

Analysis of Community Forest Utilization by Livestock Farmers Of HKm Ulusena Farmers Group in Ulusena Village, Moramo District, South Konawe Regency

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Abstract. *This study aims to analyze the utilization of Community Forestry, the role of farmers group, and the perceptions of livestock farmers who are members of “HKm Ulusena” Farmers Group regarding the utilization of the Ulusena Community Forest. This study was conducted from November 2024 to July 2025 in Ulusena Village, Moramo District, South Konawe Regency, Southeast Sulawesi Province. This study was conducted using a qualitative approach. The determination of informants was carried out using a non-probability sampling method with purposive sampling and snowball sampling techniques. Data sources in this study used primary and secondary data. Data collection was obtained through observation, interviews, and documentation. The data analysis process used the Miles and Huberman method, namely data reduction, data presentation, and drawing conclusions. The utilization of the Ulusena Community Forest is divided into three categories: land use, utilization and collection of non-timber forest products (NTFPs), and utilization of environmental services. Livestock serves as a secondary source of income for livestock farmers, members of the Ulusena Community Forest Farmer Group. Utilization in livestock involves the use of forest areas as land for growing green fodder. “HKm Ulusena” Farmers Group has not been actively operating, so a new group management structure was formed. The new management structure periodically carries out a process of increasing the capacity of regional, institutional, and business management to foster group synergy by reactivating group activities. Farmers' perceptions of the use of the Ulusena Community Forest tend to be positive. Positive impacts of the Ulusena Community Forest utilization include obtaining permits for non-timber forest product (NTFP) management, obtaining economic resources from NTFPs, and obtaining resources to support the livestock sector.*

Keyword: *Community forestry, Farmers group, Forest utilization*

INTRODUCTION

Social forestry aims to grant management rights to local communities based on sustainable forest principles, enabling them to contribute to protecting, utilizing, and managing forests. Based on Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number 9 of 2021 concerning Social Forestry Management, social forestry is a forest management program based on sustainability principles. Social forestry is implemented in state forest areas, as well as private or customary forests, with communities surrounding the forest and customary law communities acting as program implementers. Social forestry aims to improve community welfare, maintain ecological balance, and strengthen social and cultural dynamics. Its implementation encompasses various schemes such as customary forests, village forests, community plantation forests, community forests, and forestry partnerships. Social forestry encompasses five main schemes, one of which is Community Forestry (Syofiarti et al., 2023).

Community Forestry legally provides community groups surrounding forests with the opportunity to manage forest areas through the granting of management permits by the government. This scheme aims to improve community welfare and maintain the sustainability of forest functions. According to Dewi et al. (2018), the implementation of Community Forestry contributes to poverty reduction, increased community income, and environmental preservation. Farmers group participating in this scheme are obligated to maintain forest sustainability and manage it productively, for example through the utilization of non-timber forest products (NTFPs), agricultural crop cultivation, or the integration of livestock systems.

Ulusena Village is located in Moramo District, South Konawe Regency, bordering a protected forest area so that Ulusena Village has the potential to utilize the forest to improve the welfare of village communities through a Community Forestry scheme by forming a forest farmer group called “HKm Ulusena” Farmers Group. Based on the Decree of the Minister of Environment and Forestry Number: SK. 10085 / MENLHK-PSKL / PKPS / PSL.0 / 12/2019 “HKm Ulusena” Farmers Group has obtained a community forest utilization business permit covering an area of \pm 333 hectares in the protected forest area in Ulusena Village in 2019. The Ulusena Community Forestry system, implemented by the local community, combines forestry with agricultural or plantation businesses to support sustainable protected forest management. Ecologically,

this system reduces the risk of land degradation, improves soil quality, and enhances biodiversity. Economically, it offers opportunities for income diversification through a combination of agricultural or plantation products, forestry, and livestock products, utilizing agricultural or plantation byproducts as a source of green fodder. Social benefits include strengthening farmer group institutions, increasing farmer capacity in natural resource management, and improving the local economy (Wulandari et al., 2020).

Forest utilization carried out by “HKm Ulusena” Farmers Group must comply with applicable regulations and support conservation efforts to maintain forest sustainability so as not to cause forest damage that will have a negative impact on humans, animals living in the forest and all biodiversity contained in the forest so that it can provide benefits for livestock farmers and the surrounding environment. However, in “HKm Ulusena” Farmers Group, activities have not been carried out jointly by the group and the farmer group is also not active. This can be a negative gap due to the lack of role of the group that pays attention to its members, especially this social forestry program includes monitoring and evaluation of farmers group holding management permits. In the Ulusena Community Forest, there has been no research that examines forest utilization, the role of the Community Forestry Farmers Group, and the perception of livestock farmers towards the utilization of community forests. The study was conducted to determine the form of utilization of Community Forest management and the role of “HKm Ulusena” Farmers Group towards livestock members as well as to determine the perception of the livestock community towards the utilization of Community Forests in supporting livestock businesses so that the group can actively carry out its functions and be able to realize a prosperous community and forest sustainability in accordance with applicable regulations.

LITERATURE REVIEW

The utilization of community forests located in protected forest status can be analyzed from the following aspects: area utilization, utilization and collection of non-timber forest products, and utilization of environmental services (Community Forest Application Facilitation Book, 2021). Area utilization is carried out by utilizing land growing space for use without reducing the primary function of the forest to obtain environmental, social, and economic benefits (Putri and Azizah, 2024). Utilization and

collection of non-timber forest products (NTFPs) are activities aimed at managing and utilizing forest resources without damaging the environment and while maintaining the primary function of the forest (Arba et al., 2023). Utilization of environmental services can be implemented through business activities such as nature tourism services, water flow utilization, and carbon absorption/storage (Simarmata, 2023).

Farmers group serve as a forum for information exchange, a forum for discussion, a forum for improving knowledge and skills, a production unit, and a forum for collaboration (Lestari and Idris, 2019). Activities within farmers group are generally carried out collaboratively, adhering to applicable rules and agreements, to achieve common goals, particularly for the development of farming/gardening activities. Activities carried out by each member of the farmer group are collaborative, integrated, and oriented toward group goals (Herawaty et al., 2022). In “HKm Ulusena” Farmers Group, particularly in the livestock farming community, all forest utilization management activities are carried out individually; there is no collaboration between members in forest management activities. Differences in perception can lead to the group being inactive in carrying out its functions (Fardisi et al., 2023).

Mulyana (2017) explains that the perception process includes the process of receiving information through the senses (sensation), the process of focusing attention on relevant information (attention), and the process of interpreting information to understand its meaning and benefits (interpretation). There are two forms of perception results: positive perceptions that will lead to the formation of accepting behavior and negative perceptions that will lead to rejection behavior (Pieter and Lubis, 2010).

RESEARCH METHODS

This research was conducted from November 2024 to July 2025 in Ulusena Village, Moramo District, South Konawe Regency, Southeast Sulawesi. The research location was chosen because it aligns with the research title regarding the utilization of Community Forests, has obtained a decree for community forest management that has been in effect for five years, has potential land resources to support livestock business development, and creates synergy between the agriculture, forestry, and livestock sectors.

This study employed a qualitative method, focusing on natural events through direct interaction with designated informants. This method makes the researcher the primary

instrument, playing a role in interpreting and giving meaning to the social dynamics directly observed (Waruwu, 2023). A qualitative approach was used to determine community perceptions through in-depth interviews to obtain a comprehensive picture of the phenomena studied. Informants consisted of member farmers, management representatives, and social forestry extension of “HKm Ulusena” Farmers Group.

The method for determining informants uses the method non probability sampling with technique purposive sampling and snowball sampling. Informants in this study are divided into two types of informants, namely key informants and primary informants. Key informants are individuals who have in-depth knowledge of basic information related to the problem being studied (Juita et al., 2020). Key informants consist of the group leader and the social forestry extension of “HKm Ulusena” Farmers Group. Primary informants are individuals who have technical and detailed knowledge about the problem being studied (Situmorang et al., 2023). The primary informants are the livestock farming community in Ulusena Village who are members of the Ulusena Community Forest Farmers Group. In this study, there are two key informants consisting of the Head of “HKm Ulusena” Farmers Group and the and the social forestry extension of “HKm Ulusena” Farmers Group. The primary informants numbered 15 informants obtained based on the determined criteria, namely members of “HKm Ulusena” Farmers Group who own ruminant livestock and manage utilization in the Ulusena Community Forest.

Data collection was conducted through observation, interviews, and documentation. The data used consisted of qualitative data obtained through primary and secondary data. Primary data is the primary source of data in the study, obtained directly from informants without any third parties or intermediaries (Laia et al., 2022). Primary data was obtained through field observations and interviews using open-ended questionnaires with member farmers. Secondary data is additional data not obtained from primary sources; it was obtained through other pre-existing sources (Jabnabillah et al., 2023). Secondary data was obtained from group archives, the Ministry of Environment and Forestry website, and other relevant sources.

Data analysis uses the Miles and Huberman (2014) model which includes three stages: (1) data reduction, namely the process of sorting and simplifying data to focus on relevant things; (2) data presentation, namely displaying results systematically in narrative or table form to identify patterns and relationships; and (3) drawing conclusions,

namely formulating the meaning of the data that has been analyzed reflectively to describe real conditions in the field.

RESULT AND DISCUSSION

1. Overview of Research Location

The Ulusena Community Forest is located in Ulusena Village, Moramo District, South Konawe Regency, Southeast Sulawesi Province. The Ulusena Community Forest is managed by “HKm Ulusena” Farmers Group, a group of farmers and ranchers from Ulusena Village who operate on the Community Forest land. This group operates within the Community Forest area, which is designated as a protected forest. Protected forests primarily serve as life support systems, playing a vital role in maintaining soil fertility, preventing erosion, regulating water balance, and protecting the area from seawater intrusion (Ratmanda and Ismail, 2022).

“HKm Ulusena” Farmers Group has obtained a Community Forest Utilization Business Permit based on the Decree of the Minister of Environment and Forestry Number: SK. 10085 / MENLHK-PSKL / PKPS / PSL.0 / 12/2019 with an area of ± 333 hectares located in a protected forest in Ulusena Village in 2019. The topography of the physical condition of the Ulusena Community Forest area with a flat slope class of 29 hectares, a gentle slope class of 160 hectares, a rather steep slope class of 120 hectares, a steep slope class of 20 hectares, and a very steep slope class of 4 hectares. The vegetation conditions of the tree category in the Ulusena Community Forest area with dominant trees are local teak, white jabon, and durian. Other types of trees that are vegetation in the Ulusena Community Forest area are mixed jungle, durian, and petai. The location of the Ulusena Community Forest location has the following area boundaries:

- a. Northern boundary : Tambolosu Village protected forest
- b. Southern boundary : conservation of Summersari Village
- c. Eastern boundary : conservation of Summersari Village
- d. Western boundary : Bisikori Village protected forest

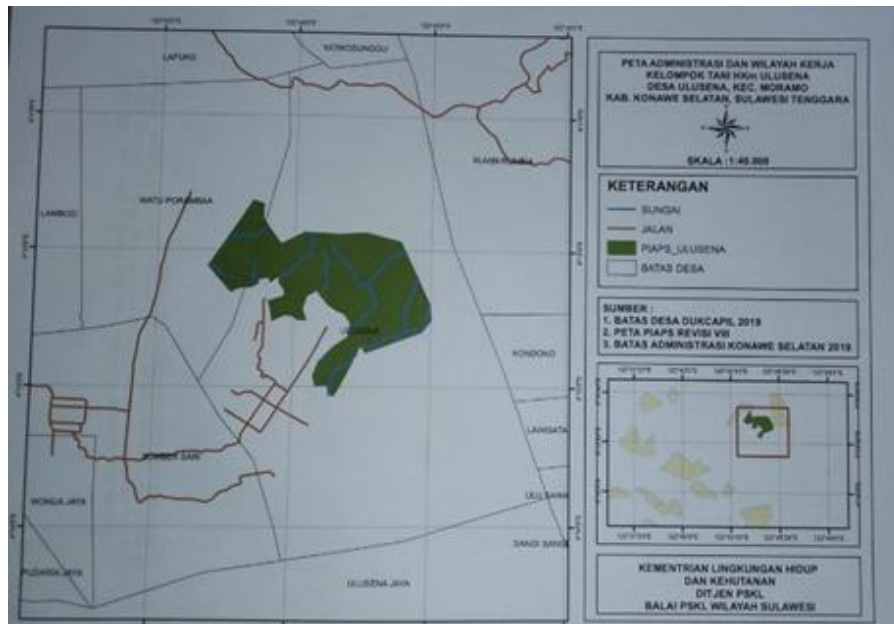


Figure 1. Administrative Map of HKm Ulusena Farmers Group
Source: Secondary Data (HKm Ulusena Farmers Group, 2019)

The Community Forest Utilization Business Permit granted to the Ulusena Community Forest Farmers Group consists of 132 family heads, consisting of 116 men and 16 women. The management approval for the Ulusena Community Forest in the Community Forest Utilization Business Permit is valid for a period of 35 years and can be extended. The forest utilization carried out by the community is utilizing forest land as an area for planting plantation commodities. The main commodities produced are pepper, porang, ginger, turmeric, and patchouli. In addition, the community actively raises goats and cattle by utilizing the forest as a source of green fodder for livestock. In an effort to support the development of existing plantation and livestock businesses, the Ulusena Community Forest Farmers Group formed the Social Forestry Business Group agroforestry "Lestari Jaya" and silvopasture "Sukses Bersama".

2. Utilization of Ulusena Community Forest

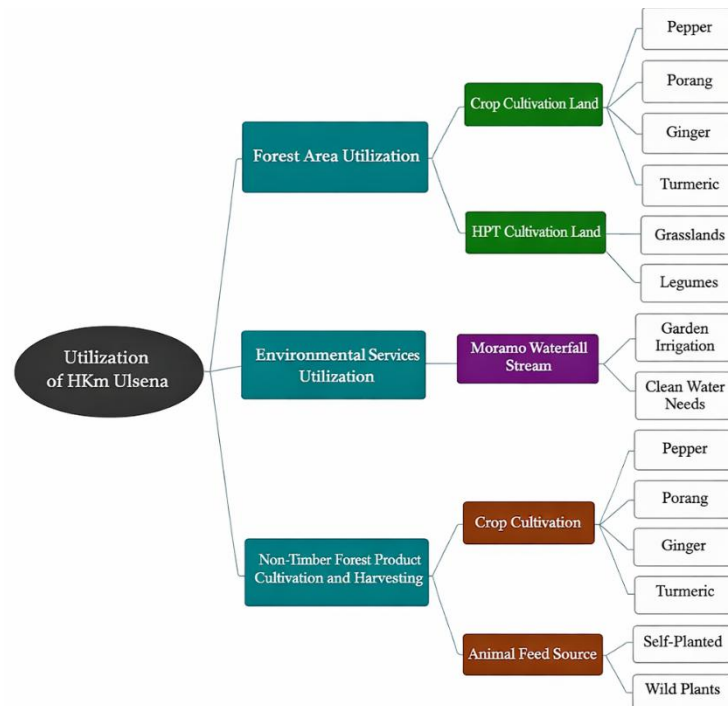


Figure 2. Utilization of Ulusena Community Forest
Source: Processed primary data (2025)

The Ulusena Community Forest is located in a protected forest area and utilizes forest areas, non-timber forest product harvesting, and environmental services. Community forest utilization activities aim to improve the economic welfare of communities surrounding the forest and maintain forest sustainability. Based on observations and interviews, the Ulusena Community Forest utilization activities have an impact on economic benefits by providing opportunities for the community to cultivate land in the forest area to plant crops of economic value. Livestock farmer the members of “HKm Ulusena” Farmers Group also plant green fodder in the forest area as a source of animal feed. The utilization and collection of non-timber forest products significantly support the economy of the community whose main occupation is farming/plantation and depend on the results of cultivating crops planted in the community forest area. In addition, the utilization of environmental services from water sources in the form of waterfalls provides benefits to the community as a source of irrigation and clean water. The forms of utilization of the Ulusena Community Forest can be seen in **Figure 2**.

Area utilization is carried out by utilizing the growing space of the land for use without reducing the primary function of the forest to obtain environmental, social, and economic benefits (Putri and Azizah, 2024). Area utilization is carried out in accordance with the Social Forestry Management Plan and the Annual Work Plan prepared by the group together with the facilitator, taking into account the potential of the available resources. Based on research results, area utilization by livestock breeders who are members of “HKm Ulusena” Farmers Group indirectly adopts an agroforestry system. Agroforestry is a system that maximizes the use of forest land to combine tree crops with agricultural/plantation food crops or animal feed crops (Wattie and Sukendah, 2023).

Interviews with member farmers revealed that each member received approximately 1 hectare of forest management land, based on a joint decision by the members at the time of the initial Community Forestry application. Farmers belonging to “HKm Ulusena” Farmers Group utilize the growing area for cultivating pepper, porang, ginger, and turmeric as their primary commodities. Furthermore, farmers utilize the Community Forestry as a place to grow green fodder, grass (odot grass, elephant grass), and legumes, such as gamal. Agroforestry is a form of land use that provides environmental, social, and economic benefits (Putri and Azizah, 2024). The form of utilization of the Ulusena Community Forestry area can be seen in **Figure 3**.



Figure 3. Utilization of the area as cultivated and green fodder planting
Source: Research documentation (2025)

The utilization and collection of non-timber forest products (NTFPs) are activities aimed at managing and utilizing forest resources without damaging the environment and maintaining the primary function of the forest (Arba et al., 2023). Utilization and collection of NTFPs are carried out to cultivate and collect forest products other than

wood while paying attention to forest sustainability and maintaining forest functions. Based on research results, livestock breeders who are members of “HKm Ulusena” Farmers Group maximize NTFPs derived from cultivated plants, namely pepper, porang, ginger, and turmeric. Livestock breeders also utilize wild plants as animal feed, in addition to intentionally planted green fodder. This is in line with research by Fitriyani et al. (2020) which states that communities utilizing protected forest areas can only collect NTFPs by harvesting plantation crops, including MPTs (*Multi Purposive Trees*) that produce valuable products from fruits, seeds, or leaves.

The harvests of porang, ginger, and turmeric are marketed directly to collectors without prior processing, while the pepper harvest is dried before being sold. Based on observations and interviews, NTFPs (non-timber forest products) are a source of income that can meet economic needs. Fatmona et al. (2024) emphasized that NTFP production significantly impacts the income of communities whose primary occupation is farming/plantation. Documentation of NTFP utilization and collection can be seen in **Figures 4 and 5.**



Figure 4. Raw pepper and drying of pepper seeds
Source: Research documentation (2025)



Figure 5. Porang and tumeric plants
Source: Research documentation (2025)

Utilization of environmental services is the utilization of the potential of environmental services without damaging their primary function. Utilization of environmental services can be implemented through business activities such as nature tourism services, water flow utilization, and carbon absorption/storage (Simarmata, 2023). Based on research results, the utilization of environmental services in the Ulusena Community Forest includes the utilization of water flow originating from the Moramo waterfall. Members of “HKM Ulusena” Farmers Group utilize this water flow for irrigation in forest areas planted with cultivated crops and as a source of daily clean water needs at their homes.

The utilization of environmental services by group members aligns with research by Sukristiyono et al. (2021), which states that the presence of water flows is essential for maintaining land productivity and meeting clean water needs, especially during the dry season. In utilizing existing waterfalls, group members play a crucial role in maintaining water balance, including planting woody plants to protect water catchment areas. Community contributions are essential in maintaining and rehabilitating forests as buffer zones for water resources to maintain environmental sustainability (Sukwika, 2022). Documentation of the utilization of environmental services can be seen in **Figure 6**.



Figure 6. Utilization of environmental services of waterfall flow
Source: Research documentation (2025)

Livestock farmers belonging to “HKm Ulusena” Farmers Group raise a variety of livestock. Research shows that the majority of farmers raise Bali cattle, while others also raise Kacang goats and Bligon goats (a cross between Kacang goats and Etawa goats). These livestock are considered among Indonesia's local livestock genetic resources (SDGT). In their research, Endrawati et al. (2022) stated that local SDGT have several

advantages in terms of their husbandry system, disease resistance, and high adaptability. Livestock documentation can be seen in **Figure 7**.



Figure 7. Goat and cattle
Source: Research documentation (2025)

The scale of livestock businesses, based on the number of livestock owned, is predominantly micro-scale. Based on Minister of Agriculture Regulation Number 14 of 2020 concerning Registration and Licensing of Livestock Businesses, ownership of 5 or less beef cattle or 15 goats is considered micro-scale. Meanwhile, ownership of 6-50 beef cattle or 16-150 goats is considered small. The total livestock owned by members of “HKm Ulusena” Farmers Group is shown in **Table 1**.

Table 1. Total number of informant livestock

Farmer	Livestock	Total Livestock (tail)	Green Fodder Requirement (kg/day)
J	Goat	5	35
T	Goat	6	40
	Cattle	3	40
R	Cattle	7	135
WS	Cattle	11	245
D	Goat	4	40
JS.	Cattle	3	80

Farmer	Livestock	Total Livestock (tail)	Green Fodder Requirement (kg/day)
AH	Cattle	1	20
MS	Cattle	6	120
Rsd	Goat	3	35
	Cattle	4	140
L	Goat	12	60
	Cattle	2	40
Swn	Goat	7	40
	Cattle	4	80
IKD	Cattle	3	30
PBP	Cattle	3	100
MR	Cattle	3	90
Stm	Cattle	5	70

Source: Processed primary data (2025)

Based on research results, livestock farmers who are members of “HKm Ulusena” Farmers Group utilize forest resources to support their livestock business by obtaining animal feed from wild plants and planting green fodder. The types of green fodder planted by the farmers are grasses, including odot grass (*Pennisetum purpureum cv.Mott*) and elephant grass (*Purple Pennisetum*) and legume plants, namely gamal (*Hedgehog's glider*). Indirectly, livestock farmers have adopted the silvopasture system, which is the integrated use of forest land for tree planting, animal feed, and livestock areas. Although in its implementation, livestock farmers from “HKm Ulusena” Farmers Group do not raise or graze livestock on community forest. Smith's research *et al.* (2022) further explained that silvopasture is an agroforestry practice that integrates the management of trees, livestock, and green fodder on the same land to diversify production, improve animal welfare, and enrich the ecosystem. The types of green fodder planted by farmers can be seen in **Figure 8**.

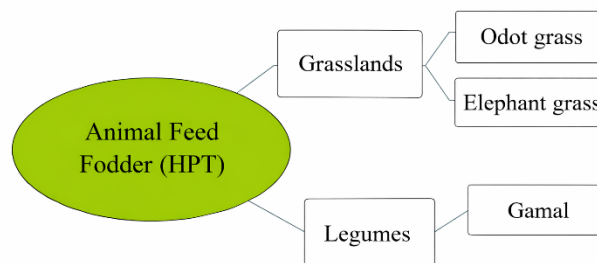


Figure 8. Green fodder resource
Source: Processed primary data (2025)

Farmers do not maintain or graze on community forest because some land is designated for plantation crops that could be damaged by livestock grazing. This is in line with research by Jose and Dollinger (2019), which states that one of the main challenges in silvopasture is the destruction of new plant seedlings by grazing livestock. Farmers only utilize the forest as a food source by planting and collecting green fodder. Based on the research, farmers in their livestock business still use traditional feed management by collecting feed twice daily in the morning and evening according to the livestock's needs. The average green fodder requirement for goats in one day for goats requires an average of 42 kg of feed and for cattle requires an average of 92 kg of feed per day.

Training programs for smallholder farmers are also considered crucial for increasing the productivity and sustainability of their businesses (Albab and Auliyah, 2025). “HKm Ulusena” Farmers Group requires support for livestock business development to enhance and maintain the sustainability of its members' livestock businesses. Although the majority of members rely on NTFPs as their primary source of income, livestock farming, which has traditionally served as a secondary source of income that can be sold at any time, still requires development, from maintenance systems to marketing systems, so that the livestock businesses run by members can continue to grow. Support from various parties, including the government, in the form of training and market development, can enable smallholder livestock businesses to become more productive and sustainable (Ta'wim et al., 2024).

3. The Role of “HKm Ulusena” Farmers Group

“HKm Ulusena” Farmers Group plays a crucial role in the sustainable management of the Ulusena Community Forestry. “HKm Ulusena” Farmers Group was established as a forum for community collaboration in managing and utilizing sustainable forest resources through a social forestry program within the Community Forestry scheme. The formation of the farmer group is expected to foster coordination and collective awareness in economic activities related to forest utilization, as well as a concern for maintaining forest sustainability. The group's existence is crucial in maintaining the orderliness of forest utilization activities, strengthening members' understanding of the community forest program, strengthening cooperation in business development, and ensuring that forest utilization adheres to sustainable forestry principles. However, observations and

interviews with members indicate that the group has not been as active as expected. Most members carry out forest utilization activities independently without any coordination from the group. Cooperation among members is still based on individuals assisting others during harvesting and processing forest products, as this requires more manpower. This situation creates vulnerabilities to the sustainability of the community forest program, especially since the program's implementation has regulations that must be followed and there is a continuous monitoring and evaluation process every five years.

Based on the results of interviews with the head and assistant of “HKm Ulusena” Farmers Group, the reason the group has not been running actively is because in the early years of “HKm Ulusena” Farmers Group obtaining community forest utilization business permit, the implementation of mentoring and management of the group's organizational structure was less communicative in providing instructions to group members as a whole. This caused a lack of synergy within the group so that the group has not been active in its activities, especially in administrative aspects such as the preparation social forestry management plan, the preparation of annual work plan, and reporting of forest products which have so far relied on assistance from assistants. Following up on this, in 2024 the assistants renewed the group's management structure starting with the election of a new chairman, secretary, and treasurer based on the capacity of individual abilities to be active in activities and easy to receive and convey information to support the development of the area, institutions, and businesses of “HKm Ulusena” Farmers Group in its activities with members.

a. Farmers Group as a Forum for Information Exchange

Farmers group serve as a forum for information exchange. Farmers group facilitate the exchange of information on various aspects of the businesses run by group members (Rachmawati et al., 2021). All group members can disseminate information, particularly related to forest utilization business activities, obtained from mentors or other parties with expertise in forest utilization. The information required by the group includes information regarding community forest utilization regulations.

Interviews with farmer members of the group revealed that the group has not actively served as a forum for information exchange. However, “HKm Ulusena” Farmers Group serves as a platform for exchanging information obtained from its facilitators and the Forestry Service through community forestry program socialization sessions attended

by all group members. The information provided relates to technical land use regulations in the field, such as prohibitions on burning, prohibitions on planting oil palms, and recommendations for maintaining forest sustainability. Socialization sessions regarding the Social Forestry program have also been conducted by the group, along with student interns serving as Social Forestry facilitators, to review the Social Forestry program implemented by “HKm Ulusena” Farmers Group. Farmers group serve not only as a social platform but also as an effective communication platform for exchanging information among members. Effective communication within farmers group helps members get to know each other, share information, and create shared goals in improving agricultural capacity (Aron et al., 2024).

b. Farmers Group as a Place for Discussion

Farmers group serve as a forum for discussion, serving as a means of communication and problem-solving for their members related to community forest utilization. Farmers group serve as a forum for discussion, sharing experiences and resolving problems faced by group members in their businesses (Permatasari et al., 2021). Group discussions are conducted to find the most appropriate solutions to the problems faced by members. However, research results indicate that discussion activities have not been carried out actively and routinely. Routine group discussions have not been actively implemented due to a lack of initiative from members and group administrators due to a lack of group institutional capacity. Farmers group are expected to be able to facilitate discussions among members or with competent parties, so they can understand and adopt the latest innovations in agriculture to increase productivity and welfare (Adriyani et al., 2023).

Following up on this, the facilitator updated the group's management structure and the implementation plan for increasing group capacity by providing understanding to all members to carry out the group's roles. The discussion on updating the group structure was attended by members to discuss the group's Articles of Association/Bylaws which contained implementation guidelines, the preparation of social forestry management plan, the preparation of annual work plan, and the planning of a proposal for assistance with productive economic tools for the "Lestari Jaya" agroforestry in forestry business groups for ginger commodities. During the discussion, it was also agreed to form a WhatsApp group containing group members to facilitate future communication.

c. Farmers Group as a Forum for Improving Knowledge and Skills

Farmers group serve as a platform for enhancing knowledge and skills, enabling members to develop their skills, particularly in the utilization of community forests and their businesses. However, research has shown that the knowledge and skills enhancement activities that should be the group's role have not been implemented. Group members reported that no knowledge and skills enhancement activities had been held jointly with the group. Facilitators reported that learning had been conducted, but these activities were only attended by the group leader and the village head in capacity building and management activities for social forestry groups. Farmers group require ongoing empowerment efforts through training and mentoring to achieve more optimal results, while simultaneously enhancing the role of group leadership and strengthening community independence (Musdalifah et al., 2023).

The learning process undertaken by the group leader is expected to provide valuable knowledge for running the group, which can be applied and disseminated within the group. Selected farmer group members who have participated in training or skills development activities will share their knowledge and experience with other members, thereby disseminating information (Nurfadillah et al., 2024). The group leader also participates in the forest utilization monitoring process carried out by “HKm Ulusena” Farmers Group, along with their facilitators, the Sulawesi Regional Forest Management Agency, and the Southeast Sulawesi Forestry Service. The monitoring aims to ensure that forest utilization by the Community Forest Farmers Group is in accordance with applicable plans and regulations and provides social, economic, and ecological benefits to the community and the environment. Monitoring activities can enhance the group leader's understanding of community forest utilization in accordance with group rules and plans.

d. Farmers Group as Production Units

Farmers group act as production units, namely groups that function as providers of facilities and infrastructure that support production for the development of the business being run. Farmers group play a role in a series of interconnected group activities in the procurement of production facilities and the development of business units as a group (Pramono and Yuliawati, 2020). “HKm Ulusena” Farmers Group has several Forestry

Business Groups (KUPS), namely "KUPS Sukses Bersama" in livestock businesses (silvopasture), "KUPS Lestari Jaya" in agricultural/plantation businesses (agroforestry), "KUPS Porang" in porang commodity businesses, and "KUPS Nilam" in patchouli commodity businesses.

Based on research results, the role of production units has not been actively implemented because the group is still in the stage of preparing a business proposal for assistance to relevant parties. Therefore, there is no group role in providing production facilities and infrastructure for the members' businesses. Business proposals that are still in the drafting stage are requests for assistance in the form of productive economic tools that will be addressed to the government or the private sector to provide facilities and infrastructure that can support the production of the members' businesses. Farmers group can function as providers of production facilities and infrastructure, which helps reduce members' difficulties in accessing various important inputs to increase business productivity (Sabinus et al., 2021). To date, members have run their livestock and agricultural/plantation production businesses independently with their families and with the assistance of other members when needed. This indicates that the group's role as a production unit is still in the preparation stage and requires further support to be implemented effectively.

e. Farmers Group as a Forum for Cooperation

Farmers group act as a collaborative forum that facilitates group collaboration with external parties or between group members to support forest utilization business activities. The role of collaboration supports collaboration between group members, enabling them to help each other in facing business challenges (Santi et al., 2024). Based on the results of interviews with members, it was stated that farmers group have not actively implemented collaboration, especially with external parties. The collaboration carried out is only collaboration between members, especially when they need assistance in implementing forest utilization. In its implementation, "HKm Ulusena" Farmer Group carries out external collaboration with seedling providers in an effort to maintain forest sustainability by supporting plant seedlings consisting of durian, jengkol, petai, sengon, and teak seedlings. Planting these seedlings is an effort to implement watershed rehabilitation. This collaboration was created with the assistance of the role of facilitators and support from "KPH Gularaya Unit XXIV".

Internally, cooperation among group members occurs in land preparation, harvesting, and processing of non-timber forest products. Collaboration among group members increases activity efficiency by involving a large workforce and can strengthen a sense of togetherness and social relationships among group members. Farmers group have the capacity to foster collaboration among members, which can add value to each member's business (Rachmawati et al., 2021). Collaboration among members often leads to collective business management, which ultimately improves production efficiency.

4. Livestock Farmers' Perceptions of the Utilization of the Ulusena Community Forest

a. Sensation

Sensation is the initial stage of the process received by the senses, which is then transmitted to the brain for processing. Sensation provides initial stimuli in the form of information that is then processed through perception to determine the most appropriate choice (Prayoga, 2025). For livestock farmers who are members of "HKm Ulusena" Farmers Group, specifically regarding the utilization of the Ulusena Community Forest, the most important are sight and hearing because both are very important in carrying out daily forest utilization activities. The sensations of livestock farmers who are members of "HKm Ulusena" Farmers Group can be seen in **Figure 9**.

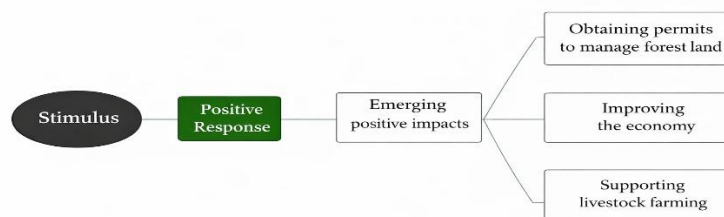


Figure 9. Farmers' sensation of the "HKm Ulusena" Farmers Group
Source: Processed primary data (2025)

The feelings expressed by livestock farmers in "HKm Ulusena" Farmers Group reflect an emotional response to the utilization of the Ulusena Community Forest, particularly in relation to livestock farming. These responses can range from feelings of happiness, neutrality, or displeasure, depending on the farmers' experience in utilizing the

Ulusena Community Forest. Research findings indicate that livestock farmers exhibited a positive response, typically characterized by feelings of happiness. The positive responses expressed by livestock farmers in the Ulusena Community Forest Farmers Group reflect the positive impacts of the Ulusena Community Forest Farmers' utilization. These positive impacts include increased peace of mind due to the legally recognized permit for utilization of the Ulusena Community Forest, increased economic income from the sale of cultivated non-timber forest products (NTFPs), and access to livestock feed from the Community Forest land. Positive responses can arise when the social forestry program is implemented with clear provisions. Overall, these positive responses indicate that the utilization of the Ulusena Community Forest by livestock farmers has provided benefits, particularly in supporting their livestock businesses (Putri and Azizah, 2024).

b. Attention

Attention is the processing of information that concerns the livestock farmers of “HKm Ulusena” Farmers Group regarding the utilization of the Ulusena Community Forest. Attention is an individual's reaction to the activity of attention to an object (Hardianty, 2022). The attention of livestock farmers to the utilization of the Ulusena Community Forest can provide attention to regulations and interesting information related to the utilization of the Ulusena Community Forest. The attention of livestock farmers of “HKm Ulusena” Farmers Group regarding the utilization of the Ulusena Community Forest can be seen in **Figure 10**.

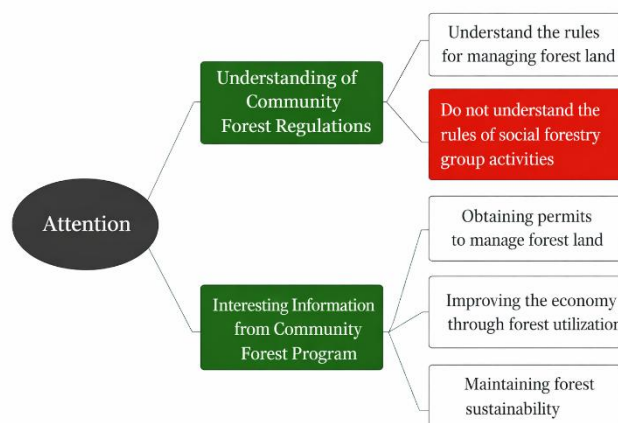


Figure 10. Farmers’ attention of ”HKm Ulusena” Farmers Group
 Source: Processed primary data (2025)

Based on the research results, the attention of member farmers towards understanding the regulations on the use of community forest Fhas been understood, especially regulations related to the technical implementation of forest land management, such as the prohibition of land burning and the recommendation to plant woody trees. However, the members of the Ulusena Community Forest Farmers Group have not yet understood the regulations related to administrative implementation, especially in group activities such as the preparation of social forestry management plan and the annual work plan, which have been assisted by the preparation of the facilitators so that the farmers are not aware of this. Facilitators not only play a role in technical assistance, but also in institutional assistance and member empowerment with a participatory approach (Raodah et al., 2024).

The form of attention of livestock farmers members of the Ulusena Community Forest Farmers Group to interesting information from the HKm program is that livestock farmers get permission to manage HKm land, get positive impacts from the use of HKm in the form of increased economic income from the sale of HHBK, and livestock farmers are encouraged to maintain forest sustainability by not burning land or cutting down trees and are encouraged to plant woody trees. The attention of livestock farmers to the interesting things from the Village Forest program is that they are given permission to plant on forest land and maintain forest sustainability (Putri and Azizah, 2024).

c. Interpretation

Interpretation is the process of giving meaning to information that has been received and observed through the five senses, so that it has meaning for the livestock farmers who are members of “HKm Ulusena” Farmers Group regarding the utilization of the Ulusena Community Forest. Interpretation is the process of interpreting and giving meaning to the information obtained, by paying attention to events that have occurred (Rusdiana, 2021 in Octavia and Sari, 2024). **Figure 11** shows that based on the results of the study, the interpretation was obtained based on the opinions of livestock farmers who are members of “HKm Ulusena” Farmers Group regarding the utilization, importance, and the implementation of the utilization of the Ulusena Community Forest for the livestock business run by livestock farmers.

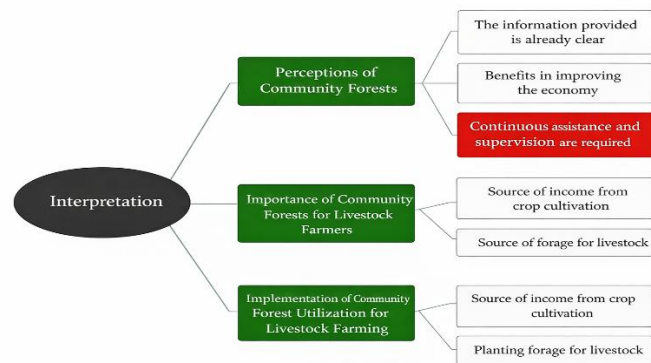


Figure 11. Farmers’ interpretation of ”HKm Ulusena” Farmers group
 Source: Processed primary data (2025)

The results of the study show that the opinions of livestock farmers who are members of “HKm Ulusena” Farmers Group regarding the utilization of the Ulusena Community Forest are that the information provided regarding is quite clearly understood and the livestock farmers believe that the Ulusena Community Forest provides benefits for improving the economy. Regarding the importance of the Ulusena Community Forest, livestock farmers who are members of “HKm Ulusena” Farmers Group give the meaning that forest is very important because it provides an impact as a source of income from the sale of NTFPs and as a source of green fodders. The implementation of the utilization of the Ulusena Community Forest carried out by livestock farmers is by planting green fodders. The impact of the utilization of HKm felt by the community is an increase in the economy and forest sustainability so that the program can be accepted by the community.

Overall research results related to the perception stages of livestock farmers in the Ulusena Community Forest Farmers Group indicate that there are positive perceptions. Livestock farmers tend to provide positive perceptions through actions to accept the use of HKm. Perception results are divided into two: positive perceptions that will lead to the formation of acceptance behavior and negative perceptions that will lead to rejection behavior (Pieter and Lubis, 2010). However, livestock farmers in the Ulusena Community Forest Farmers Group still require assistance in HKm utilization activities. The assistance needed includes increasing the capacity of institutional governance, area utilization, and business governance, especially livestock. Mentoring activities are needed to supervise and guide the Ulusena Community Forest Farmers Group in HKm utilization activities so that forest sustainability is maintained and the HKm program can continue.

CONCLUSION

The utilization of the Ulusena Community Forest is divided into three forms: area utilization in the form of forest land utilization for crop cultivation and green fodder, utilization of non-timber forest products (NTFPs) in the form of utilization of cultivated crop harvests, and utilization of environmental services in the form of utilization of the Moramo Waterfall flow for garden irrigation and clean water sources. Utilization in livestock businesses in the form of utilization of forest areas as land for planting green fodder in the available growing space. The role of the group as a forum for information exchange, discussion forum, forum for increasing knowledge and skills, production unit, and cooperation forum has not been running actively. The new group management together with facilitators periodically carry out the process of increasing the capacity of area governance, institutions, and businesses to form group synergy by starting to reactivate group activities. The perception of livestock farmers who are members of "HKm Ulusena" Farmers Group towards the utilization of the Ulusena Community Forest tends to be positive. The livestock farmers have a positive response because they have felt the positive impact of the utilization of the Ulusena Community Forest, namely obtaining permits to manage the Community Forest land, considering the Community Forest very important for economic sources from the Community Forest, and obtaining resources that support livestock businesses. Farmers already understand the technical regulations in the field. However, they believe that further guidance and supervision are needed to improve management capacity in areas, institutions, and businesses.

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