

Financial Analysis and Sustainability of the Food Estate Program in Pulang Pisau Regency, Central Kalimantan

Dina Mariana Simanjuntak^{a,1,*}, Lestari Rahayu W^{b,2}, Masyhuri^{b,3}, Isnaini Rohmawati^{a,4}

^a Department of Agricultural Economic, Graduate School, Faculty of Agriculture, Universitas Gadjah Mada (UGM), Bulaksumur, Caturtunggal, Depok, Sleman, Yogyakarta, 55281, Indonesia

^b Department of Agricultural Economic, Faculty of Agriculture, Universitas Gadjah Mada (UGM), Bulaksumur, Caturtunggal, Depok, Sleman, Yogyakarta, 55281, Indonesia

¹ dinasimanjuntak@mail.ugm.ac.id*; ² Email Second Author; ³ Email Third Author (9pt); ⁴ isnaini.rohmawati@mail.ugm.ac.id

* corresponding author

ABSTRACT

Article history

Received : 15 February 2026

Revised : 20 February 2026

Accepted : 25 February 2026

Keywords : Food Estate; Financial Feasibility; Sustainability; RAPFISH

The government implemented the food estate program to maintain food crop productivity. The optimal and sustainable management of the food estate program played a vital role, especially in avoiding the risks of failure and addressing challenges in agricultural cultivation areas. This study on the sustainability of the food estate program was analyzed using a multidimensional approach (5 dimensions) and focused on farming activities in Pulang Pisau Regency, with 90 respondents. The objectives of this research are: (1) to analyze the financial of the food estate development program and (2) to assess the sustainability of the food estate program. The results of the study indicate that the food estate program in Pulang Pisau Regency is deemed feasible and sustainable based on feasibility analysis; (1) the net B/C ratio is 1,52, indicating feasibility, (2) the NPV is IDR 95.360,35, indicating feasibility, the EIRR (Economic Internal Rate of Return) is 18%, indicating feasibility, and the payback period is < 1 years. The multidimensional analysis resulted in a score of 70.35, indicating that the food estate program is sufficiently sustainable. The findings show that the food estate program is considered successful, with many farmers benefiting across the ecological, economic, social, institutional, and technological dimensions. The average analysis of RAP-Food Estate suggests that the program is fairly sustainable. The Food Estate Program investment (in the rice cultivation sector) provides a positive contribution to the economy of Pulang Pisau Regency in Central Kalimantan Province.

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1. Introduction

Sustainability in agriculture refers to the ability of farmers to continue production consistently without damaging the environment or depleting resources, while maintaining economic viability and social stability (Struik and Kuyper, 2017). Sustainable agriculture is a multidimensional concept that encompasses environmental integrity, human rights and well-being, resilient economies, and transparent governance (FAO, 2015). Farmers' informal knowledge has contributed significantly to the development of sustainable and resilient agriculture. Formal institutions need to reassess the local social, ecological, and economic aspects, focusing on farmers' needs (Mukti, 2021).

Food sovereignty is one of the benchmarks or indicators of successful regional development or prosperity. The concept of food estate refers to large-scale agricultural activities (>25 ha) carried out under an agricultural system that is industrial in nature, based on science and technology (S&T), capital, as well as modern organization and management. Food estates are directed towards an agribusiness system that is deeply rooted in rural areas, based on the empowerment of

indigenous/local communities, which serves as the foundation for regional development (Lula and Afriza, 2020). The food estate program has been implemented as a sustainable agricultural development initiative in several provinces of Indonesia. The plan for developing a food estate covers a vast area of 164,598 hectares of swamp land in Central Kalimantan. The increase in rice production and proper land management in Central Kalimantan supports land opening (land diversification) in the form of food estate areas, particularly in Pulang Pisau Regency (Government of Central Kalimantan Province, 2020).

The study highlights the significant impact of the COVID-19 pandemic on the food and agricultural sectors, using the Rapfish analysis method, which discusses the strategies for food estate development while considering the benefits and risks regarding the well-being of local communities (Yeny et al, 2022). Rice production in Pulang Pisau Regency has increased, but rice prices in Palangkaraya remain high due to the expensive production and distribution costs. The food estate program implemented in Pulang Pisau has successfully increased rice production. However, this rice is generally purchased and processed into high-quality rice using modern rice mills in Banjarmasin. The high-quality rice is then sold back in Central Kalimantan, especially in Palangkaraya (Mahardika, 2024).

The development of food estate areas in Central Kalimantan Province requires support through geospatial analysis of land bio-physical suitability from six relevant Ministries/Agencies, coordinated by the Coordinating Ministry for Economic Affairs, to determine the area of interest (AOI) for the development zone. In 2020, intensification was carried out on existing rice fields, covering 10,000 hectares in Pulang Pisau Regency (Husnain & Anny, 2021).

Conducted to determine whether a proposed project makes a tangible contribution to the overall economic development and whether its contribution is significant in deciding the necessary resource allocations. The perspective taken in this economic analysis is that of the society as a whole (Gittinger, 1986). A political economy analysis of the Food Estate project as a step toward achieving food security in Indonesia reveals various factors that influence the success and impact of the project. The research findings indicate that political, economic, and social factors are interrelated and play an essential role in shaping the dynamics of the Food Estate project (Hamdiah et al., 2023). The results of the financial feasibility analysis demonstrate that the Food Estate Program is financially sound and beneficial. The project provides significant profits to both the project implementers and the farmers involved, whether directly or indirectly. The NPV, IRR, BCR, and payback period all indicate that the project is a profitable and worthwhile investment. Based on these results, the program is considered financially viable and suitable for implementation.

The institutional framework for funding the Food Estate Program is directly managed by the capital owners, while the government plays a facilitative role. The issues outlined above indirectly affect the costs incurred, which increase, while the benefits produced decrease. Efforts to avoid large investments in unprofitable activities or programs require feasibility studies on agricultural enterprises. Ongoing evaluation of the Food Estate program's implementation is necessary. Greenpeace has expressed concern about the environmental impact, and the government must work to address these issues. Regular evaluations will help ensure that the program runs as planned, without causing environmental harm or negatively altering national agricultural patterns (Risdiyanto et al., 2024).

2. Method

This research was conducted in Pulang Pisau Regency, East Kalimantan, Indonesia. Pulang Pisau Regency was chosen as the research area based on geographical and administrative considerations, as most of its land is tidal. In addition, it was selected because Pulang Pisau has been a central rice-producing area prior to the food estate program, and land diversification has led to an increase in rice production in the region.

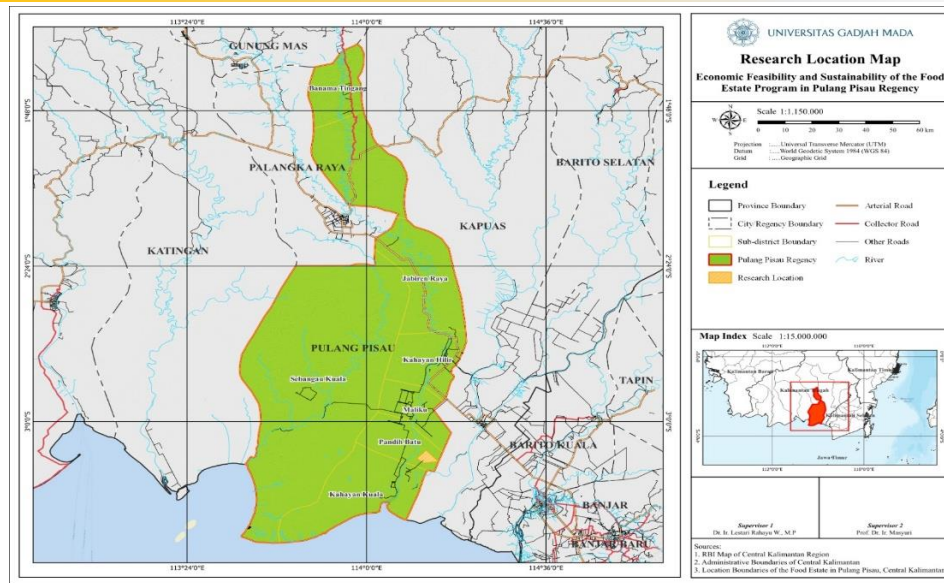


Figure 1. Research Location Map

The sampling technique used in this study is probability sampling, specifically Proportionate Stratified Random Sampling, which provides an equal chance for each member of the population to be selected as a sample when the population in the study area is heterogeneous. In this technique, the population is grouped or categorized into strata based on local farmers (Banjar and Dayak ethnic groups) and migrant farmers (ethnic groups from outside Java Island).

Table 1. The determination of the sample size for farmers in Pulang Pisau Regency in 2022 was carried out accordingly

District	Respondent Category	Number of Respondents
Pulang Pisau	Local Farmers	21
	Transmigrant Farmers	69
	Total	90

Source: Primary Data, 2024

Economic feasibility analysis is conducted by first preparing the cash flow for the food estate program in Central Kalimantan per year, based on a project duration of 3 years and assuming a 20-year period. The economic feasibility analysis of the food estate program uses the following 3 (three) formulas:

1. Net Present Value

$$NPV = \sum \frac{B_t - C_t}{(1+r)^t} = (B_0 - C_0) + \frac{B_1 - C_1}{(1+r)^1} + \dots + \frac{B_N - C_N}{(1+r)^N}$$

Note: Σ = Total sum from year 1 to N; t = initial year of the project; N = final year of the project (1,.....,3); B = benefits; C = costs; r = discount rate.

2. Economic Internal Rate of Return (EIRR)

$$EIRR = i_1 + \frac{NPV_1}{NPV_1 + NPV_2} (i_2 - i_1)$$

Note: i_1 = Discount Factor resulting from NPV1; i_2 = Discount Factor resulting from NPV2

3. Benefit-Cost Ratio (BCR)

$$B/C = \frac{\sum_{t=0}^n \frac{B_t}{(1+r)^t}}{\sum_{t=0}^n \frac{C_t}{(1+r)^t}}$$

Criteria: The project will be implemented if the BCR indicates NPV > 0; BCR > 1, meaning the Food Estate Program indicates NPV > 0; BCR < 1, meaning the Food Estate Program does not indicate NPV > 0.

Munasinghe (2009) illustrates sustainability as consisting of three pillars as follows:

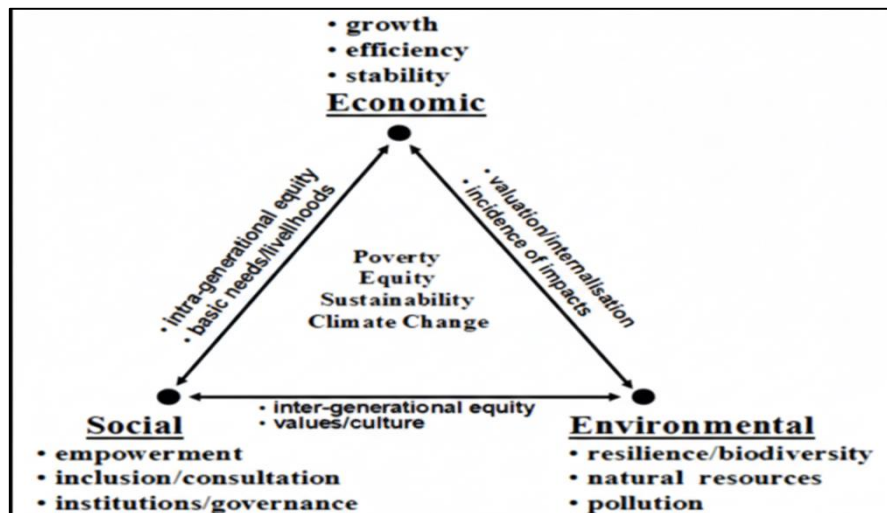


Figure 2. The Three Pillars of Sustainable Development viewed from the Economic, Social, and Ecological Dimensions.

(Source: Munasinghe and Cruz in Herdaker, 1997).

Measuring sustainable agriculture requires a set of indicators divided into three categories: economic, social, and ecological indicators. Sustainability indicators have been defined as those that provide information, either directly or indirectly, about the future sustainability of specific social objectives such as material well-being, environmental quality, and natural ease (Braat, 1991). The sustainability analysis method for agricultural enterprises is based on Multi-Dimensional Scaling (MDS). The MDS analysis aims to describe the sustainability status of each dimension so that imbalances between dimensions can be identified. MDS analysis is then developed into the RAP-FISH software, which is used to determine each measurable indicator. Based on the RAP-FISH method, sustainability analysis is presented quantitatively through a number of criteria defined in numerical analysis by a set of attributes that are evaluated (Pitcher et al., 1998).

3. Results and Discussion

3.1. Results of the Food Estate Program Production

The production output in this study is the amount of rice produced by the project multiplied by the price of rice per kilogram. This amount represents the total production over three years, from the first year to the third year, with a rice field area scale of 4,882 hectares. The price used to assess the rice in this study varies each year, in accordance with the estimated price calculated based on the export and import values of rice in Indonesia.

Table 2. Production results of the Food Estate Program in years 1 to 3 in Central Kalimantan Province.

Period	Price	Production Quantity	Production Results
	(Rp/Kg)	(Kg)	(Rp)
Year 1	7.824	1.662.261	13.005.530.064
Year 2	6.611	17.146.542	113.355.789.162
Year 3	6.973	20.845.766	145.357.526.318
Total	21.408	39.654.569	271.718.245.544

Source: Agricultural Office of Palangka Raya City, 2023.

The production results obtained in the first year were much lower compared to the second year, and similarly in the third year. In addition to the significantly lower rice selling price, the high number of pest and disease attacks, which almost led to crop failure, was also a factor contributing to the low production in the first year, resulting in a lower benefit value compared to the second and third years. In the third year, the benefit value of production was the highest, due to the expansion of cultivated land, which positively impacted the production volume.

3.2 Feasibility Analysis of the Food Estate Program

The cash flow in the Food Estate Program consists of income and expenditure flows. Income is derived from the sale of rice production generated by this project. The production value is obtained by multiplying the production yield with the price, which is IDR 5,066 in the first year, IDR 6,259 in the second year, and IDR 6,012 in the third year, representing the opportunity cost or shadow price per kilogram.

Table 3. Results of the Financial Feasibility Analysis of the Food Estate Program for 2022 in Pulang Pisau Regency.

Indicators	Feasibility Criteria	Results of the Analysis	Explanation
NPV	NPV > 0	Rp 95.360,35	Viable
Gross B/C	Gross B/C > 1	2,52	Viable
Net B/C	Net B/C > 1	1,52	Viable
IRR	IRR > Discount Rate	18%	Viable
Payback Period	PP < Project lifespan (3 year)	< 1 year	Viable

Source: Primary data analysis (2024)

The investment feasibility showed a B/C ratio of 1.52, meaning that for every 1 rupiah of expenditure, there would have been a benefit or return of 1.52 rupiah. The NPV (Net Present Value) was calculated at Rp95,360.35 billion, indicating that the NPV was positive, meaning the investment in the Food Estate Program would generate a profit of 95,360.35 million rupiah over 3 years, based on present value. The IRR (Internal Rate of Return) was 18%, which was higher than the prevailing interest rate, meaning that the investment could cover the cost of capital used. The payback period was less than 1 year, shorter than the project's lifespan.

The feasibility analysis results showed that the Food Estate Program was financially viable, meaning the project provided benefits to both the project implementers and farmers in general,

including those directly and indirectly involved. Financially, the Food Estate Program was also profitable, as indicated by the previous analysis conducted by the government. Furthermore, the calculation of benefits from production, where 60% of the profit was received by the investors, showed that the cash flow position was feasible according to NPV, IRR, and BCR criteria, confirming the financial viability of the Food Estate Program.

Based on the sensitivity analysis with the first scenario shown in Table 5.9, it was revealed that the feasibility of the Food Estate project was highly sensitive to changes in benefits. If the benefits increased by 10%, the project became more feasible with a significant increase in NPV. However, if the benefits decreased by 10%, the project remained feasible, but with a smaller margin. The project was also sensitive to costs. A 10% reduction in costs improved the feasibility of the project, with the NPV becoming larger, while a 10% increase in costs only slightly reduced the NPV but did not make the project unfeasible. Strategies to increase benefits, such as optimizing production output or improving management efficiency, as well as controlling costs, were crucial to ensuring the project remained financially viable.

Sensitivity analysis is conducted to evaluate the impact of changes in various financial parameters on the decisions made. In agricultural projects, there are several uncertainties, such as floods, diseases, technological factors affecting the production process, and human factors related to the labor force. Additionally, the ability to forecast future events, including projections of production value and market conditions, is also an important factor to consider (Berardi, 2011).

Table 4. Sensitivity Analysis of the Food Estate Project in Central Kalimantan Province (first scenario)

Scenario	NPV (Rp)	Description
Benefits Increase by 10%	Rp163.882,96	Viable
Benefits Decrease by 10%	Rp117.282,96	Viable
Costs Increase by 10%	Rp131.327,07	Viable
Costs Decrease by 10%	Rp149.838,85	Viable

Source: Primary data analysis (2024)

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3.3 Sustainability in the Ecological Dimension

The attributes that are expected to influence the level of sustainability in the ecological dimension consist of eight attributes: (1) the type of soil worked by farmers; (2) ease of land cultivation such as plowing or tilling; (3) duration of inorganic fertilizer use; (4) duration of organic

fertilizer use; (5) duration of chemical pesticide use; (6) availability of continuous irrigation water; (7) crop rotation in the food estate; (8) use of food estate seeds.

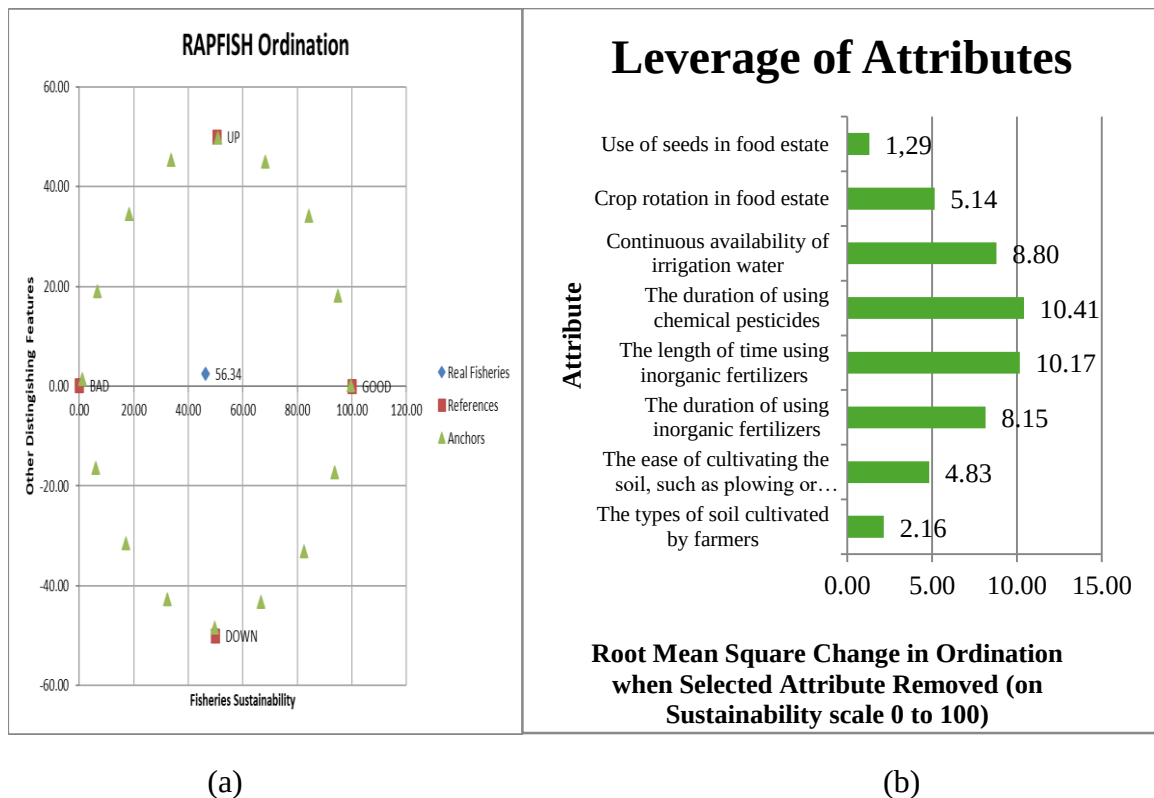


Figure 2. (a) Rap-Fish Ecological Dimension; (b) Leverage Analysis of the Ecological Dimension

The MDS analysis conducted using RAP Food Estate shows that the ecological condition in Pulang Pisau has an economic dimension sustainability index value of 56.34%. Based on sustainability status classification, this value indicates that the ecological condition of the food estate in Central Kalimantan Province, particularly in Pandih Batu District, is considered fairly sustainable. Based on the leverage analysis of the attributes in the economic dimension shown in Figure 2, three attributes were found to be sensitive to the sustainability index of the ecological dimension: the duration of chemical pesticide use (10.41%), the duration of organic fertilizer use (10.17%), and the availability of continuous irrigation water (8.80%).

The attribute with the largest RMS value is the duration of chemical pesticide use, which significantly affects the ecology due to its connection with large-scale land clearing, initially forests or uncultivated land, leading to pest infestations. Additionally, the soil contains high lime levels from peatland, which requires organic fertilizers to reduce lime content for optimal rice growth. Low organic fertilizer use hinders rice growth and reduces farmers' income. The second-largest RMS value is the duration of organic fertilizer use, which is important for stabilizing rice growth until harvest. The third attribute is the availability of continuous irrigation water. Sufficient irrigation helps farmers in rice production, especially since hot weather with temperatures above 35°C often causes drought, leading to crop failure. Irrigation is supplied through a dam along the Kapuas River.

The Indonesian Ministry of Agriculture contributes to this project by supporting the program in areas such as land engineering, seeds, fertilizers, machinery and agricultural equipment, and other related tasks. This is crucial, as farmers currently use traditional machines. Moreover, the use of high-quality seeds and fertilizers, along with modern machinery technology, can improve both the

quality and quantity of production. Therefore, the Ministry of Agriculture's contribution is vital in achieving food security (Marwanto and Pangestu, 2021).

3.4 Sustainability Status of the Economic Dimension

The attributes that are estimated to influence the sustainability level in the economic dimension consist of six attributes, namely: (1) distribution of harvest per commodity; (2) contribution of farm income to total family income; (3) status of land ownership for farming; (4) stabilization of production supply; (5) accessibility of production or food supply; (6) affordability of agricultural input supplies.

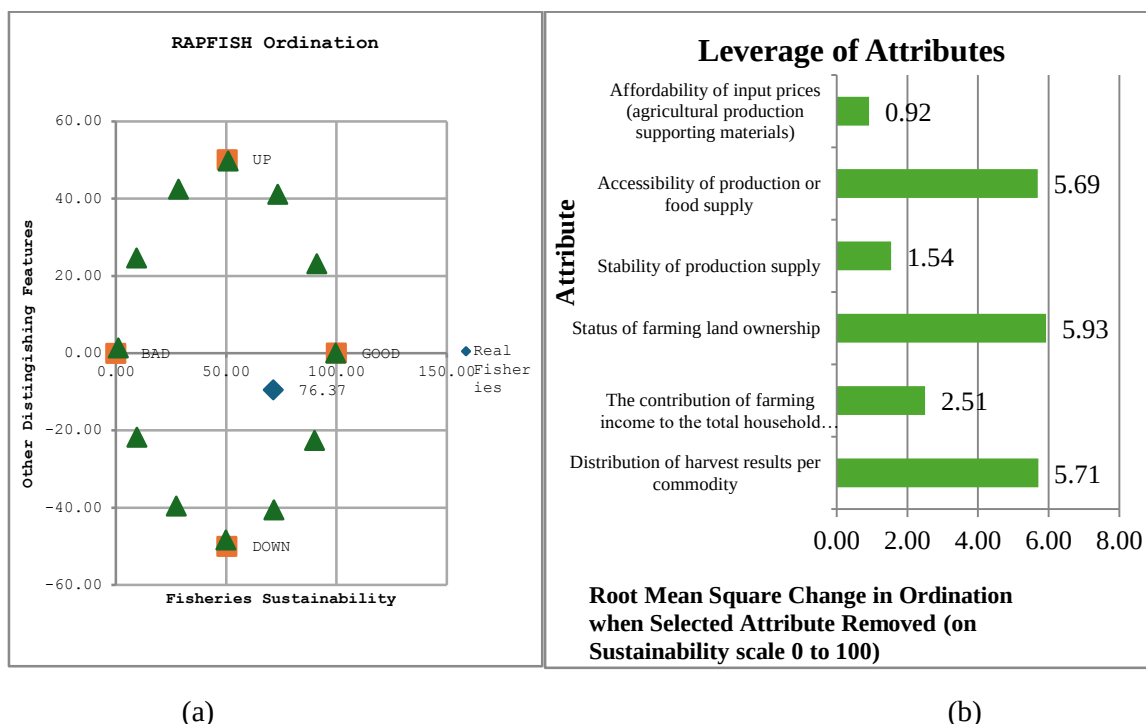


Figure 3. (a) Rap-Fish Economic Dimension; (b) Leverage Analysis of the Economic Dimension

The MDS analysis conducted with RAP-Food Estate in Pandih Batu District shows an economic dimension sustainability index value of 76.37%. Based on the sustainability status classification, this value indicates that the economic condition in Pandih Batu District is highly sustainable. The MDS data processing results using RAP-Food Estate are shown in Figure 4. Based on the leverage analysis of the attributes in the economic dimension shown in Figure 5.4, three attributes were found to be sensitive to the sustainability index of the ecological dimension: land ownership status (5.93%), distribution of harvest per commodity (5.71%), and accessibility of production or food supply (5.69%). The land ownership status attribute has the largest value because most of the population in Pandih Batu District consists of transmigrant residents or people from other regions.

The attribute with the largest land ownership status value is due to the fact that most of the population in Pandih Batu District consists of transmigrant residents or people from other regions. As a result, many of the residents do not own land. With the food estate program, every farmer participating in the program receives land ownership, with each household getting 10 hectares. The second-highest RMS value attribute is the distribution of harvest per commodity. For transmigrant residents, the limited number of middlemen or buyers for wet rice in Pandih Batu District makes this program highly beneficial. Farmers can sell their production directly to the provincial government,

assisted by stakeholders such as the Ministry of Agriculture and the Provincial Agriculture Office of Central Kalimantan. The purchase price from the government is also higher than what farmers would receive from middlemen—Rp 3,300 per kilogram for wet rice and Rp 5,100 per kilogram for dry rice. These prices help improve the economic situation of farming families. The third-largest RMS value attribute is the accessibility of production or food supply, which also supports and alleviates the burden on farmers by providing land capital, seeds, subsidized fertilizers, and the sale of production, all of which are facilities provided by the government to assist farmers in Pandih Batu District.

3.5 Sustainability Status of the Social Dimension

The attributes that are estimated to influence the sustainability level in the social dimension consist of six attributes, namely: (1) priority level among household farming needs; (2) government involvement in food estate development; (3) participation and distribution of family labor in farming activities; (4) system or pattern in harvesting activities.

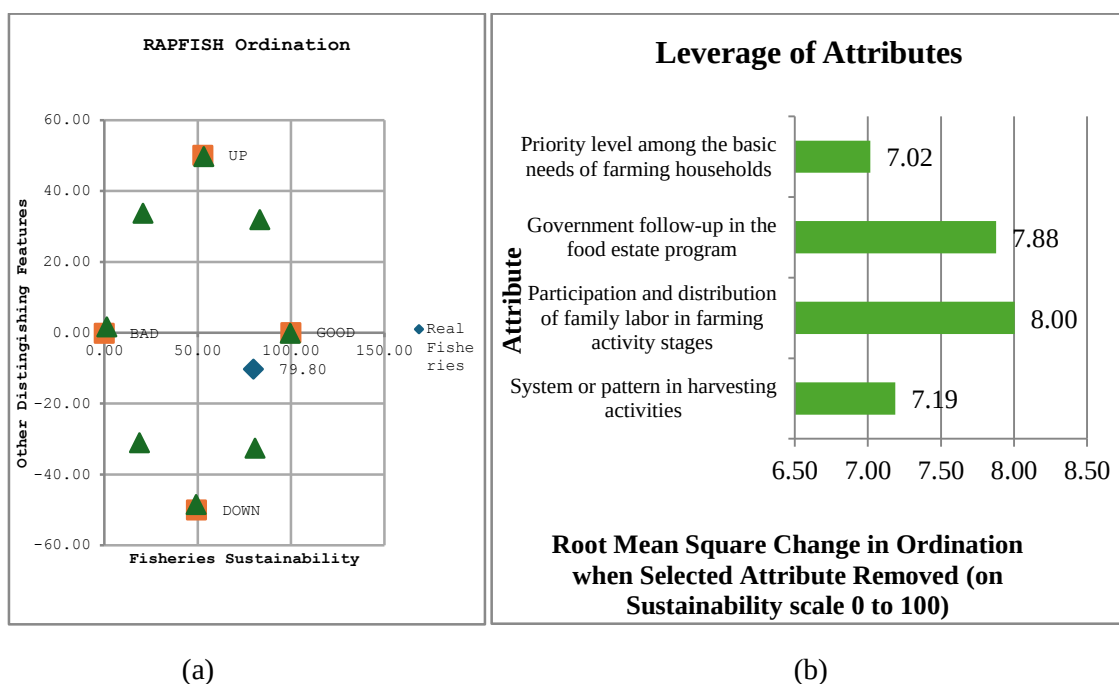


Figure 4. (a) Rap-Fish Social Dimension; (b) Social Dimension Leverage Analysis

The MDS analysis conducted with RAP-Food Estate in the Pandih Batu District shows a sustainability index value for the social dimension of 79.80%. Based on sustainability status classification, this value indicates that the social conditions in Pandih Batu District are highly sustainable. The processed MDS data using RAP-Food Estate is shown in Figure 6. Based on the leverage analysis of the attributes in the social dimension, as shown in Figure 5.6, three attributes were found to be sensitive to the sustainability index of the social dimension: (1) family labor participation and distribution in farming activities (8.00%) and (2) government follow-up in the food estate program (7.88%).

The highest percentage attribute is family labor participation and distribution in farming activities. The availability of family labor represents a significant potential in farming activities, as utilizing family labor reduces the costs that would otherwise be spent on hiring external labor. The use of family labor contributes to reducing the expenses for external labor wages. In Pandih Batu

District, rice farming activities mostly rely on family labor (TKDK), with only a small portion utilizing external labor (TKLK).

The second-highest percentage attribute is government follow-up in the food estate program, where food security remains a crucial issue. Several government follow-up actions in the implementation of the food estate program include: 1) land selection and the environmental problems caused by previous projects. The opening of new land in the PLG program (a million hectares) led to environmental issues, such as the conversion of tropical rainforests into open land; 2) Human Resources (HR) and conflicts with local communities. HR is a critical factor to address, as it was one of the reasons for the failure of previous food estate projects. The government must ensure that workers have the necessary skills in peatland farming and that competent extension workers are available to carry out the program; 3) Budgeting. The development of irrigation networks, technology, superior varieties, and land rehabilitation requires significant investment. Moving forward, public-private partnerships will be necessary to avoid overburdening the state budget (APBN).

3.6 Sustainability Status of Institutional Dimension

The attributes expected to influence the level of sustainability in the institutional dimension consist of six attributes, namely: (1) ease of access to agricultural business credit, (2) sources of capital for agricultural businesses, (3) farmer participation in training and extension related to sustainable agriculture in the past year, (4) active membership of farmers in farmer groups, (5) farmers' consistent participation in farmer group activities or other organizations.

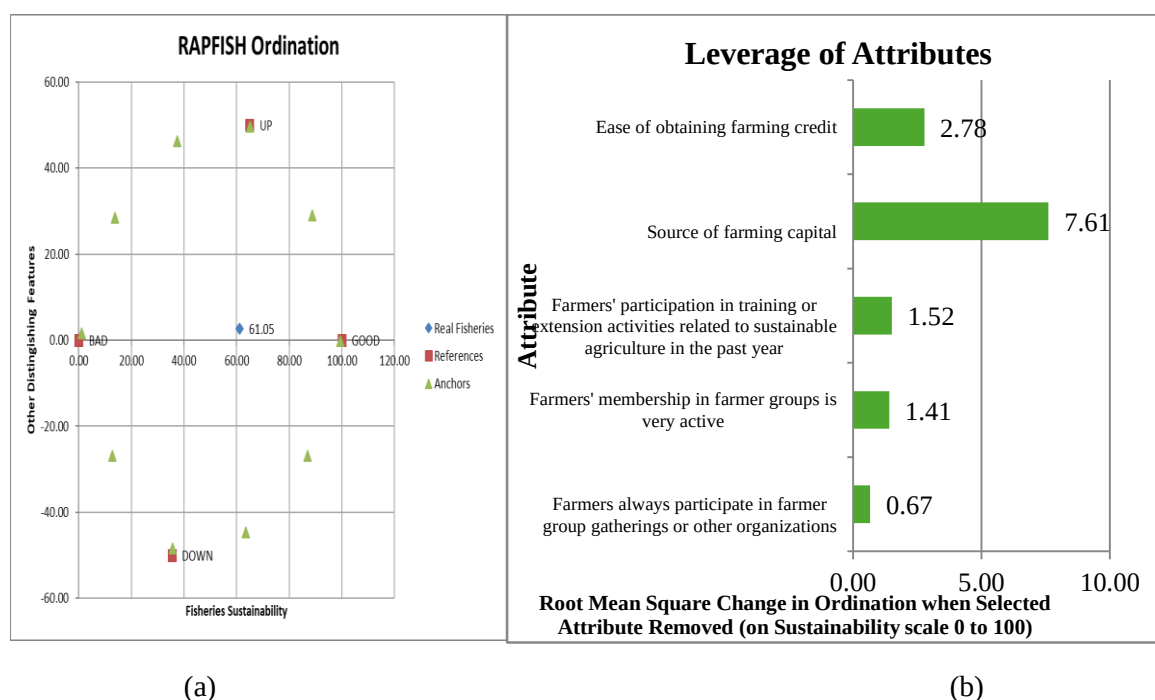


Figure 5. (a) Rap-Fish Social Institutional; (b) Analysis of Leverage in the Institutional Dimension

The institutional dimension sustainability index is 61.05%. Based on the sustainability status classification, this value indicates that the institutional conditions in Pandih Batu District are highly sustainable. The MDS data processing results using RAP-Food Estate are shown in Figure 5.5. Based on the leverage analysis of the attributes within the institutional dimension in Figure 5.6, two

attributes were identified as being sensitive to the sustainability index of the institutional dimension: (1) sources of agricultural business capital (7.61%) and (2) ease of obtaining agricultural credit (2.78%).

The attribute with the highest percentage is the source of agricultural business capital. During the Food Estate program, assistance has been provided, such as land ownership, seed or seedling subsidies, fertilizer subsidies, and continued support during the rice harvesting process. As a result, farmers enrolled in the Food Estate program have been greatly assisted, allowing them to minimize personal financial contributions and thus achieve greater profits. The second attribute considered sensitive is the ease with which farmers can obtain agricultural credit. This assistance remains in the form of small loans provided by the Palangkaraya Agriculture Office, primarily for planting activities, such as purchasing fertilizer beyond the subsidies or additional capital for farmers.

3.7 Sustainability Status of the Technology Dimension

The attributes that are expected to influence the sustainability level in the technology dimension consist of four attributes: (1) the application of information technology, (2) farmers adopting and developing location-specific farming technologies, (3) controlling plant pests (OPT), and (4) the implementation of technology in managing the food estate program (Figure 8).

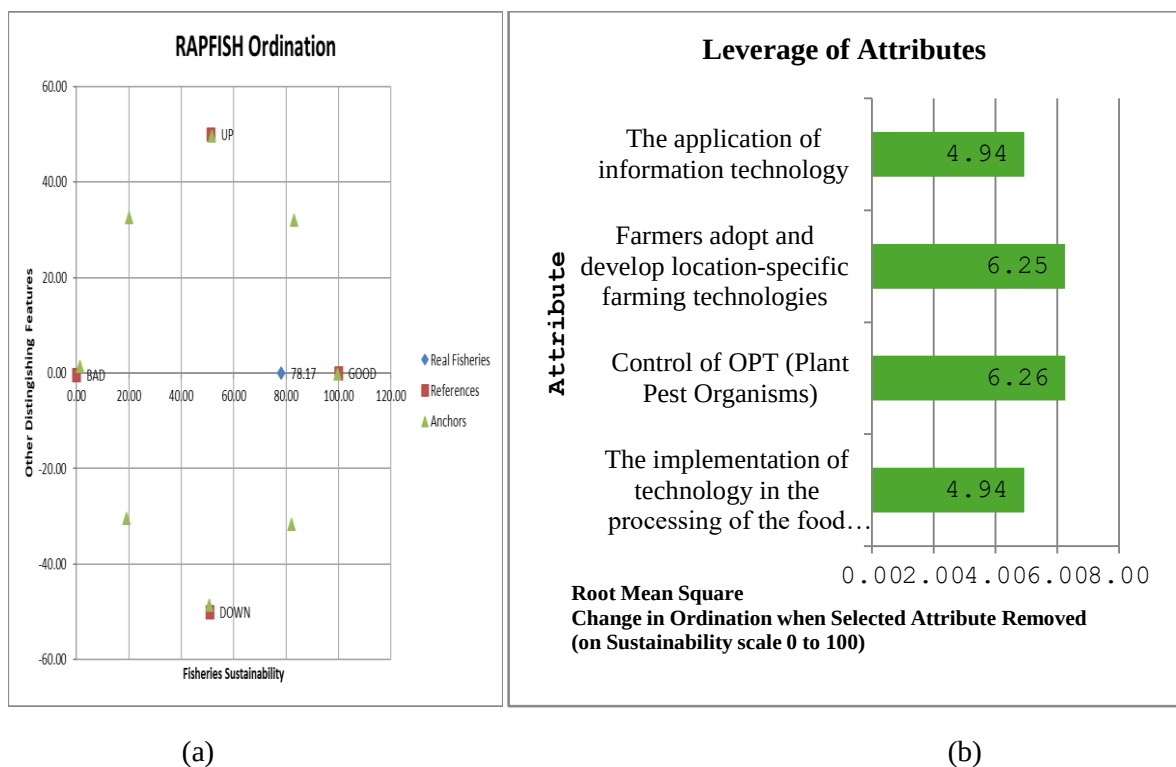


Figure 6. (a) Rap-Fish Technology Dimension; (b) Technology Dimension Leverage Analysis

The MDS analysis using RAP-Food Estate in Pandih Batu District shows a sustainability index of 78.17% for the social dimension, indicating that the social condition in the area is highly sustainable. Further analysis of the attributes in the technology dimension identified two sensitive attributes to the sustainability index: control of plant pests (OPT) with a value of 6.26% and the implementation of technology in managing the food estate program with a value of 4.94%.

The most sensitive attribute is the control of OPT, where BPTP Central Kalimantan consistently controls OPT in the Central Kalimantan food estate development area, especially during the generative phase (flowering) and approaching harvest. In several varieties planted in the Food Estate Center of Excellence (CoE) Demfarm Balitbangtan demonstration area, an outbreak of Blast and Leaf Blast Disease (HBD) was found. Consequently, control was carried out by monitoring the plants and providing assistance in the form of fungicide and KCl 25-30 kg/ha, which was applied by field officers and the OPT team from BPTPH Central Kalimantan.

3.8 Multidimensional Analysis of Sustainability Status

The sustainability status of the Food Estate Program in Pandih Batu District is considered fairly sustainable, according to the multidimensional analysis, with a sustainability index value of 70.35%. This status of being fairly sustainable is reflected by the sustainability index values in each dimension. The sustainability index values for the five dimensions can be visualized in the form of a spider web diagram, as shown in Figure 19. This illustrates that the average index value is at a moderately sustainable status. To maintain and improve this index value in the future, achieving a very sustainable status, improvements need to be made to the attributes that are sensitive and affect the index values of the ecological, economic, social, institutional, and technological dimensions.

The results of the sustainability analysis assessed from the five dimensions are as follows: (1) ecological dimension with a percentage of 56.34%, categorized as moderately sustainable, (2) economic dimension with a percentage of 76.37%, categorized as very sustainable, (3) social dimension with a percentage of 79.80%, categorized as very sustainable, (4) institutional dimension with a percentage of 61.05%, categorized as moderately sustainable, and (5) technological dimension with a percentage of 78.17%, categorized as very sustainable.

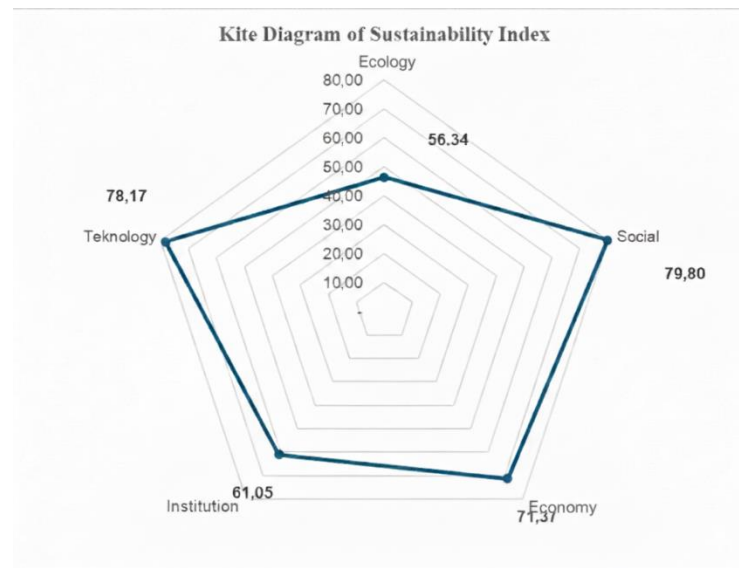


Figure 7. Spider Web Diagram of the Sustainability Index

The result of the multidimensional analysis is 70.35, indicating that the food estate program is considered to be fairly sustainable. This study identifies two types of benefits derived from the Food Estate Program: tangible and intangible benefits. Tangible benefits are those that directly affect the profitability of the company and the costs incurred, such as rice production, which is a direct benefit of this program. Meanwhile, intangible benefits are difficult to measure in monetary terms and are

more related to the indirect impacts on the community, such as increased job opportunities, UPJA activities, and income for local traders. These intangible benefits play an important role in economic growth, especially in terms of improving performance and public services.

4. Conclusion

The Food Estate Program investment (rice sector) contributed positively to the finances of Central Kalimantan Province, increasing income and labor absorption. According to the criteria of NPV, B/C, and ERR, the investment in the Food Estate was economically feasible and profitable, with a relatively short payback period of 8 years. The sensitivity analysis in both scenarios showed that the Food Estate Program investment was highly sensitive to changes in output price reduction, seed price increases, and labor wage hikes, which could reduce the project's feasibility. The Food Estate Program investment (rice sector) positively contributed to the economy of Central Kalimantan Province, specifically in Pandih Batu District, through output increase, income growth, and labor absorption. The sustainability of the Food Estate Program was considered good, with many farmers benefiting from ecological, economic, social, institutional, and technological dimensions. The average result from the RAP-Food Estate analysis indicated that the program was fairly sustainable. From a sustainability perspective, the Food Estate Program was deemed successful, with many farmers benefiting across ecological, economic, social, institutional, and technological dimensions, as indicated by the overall results of the RAP-Food Estate analysis.

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