

# The Competitiveness Analysis of Superior Village Products in Gunung Sari District, West Lombok Regency, Indonesia

Andy Ayu Shabila<sup>1</sup>, Tajidan Tajidan<sup>2\*</sup>, Candra Ayu<sup>3</sup>

Agribusiness Study Program, Faculty of Agriculture, University of Mataram, Mataram, Indonesia

\*Corresponding Author

DOI: <https://doi.org/10.51584/IJRIAS.2026.110400072>

Received: 09 April 2026; Accepted: 14 April 2026; Published: 07 May 2026

## ABSTRACT

Village superior products play an important role in driving the regional economy by optimizing the management of small industries, agriculture, and handicrafts. This study analyzes the competitiveness of village superior products in Gunung Sari District, West Lombok Regency. This type of research is a descriptive, quantitative study involving 16 respondents and using both primary and secondary data. The analysis includes sorting methods, Composite Performance Index (CPI), and Domestic Resource Cost (DRC). The results show the types of village superior products based on the criteria of the number of Small and Medium Industries (SMEs) and production value, the level of competitiveness of village superior products based on five main criteria (number of Small and Medium Industries (SMEs), production value, percentage of local raw material use, percentage of regional and export marketing, and net B/C ratio) in Gunung Sari District, West Lombok Regency, and the competitiveness of village superior products in utilizing domestic resources and having a comparative advantage. Based on the results of sorting the types of village superior products in Gunung Sari District, West Lombok Regency, the agro-industry sector is dominated by agricultural and plantation-based food processing. Ten villages develop food craft products, and six villages develop non-food craft products. Based on the CPI analysis, the priority for developing superior village products is carving wood-cukli products in Midang Village (ranked highest at 3,634.09), berugaq in Taman Sari and Ranjok Villages (2,851.51 and 2,830.75), and palm sugar in Gelangsar Village (1,662.51). The results of the DRC analysis show that three superior village products are highly competitive, with DRC values  $> 1$ : palm sugar (0.11), carving wood-cukli (0.32), and berugaq (0.44). These findings indicate that superior village products in Gunung Sari District can efficiently utilize domestic resources and are highly competitive. Therefore, business actors are expected to maintain the efficient use of domestic resources by continuously improving product quality, workforce skills, and the application of appropriate technology, thereby enabling sustainable development and contributing to regional economic growth.

**Keywords:** competitiveness, village superior products, composite performance index (CPI), domestic resource cost (DRC), local raw material

## INTRODUCTION

Regional economic development is a strategic effort to sustainably improve community welfare. The agricultural sector plays a vital role in regional economic development by increasing Gross Regional Domestic Product (GRDP), absorbing labor, and promoting community welfare [1]

In the era of globalization, the competitiveness of superior products is a key factor. Increasingly fierce market competition demands that local products be able to compete nationally and internationally. Regions with superior products have strong competitiveness and can increase per capita income by 15-20 percent. [2]. Therefore, local governments need to develop a targeted strategy for developing superior products based on local potential.

Diversity in the management of natural resource potential drives economic growth in communities, increases product value, and creates new jobs. The diversity of local products, such as agricultural goods, processed foods, and small- and medium-sized industries, can serve as the primary basis for strengthening regional economies. This is supported by innovation, market access, and improvements in the quality of human resources [3].

Gunung Sari District, West Lombok Regency, has natural and cultural resources with potential to be developed into high-quality products. In 2023, there were 110 potential business units, dominated by the agro-industry, textiles, and workshop sectors (Secondary Data from the West Lombok Regency Trade and Industry Office, 2023). This indicates that community economic activities still rely on the use of local resources and the development of Small and Medium Enterprises (SMEs).

Limited infrastructure, outdated production technology, and the use of digital promotion contribute to the slow pace of local economic transformation. Therefore, an integrated development strategy is needed to increase business capacity and strengthen the position of superior products in the regional economy. Unintegrated collaboration among businesses, the government, and supporting institutions results in suboptimal, less sustainable business development. Collaboration between stakeholders is a crucial factor in increasing the innovation and competitiveness of MSMEs [4].

Several previous studies have examined the competitiveness of superior products. Research by Wardani et al. (2023) to determine the priority of agro-industries for superior regional MSME clusters, the Analytical Hierarchy Process (AHP) method was used, considering criteria such as competitiveness, workforce, target market, and economic contribution [5]. Another study by Muslim and Nurasa (2011) discussed the competitiveness of mangosteen export commodities using PAM and DRC analysis [6].

Based on this, this study aims to identify the types of superior village products in Gunung Sari District, West Lombok Regency, determine the development priorities for these products, and analyze their competitiveness. This research is expected to provide an empirical contribution to the study of the competitiveness of superior village products and to serve as a basis for consideration by business actors and the government in formulating strategies to improve them.

## METHOD

This study uses a quantitative descriptive approach. This approach was chosen to identify the types of superior village products descriptively, determine the priority for the development of superior products, and analyze the competitiveness of superior village products. The study focuses on the economic value of products produced by SMEs in Gunung Sari District. The location determination was carried out purposively in sixteen villages in Gunung Sari District, namely Jati Sela Village, Sesela Village, Midang Village, Kekeri Village, Mambalan Village, Penimbung Village, Bukit Tinggi Village, Mekar Sari Village, Gelangsar Village, Jeringo Village, Dopang Village, Guntur Macan Village, Ranjok Village, Taman Sari Village, Gunung Sari Village, Kekait Village, because these locations represent the centers of village SME activities.

Respondents were selected based on production value and the number of SMEs producing products of economic value, a total of 16 people, evenly distributed across 16 research locations, with 3 respondents and 1 village informant per location. The data used comprised primary data collected through questionnaires and secondary data sourced from the literature, scientific journals, and related official publications.

Primary data were obtained through a direct questionnaire survey of respondents at the research location. Priority variables for developing superior products were measured using product criteria, including the number of SMEs, production value, percentage of local raw materials, percentage of regional and export marketing, and the Net B/C Ratio. Data analysis was carried out using a sorting method to identify the types of superior village products, and the priority for developing them was determined using the Composite Performance Index (CPI) and Domestic Resource Cost (DRC) analyses to assess their competitiveness. All data processing was performed using Microsoft Excel.

## RESULTS AND DISCUSSION

### Identification of Types of Superior Village Products

Superior products are distributed throughout the villages in Gunung Sari District. Each village produces at least three economic products, all of which are produced by SMEs. Based on these three types of economic-value products, a sorting method is used to identify a superior village product. Data sorting is a method used to select and sort important data, or to filter [7]. The results of sorting products with economic value into superior village products are in Table 1.

**Table 1. Types of Village Superior Products**

No.	Featured products	Villages Name	Types of products	Products Classification
1.	Palm Sugar Semut	Bukit Tinggi	Agroindustry	Food Processing
2.	Various Chips	Dopang	Agroindustry	Food Processing
3.	Palm sugar	Gelangsar	Agroindustry	Food Processing
4.	Bamboo Crafts	Guntur Macan	Craft	Non-Food
5.	Cassava Chips	Gunung Sari	Agroindustry	Food Processing
6.	Cassava Tape Roll	Jatisela	Agroindustry	Food Processing
7.	Jelly	Jeringo	Agroindustry	Food Processing
8.	Palm Sugar	Kekait	Agroindustry	Food Processing
9.	Ting-Ting Peanuts	Kekeri	Agroindustry	Food Processing
10.	Palm sugar	Mekarsari	Agroindustry	Food Processing
11.	Carving Wood-Cukli	Midang	Craft	Non-Food
12.	Pusut Satay	Mambalan	Agroindustry	Food Processing
13.	Stone Mortar	Penimbung	Craft	Non-Food
14.	Berugaq	Ranjok	Craft	Non-Food
15.	Shadow Puppets	Sesela	Craft	Non-Food
16.	Berugaq	Taman Sari	Craft	Non-Food

Source: Processed Primary Data, 2026

Based on Table 1, the types of superior village products developed are dominated by the agricultural and plantation-based food processing agro-industry sector. Ten villages develop food craft products, including chips, tape rolls, jelly, ting-ting peanuts, and pusut satay, while six villages develop non-food craft products, including bamboo crafts, carvings, mortars, berugaks, and cukli. The diversity of processed products has been proven to increase added value and community income [8]. Thus, Gunung Sari District has 16 superior village products. These superior village products include processed food, agro-industrial products, and non-food craft products.

### Determining Priorities for Superior Village Products

The priority of developing superior village products in this study was carried out using a Composite Performance Index (CPI) weighting analysis of five main criteria, namely the number of SMEs, production

value, percentage of local raw material use, percentage of regional and export marketing, and Net B/C Ratio to identify the superior village products that have the most potential for development.

### Criteria and Weight Properties

The criteria and weights are presented in Table 2.

**Table 2. Criteria and Weighting**

No.	Criteria	Weight	Meaning of Weight
1.	Number of SMEs	0.25	The number of small and medium-sized industry players involved. The more SMEs there are, the stronger the community's economic base.
2.	Production Value	0.15	Shows the economic output value of the village's leading products. The higher the value, the greater the economic contribution.
3.	Percentage of Local Raw Materials	0.25	Measuring village independence in providing local raw materials, which supports sustainable production.
4.	Net B/C Ratio	0.15	Describes the level of financial feasibility of a business. The higher the B/C value, the more viable and profitable it is.
5.	Regional Marketing and Export Percentage	0.20	Describes the product's market reach. The broader the market, the greater the potential for economic growth.

Based on Table 2, the meaning of weighting is that the nature of all criteria in determining the priority of superior products is a positive trend: all criteria aim to be maximized; the larger the number, the higher the final CPI score.

The weight of the criteria is based on the OVOP Study Report of West Lombok Regency (2026), compiled by experts (expert judgment) and through managerial agreement, as the report has undergone a systematic study and is in accordance with the conditions of the research area [8].

### Trend Transformation Results

After identifying the nature and weighting of the criteria, the data were transformed based on the smallest percentage value for each indicator. The data transformation aimed to standardize the direction of the assessment so that all criteria could be compared on a proportional basis. The transformation process was carried out using the smallest-percentage-value method. Each value in a criterion was divided by the smallest value for the same criterion. The result was then multiplied by 100 to form a percentage. The results of the trend transformation based on the smallest percentage value are shown in Table 3.

**Table 3. Trend Transformation Results Based on the Percentage of the Smallest Values**

No.	Product name	Criteria				
		Number of SMEs	Production Value	Local Row Material (%)	Regional Exports	Markets and Net B/C Ratio
1.	Palm Sugar Semut	3,000	2,727.27	1,000	300	120
2.	Various Chips	700	6,818.18	700	900	108
3.	Palm sugar	5,000	272.73	1,000	500	144
4.	Bamboo Crafts	500	545.45	1,000	200	132
5.	Cassava Chips	1,000	818.18	700	800	144
6.	Cassava Tape Roll	600	1,818.18	200	120	124

7.	Jelly	100	7,272.73	100	200	124
8.	Palm Sugar	1,000	454.55	970	700	156
9.	Ting-Ting Peanuts	200	2,386.36	900	700	184
10.	Palm sugar	2,000	100.00	1,000	100	228
11.	Carving Wood-Cukli	1,000	20,727.27	800	300	100
12.	Pusut Satay	2,500	681.82	1,000	400	168
13.	Stone Mortar	100	454.55	1,000	300	172
14.	Berugaq	400	16,363.64	900	130	168
15.	Shadow Puppets	1,000	3,636.36	800	900	124
16.	Berugaq	3,000	12,272.73	900	100	104
	Smallest Value	100	100	100	100	100

Source: Processed Primary Data, 2026

The results in Table 3 will then be used to compute the weighted matrix, which will be multiplied by each criterion's weight.

### Weighted Matrix Calculation Results

The weighted matrix is calculated by multiplying the trend transformation results in Table 3 by each criterion's weight (Table 2). The results of the weighted-matrix calculation are shown in Table 4.

**Table 4. Weighted Matrix Calculation Results**

No.	Product name	Criteria					Net B/C Ratio
		Number of SMEs	Production Value	Local Row Material (%)	Regional Exports	Markets and	
1.	Palm Sugar Semut	750	409.09	250	60		18.00
2.	Various Chips	175	1,022.73	175	180		16.20
3.	Palm sugar	1,250	40.91	250	100		21.60
4.	Bamboo Crafts	125	81.82	250	40		19.80
5.	Cassava Chips	250	122.73	175	160		21.60
6.	Cassava Tape Roll	150	272.73	50	24		18.60
7.	Jelly	25	1,090.91	25	40		18.60
8.	Palm Sugar	250	68.18	242.5	140		23.40
9.	Ting-Ting Peanuts	50	357.95	225	140		27.60
10.	Palm sugar	500	15.00	250	20		34.20
11.	Carving Wood-Cukli	250	3,109.09	200	60		15.00
12.	Pusut Satay	625	102.27	250	80		25.20
13.	Stone Mortar	25	68.18	250	60		25.80
14.	Berugaq	100	2,454.55	225	26		25.20
15.	Shadow Puppets	250	545.45	200	180		18.60
16.	Berugaq	750	1,840.91	225	20		15.60
	Weight	0.25	0.15	0.25	0.20		0.15

Source: Processed Primary Data, 2026

The result of the weighted-matrix calculation is a weighted performance matrix that describes each criterion's contribution to the composite score. Based on the results of the calculations in Table 4, the CPI value is then calculated.

**Composite Performance Index (CPI) Calculation Results**

The CPI results are obtained by summing all criteria in the weighted matrix (Table 4). The CPI calculation results are in Table 5.

**Table 5. CPI Value Calculation Results**

Source: Processed Primary Data, 2026

No.	Featured products	Villages Name	CPI Value
1.	Palm Sugar Semut	Bukit Tinggi	1,487.09
2.	Various Chips	Dopang	1,568.93
3.	Palm sugar	Gelangsar	1,662.51
4.	Bamboo Crafts	Guntur Macan	516.62
5.	Cassava Chips	Gunung Sari	729.33
6.	Cassava Tape Roll	Jatisela	515.33
7.	Jelly	Jeringo	1,199.51
8.	Palm Sugar	Kekait	724.08
9.	Ting-Ting Peanuts	Kekeri	800.55
10.	Palm sugar	Mekarsari	819.20
11.	Carving Wood-Cukli	Midang	3,634.09
12.	Pusut Satay	Mambalan	1,082.47
13.	Stone Mortar	Penimbung	428.98
14.	Berugaq	Ranjok	2,830.75
15.	Shadow Puppets	Sesela	1,194.05
16.	Berugaq	Taman Sari	2,851.51

Based on Table 5, the priority for developing superior village products in Gunung Sari District can be ranked by CPI value from highest to lowest, as shown in Table 6.

**Table 6. Priority Order for Developing Superior Village Products Using the Composite Performance Index (CPI) Method**

No.	Featured products	Villages Name	CPI Value
1.	Carving Wood-Cukli	Midang	3,634.09
2.	Berugaq	Taman Sari	2,851.51
3.	Berugaq	Ranjok	2,830.75
4.	Palm sugar	Gelangsar	1,662.51
5.	Various Chips	Dopang	1,568.93
6.	Palm Sugar Semut	Bukit Tinggi	1,487.09
7.	Jelly	Jeringo	1,199.51
8.	Shadow Puppets	Sesela	1,194.05
9.	Pusut Satay	Mambalan	1,082.47
10.	Palm sugar	Mekarsari	819.20
11.	Ting-Ting Peanuts	Kekeri	800.55
12.	Cassava Chips	Gunung Sari	729.33
13.	Palm Sugar	Kekait	724.08
14.	Bamboo Crafts	Guntur Macan	516.62
15.	Cassava Tape Roll	Jatisela	515.33
16.	Stone Mortar	Penimbung	428.98

Source: Processed Primary Data, 2026

Based on Table 6, wood carving-cukli products in Midang Village (3,634.09) rank highest. This value indicates the top priority in developing superior village products. Carving wood-cukli products have good financial performance, with a significant number of small and medium enterprises (SMEs) and high production value. The crafts sector boasts a high level of competitiveness, workforce skills, and sustainable product innovation and development [9].

Berugaq products in Taman Sari Village (2,851.51) and Ranjok Village (2,830.75) ranked second. The CPI value indicates the potential for developing products based on local wisdom. In line with Setiajatnika and Astuti (2022), who emphasized that superior products based on local wisdom can strengthen the community's economy while maintaining regional cultural identity [14].

Palm sugar products in Gelangsar Village (1,662.51) are ranked third. The number of SMEs in Gelangsar Village is high, and the use of local raw materials reaches 100%, yet production value remains relatively low. This situation places Gelangsar Village's palm sugar product third on the priority list for developing superior village products.

Products with medium-to-low CPI values require marketing improvements and increased production efficiency. These products include various chips, palm sugar, and jelly. This research aligns with the findings by Tajidan et al. (2026) [15]. This demonstrates that the CPI method provides consistent assessments in prioritizing superior village products. Therefore, products with the highest CPI values should be prioritized in local economic development policies through policy support, business mentoring, and sustainable budget allocation.

### Analysis of the Competitiveness of Village Superior Products

The analysis of the competitiveness of village superior products in Gunung Sari District was conducted using the Domestic Resource Cost (DRC) method, which assesses the efficiency of domestic resource use in generating a product's added value. [12]. A lower DRC value indicates greater comparative advantage; if the DRC is  $<1$ , the product is competitive. The DRC calculation is carried out through several stages, namely: (1) identifying cost and output components, (2) grouping tradable and non-tradable inputs, (3) determining shadow prices, (4) calculating social added value as the value of output and tradable input costs, (5) calculating domestic resource costs, and (6) calculating the DRC ratio as a comparison between domestic resource costs and social added value. This study analyzed the top three products based on the results of determining the priority for developing superior village products (Table 6). To interpret the DRC value, the following assessment criteria are used [13]:

- (1) If  $DRC < 1$ , then the product has competitiveness and a comparative advantage.
- (2) If  $DRC = 1$ , then the product is in neutral condition.
- (3) If  $DRC > 1$ , then the product does not have competitiveness and a comparative advantage.

Based on data processed in Microsoft Excel, the DRC value for each product is shown in Table 7.

**Table 7. Competitiveness Analysis of Three Superior Village Products**

No.	Villages Name	Featured products	DRC Value	Criteria
1.	Gelangsar	Palm sugar	0.11	$<1$
2.	Midang	Carving Wood-Cukli	0.32	$<1$
3.	Taman Sari dan Rajok	Berugaq	0.44	$<1$

Source: Processed Primary Data, 2026

Based on the results in Table 7, the three products analyzed have DRC values  $<1$ . Palm sugar products in Gelangsar Village have a DRC value of 0.11, wood carvings and cukli products in Midang Village have a

DRC value of 0.32, and berugaq products in Taman Sari Village and Ranjok Village have a DRC value of 0.44. These values indicate a comparative advantage for each product. The DRC value indicates the efficiency of domestic resource use compared to imported alternatives. This is in line with research. Mizik (2021) It states that a DRC value  $<1$  indicates efficient use of local resources.

The use of local raw materials and labor influences the low DRC value. Palm sugar products from Gelangsar Village demonstrate the highest efficiency level. Wood carvings and cukli products from Midang Village are labor-intensive. Berugaq products from Taman Sari and Ranjok Villages have good product quality. This is in line with research. Antriyandarti (2015) and Saputra et al. (2021) show that a DRC value  $<1$  indicates a comparative advantage for Indonesian agribusiness commodities [20, 21].

The DRC analysis results show significant potential in superior village products in Gunung Sari District, West Lombok Regency. The three products analyzed have the potential to serve as the basis for a sustainable local economy. The local government needs to increase market access, strengthen human resource capacity, and provide capital support. These efforts can sustainably enhance the competitiveness of superior products.

## CONCLUSIONS AND SUGGESTIONS

Based on the objectives and results of the discussion in this study, it can be concluded:

The leading village products in Gunung Sari District, West Lombok Regency, are dominated by the agricultural and plantation-based food processing agro-industry sector. Ten villages are developing food agro-industries, while six villages are developing non-food craft products. Determining the priority of developing superior village products using the Composite Performance Index (CPI) method shows that carving wood-cukli products from Midang Village have the highest CPI value of 3,634.09. Berugaq products from Taman Sari Village and Ranjok Village are ranked second with CPI values of 2,851.51 and 2,830.75, respectively. Palm sugar products from Gelangsar Village rank third, with a CPI of 1,662.51. The number of SMEs, production value, the percentage of local raw material use, the percentage of regional and export marketing, and the Net B/C Ratio influence the CPI value. The superior village products in Gunung Sari District are highly competitive. The analysis results using the Domestic Resource Cost (DRC) method show a DRC value  $<1$ . Palm sugar products from Gelangsar Village have a DRC value of 0.11. Carving wood-cukli products from Midang Village has a DRC value of 0.32. Berugaq products from Taman Sari and Ranjok Villages have a DRC value of 0.44. The DRC values show the comparative advantage of superior village products in Gunung Sari District, West Lombok Regency. These three superior village products in Gunung Sari District, West Lombok Regency are worth maintaining and developing as drivers of the regional economy.

To the West Lombok Regency Government, for considering the development of palm sugar products, wood carvings, and berugaq as village superior products in Gunung Sari District.

## ACKNOWLEDGMENTS

Sincere gratitude is expressed to the Dean of the Faculty of Agriculture, the Head of the Department of Agricultural Socioeconomics, and the Head of the Agribusiness Study Program for facilitating the implementation of research and thesis preparation as a condition that must be met to complete undergraduate program studies at the Faculty of Agriculture, University of Mataram.

## REFERENCES

1. A. Prawira and B. Hakim, "Study of the role of the agricultural sector in regional economic development," *Emb. Econ. Manag. Bus. Res. J.*, vol. 1, no. 2, pp. 88–95, 2025.
2. World Bank, *Climate Action for Development*. Washington, DC: World Bank, 2023.

3. A. Purbantara, D. Mujianto, and N. Rahmawati, "Developing the competitiveness of superior products from villages and underdeveloped regions and transmigration," *J. Ilm. Ekon. Bisnis*, vol. 26, no. 3, pp. 278–292, 2021.
4. B. Morisson and A. A. H. S. Fikri, "Digitalization of MSMEs as a strategy to increase competitiveness in the digital economy era," *EBISNIS J. Ilm. Ekon. dan Bisnis*, vol. 18, no. 1, pp. 289–299, 2025.
5. I. Wardani, T. R. Dewi, and W. T. Nugroho, "Implementation of the AHP method for prioritizing agro-industry MSMEs," *J. Pertan. Agros*, vol. 25, no. 4, pp. 3431–3436, 2023.
6. C. Muslim and T. Nurasa, "Competitiveness of mangosteen export promotion commodities," *J. Agroekonomi*, vol. 29, no. 1, pp. 87–111, 2011.
7. S. Sugiyono, *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta, 2016.
8. J. Sarwono, *Quantitative and Qualitative Research Methods*, 2nd ed. Yogyakarta: Suluh Media, 2018.
9. I. R. Dhaifullah, M. H. Muttanifudin, A. A. Salsabila, and M. A. Yakin, "Survey of software testing techniques," *JACIS J. Autom. Comput. Inf. Syst.*, vol. 2, no. 1, 2022.
10. A. S. Millah et al., "Data analysis in classroom action research," *J. Kreat. Mhs.*, vol. 1, no. 2, pp. 140–153, 2023.
11. V. Arumsari and S. Syamsiar, "Empowerment of rural communities based on local food agroindustry," *SEPA J. Sos. Ekon. Pertan. dan Agribisnis*, vol. 8, no. 1, pp. 35–41, 2011.
12. I. P. Sari, S. W. Dachi, and T. H. Harahap, "Composite Performance Index (CPI) decision support system," *PRINCIP Portal for Software Research and Innovation*, vol. 2, no. 2, pp. 83–90, 2024.
13. I. Y. Astuti and U. Jatmiko, "Revitalizing the mindset of wood craftsmen through diversification and digitalization," *Kumawula J. Pengabd. Kpd. Masy.*, vol. 5, no. 1, pp. 49–56, 2022.
14. E. Setiajatnika and Y. D. Astuti, "Potential regional superior products and development strategies," *J. Ilm. Manaj.*, vol. 13, no. 1, pp. 98–114, 2022.
15. T. Tajidan et al., "Feasibility and priority of developing superior village products using CPI analysis," *Asian J. Educ. Soc. Stud.*, vol. 52, no. 2, pp. 1–11, 2026.
16. M. Bruno, "Domestic resource costs and effective protection: Clarification and synthesis," *J. Polit. Econ.*, vol. 80, no. 1, pp. 16–33, 1972.
17. R. A. Nadja et al., "Competitiveness of collated Arabica coffee," *J. Pertan. Agros*, vol. 25, no. 2, pp. 1453–1457, 2023.
18. H. E. Dewi, D. Koestiono, and S. Suhartini, "Comparative advantages and policy impact on potato commodity development," *Habita*, vol. 24, no. 2, pp. 85–95, 2013.
19. T. Mizik, "Agri-food trade competitiveness: A review of the literature," *Sustainability*, vol. 13, no. 20, pp. 2–14, 2021.
20. E. Antriandarti, "Competitiveness and cost efficiency of rice farming in Indonesia," *J. Rural Probl.*, vol. 61, no. 2, pp. 74–85, 2015.
21. I. A. Saputra, L. Simamora, and Y. Yuliawati, "Comparative analysis of competitive and comparative advantages of soybean and rice farming," *JAGRISSEP*, vol. 20, no. 1, pp. 219–232, 2021.