ISSN:2527-273X (Online)
Accredited by Ministry of Education, Culture, Research, and Technology with the ranking of Sinta (S4) SK NO.105/E/KPT/2022, 7th April 2022

JIA (Jurnal Ilmiah Agribisnis) : Jurnal Agribisnis dan Ilmu Sosial Ekonomi Pertanian
2024:9(3):259-265
https://ejournal.agribisnis.uho.ac.id/index.php/JIA
doi: http://doi.org/10.37149/JIA.v9i3.1144

THE PERFORMANCE ANALYSIS OF HORTICULTURAL FARMER GROUPS IN TAMPA BULU VILLAGE NORTH POLEANG SUB-DISTRICT BOMBANA DISTRICT

Sulaiman[1*)], Marsuki Iswandi[1)], La Ode Alwi[1)]

[1]Department of Agribusiness Faculty of Agriculture Universitas Halu Oleo Kendari 93232

**Corresponding author:* sulaimanjr34@gmail.com

To cite this article:
Sulaiman, S., iswandi, M., & Alwi, L. O. (2024). The Performance Analysis of Horticultural Farmer Groups in Tampa Bulu Village North Poleang Sub-District Bombana District. *JIA (Jurnal Ilmiah Agribisnis) : Jurnal Agribisnis Dan Ilmu Sosial Ekonomi Pertanian*, *9*(3), 259–265. https://doi.org/10.37149/jia.v9i3.1144

Received: March 25, 2024**; Accepted:** July 08, 2024**; Published:** July 12, 2024

ABSTRACT

This study aims to determine the performance and role of horticultural farmer groups in Tampa Bulu Village, North Poleang Sub-district, Bombana District, Southeast Sulawesi. Through this research, it is expected that strategies can be found to improve the effectiveness and efficiency of farmer groups in developing horticultural farming. This research was conducted from June 2022 to May 2023. The research location was chosen purposively because it has four horticultural farmer groups with 30 members each formed since 2016. The study population was all members of horticultural farmer groups in Tampa Bulu Village, totaling 120 people. The sample was taken randomly using the Taro Yamane formula with a margin of error of 15%, resulting in a sample of 32 people. The variables studied included the characteristics of respondents (age, education, land area, and length of farming) and the performance of farmer groups assessed by their role as a learning class, a vehicle for cooperation, and a production unit. The analytical tool used is Importance Performance Analysis (IPA), which measures the level of importance and performance in a two-dimensional graph. The results showed that most respondents were in the productive age range of 15-54 years (90.63%) with an education level of primarily high school graduates (43.76%). 81.25% of respondents had more than ten years of farming experience, and 50% had less than four dependents. Based on IPA analysis, six attributes were found in the "Improve Performance" quadrant, four attributes in the "Maintain Achievement" quadrant, four attributes in the "Low Priority" quadrant, and three attributes in the "Excessive" quadrant. This research provides insight into the performance and role of horticultural farmer groups and offers recommendations that can be implemented to improve the effectiveness and efficiency of farmer groups in Tampa Bulu Village.

Keywords: farmer group; horticulture; importance performance analysis; performance; role agriculture.

INTRODUCTION

Indonesia is a tropical maritime country with 17,508 islands spanning 1,922,570 km². (Kusumasari, 2019). The country's wet tropical climate, influenced by the monsoon winds, brings distinct seasons: the eastern monsoon from the Pacific Ocean creates the wet season, while the western monsoon from Australia produces the dry season (Kusumasari, 2019). This climatic diversity fosters a prosperous agricultural sector, especially in horticulture, which significantly contributes to Indonesia's economy and the well-being of its population. (Kusumasari, 2019). In addition, Indonesia's vulnerability to natural hazards such as floods, landslides, and droughts has prompted the establishment of a robust disaster management system, positioning the country as a global leader in legal preparedness to reduce human vulnerability to such disasters. (Kusumasari, 2019).

Horticulture in Indonesia, consisting of fruits, vegetables, biopharmaceuticals, and ornamental plants, holds significant promise for improving farmers' welfare as the country's diverse agro-climate supports the cultivation of 323 different commodities. Despite this potential, challenges remain, including suboptimal regulations, inadequate technical training, limited human resources, weak

institutions, and underutilized technological innovations. (Trisnawati & Purnamasari, 2023). To overcome these barriers and accelerate horticultural development, policies aim to improve farmers' capabilities and the institutional capacity of farmer groups, enabling them to effectively support farmers' interests (Suwarnata et al., 2023). By strengthening these aspects, Indonesia can better utilize the economic and social benefits offered by the horticulture sector.

Farmer groups are essential in driving horticultural development by supporting members in overcoming farming challenges and accessing market information, technology, finance, and other critical resources. This support significantly increases farmers' self-reliance and resilience in their agricultural endeavors. Various studies have shown that farmer groups can increase smallholder farmers' access to markets, strengthen business skills, and improve production performance through collective support and collective action (Nwafor et al., 2020) (Shiferaw et al., 2011). In addition, farmer groups link farmers to financial resources that are critical for increasing productivity and income (Abdul-Rahaman & Abdulai, 2020) (Khayyati, 2020).

In Tampa Bulu Village, Southeast Sulawesi, where most of the population is engaged in horticulture, farmer groups have been instrumental in facilitating agricultural progress and development. According to research, farmer groups can increase smallholder farmers' access to markets, strengthen business skills, and improve production performance through collective support and collective action (Martini et al., 2017)(Boni, 2022).

However, in Tampa Bulu Village, farmers' groups mainly function as social gatherings rather than platforms for agribusiness advancement, leading to low member engagement and underutilization of group benefits, hindering the achievement of the group's intended goals. This lack of active engagement reduces the effectiveness of farmer groups, highlighting the importance of increasing participation to maximize the potential impact on agricultural development and community welfare. (Martini et al., 2017) (Boni, 2022).

Through this research, it is expected to find strategies to improve the effectiveness and efficiency of farmer groups in developing horticultural farming. Previous research has shown the importance of farmer groups in agricultural development, but not many have examined the performance and role of horticultural farmer groups in the village. Therefore, this study is novel in analyzing the performance of farmer groups and providing recommendations for more targeted improvements.

Research (Abdul-Rahaman & Abdulai, 2020) shows that farmer groups play an essential role in collective marketing and farm performance in rural Ghana, which is relevant in horticulture in Indonesia as it underscores the importance of institutional and collective support to increase farmers' income. In addition, research by (Basu et al., 2009) highlighted the importance of knowledge management and technology adaptation by farmer groups in improving farm performance. These studies show that with the right strategies, farmer groups can significantly improve the productivity and sustainability of their farming enterprises (Khayyati, 2020). Thus, this research contributes to the literature by providing an in-depth analysis of how horticultural farmer groups can be more effective in achieving their goals, as well as offering recommendations that can be implemented to improve the performance and role of farmer groups in Tampa Bulu Village. This research aims to determine the performance and role of horticultural farmer groups in Tampa Bulu Village.

MATERIALS AND METHODS

This research was conducted in Tampa Bulu Village, North Poleang Subdistrict, Bombana District, Southeast Sulawesi, from June 2022 to May 2023. The research location was selected using a purposive sampling method, considering that this location has four horticultural farmer groups, each with 30 members, and has been formed since 2016. The population of this study were all members of horticultural farmer groups in Tampa Bulu Village, totaling 120 people from four groups. The research sample was taken randomly using the Taro Yamane formula with a margin of error of 15%, resulting in a sample of 32 people. Sampling was done using a simple random sampling method.

Variables in this study included respondent characteristics, such as age, education, land size, and length of farming. In addition, the performance of farmer groups was assessed in terms of their role as learning class, cooperation vehicle, and production unit. The Importance Performance Analysis (IPA) tool was used to answer the research objectives, measuring the importance and performance level in a two-dimensional graph (Martilla & James, 1977).

Data were analyzed descriptively to describe the primary and secondary data collected. Primary data was obtained through direct interviews with respondents using questionnaires, while secondary data was obtained from searching library information, including articles, journals, and

publications of relevant agencies, as well as data from the North Poleang Subdistrict Statistics Agency.

RESULTS AND DISCUSSION

Respondent Characteristics

Respondent characteristics present the demographic and socio-economic conditions of the respondents involved in this study. This data includes essential aspects such as age, education level, farming experience, and number of dependents. These characteristics provide an overview of the profile of horticultural farmers in Tampa Bulu Village, North Poleang Sub-district, Bombana District. This information is essential to understand the respondents' background and socio-economic context, which may affect their performance and role in the farmer group. Analysis of these characteristics also helps identify factors that may affect the effectiveness of the interventions and development strategies proposed in this study. The following is a breakdown of the respondents' characteristics measured:

Table 1. Respondents characteristics

No	Respondent Characteristics	Number of Farmers (People)	Percentage (%)
1	Age (Year)		
	15-54	29	90,63
	>54	3	9,37
2	Education Level		
	Elementary school graduate	9	28,12
	Junior high school graduate	9	28,12
	High school graduate	14	43,76
3	Farming Experience (Years)		
	5-10	6	18,75
	>10	26	81,25
4	Dependents (People)		
	< 4	16	50,00
	> 4 - 6	14	43,75
	> 6	2	6,25

The table above explains the distribution of demographic and socio-economic characteristics of respondents involved in this study. Most respondents were in the productive age range of 15-54 years old, as many as 90.63%, while only 9.37% were older than 54. The education level of the respondents showed that 43.76% had completed senior high school, followed by 28.12% who had completed junior high school and primary school, respectively. Farming experience is also an essential factor, with 81.25% of respondents having more than ten years of experience, indicating that most respondents have sufficient farming knowledge. The number of family dependents shows that 50% of respondents have less than four dependents, 43.75% have 4-6 dependents, and only 6.25% have more than six dependents. This data provides a comprehensive picture of the profile of horticultural farmers in Tampa Bulu Village and can be used to understand the factors that influence their performance and role in farmer groups.

Research shows that factors such as age, education level, farming experience, and number of dependents significantly influence livelihood diversification strategies and agricultural productivity. (Habib et al., 2023) (Paltasingh & Goyari, 2018). In addition, the Importance Performance Analysis (IPA) method used in this study effectively measures performance and importance in various contexts, including agriculture (Martilla & James, 1977)

Horticultural Farmer Group Performance Analysis

Measurement of the performance of horticultural farmer groups is done using a Likert scale. The five leading indicators were translated into some questions organized in the form of a questionnaire, where each question was scored based on the choices given by the respondents. Each respondent's answer was then given a score corresponding to their agreement level with the statement proposed. Cartesian diagrams are used to determine the level of customer satisfaction, whether it is located in a position that must be improved or maintained. (Tuncer et al., 2021) (Gabrow, 2021).

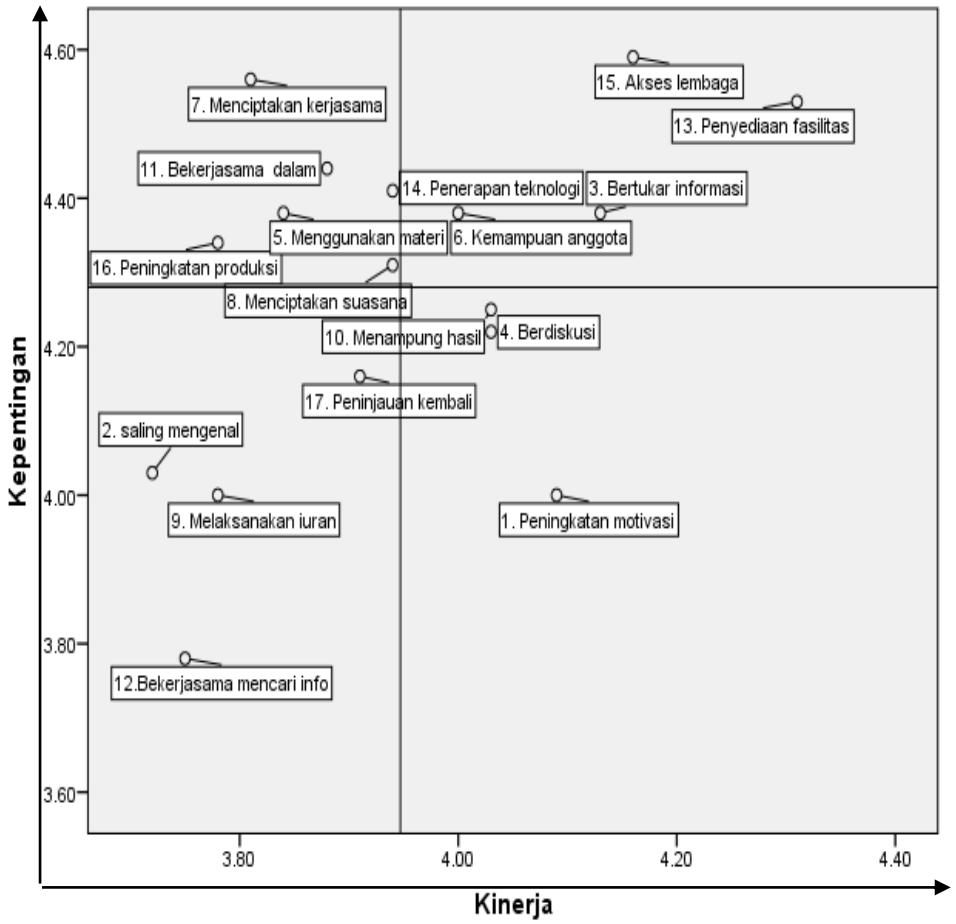

Figure 1. Cartesian diagram of customer satisfaction level

Based on Figure 1, there are six attributes in quadrant A, four attributes in quadrant B, four attributes in quadrant C, and three attributes in quadrant D. Each quadrant can be explained as follows:

Quadrant A, or "Improve Performance," is the top priority where farmers feel the attributes in this quadrant are very important, but performance is not maximized. Attributes in this quadrant include using materials from extension workers, cooperation among group members, an atmosphere of openness in the group, cooperation in the availability of capital, application of more advanced farming technology, and increased production and income of members. According to research, attributes in this quadrant require special attention to be improved because they significantly influence overall satisfaction and performance. (Cladera, 2021).

Quadrant B, or "Maintain Achievement," are attributes whose performance is considered reasonable by farmers and should be maintained. Attributes in this quadrant include exchanging information or experience, members' ability in various crop preparation and maintenance activities, provision of production facilities, and access to capital institutions. Research shows that maintaining performance on these attributes is essential to maintain high satisfaction among farmers (Cladera, 2021)

Quadrant C, or "Low Priority," contains attributes considered less critical, and their level of performance is not very special. Attributes in this quadrant are mutual recognition and respect, implementation of dues for group purposes, cooperation in seeking market information, and review of activities that have been carried out. Attributes in this quadrant have a low priority due to their minimal impact on overall farmer satisfaction (Cladera, 2021).

Quadrant D, or "Excessive," shows attributes whose performance is good and exceeds farmers' expectations but is unimportant to them. Attributes in this quadrant are increasing farmer motivation, discussing problem-solving, and accommodating farm results. Research shows that excessive focus on attributes in this quadrant may be inefficient as it does not increase overall satisfaction (Deng & Pierskalla, 2018)

The Role of Farmer Groups in Horticultural Farming

Farmer groups are farmers who join non-formally based on shared interests, environmental conditions (social, economic, resources), familiarity, and harmony, and have a leader who aims to achieve common goals. (Eda et al., 2023). This farmer group has several characteristics, including (a) members know each other, are familiar with and trust each other; (b) share the same views and interests in farming activities; (c) have similarities in traditions, settlements, types of businesses, economic and social status, language, education, and ecology; (d) there is a division of tasks and responsibilities among members based on mutual agreement. The role of farmer groups in horticultural farming in Tampa Bulu Village, North Poleang Subdistrict, Bombana Regency can be seen in Table 2.

Table 2. The role of farmer groups in horticultural farming

No	Statement	Average Score	Category
1	Farmer groups can provide information	4,38	Very Satisfied
2	Farmer groups can provide facilities and means of production	3,88	Satisfied
3	Farmer groups can plan activities	3,75	Satisfied
4	Farmer groups can apply the five agricultural business technologies	3,44	Satisfied
5	Farmer groups can cooperate with KUD institutions	3,63	Satisfied

Based on Table 2, it can be seen that of the five statements to measure the benchmarks of the role of farmer groups, one statement falls into the very satisfied category, and four other statements fall into the satisfied category. Research data shows that the role of farmer groups supports the success of agricultural businesses (Sargani et al., 2020), (Hilmiati, 2020), (Khoirul Anam & Teguh Soedarto, 2022).. The literature highlights the importance of improving business capabilities in farmer groups through better management practices, such as improving the quality of horticultural crops, increasing product value, and developing institutional support for farmer groups. (Hilmiati, 2020), (Khoirul Anam & Teguh Soedarto, 2022).. Implementing innovations can be significantly improved by focusing on factors such as strong leadership, transparency, regular meetings, and monetizing within farmer groups, leading to more successful and comprehensive farming practices. (Hilmiati, 2020). Farmer group empowerment is identified as a critical strategy to increase community participation in modern agriculture, emphasizing the need for awareness, capacity building, and stakeholder collaboration to drive better agricultural initiatives forward. (Khoirul Anam & Teguh Soedarto, 2022)..

CONCLUSIONS AND SUGGESTION

This study has successfully identified the performance and role of horticultural farmer groups in Tampa Bulu Village, North Poleang Sub-district, Bombana District, Southeast Sulawesi. Based on the analysis results, farmer groups play an essential role in supporting horticultural development by providing information, facilities, and means of production, planning activities, and implementing more advanced agricultural technologies. Farmer groups also demonstrate an excellent ability to cooperate with financial institutions to increase production and member income. The research revealed that despite the many potentials, challenges still need to be overcome, such as the lack of active involvement of farmer group members and the suboptimal utilization of group benefits. This suggests the need for more effective strategies to increase member participation and maximize the impact of farmer groups on agricultural development and community welfare. The findings provide a new contribution to the literature by profoundly analyzing the performance of horticultural farmer groups and providing recommendations that can be implemented for more targeted improvements. As such, this study offers valuable insights for developing policies and interventions to improve the effectiveness and efficiency of horticultural farmer groups in Indonesia.

REFERENCES

Abdul-Rahaman, A., & Abdulai, A. (2020). Farmer groups, collective marketing and smallholder farm performance in rural Ghana. *Journal of Agribusiness in Developing and Emerging Economies*, *10*(5), 511-527. https://doi.org/10.1108/JADEE-07-2019-0095

Basu, D., Banerjee, S., & Goswami, R. (2009). Farmers' Knowledge Management In Banana Cultivation In A Village Of West Bengl, India: A Reflection Of Farmer Managed Technology Adaptation And Transfer In Horticulture. *Acta Horticulturae*, *832*, 49-56. https://doi.org/10.17660/ActaHortic.2009.832.6

Boni, Y. (2022). Agricultural Development's Influence on Rural Poverty Alleviation in the North Buton Regency, Indonesia-The Mediating Role of Farmer Performance. *Economies*, *10*(10), 240. https://doi.org/10.3390/economies10100240

Cladera, M. (2021). An application of importance-performance analysis to students' evaluation of teaching. *Educational Assessment, Evaluation, and Accountability*, *33*(4), 701-715. https://doi.org/10.1007/s11092-020-09338-4

Deng, J., & Pierskalla, C. (2018). They link Importance-Performance Analysis, Satisfaction, and Loyalty: A Study of Savannah, GA. *Sustainability*, *10*(3), 704. https://doi.org/10.3390/su10030704

Eda, K., Kusrini, N., & Oktoriana, S. (2023). The Role of Farmer Groups in Increasing the Productivity of Mustard Farming in North Pontianak. *Journal of Agricultural Social Economics*, *16*(2), 149. https://doi.org/10.19184/jsep.v16i2.40133

Gabrow, R. Y. (2021). Evaluation of customer satisfaction and service quality using SERVQUAL model: the case of fast-food restaurants in Iraq. *Periodicals of Engineering and Natural Sciences (PEN)*, *9*(1), 336. https://doi.org/10.21533/pen.v9i2.1915

Habib, N., Ariyawardana, A., & Aziz, A. A. (2023). The influence and impact of livelihood capitals on livelihood diversification strategies in developing countries: a systematic literature review. *Environmental Science and Pollution Research*, *30*(27), 69882-69898. https://doi.org/10.1007/s11356-023-27638-2

Hilmiati, N. (2020). Farmer Group Institution's Typology and Agricultural Innovation Implementation Sustainability. *SOCA: Journal of Social, Agricultural Economics*, *14*(2), 204. https://doi.org/10.24843/SOCA.2020.v14.i02.p02

Holloway, L., Mahon, N., Clark, B., & Proctor, A. (2023). Changing interventions in farm animal health and welfare: A governmentality approach to the case of lameness. *Journal of Rural Studies*, *97*, 95-104. https://doi.org/10.1016/j.jrurstud.2022.12.004

Khayyati, M. (2020). *Farmer-Based Organizations: A Coalition and Proxy for Development* (pp. 293-303). https://doi.org/10.1007/978-3-319-95675-6_12

Khoirul Anam, & Teguh Soedarto. (2022). Efforts to Encourage Development of Sustainable Modern Agriculture Through Empowerment of Farmer Group. *Agricultural Science*, *5*(2), 91-101. https://doi.org/10.55173/agriscience.v5i2.70

Kusumasari, B. (2019). Natural Hazards Governance in Indonesia. In *Oxford Research Encyclopedia of Natural Hazard Science*. Oxford University Press. https://doi.org/10.1093/acrefore/9780199389407.013.234

Martilla, J. A., & James, J. C. (1977). Importance-Performance Analysis. *Journal of Marketing*, *41*(1), 77. https://doi.org/10.2307/1250495

Martini, E., Roshetko, J. M., & Paramita, E. (2017). Can farmer-to-farmer communication boost the dissemination of agroforestry innovations? A case study from Sulawesi, Indonesia. *Agroforestry Systems*, *91*(5), 811-824. https://doi.org/10.1007/s10457-016-0011-3

Nwafor, C. U., Ogundeji, A. A., & van der Westhuizen, C. (2020). Adoption of ICT-Based Information Sources and Market Participation among Smallholder Livestock Farmers in South Africa. *Agriculture*, *10*(2), 44. https://doi.org/10.3390/agriculture10020044

Paltasingh, K. R., & Goyari, P. (2018). Impact of farmer education on farm productivity under varying technologies: a case of paddy growers in India. *Agricultural and Food Economics*, *6*(1), 7. https://doi.org/10.1186/s40100-018-0101-9

Sargani, G. R., Zhou, D., Raza, M. H., & Wei, Y. (2020). Sustainable Entrepreneurship in the Agriculture Sector: The Nexus of the Triple Bottom Line Measurement Approach. *Sustainability*, *12*(8), 3275. https://doi.org/10.3390/su12083275

Shiferaw, B., Hellin, J., & Muricho, G. (2011). Improving market access and agricultural productivity growth in Africa: what role do producer organizations and collective action institutions have? *Food Security*, *3*(4), 475-489. https://doi.org/10.1007/s12571-011-0153-0

Suwarnata, A. A. E., Sonani, N., & Rosiana, A. (2023). Identification and Strategy for Improving Horticultural Leading Commodities in Women Farmers Groups in Bogor City. *Mimbar Agribusiness: Journal of Agribusiness-Informed Scientific Society Thought*, *9*(1), 1198. https://doi.org/10.25157/ma.v9i1.9364

Trisnawati, P., & Purnamasari, A. I. (2023). Application of Agricultural Productivity Grouping Using K-Means Algorithm. *Infotek: Journal of Informatics and Technology*, *6*(2), 249-257.

https://doi.org/10.29408/jit.v6i2.10198

Tuncer, I., Unusan, C., & Cobanoglu, C. (2021). Service Quality, Perceived Value and Customer Satisfaction on Behavioral Intention in Restaurants: An Integrated Structural Model. *Journal of Quality Assurance in Hospitality & Tourism*, *22*(4), 447-475. https://doi.org/10.1080/1528008X.2020.1802390