

I. INTRODUCTION

1.1. Background

Agriculture is a vital sector in Indonesia because it supplies food and absorbs a substantial share of the rural labor force (Setyanti, 2021). Although changes in the economic structure have shifted agriculture's contribution and employment patterns, improving farm-level productivity remains an urgent need. Persistent constraints include small farm sizes, unequal access to technology, and farmers' weak bargaining position in the market. Diversification based on local food commodities is therefore an important option for reducing dependence on rice and expanding regional agribusiness opportunities. Cassava is a strategic commodity because it can serve as an alternative carbohydrate source and as raw material for food and non-food industries. In Indonesia, cassava is processed into dried cassava, tapioca, modified starch, and various value-added household products. These opportunities have gradually shifted cassava from being viewed merely as a "reserve crop" toward recognition as a commodity with broader agroindustrial and market potential (Wiraputra et al., 2019). Nevertheless, inconsistent raw-material quality and limited processing innovation in many regions have constrained value addition. Weak upstream - downstream linkages also cause farmers to sell fresh roots at fluctuating prices, while a larger share of profits is often captured by downstream actors. These conditions underscore the importance of examining cassava farmer institutions so that agribusiness development can proceed in a more coordinated and sustainable manner.

Table 1.1 Cassava Production in Major Producing Provinces in Indonesia, 2018 - 2022 (tons)

Province	Year				
	2018	2019	2020	2021	2022
Lampung	5,016,790	5,438,850	5,820,831	5,643,185	5,952,537
Central Java	2,544,132	2,884,726	3,257,955	2,863,289	2,482,939
East Java	2,239,004	1,888,803	1,552,634	1,618,905	1,434,699
West Java	1,599,223	1,579,185	1,309,557	1,299,196	1,034,950
North Sumatra	848,389	1,226,979	1,092,745	1,065,047	878,767
Special Region of Yogyakarta	890,897	761,032	758,748	758,185	813,758
East Nusa Tenggara	624,080	534,468	508,729	516,662	476,781
Others	2,356,506	2,036,328	1,969,822	1,966,500	1,903,880
Indonesia	16,119,020	16,350,370	16,271,022	15,730,971	14,978,310

Source: Center for Agricultural Data and Information Systems, Secretariat General, Ministry of Agriculture of the Republic of Indonesia (2023)

East Java is one of Indonesia's major cassava production and processing centers and is connected to interregional markets across Java (Nurdiastuti et al., 2014). Cassava production is concentrated particularly in the southern part of the province, where extensive dryland areas make the crop an important source of household income. Cassava-based agroindustry has also developed from household enterprises to larger processing units, especially for processed food products (Suryaningrat, 2016). These supply chains require continuous raw-material availability and clear quality standards to operate reliably. In practice, however, farm supply remains seasonal and root quality varies across locations and seasons. Relationships among farmers, traders, and processors are often based on customary arrangements rather than formal contracts or mutually agreed standards. Farmers' access to market information and processing innovation also remains uneven, causing cultivation and harvesting decisions to be poorly aligned with industrial requirements. Development of cassava-producing areas in East Java therefore

requires institutional support that integrates production, processing, and marketing. Production data by regency/city for 2020 - 2024 indicate substantial year-to-year variation among the province's principal producing areas.

Ponorogo, Pacitan, and Trenggalek Regencies remain areas with relatively high cassava production compared with the other regions presented. Tulungagung Regency, however, experienced a substantial decline in production, particularly in 2024. This condition indicates that cassava production in East Java differs not only among regions, but also changes from year to year. The development of cassava production in selected regencies and cities of East Java Province is presented in below.

Table 1.2 Cassava Production by Regency/City in East Java Province, 2020 - 2024 (tons)

Regency/City	Year				
	2020	2021	2022	2023	2024
Pacitan	198,659	160,726	170,526	154,620	175,761
Ponorogo	295,176	318,841	242,408	298,001	245,107
Trenggalek	149,873	231,326	156,473	98,436	150,266
Tulungagung	59,053	140,252	68,343	71,523	15,780
Blitar	92,916	88,880	76,211	58,097	45,814
Kediri	74,519	73,869	27,543	24,458	20,996

Source: Statistics Indonesia (BPS), Agricultural Indicators of East Java Province 2024

Table 1.2 shows that Ponorogo Regency recorded the highest cassava production during the 2020 - 2024 period, although its production continued to fluctuate. Pacitan and Trenggalek Regencies also maintained relatively high production, whereas Tulungagung experienced more pronounced changes. Cassava production in Tulungagung increased from 59,053 tons in 2020 to 140,252 tons in 2021, but subsequently declined to only 15,780 tons in 2024. This decline indicates a possible problem in the sustainability of cassava production in the region. To determine whether the production decline was associated with changes in harvested area, data

on cassava harvested area by regency and city in East Java Province are presented in Table 1.3. The data show that the decline in Tulungagung's cassava production occurred alongside a reduction in harvested area. The cassava harvested area in Tulungagung declined from 5,063 hectares in 2021 to only 652 hectares in 2024. This contraction was sharper than that recorded in several other areas presented in the table. The cassava problem in Tulungagung therefore concerns not only declining production volume, but also the continuing reduction in harvested area. The decline in harvested area and production provides an important basis for examining cassava farmer-group performance, particularly its role in facilitating access to capital, technology adoption, market information, and product marketing. Research entitled “Performance of Cassava Farmer Groups in Supporting Agribusiness Development in Blendis Village, Gondang District, Tulungagung Regency” is therefore relevant and necessary.

Table 1.3 Cassava Harvested Area by Regency/City in East Java Province, 2020 - 2024 (ha)

Regency/City	Year				
	2020	2021	2022	2023	2024
Pacitan	10,075	8,498	8,354	8,156	8,465
Ponorogo	17,064	14,426	10,862	12,100	9,786
Trenggalek	7,998	11,403	8,125	5,131	6,730
Tulungagung	4,391	5,063	3,647	2,648	652
Blitar	3,344	3,279	2,786	2,100	1,833
Kediri	2,262	2,354	1,107	898	749

Source: Statistics Indonesia (BPS), Agricultural Indicators of East Java Province (2024)

The decline in cassava production and harvested area should not be interpreted solely as a production problem. Instead, it indicates increasing vulnerability in the sustainability of cassava agribusiness and raises questions about the support available to farmers. Farmer groups are expected to assist members in obtaining production inputs, accessing capital, adopting appropriate technology,

receiving market information, and developing marketing cooperation. Therefore, the central issue of this study is the gap between the institutional functions expected by farmers and the actual performance of farmer groups in providing those services. Weak institutional performance can leave farmers acting individually in purchasing inputs, determining harvest schedules, and negotiating prices. A cassava agribusiness system comprises interrelated input-supply, farming, agroindustry, marketing, and supporting-institution subsystems. When one subsystem, such as marketing or financing support, is weak, the entire chain becomes unbalanced and farmers struggle to increase value added (Siallagan et al., 2016). Cooperatives, women farmers' groups, and government programs can improve access to equipment, finance, and promotion, but such support is not always available or active. The absence of collective arrangements for quality standards, weighing, and price information encourages information asymmetry and raises transaction costs, ultimately weakening farmers' bargaining position toward traders and processors. Strengthening cassava farmer groups should therefore focus on organizational capacity, market access, and business partnerships to support more inclusive and sustainable agribusiness development.

Tulungagung Regency has potential for cassava development because the commodity is cultivated in several areas and can be used as raw material for local food-processing activities (Fahmi and Santoso, 2021). However, cassava agribusiness development has not yet been fully supported by coordinated relationships among farmers, farmer groups, traders, processors, and government institutions. Farmers continue to face limited market information, unstable prices, weak processing development, and the absence of stronger collective marketing

arrangements. These conditions demonstrate that cassava agribusiness problems are related not only to cultivation, but also to the capacity of farmer institutions to coordinate production, services, and marketing activities. Household-scale samiler cracker enterprises in Tulungagung demonstrate that downstream cassava processing is already taking place, although promotion and sales still depend largely on traditional methods (Pratiwi et al., 2022). Limited information, access to training, and market-network support prevent small-enterprise institutions and raw-material farmer institutions from reinforcing one another. Coordination among cassava farmers, processors, and local government is required so that raw-material quality, continuity of supply, and marketing strategies can be jointly agreed upon. Cassava agribusiness development in Tulungagung will be more effective when farmer institutions are able to establish collective cooperation through farmer groups or farmer-group associations, cooperatives, or partnerships with processing businesses (Fahmi and Santoso, 2021). These institutional problems provide the basis for investigating cassava farmer-institution performance in Gondang District, Tulungagung Regency, in order to support more integrated agribusiness development (Fahmi and Santoso, 2021).

The urgency of this research lies in the need to evaluate farmer groups on the basis of their actual functions rather than their formal existence. The presence of farmer groups does not automatically indicate that members have received adequate institutional services. A systematic assessment is therefore required to determine whether farmer groups have met farmers' needs, which services remain below expectations, and which institutional improvements should be prioritized.

Without such an assessment, farmer-group strengthening programs may not directly address the problems experienced by cassava farmers. (FAO and IFAD, 2019).

Institutional problems in Tulungagung's cassava sector have become increasingly important because the decline in production and harvested area indicates issues that require further investigation. Gondang District, the research location, has farmers organized into farmer groups, but the existence of those groups must be examined through their performance rather than merely through their membership numbers or formal institutional status. Local farmer institutions are expected to help farmers obtain price information, gain access to capital, participate in technology training, establish marketing cooperation, and strengthen relationships with cassava agribusiness actors. When these institutions do not function effectively, farmers become more vulnerable to price fluctuations, information limitations, and difficulties in expanding markets for their products. These conditions provide the rationale for conducting. This research is important because its findings can identify institutional attributes that already function well, attributes that require improvement, and institutional-strengthening strategies that are most appropriate to the conditions of cassava farmers in the research area. Accordingly, the study is directed toward analyzing farmer-institution performance, assessing the role of institutions in facilitating capital access, technology adoption, and market expansion, and formulating more targeted strategies for strengthening cassava farmer institutions (FAO and IFAD, 2019).

Table 1.4 Harvested Area, Productivity, and Cassava Production in Gondang District, 2021 - 2025

Description	Year				
	2021	2022	2023	2024	2025
Harvested Area (ha)	230	190	194	63	52
Productivity (quintals/ha)	271.16	284.17	285.53	269.42	270.96
Production (tons)	6,236.68	5,399.25	5,539.37	1,697.37	1,409

Source: Tulungagung Regency Agriculture Office (2026)

Table 1.4 shows that cassava production in Gondang District declined from 6,236.68 tons in 2021 to 1,409 tons in 2025, while the harvested area decreased from 230 hectares to 52 hectares. In contrast, productivity remained relatively stable at more than 260 quintals per hectare. These data suggest that the decline in production occurred primarily alongside the contraction of the harvested area rather than a substantial decline in yield per hectare. However, the production decline is used only as a contextual indication of challenges to cassava-agribusiness sustainability and is not treated as a direct measure of farmer satisfaction. In this study, farmer satisfaction refers specifically to farmers' assessments of the services and performance of their farmer groups.

At the local level, Blendis Village was selected because cassava farming is supported by four farmer groups, namely Subur Santoso I, Subur Santoso II, Subur Santoso III, and Subur Santoso IV, with a combined membership of 165 farmers. The village has uneven irrigation conditions, and farmers commonly use intercropping systems to adjust to land and water availability. Cassava remains suitable for these conditions because it requires relatively limited water and can be cultivated on dryland. Nevertheless, cassava is generally sold as fresh roots through traders or local intermediaries, while collective marketing, value-added processing,

price-information services, and partnerships with processing businesses remain limited. These conditions indicate that the main problem in Blendis Village is not the absence of farmer organizations, but their limited capacity to connect farmers with technology, production inputs, capital, information, and markets.

Based on these conditions, the research gap concerns the absence of a comprehensive assessment that connects farmer-group performance, farmer satisfaction, and institutional-strengthening priorities. Evaluating performance alone is insufficient because it does not show whether the services considered most important by farmers have been adequately provided. Similarly, measuring satisfaction alone does not identify which attributes require immediate improvement or which strengthening strategy should be implemented first.

Therefore, this study applies three complementary analytical stages. Importance Performance Analysis is used to identify farmer-group attributes that are considered important but demonstrate inadequate performance. The Customer Satisfaction Index is used to measure farmers' overall satisfaction with farmer-group performance. The Analytical Hierarchy Process is then used to determine priority strategies for institutional strengthening based on expert assessments. Through these stages, the study is expected to provide a clear and measurable basis for improving the role of farmer groups in supporting cassava agribusiness development in Blendis Village.

1.2. Research Questions

Based on the preceding background, the research questions are formulated as follows:

1. What are the importance and performance levels of cassava farmer groups in supporting agribusiness development in Blendis Village, Gondang District, Tulungagung Regency?
2. What is the level of farmer satisfaction with farmer-group performance in supporting cassava agribusiness development in Blendis Village, Gondang District, Tulungagung Regency?
3. Which strategies should be prioritized to strengthen cassava farmer groups in supporting agribusiness development in Blendis Village, Gondang District, Tulungagung Regency?

1.3. Research Objectives

Based on the research questions presented above, this study aims to analyze the performance of cassava farmer groups in supporting agribusiness development in Blendis Village, Gondang District, Tulungagung Regency. Specifically, the objectives of this study are as follows:

1. To analyze the importance and performance levels of cassava farmer groups in supporting agribusiness development in Blendis Village, Gondang District, Tulungagung Regency.
2. To measure farmer satisfaction with farmer-group performance in supporting cassava agribusiness development in Blendis Village, Gondang District, Tulungagung Regency.
3. To determine priority strategies for strengthening cassava farmer groups in supporting agribusiness development in Blendis Village, Gondang District, Tulungagung Regency.

1.4. Research Significance

1. Benefits for Students

This study is expected to broaden students' knowledge and understanding, particularly in agribusiness and agricultural development, concerning the role of agricultural institutions in supporting local food-crop farming. It also provides an opportunity to apply theories acquired during coursework to actual field conditions.

2. Benefits for Future Researchers

This study is expected to serve as a reference and foundation for further research on agricultural institutions, cassava agribusiness, and agricultural development in non-major production areas.

3. Benefits for UPN "Veteran" Jawa Timur

The findings are expected to contribute academically to the development of knowledge at UPN "Veteran" Jawa Timur, particularly in agriculture and agribusiness. The study may also support the university's role in regional agricultural development, farmer-institution strengthening, and the agribusiness development of local food commodities.

4. Benefits for Farmers

This study is expected to inform cassava farmers about the importance of institutions in agribusiness activities. The findings may help farmers identify institutional attributes that require strengthening, particularly access to capital, market information, marketing cooperation, and cultivation technology. They may also guide farmer groups in improving their institutional roles and functions more effectively in support of cassava farming.

5. Benefits for Local Government

This study is expected to provide considerations for local government in formulating policies for cassava agribusiness development and farmer-institution strengthening in Tulungagung Regency, particularly in Gondang District. The findings are also expected to assist local government in understanding the condition of farmer institutions and determining guidance, facilitation, and empowerment programs that are more consistent with the needs of cassava farmers in the field. In addition, this study may serve as a source of information to support sustainable agricultural development based on local food commodities.

1.5. Operational Scope of the Study

To maintain a clear focus, the operational scope of this study is defined as follows:

1. This study was conducted on cassava farmer groups in Blendis Village, Gondang District, Tulungagung Regency.
2. The respondents for the IPA and CSI analyses were cassava farmers who belonged to farmer groups in Blendis Village.
3. The IPA and CSI sample consisted of 62 farmers selected from four cassava farmer groups.
4. The AHP respondents were expert respondents who understood farmer-group institutions and cassava agribusiness, consisting of farmer-group leaders, agricultural extension workers, an agricultural-agency representative, and cassava marketing actors.

5. Farmer-group performance was analyzed through six aspects, namely organizational, economic, social, capital-access, technology-adoption, and market-access and agribusiness-development aspects.
6. Farmer-group strengthening strategies were formulated based on the results of IPA, CSI, field observations, interviews, and AHP assessments.
7. This study did not analyze cassava-farming income in financial terms, but focused on farmer-group performance and priority strategies for strengthening farmer groups in supporting cassava agribusiness development.