also on inclusive governance, protecting vulnerable groups, and science-based resource management.

Community Forest Management (CFM) is a relevant approach to ensuring that ecosystem restoration and forestry business development activities do not increase community vulnerability to the impacts of climate change. Rockström et al. (2023) also developed the *Earth System Boundaries* (ESBs) concept, which refines the *Planetary Boundaries approach* by incorporating social justice aspects. This framework defines "safe and equitable corridors" for Earth's sustainability by considering global biophysical thresholds (climate, biosphere, freshwater, nutrients, pollution) while ensuring the fulfillment of basic human needs. This approach is important for the CFM program because it can be used to establish local ecological thresholds such as minimum vegetation cover, water quality, and land carrying capacity that must not be exceeded in forest utilization processes.

Furthermore, the *Nature-based Solutions* (NbS) framework agreed upon at the 2022 UN Environment Assembly (UNEA 5.2) is a significant milestone, affirming that ecosystem protection, restoration, and management can provide solutions to social challenges while simultaneously supporting biodiversity (UNEP, 2022). The NbS principles align with *the Kunming–Montreal Global Biodiversity Framework* (GBF) adopted at COP15 in 2022, which sets global targets such as restoring 30% of degraded ecosystems and protecting high conservation value areas by 2030 (CBD, 2022). For PHKM in Kapita Village, the implementation of NbS can be realized through riparian area rehabilitation, biodiversity-friendly agroforestry development, and the protection of important habitats that support ecosystem services.

Furthermore, new approaches such as *the Science-Based Targets for Nature* (SBTN), released in 2023, provide guidance on setting science-based targets in the water and land domains to encourage both the public and private sectors to restore ecosystems (SBTN, 2023).

This framework can be integrated with *the Taskforce on Nature-related Financial Disclosures* (TNFD, 2023), which promotes transparency and reporting of nature-related risks in business management. Under the PHKM framework, the implementation of SBTN and TNFD can increase opportunities for access to partnerships and green financing through reporting measurable sustainability indicators. Finally, *the Just Transition Work Programme* under the UNFCCC (2022–2023) emphasizes that sustainability must be pursued with the principle of a just transition for all communities, including the provision of social protection and the participation of vulnerable groups in decision-making (UNFCCC, 2023). This principle is relevant in the PHKM framework to ensure that restrictions on access or changes in forest use patterns do not marginalize poor communities, but instead strengthen their well-being.

Thus, current sustainability theories not only emphasize the balance between social, economic, and ecological dimensions but also broaden the scope of sustainability to include aspects of justice, climate resilience, and global accountability mechanisms. These frameworks can serve as the basis for developing sustainability indicators in the evaluation of the PHKM program in Kapita Village, so that forest management outcomes can contribute to the simultaneous achievement of local, national, and global targets.

2.3 Institutional Theory

The development of post-2022 institutional theory -emphasizes that institutions are not just sets of formal rules, but also the "rules in use" that are lived out in practice, shaping

collective incentives and behavior in socioecological systems. This new direction combines Ostrom's legacy of *the commons* with an adaptive and polycentric governance approach in which multiple decision centers (villages, districts, provinces, markets, financial institutions) interact and monitor each other. The current emphasis is on procedural and distributional justice (who is involved and who benefits), the legitimacy of rules in the eyes of users, and the ability to learn -and adapt through the plan-action-monitor-reflect cycle. In the context of PHKM, this means clear, enforceable group rules that are continuously adjusted based on field data and community input, rather than simply following written documents.

The climate resilience dimension has increasingly become a central part of institutional discourse since IPCC AR6 (2022–2023) defined *climate -resilient development* as a development framework that integrates mitigation, adaptation, and equity. Effective institutions are understood as a prerequisite for communities' ability to anticipate risks, manage uncertainty, and distribute burdens/benefits equitably. This emphasizes the importance of recognizing rights (tenure) and meaningful participation of vulnerable groups (women, youth, remote villages) in establishing harvesting regulations, NTFP utilization, and protecting protected zones. In the Kapita PHKM, strengthening the legitimacy of regulations through regular deliberations, information transparency, and a simple complaint mechanism will increase compliance and reduce transaction costs for oversight.

At the global level, the latest UNEA 5.2 (2022) policy framework on Nature- -based Solutions and the Kunming–Montreal Global Biodiversity Framework (2022) promote inclusive governance that recognizes the role of local communities as managers and guardians of ecosystem services. The IPBES *Values Assessment* (2022) also emphasizes the need to accommodate a plurality of values (economic, cultural, and spiritual) within local institutions to ensure regulations are truly -relevant and adhered to. The implication at the village level is the development of differentiated regulations: for example, a NTFP harvest calendar that adapts to local customs/rituals while protecting the regeneration cycle of key species; or the establishment of restricted-use zones based on cultural and ecological values.

In line with increasing demands for accountability, institutional innovations based on -financial markets have emerged. The TNFD (v1.0, 2023) recommendations encourage organizations to map dependencies and impacts on nature and disclose risks/opportunities for investors (the LEAP approach). Meanwhile, the SBTN (2023/2024) introduced the Assess–Prioritize–Set–Act–Track approach to establish science-based targets for water and land. Both shift institutions from mere "administrative compliance" to measurable and auditable performance-based management. For PHKM groups, internal arrangements such as monitoring SOPs, financial and benefit recording, and indicator reporting (socio-economic and ecological) not only strengthen governance but also open access to market partnerships and green financing.

Another new direction is jurisdictional/landscape governance, which links village/group regulations with district- or watershed-level targets for consistency and mutual reinforcement. This accommodates a diversity of actors (local government, private sector, NGOs, universities) within a single performance-based incentive framework (e.g., rewards for reduced fires, increased cover, or social compliance). Key to its success are clear roles (who monitors, who enforces), proportional, graduated sanctions, a cost-effective conflict resolution mechanism -, and external recognition of the group's right to govern. In Kapita, a co-management MoU with the government/UPT and business partners can reduce overlapping authority while providing certainty for long-term investment.

Finally, digital transformation fosters data-driven institutions: regulations requiring transparent MRV (*measurement-reporting-verification*) using remote sensing, permanent plots, and participatory citizen monitoring. These practices foster horizontal accountability (among members) and vertical accountability (to the government/partners), strengthening trust *and* social capital. With a simple *dashboard* and quarterly evaluation meetings, PHKM groups can periodically update regulations, for example, adjusting harvest quotas, temporarily closing erosion-prone plots, or restructuring benefit sharing, ensuring institutions remain relevant to market and climate dynamics.

3. Proposed Method

This study uses a mixed methods approach that combines quantitative and qualitative methods to analyze the sustainability of the Community Forest Management Program (PHKM) in Kapita Village, Bangkala District, Jeneponto Regency, South Sulawesi. The quantitative approach was used to measure social, economic, and ecological indicators through a structured questionnaire to 134 respondents who are members of forest farmer groups, while the qualitative approach was carried out through in-depth interviews, participant observation, and documentation to explore social dynamics, institutions, and community perceptions of the implementation of PHKM. Quantitative data analysis was carried out using descriptive statistics and sustainability index calculations that integrate all three dimensions (social, economic, ecological), while qualitative data were analyzed thematically using open and axial coding to find patterns that explain the social and institutional context. This approach provides a comprehensive picture of the level of sustainability and factors that influence the effectiveness of the PHKM program at the local level.

4. Results and Discussion

a. Quantitative Data Analysis

Social Aspects

1) Participation in Farmer Group Meetings

The participation of farmer group members in meetings is an important indicator in assessing community involvement in community forest management. To determine the level of respondent participation in farmer group meetings, see the distribution of responses in the following table:

Table 1. Distribution of Respondents' Answers regarding Participation in Farmer Group Meetings

Answer Options	Number of Respondents	Percentage (%)
Always	0	0.0
Often	0	0.0
Sometimes	0	0.0
Seldom	50	37.3
Never	84	62.7
Amount	134	100

Source: Processed Primary Data, 2025

The table above shows that of the 13 respondents, the majority were inactive in group meetings. Eighty-four (62.7%) stated *they never* attended meetings, and 50 (37.3%) stated *they rarely* attended. No respondents chose the categories *always* , *often* , or *sometimes* .

This indicates that member participation in group meetings remains very low. This situation can lead to weak internal communication and involvement in the collective decision-making process.

2) Role in Decision Making

Data in farmer group decision making can be displayed in the following table:

Table 2. Distribution of Respondents' Answers to Roles in Decision Making

Answer Options	Number of Respondents	Percentage (%)
Strongly agree	89	66.4
Agree	30	22.4
Neutral	15	11.2
Don't agree	0	0.0
Strongly Disagree	0	0.0
Amount	134	100

Source: Processed Primary Data, 2025

The table above shows that the majority of respondents feel they have an important role in decision-making. Eighty-nine respondents (66.4%) strongly agree, and 30 respondents (22.4%) agree. Meanwhile, 15 respondents (11.2%) stated they were neutral, and none *disagreed* or *strongly disagreed* .

This means that even though attendance at meetings is low, most members still feel involved in the group decision-making process.

3) Clarity of Forest Management Rules

Data on the clarity of forest management regulations can be displayed in the following table:

Table 3. Distribution of Respondents' Answers regarding the Clarity of Forest Management Rules

Answer Options	Number of Respondents	Percentage (%)
Yes	85	63.4
No	0	0.0
Don't know	49	36.6
Amount	134	100

Source: Processed Primary Data, 2025

The survey results showed that 85 respondents (63.4%) stated that their farmer groups have clear rules, while 49 respondents (36.6%) were unsure. None answered that *there are no rules* .

This shows that even though formal rules are available, there are still some members who do not understand or have not been involved in the process of drafting and socializing these rules.

4) Relationships Between Group Members

Data on the relationships between group members can be displayed in the following table:

Table 4. Distribution of Respondents' Answers regarding Relationships Between Group Members

Answer Options	Number of Respondents	Percentage (%)
Very good	0	0.0
Good	134	100
Enough	0	0.0
Bad	0	0.0
Very bad	0	0.0
Amount	134	100

Source: Processed Primary Data, 2025

The data shows that all respondents (134 people, or 100%) rated the relationship between group members as *good* . No respondents chose the categories *"very good* , " *"fair* ," *"poor* ," or *"very bad* ." This means that social solidarity and harmony among members are relatively well maintained.

Social Sustainability Index

Sustainability Index Formula (Scale 0–100)

The scoring method uses the formula:

$$IKS = \frac{\sum(fi \times si)}{N \times Smax} \times 100$$

Information:

- Fi = number of respondents in category iii
- Si = score of category III
- N = total number of respondents
- Smax = highest score (100)

With scoring provisions:

- Most positive answer = 100
- Most negative answer = 0
- Middle answer (neutral/don't know) = 50
- Answers between positive–negative = 25 / 75 according to category position.

1. Participation in farmer group meetings
   - Score: Always = 100, Often = 75, Sometimes = 50, Rarely = 25, Never = 0
   - Results:

$$IKS = \frac{(50 \times 25)+(84 \times 0)}{134 \times 100} \times 100$$

$$= \frac{1{,}250}{13{,}400} \times 100$$

$$= 9.3$$

2. Role in decision making
   - Score: Strongly agree = 100, Agree = 75, Neutral = 50, Disagree = 25, Strongly disagree = 0
   - Results:

$$IKS = \frac{(89 \times 100)+(30 \times 75)+(15 \times 50)}{134 \times 100} \times 100$$

$$= \frac{11{,}900}{13{,}400} \times 100$$

$$= 88.8$$

3. Clarity of forest management regulations
   - Score: Yes = 100, Don't know = 50, No = 0
   - Results:

$$IKS = \frac{(85 \times 100)+(49 \times 50)}{134 \times 100} \times 100$$

$$= \frac{10{,}950}{13{,}400} \times 100$$

$$= 81.7$$

4. Relationships between group members
   - Score: Very good = 100, Good = 75, Fair = 50, Poor = 25, Very poor = 0
   - Results:

IKS = $\frac{(134\times75)}{134\times100} \times 100$

$= \frac{10{,}050}{13{,}400} \times 100$

= 75.0

Average Social Aspect Index

Average index = $\frac{9.3+88.8+81.7+75.0}{4}$

= 63.7

For the classification of social aspect sustainability index values based on the categories 0 – 25 = Low, 26 – 50 = Less, 51 – 75 = Medium, 76 – 100 = High, can be seen in the following table:

Table 5. Summary of Questionnaire Results on the Social Aspect Sustainability Index

Indicator	Index (%)	Category
Participation in farmer group meetings	9.3	Low
Role in decision making	88.8	Tall
Clarity of forest management rules	81.7	Tall
Relationships between group members	75.0	Currently
Average Social Index	63.7	Currently

Source: Processed Primary Data, 2025

Based on the analysis of the social sustainability index, the average score was 63.7%, which falls into the moderate or fairly sustainable category. When viewed by indicator, member participation in farmer group meetings showed the lowest score at 9.3%, falling into the low category. This indicates that most members are less active in attending official group forums, potentially weakening internal communication and reducing the quality of collective decision-making.

In contrast, the role indicator in decision-making achieved a very high score of 88.8%, categorized as high. This finding indicates that despite low meeting attendance, the majority of members still feel involved in the group's decision-making process. This is crucial for maintaining the legitimacy of decisions and strengthening a sense of ownership in the management of forest farmer groups.

The next indicator is the clarity of forest management regulations, with a score of 81.7% (high category). This achievement confirms that forest farmer groups already have formal regulations that serve as guidelines for management. However, some members (36.6%) are still unaware of these regulations, indicating that dissemination of these regulations is necessary to ensure that all members understand and consistently implement them.

Meanwhile, the indicator for relationships between group members was at 75.0%, in the moderate category. This result indicates that all respondents considered social relations between members to be good, although not yet in the very high category. Harmony among members is a social strength that can support sustainability, but it still requires strengthening solidarity through joint activities and increased active participation.

Overall, the social aspects of community forestry management can be said to be quite supportive of sustainability. The main strength lies in the role of members in decision-making and the existence of clear group rules, while the biggest weakness is the low level of participation in meetings. Therefore, strategies to improve social sustainability need to focus on encouraging active member participation through capacity building, motivation, and raising awareness of the importance of attendance at farmer group forums.

1. Qualitative Data Analysis

Social Conditions

a. Community Involvement

All community members are actively involved in managing the HKm area, particularly during the rainy season (planting) and the dry season (maintenance and harvesting of non-timber forest products/NTFPs such as cashew nuts). Participation is predominantly focused on technical activities, such as planting, independent land maintenance, and protection of their respective plots. However, institutional activities such as joint meetings are rare, unless directly facilitated by field extension workers.

Community participation also demonstrates a gender-based division of roles. Men are more involved in physical labor such as clearing and land maintenance, while women participate in lighter activities, particularly during harvest time, supported by simple transportation such as motorcycle taxis. The primary motivation for community participation is to supplement family income, making economic factors the most significant driver of their continued involvement.

Strong economic motivation encourages members to maintain their commitment to land management, even though this sometimes requires sacrificing time to attend group meetings. This demonstrates that the sustainability of the HKm program is strongly influenced by the direct benefits experienced by the community, particularly in the form of increased household income. Therefore, the role of non-timber forest products (NTFPs) such as cashew nuts and other forestry products is a crucial factor in maintaining member engagement.

Furthermore, the differences in levels of involvement between men and women also illustrate the importance of gender-based empowerment strategies. If women can be better facilitated, particularly in access to information, training, and institutions, their participation has the potential to increase. This will strengthen social cohesion and enhance the effectiveness of collective forest management.

b. Social Challenges

Some of the social challenges faced include:

- Internal conflicts, especially regarding control of inherited land, sometimes trigger differences of opinion among members.
- Low attendance of members in group meetings is generally caused by being busy managing their own land, the distance to the meeting location, and limited transportation costs.
- Obstacles to participation stem from time constraints, economic factors, and minimal direct benefits from land that has largely been planted with forestry crops.

In these conditions, field extension workers play an important role by providing flexible assistance, taking a personal approach, and providing education about the long-term benefits of the HKm program.

These emerging social challenges are inherently latent, as although they don't lead to major conflict, they have the potential to undermine group cohesion if not addressed promptly. Minimal participation in meeting forums and low levels of communication among members also weaken institutional ties, resulting in often unrepresentative decision-making.

Furthermore, low awareness of the long-term benefits of forests has led some members to prioritize short-term economic interests. Without appropriate intervention, this situation could impact the sustainability of forest management. Therefore, efforts to strengthen institutions, increase collective understanding, and balance incentives are needed to prevent social challenges from becoming a major obstacle to the sustainability of the HKm program.

c. Decision-making

Decision-making in forest farmer groups is generally still centered on the group leader, as joint meetings are rare. Although all members have the opportunity to express their opinions, the dynamics of discussions often sub-optimal. When differing views or conflicts

arise, extension workers typically act as mediators to ensure decisions are acceptable to all parties.

This top-down decision-making pattern indicates that institutional democratization remains limited. This can lead to a diminished sense of belonging among members to the HKm program, as most decisions are not made through an open deliberation process. In the long term, this situation could impact members' participation levels and trust in the management.

The role of extension workers in mediating differences of opinion is a key factor in maintaining group harmony. However, if dependence on extension workers is too high, the group's institutional independence will be reduced. Therefore, it is important to establish a more participatory, transparent, and inclusive internal decision-making mechanism, giving members greater freedom to determine the direction of group policy.

5. Conclusion

Community participation in the PHKM program is quite high, especially among members who do not migrate. This involvement is evident in area management activities during the rainy season and NTFP maintenance and harvesting during the dry season. However, some members are less active due to time constraints or other commitments.

This research suggests that strengthening community participation needs to be done by encouraging less active members to be more involved through incentive mechanisms or flexible task distribution according to their respective abilities. Furthermore, increasing market and capital access is important by expanding marketing networks, increasing member capacity through training, and facilitating access to capital for the development of non-timber forest product (NTFP) businesses to strengthen economic sustainability. From an environmental perspective, sustainable forest management can be achieved through routine monitoring of forest cover, developing conservation activities involving the community, and educating people about the importance of balancing ecological and economic aspects. Furthermore, coordination with the government and supporting institutions also needs to be improved to strengthen technical support, policies, and mentoring so that the Community Forest Management (PHKM) program can run more effectively, directed, and sustainably.

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