

Institutions and Partnership in Clove Farming Development: A Case of Puulemo Village in Kolaka District of Southeast Sulawesi

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Abstract: In the realm of rural agricultural development, the efficacy of institutions and partnerships is crucial. These entities not only facilitate resource sharing but also play a critical role in enhancing agricultural productivity and farmer welfare. This research aimed to explore the structures and dynamics of institutions and partnerships in the context of clove farming in Puulemo Village, Baula Sub-District, Kolaka District. With a focus on a population of 200 farmers, where 36 were selected through simple random sampling, the study employed interviews and observation to gather data. The study identifies the necessity for facilitating and service institutions to be more functional and observes that partnerships are still limited. It finds that farmer institutions primarily manifest as farmer groups and Village-Owned Enterprises, vital for encouraging farmer cooperation towards shared objectives. Institutional patterns include facilitating and service institutions, while the predominant partnership form involves small farmers, typically in a general trade pattern.

Keywords: clove, development, farming, institutions, partnership.

1. Introduction

Clove, a significant commodity in the plantation sector, holds a promising developmental prospect with substantial export opportunities. Indonesia has seen a remarkable increase in clove exports, demonstrating its crucial role in the agricultural landscape. In 2018, clove exports surged by 123% from the previous year, reaching 20,246 tons, and continued to grow significantly in 2019 [1]. This remarkable export performance underscores the importance of cloves not only in contributing to Indonesia's plantation sector but also in its broader national economic development. As a key player in the global spice market, Indonesia's clove industry plays a significant role in shaping the country's agricultural export dynamics.

In Southeast Sulawesi, clove holds a position of regional significance, contributing markedly to the province's agricultural output. Particularly in Kolaka, the cultivation of clove represents a substantial part of the local economy, providing livelihoods for a significant portion of the population [2]. This region's climate and soil conditions are notably conducive to clove cultivation, enabling the production of high-quality cloves that are sought after both locally and in

international markets. The strategic role of clove cultivation in Kolaka not only enhances the economic resilience of local communities but also contributes to the region's identity as a key player in Indonesia's spice trade.

The development of clove agribusiness in Indonesia, while promising, faces numerous challenges. Farmers often contend with issues such as fluctuating market prices [3], which can significantly impact their income stability. Additionally, the lack of access to modern farming techniques and efficient agricultural practices hinders productivity and quality [4]. Environmental challenges, including climate change [5] and pest infestations, further exacerbate the situation, affecting crop yields. Moreover, small-scale farmers frequently face difficulties in accessing credit facilities, which limits their capacity to invest in better agricultural inputs and technologies [6]. These multifaceted challenges underscore the need for strategic interventions to support and sustain the clove agribusiness sector.

Partnerships in agribusiness are essential for addressing the challenges faced by farmers and enhancing industry growth. According to Sayaka as quoted in Suddin [7], these collaborations, ranging from government agencies to private enterprises, play a vital role in providing farmers with access to better resources, including technological advancements and market information. Partnerships help bridge the gap between small-scale farmers and larger markets, enabling more effective distribution and marketing strategies. Furthermore, they facilitate knowledge transfer, empowering farmers with best practices in sustainable agriculture. The synergy from these partnerships not only aids in mitigating the problems faced by farmers but also contributes to the overall development and resilience of the clove agribusiness sector.

Institutions play a critical role in the development of the clove agribusiness sector [8]. They encompass a range of entities including government bodies, cooperatives, and local farmer organizations. These institutions are pivotal in setting and enforcing quality standards, providing training, and facilitating access to finance and inputs. They also act as mediators in market negotiations, ensuring fair practices. By addressing systemic issues like land rights, infrastructure, and

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market access, institutions are crucial in overcoming the barriers that smallholder farmers face, thereby enhancing productivity, sustainability, and profitability in the clove agribusiness sector.

The imperative for research in the realm of institutions and partnerships within clove farming is paramount. Such research is crucial for understanding the dynamics between various stakeholders, identifying gaps in current models, and proposing innovative solutions to enhance efficiency and sustainability. It offers insights into the effectiveness of existing structures and collaboration mechanisms, and explores how these can be optimized to support farmers better. This research is not only vital for informing policy and practice but also for ensuring the long-term viability and growth of the clove agribusiness sector.

2. Materials and Methods

This study was conducted in Puulemo Village, Baula Sub-District, Kolaka Regency, between November and February 2023. The research location was chosen purposively due to its unique institutional patterns and partnerships in clove farming development. The population consisted of 200 clove farmers in the village, with a sample size of 36 farmers selected using simple random sampling.

The study primarily utilized qualitative data, gathered through direct interviews with farmers. Primary data was obtained from field observations and interviews, focusing on issues directly relevant to the study's objectives. Secondary data was sourced from institutional publications and local agricultural offices, providing supplementary information.

Data collection techniques included interviews, literature review, and documentation. Interviews were conducted to gather primary data, using questionnaires for structured responses. Literature reviews were used to collect secondary data regarding institutional structures and partnership models in clove farming. Documentation involved photographic and recorded evidence of the research conducted in Puulemo Village.

The research variables included institutional patterns (comprising supervisory institutions, service institutions, and business institutions), and partnership models (inti-plasma, sub-contract, and general trade partnerships). Operational concepts were defined to clarify the study's scope, including respondent demographics, land area, partnership types, and institutional categories.

Data analysis was conducted using qualitative descriptive analysis, focusing on the institutional and partnership patterns in clove farming. The analysis adhered to the methods described by Miles and Huberman [9], ensuring continuous evaluation at each research stage until data saturation was achieved.

3. Results and Discussion

A. Institutional Forms

1) Farmer group

Farmer groups are collectives of farmers formed based on shared interests within their environmental (social, economic,

resource) conditions, supplemented by mutual familiarity among farmers to advance their agricultural enterprises. The development of farmer groups is aimed at applying agribusiness systems and increasing farmer participation by collaborating with other relevant parties to develop their agricultural business [10].

The awareness of farmer groups is crucial, especially in fostering communication between groups that arises from necessity, not coercion or specific project incentives. This awareness can drive and guide farmers to collaborate economically. Members of a group should share common interests and trust, fostering cohesive and harmonious cooperation [11]. The farmer groups in Puulemo Village, Baula District, as explained by Mr. Musliadi, show that:

“The group awareness in Clove Farmer Groups is admittedly low, where I, as the group leader, often inform about the importance of expanding the group, especially since cloves are a potential crop in this region. However, each member has their own view, for instance, questioning the need to develop and strengthen the group if members are preoccupied with their individual activities. We invite farmers monthly to discuss the progress of clove plants in each group. When there are failures or pest and disease attacks, these need to be discussed carefully. But the response from several group members is often that they prefer to work independently, leading to a lack of group awareness.”

This is in line with the statements of the Farmer Group leader, Mr. Abunawas, who asserts that:

“Farmer understanding of group awareness is declining due to the lack of unity among group members. For example, when there is a demonstration of new clove seed varieties suitable for Puulemo Village, group members sometimes do not attend these important events, though it's crucial for farmers to evaluate which clove varieties are suitable and profitable for development in Puulemo Village.”

Based on the interviews, it can be concluded that farmer group awareness is seen as crucial and influential in motivating other farmers, fostering cooperation among groups to achieve desired interests and goals. This aligns with Indaryati's research, which found that farmer groups need performance improvement to increase access to services and marketing to meet consumer needs [12]. However, in her research, the community was aware of the importance of farmer groups in improving the quality of their farming business, whereas in this study, the groups still exist but community awareness is lacking. The lack of group awareness could lead to less group dynamics, which will have implication on the behavior of the group or its members to achieve their goals. A more dynamic group will be functioning more effectively for the attainment of the goals of its members in their livelihoods [11].

2) Village owned enterprise

The Village-Owned Enterprise (BUMDes) is an instrument for local economic empowerment with various types tailored to the potential of the village business institution managed by the village government. Its capacity enhancement aims to improve the economy and welfare of village residents through the development of economic ventures. BUMDes also impacts the

increase of the village's original revenue (*Pendapatan Asli Daerah* or PAD), enabling the village to undertake development and improve community welfare [13].

BUMDes exists to accommodate all activities in the economic and public service sectors managed by the village or through inter-village cooperation. Its presence contributes to the local economy and empowers potential for village development [14].

In Puulemo Village, Baula Sub-District, BUMDes is managed by the Village Government in collaboration with the community. Its management involves the community, aiming to improve the local economy and welfare. The management of BUMDes in Puulemo Village is based on discussions with the village government and community to achieve desired outcomes. As the Head of Puulemo Village stated:

"Before forming the management, we conducted socialization and learning about BUMDes, then started looking for capable managers, followed by discussions. The BUMDes managers can then plan their work for mutual benefit to the village and involved community."

The interviews suggest that managing BUMDes strategies involves a management team running it effectively to benefit the community, especially in clove farming. Awareness about BUMDes is crucial for farmers to get better information and plan for agricultural development, particularly in clove farming in Puulemo Village. Marrus [15] states that strategy is a process of determining top leaders' plans focused on long-term organizational goals, accompanied by ways to achieve these goals. The BUMDes manager in Puulemo Village mentioned:

"The management system of BUMDes in Puulemo Village is about creating business opportunities, with all business forms being profitable."

The interviews conclude that BUMDes management aims to create business opportunities. The government plays a crucial role in managing potentially profitable businesses in various sectors, such as collectors buying agricultural products like cloves from farmers and selling them at higher prices.

Village business institutions managed by the community and village government aim to strengthen the village economy, formed based on needs and potential, according to Law No. 32 of 2004 on regional government, including for increasing village original revenue in Puulemo. Contrary to Darwis's research, local institutions are formed due to collective needs, while government-formed institutions focus on village development programs [16].

B. Institutional Pattern

According to Dwiarta [17], institutional capacity development is a planned social change process intended as a means to drive change and innovation. Institutional transformation in farmers through the development of institutions can make them a crucial part in meeting their agricultural needs. There are two institutional patterns in Puulemo Village, Baula Sub-District, Kolaka Regency: facilitating institutions and service institutions.

1) Facilitating institution

Facilitating institutions play a pivotal role in enabling

farmers to access market information, technology, and other vital resources, thereby boosting productivity, operational efficiency, and income. These institutions encompass entities focused on human resource development, as well as those dedicated to innovating and disseminating technology tailored to specific locations. Key players in providing training, agricultural extension, research, and development include universities, Agricultural Technology Assessment Institutes, and Extension Offices [18]. Extension officers, especially at the village level, are instrumental in disseminating information about agricultural innovations and technologies, underlining their crucial role in the agricultural sector.

In Puulemo Village, Baula Sub-District, as mentioned by Mr. Yusri:

"There were instances of extension workers providing advice on clove cultivation to increase fruit yield and promote healthy growth. They also shared information about the market value of cloves."

The interviews indicate that while clove farmers require support in accessing market information and crop maintenance, they often do not receive adequate information from extension officers. Instead, they resort to alternative sources, including social media [19]. This underscores the necessity for more proactive engagement from the extension office and relevant government agencies in providing pertinent information to clove farmers. Facilitating institutions, therefore, play a critical role in clove farming. Although Tedjaningsih's research suggests that institutions satisfy farmer needs through production facilities, trade, and extension services [8], this study observed a lack of training or meetings by these institutions specifically focused on clove farming development.

2) Service institutions

Service institutions include those providing production facilities, capital, marketing, and market information [8]. Production facility institutions are economic entities in production, providing and distributing such facilities, like village cooperative units (KUD). Capital institutions provide funds for the agribusiness sector, both commercially and through government-subsidized credit programs. Marketing institutions are involved in the agricultural produce trade system from producers to consumers. In Puulemo Village, Baula Sub-District, Mr. Harris explains:

"Service institutions in Puulemo Village are rare. There used to be some, but lately, they have ceased functioning, similar to cooperatives. Due to the cooperatives' inactivity and communication difficulties, farmers prefer using their own capital."

The interviews suggest that service institutions are not functioning effectively due to limited government participation, leading clove farmers to rely on their own capital instead of cooperative or KUD loans. Tedjaningsih's research found farmer satisfaction with these institutions, particularly cooperatives [8], but in this study, cooperatives or KUD are no longer active.

C. Partnership Form

Partnership is a business strategy between two or more

parties for a certain period with the goal of mutual profit based on principles of mutual benefit and growth [20]. Tohar defines partnership as a business collaboration between small businesses, including cooperatives, with medium or large enterprises, accompanied by mentoring and development, emphasizing principles of mutual need, strengthening, and benefit [21].

Successful partnerships rely on adherence to business ethics by all parties. This involves understanding and adopting foundational business ethics as a benchmark for partnership operations. Implementing these ethical foundations in a partnership is akin to laying a foundation for a house or building [20].

Partnerships generally involve vertical coordination often followed by contractual relationships or agreements [22]. The government's partnership program policy is a key development strategy supporting small and medium enterprises. This program aims to empower farmers and reduce economic disparities between large agro-industrial companies and small farmers. In Puulemo Village, Baula District, Kolaka Regency, the partnership form involves only small farmers.

Small farmers are characterized as rural and peri-urban residents engaged in autonomous crop farming decisions. Their primary occupation in agriculture is vital for their livelihood [23]. Empowering small farmers involves enhancing their capacity, strength, and access to developmental resources to improve their life quality. Empowered farmers possess knowledge and skills, play a role in decision-making, and can manage and address farming challenges [23]. Mr. Baso states:

"To create a beneficial partnership, farmer groups should organize, particularly in collecting and selling clove produce, to achieve fair prices from various buyers. This partnership development benefits both parties, enhancing farmers' welfare."

The interview concludes that partnerships significantly impact small farmers, enabling them to obtain fair prices from buyers, thus improving their welfare and allowing them to sustain and expand their clove farming ventures.

D. Partnership Pattern

Partnership patterns involve stages designed to leverage strengths and minimize weaknesses of each party, aiming to enhance the capacity of small farmers sustainably. Partnerships, essentially cooperative processes, organize numerous activities, increasingly seen as necessary due to the growing complexity of farmers' needs in response to the diverse and complex needs of non-farmer communities [20], [24]. In Puulemo Village, Baula Sub-District, Kolaka Regency, the partnership pattern is primarily general trade.

General trade partnership is a model where a business relationship exists in the marketing of production. The involved parties are marketers and supplier groups providing commodities needed by the marketers. Mr. Muh. Basri states:

"Currently, in Puulemo Village, the ongoing partnership involves farmers selling their dried cloves only to collectors; thus, there is only one place for farmers to sell their cloves."

Suddin's research shows a partnership system starting from

farmers, collectors, to traditional markets [7]. The interview indicates that the existing pattern in the study location is general trade (collector), with only one collector for clove sales. The general trade partnership system is usually adopted by clove farmers in the form of marketing cooperation and supplying produce to companies that collect clove harvests. This differs from Suddin's findings [7], which identified two partnership patterns: 1) farmers, collectors, and traditional markets; 2) farmers, large traders, provincial traditional markets, and end consumers. His research presented a broader partnership model compared to this study.

The limited partnership in the study area may indeed relate to the nature of clove cultivation and its market dynamics. Since cloves do not require specialized processing and there is no local processing company, the crop is often shipped directly to larger markets like Makassar with minimal processing. This reduces the scope for partnerships in processing or value addition. Additionally, individual selling habits of farmers can limit partnership development. Farmers who sell independently may not feel the need or see the benefit in forming partnerships, leading to a predominantly solitary approach to marketing their produce. This behavior can stem from a variety of factors, including traditional practices, lack of awareness about the benefits of partnerships, or a simple preference for maintaining control over their own sales.

E. Clove Farming Development

Farm is a place where a farmer manages production factors (land, labor, technology, fertilizer, seeds, and pesticides) to grow plant or raise animal effectively and efficiently for high yields and increased income [25]. Agricultural development strategies aim to increase farmers' income and the competitiveness of agricultural commodities.

Formulating strategies includes developing a business's vision and mission, identifying organizational external opportunities and threats, setting long-term goals, creating alternative strategies, and selecting specific strategies for use [26]. Mr. Madi's interview regarding institutions and partnerships in clove farming development in the research location states that:

"The presence of institutions and partnerships positively impacts farming development, informing farmers about market conditions. Currently, only collectors are present for selling produce, which is similar to the role of institutions providing market information. We would benefit from more diverse partnerships, including companies, to not only sell produce but also provide capital for clove farming."

The interview concludes that institutional (farmer groups) and partnership (collectors) roles in Puulemo Village significantly aid farmers in training, selling harvests, and market information. Farmers have good relationships with these entities, valuing their guidance and implementing their advice in farming.

4. Conclusion

This study reveals that farmer institutions, comprising farmer groups and Village-Owned Enterprises (BUMDES), play a

critical role in fostering cooperation and achieving collective goals. However, the functionality of facilitating and service institutions needs enhancement, and partnerships among farmers are limited, primarily involving small farmers engaged in general trade. This underscores the necessity for stronger institutional support and broader partnership frameworks to optimize the efficacy and sustainability of clove farming in the region. Based on study results, it is recommended to strengthen institutional support, expand partnership model, improve information dissemination, promote farmer group activities, and advocate for more targeted government interventions and policies.

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