

ANALYSIS OF ORGANIC RICE SUPPLY CHAIN IN AL-BAROKAH FARMERS ASSOCIATION, SEMARANG DISTRICT

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Abstract: Indonesia's agriculture sector significantly contributes to national economic development, accounting for 13.28% of GDP in 2021. Rising demand for chemical free food has accelerated the growth of organic farming, particularly in organic rice cultivation; however, adoption remains limited. This study used a mixed methods approach on the Al-Barokah Farmers Association in Semarang, complemented by quantitative data from 100 respondents selected via purposive and snowball sampling, to examine challenges in market access, capital availability, and resource limitations. The Food Supply Chain Network (FSCN) model was used to analyze six key elements: supply chain targets, structure, management, resources, business processes, and performance. Results indicate that organic rice is distributed through five marketing channels, with the farmer's share exceeding 50% across all channels, reaching up to 100% in some cases. The cooperative effectively maintains an efficient and interconnected supply chain, stabilizing prices and supporting export activities. The study recommends improving communication, optimizing marketing channel participation, and accurately calculating production costs to sustain the cooperative's organic rice supply chain.

Keywords: farmer's share, FSCN, organic rice, supply chain

INTRODUCTION

Agriculture plays an important role in Indonesia's economic development by providing food and industrial raw materials, supporting regional and rural livelihoods, creating employment, and contributing to the national gross domestic contribution (GDP) and currency of the country. The agricultural sector in 2021 contributed 13.28% to GDP and grew by 1,37% in 2022 (Badan Pusat Statistik, 2022). In recent years, consumer awareness of chemical free food has increased, supported by the healthier lifestyle preferences, rising incomes, and willingness to pay the higher prices. This has strengthened the trend toward organic farming, particularly organic rice (Barki & Rachmah, 2023). Organic farming emphasizes health, ecology, and sustainability, providing long term solutions to the problems of conventional agriculture and excessive chemical use (Hamakonda & Mau, 2023).

The demand for organic rice in Indonesia continues to grow both domestically and internationally. Between 2013 and 2016, the demand for organic rice increased rapidly by 14 million tons, but organic farming in Indonesia is still rarely done, so consumer demand for Organic rice is still not met. The demand for organic rice export market has been shown to increase revised by the volume of its exports each year. Based on data from Statistics Indonesia, national rice production during the period 2021–2024 exhibited a fluctuating pattern with a downward tendency. In 2022, rice production increased by

0.61% compared to 2021. However, this growth was not sustained, as production declined by 1.40% in 2023, followed by another decrease of 1.55% in 2024 (Badan Pusat Statistik, 2024). These condition presents opportunities for farmer groups such as the Al-Barokah Farmers Association di Semarang district to expand production and strengthen their role in organic rice markets.

Within the market demand, products should be fairly priced with relative assurance, evenness in supply, and product distribution. Nevertheless, increasing demand in itself is inadequate without the support of an efficient supply chain. Supply chain processes should be important to be studied and tracked in order to find the factors that are the drivers of the chain. Supply chain management encompassing the regulation of financial transactions, product flows, and information exchange so that plays a pivotal role in realizing these objectives (Rahayu et al., 2021). To satisfy consumer expectations, products must be accessible at fair prices, consistently supplied, and distributed in a reliable manner. Through supply chain management, organizations are able to regulate their supply by coordinating distribution flows, financial resources, and information systems (Geha et al., 2021).

The efficiency of organic rice supply chain can be enhanced by optimizing performance across all stages of the chain. This can be achieved by minimizing excessive input use while maximizing output. In other words, efficiency is not solely attained through cost and resource reduction, but also by improving productivity, product quality, and distribution effectiveness, thereby enabling the supply chain to generate greater added value in a sustainable manner (Indriani et al., 2024). It is deemed that supply chain performance is efficient when the value of marketing margin is decreasing and the running of marketing chain is becoming shorter. It can be proved by the works of Lubis & Viantika, (2022a); Mukhtasida et al. (2022b) mentioning that with a short marketing channel, the value of farmer shares exceeds 50 percent. Large-small marketing margin determines the small value of the share of the farmer, the higher the profits obtained by the farmers. The less there is the marketing chain and the shorter the marketing margin, the more efficient the marketing activity (Waridin & Al- Hafidz, 2021).

Although many studies have analyzed the efficiency of organic rice marketing channels, only few have examined the entire supply chain comprehensively and particularly at the farmer group level. Furthermore, the application of the Food Supply Chain Network (FSCN) framework to organic rice remains limited. The FSCN approach is valuable because it evaluates not only performance outcomes but also the supply chain's structure, management, resources, and processes. Thereby providing insights into the factors that may contribute to low performance within the overall supply chain network (Apriyani & Helbawanti, 2022).

Therefore, this study aims to analyze the organic rice supply chain of the Al-Barokah Farmers Association di Semarang District by using the FSCN framework. Specifically, it investigates product, financial and information flows while evaluating supply chain performance through marketing margins and farmers shares, the novelty of this research is in applying the FSCN framework at the farmer group level, offering insight into how

grassroots organizations can build efficient and sustainable supply chains for both domestic and export markets.

METHOD

The research was conducted on Association organic farmers Al-Barokah, Susukan district, Semarang. The sampling method was purposive sampling with 100 respondents and snowball sampling technique for collecting information related to supply chain channel actors. The informants consisted of 5 cooperative administrators, and 3 consumers. Snowball sampling is a method of research using initial information as a determinant of subsequent information (Lenaini, 2021). Primary data is obtained through direct interviews with questionnaires and field observations related to marketing flows. Secondary data is obtained through research-related government agencies or agencies. The data analysis method is carried out using the Food Supply Chain Network (FSCN) approach with six elements that are analyzed: supply chain targets, supply Chain structure, supply chain management, supplier chain resources, supply-chain business processes, and supply-chain performance. Supply chain performance is analyzed quantitatively through indicators of marketing margin efficiency and farmer's share.

Marketing margin is the difference between the price received by the farmer and the price issued by the consumer (Iqbal et al., 2020). The marketing margin is systematically formulated as follows:

$$MP = P_r - P_f \quad (1)$$

MP represents the marketing margin (Rp/kg), P_r is the price of rice increased by consumers (Rp/kg) and P_f is price of rice increased by farmers (Rp/kg). $P_f > MP$ which implies that marketing of organic rice is said to be efficient and $P_f < MP$ which implies that organic marketing of rice is to be inefficient (Iqbal et al, 2020).

The farmer's share used as an indicator of marketing efficiency is how much the share given to the farmer by consumers (Wuryantoro & Ayu, 2021) is formed as follows:

$$F_s = \frac{P_f}{P_k} \times 100\% \quad (2)$$

F_s represents the degree of the share of the farmer, P_f represents the price of purchase or the elevated price of the farmer (Rp/kg) and P_k represents the costs of sale or the purchaser rate (Rp/kg). Anything above 50% of the market share goes to Farmer, denotes efficient marketing by the market and less than 50 percent implies effective marketing by the market. It is able to store up to 600 files based on (Wuryantoro & Ayu, 2021).

RESULT AND DISCUSSION

General Conditions of Research Location

Association Farmers Al-Barokah is a rural community organization based on integrated organic farming and focused on strengthening the economy of its members. Association

Al-Barokah was officially established on September 16, 1998. The organization has been established by law number 24 by the act of notaries Muhammad Fauzan, SH in Salatiga on 14 September 2004. Association Al-Barokah comprises 17 peasant groups with 1004 members of which 574 farmers have been certified. Association Al-Barokah has an area of approximately 180,32 hectares of certified organic land with a total of 2811,35 tons of GKP, of which 64% is consumed by farmers and 36% is channeled to the Al- Barokah Corporation. organic rice products have been certified by the organic certification agency of Mutu Certification International and LSO INOFICE.

Condition of Respondents

The population that participated as the respondents included 100 farmers, 5 managers of the cooperatives, and 3 consumers. The general condition of the respondents of the study can be seen in Table 1.

Table 1. Condition of the respondents

Indicator	Average
Farmer	
Age	>50 years
Gender	Man
Education	Primary School
Long time trying	4-10 years
Cooperative Management	
Age	31-40 years
Gender	Woman
Education	College
Length of work	4- 10 years
Consumer	
Age	31-40 years
Gender	Woman
Education	College
Long time partner	>4 years

Source: Research Primary Data (2025)

The age of respondents of farmers includes the middle of adulthood to adulthood and belongs to the productive age. The average respondent is a man with a low level of education. The average respondent tried organic crops for 4 to 10 years. The average respondent manager is 31–40 years old. The average respondent is a woman and the average college graduate. the average cooperative manager respondent has worked for 4–10 years. The average consumer respondents in this study were women with an average age of 31 – 40 years, an average college education, and an average partner of more than 4 years.

Rice Supply Chain Conditions

Farmer

Organic farmers in the rice supply chain play a crucial role in ensuring the availability of quality organic rice to consumers. Organic farming not only improves consumer health but also supports ecosystem development, biodiversity, and soil biological activity. It contributes to environmental sustainability by reducing air, soil, and water pollution while simultaneously enhancing the health and productivity of plants, animals, and humans (Parmila et al., 2022). As part of the organic rice supply chain, farmers contribute to the production and distribution stages. Farmers sell the entire harvest in organic rice and farmers sell all the yields to the Al-Barokah cooperative, considering that 60% of the harvest is for private consumption and 40% is distributed to the cooperative. Some farmers sell organic rice directly to consumers because of family bonds. According to the interview, the farmers were very helpful with the Al-Barokah cooperation. The concept of organic farming is especially useful for farmers, as it has a promising profit potential compared to conventional farming economically and has high production prices (Septiadi & Mundiayah, 2020).

The Al-Barokah Corporation

The Al-Barokah Corporation receives all the harvests from the member farmers at a fixed price. The cooperative guarantees the sale of all organic products produced by members of the group and the purchase of higher than the market price to guarantee the welfare of farmers. Farmers who can distribute organic rice to cooperatives must follow the rules of a cooperative one of which is that rice sold to the cooperative is the rest of what is consumed by the farmers themselves. Co-operatives play a role in consolidating the supply of organic rice from their members, collecting organic rice from individual farmers to form a larger quantity. This makes it possible to deal with the market better and offer a stable supply to the buyer. Cooperatives are present with the role of establishing cooperation with other sectors as well as facilitating farmers to engage in marketing activities and distribution of products from farm groups to consumers so that farmers can enjoy profits (Parmila et al., 2022).

Distributors/Agents

One of the main roles of distributors/agents in this supply chain is to organize and implement the distribution of organic rice to various retailers or consumers. Distributors/agents arrange the delivery and delivery of organic rice taking into account factors such as distance, time, and transport conditions. Distributors can manage inventory and inventory management to ensure sufficient availability of organic rice on the market. Distributors or agents are also involved in the marketing and promotion of organic rice. Distributors can promote the excellence and privilege of organic rice to retailers and end consumers through appropriate marketing campaigns. This helps in raising awareness and demand for organic rice in the market. Distributors carry out several important activities in supply chain activities, including buying organic products from farmers, engaging in the process of adding sales value to products, distributing to consumers, improving

farmer's welfare, and ensuring product quality consistency and the sustainability of market supply (Fauziah et al., 2021).

Large Companies / Resellers

Large companies or resellers play an important role in large-scale marketing. Partner companies contribute to the marketing of organic rice through promotional efforts and by ensuring quota fulfilment at regular intervals. Most retailers function as resellers, focusing on exchange, storage, and facilitation activities such as financing, risk-bearing, and market intelligence (Fauziah et al., 2021). The company can handle large production volumes. The company purchased organic rice from a cooperative owned by Association Al-Barokah in large quantities to meet demand in the international market. The company has an extensive distribution network in various countries or regions so it allows them to reach broader export markets and establish partnerships with importers in the destination country.

End Consumers

Consumers represent the final participants in the supply chain and the ultimate target of the marketing channel. Consumers purchase organic rice through farmer cooperatives, distributors or agents, and partner companies. End consumers obtain the product upstream and complete payment after verifying information about the rice purchased. For them, the quality and authenticity of organic rice are key determinants of satisfaction and trust. In this context, supply chain management is particularly important, as organic rice is an exclusive product that requires a specialized distribution network to ensure timely delivery and consumer protection. Guaranteeing the integrity of organic products further strengthens consumer confidence and provides assurance that the products consumed meet organic standards, thereby preventing a sense of distrust or dissatisfaction (Fauziah et al., 2021). Consumers influence the quality standards of organic rice demanded by the market, while also seeking convenience in the purchasing process and prices that are affordable relative to the quality offered.

Supply Chain Management

Partner Selection

The Association Al-Barokah cooperative establishes partnerships based on specific criteria. Farmers who join the cooperative are required to consistently implement organic cultivation according to the applicable SOPs, while partner companies must provide valid organic certification from the relevant agencies to ensure that products are free from chemical residues, as formalized through written agreements (MoUs). Partner selection is a critical factor influencing supply chain performance and overall business success. Farmers with smaller landholdings tend to choose partners offering higher prices and immediate payments, whereas others prefer group-based arrangements that foster mutual trust and strengthen collective commitment within farming communities. The core principle of these partnerships is mutual benefit, ensuring that all parties gain value while maintaining sustainability across the network.

Contractual agreements further enhance cooperation by securing product quantity, quality, and continuity, stabilizing prices over a specified period, and providing access to capital assistance (Mardalisa & Varwasih, 2025). While the cooperative does not impose special criteria for distributors or agents, partner selection remains central, as it directly influences price determination (Harya et al., 2020). Cooperative pricing is generally above market rates, providing significant benefits to farmers. Revenue from organic rice sales is allocated as follows: 55% to farmers, 30% to the cooperative, and 10% to farmer groups. However, the study concludes that the farmer's share remains inefficient, as an efficient marketing criterion is defined when the farmer's share exceeds 70% (Fauziah et al., 2021). This inefficiency is likely due to farmers performing substantially fewer marketing functions than those carried out by the cooperative. Finally, the cooperative distributes organic rice to partners who meet the established criteria, and all supply chain members carefully consider product quality when selecting suppliers.

Contractual Agreement

In the Association Al-Barokah cooperative, agreements within the organic rice supply chain are established both formally (written) and informally (unwritten). Written agreements with farmers regulate compliance with organic farming SOPs, production cycles, product quality, sales prices, and sales volumes. Formal contracts generally outline agreements on sales volume, supply continuity, and payment procedures. The agreements between Al-Barokah and large companies specify selling prices, product quality, quantity, and organic certification. The agreements with distributors or agents are formalized in writing, allowing them to sell products freely while requiring proof of the cooperative's organic certification. The purpose of such contracts is to define obligations and limitations within a predetermined period, ensuring that all stakeholders clearly understand their responsibilities, fostering mutually beneficial relationships, preventing fraud, and maintaining compliance (Mardalisa & Varwasih, 2025).

Transaction System

Transaction systems within the supply chain are implemented based on prices determined by the cooperative. Payments from the cooperative to farmers are conducted entirely in cash, with farmers receiving the full transaction amount directly at the time of sale. This financial flow represents a mechanism of value distribution in rupiah, encompassing both costs incurred and profits earned in marketing activities (Mardalisa & Varwasih, 2025). In contrast, transactions between the cooperative and distributors, agents, or companies are conducted using both cash and non-cash methods. Payments may be made directly on the same day or through online transfers, accompanied by invoices issued by the cooperative according to the agreed due date.

Resource

Physical Resources

The physical resources of the farmer are land, seedlings, means of agricultural production, and other supporting resources. Physical resources owned by the cooperative

are scales, sorting tools, packaging tools and machines (sealers), communication tools, and transportation tools. Association Al-Barokah facilitated farmers in need of help to meet the necessary physical resources through peasant groups. A group of farmers is a form of consolidated agriculture and collectively acquires and fulfills the needs of production advice or physical resources, thereby helping to increase productivity, income, and well-being for farmers (Nuryanti et al., 2011).

Technology Resources

Techniques applied by Al-Barokah organic farmers are the use of seeds of superior varieties, tractor machines, hand sprayers, waste engines, land certification every year and until now still performed digital farming assessments on farmers' land. Modern and appropriate technological resources are essential inlining quality during the production process, thus helping to facilitate and produce quality products (Alam et al., 2021). The cooperative applies technology in carrying out marketing activities such as the use of sorting tools, digital scales, packaging tools (sealer), use of social media, and websites for marketing activities. The Association farmer cooperation also has a pick-up box to support the process of delivering goods to distributors/agents and companies.

Human Resources

In the planting activities up to the harvest, farmers employed 15-20 workers. The workforce required by the cooperative is about 5-10 people and the workforce when distributing goods is needed about 1-2 people. The human resources directly involved have helped to contribute to the economy in the production area of agricultural enterprises through the absorption of labor through farmers who are in the surrounding area of the agricultural products (Alam et al., 2021).

Capital Resources

Most Al-Barokah organic farmers finance their cultivation activities through private capital, support from the Association Al-Barokah cooperative, and profits from previous cooperative operations (SHU). Additional sources of capital include bank loans and income-sharing arrangements with landowners. Funding obtained through partner companies may be reimbursed after product sales or settled by adjusting sales prices. Such financial mechanisms contribute to productivity improvements, business efficiency, and enhanced access to markets, technology, and information. In general, cooperatives rely more heavily on capital investment than on operational turnover (Mardalisa & Varwasih, 2025).

Supply Chain Business Process

According to (Mukhtasida et al., 2022), the supply chain consists of four process cycles, such as the procurement cycle, the manufacturing, the replenishment, and the customer order. In the case of organic rice, the procurement cycle is managed by cooperatives that distribute products from farmers. The manufacturing cycle does not occur, as no agency is directly involved in processing; instead, farmers process paddy into

rice using facilities provided by the Association. The replenishment cycle, conducted by distributors, agents, companies, and exporters, involves restocking products from upstream supply chain members and takes place prior to customer ordering, thereby enabling a push process (Iskandar et al., 2024). In the last cycle, the customer order cycle occurs when end consumers purchase rice either directly at the location or through indirect transactions.

Distribution Pattern

Product Flow

In this supply chain, the products that are circulated are already in the form of the final product, organic rice. The supply chain in the study involved farmers as organic rice producers, cooperatives as product or service providers, distributors, agents, and companies as traders that channel organic rice to final consumers. Human resources in the organic rice supply chain involve various parties and the supply chain represents a series of interconnected productive activities that create value within the industry, comprising suppliers, farmers as producers, traders as intermediaries, retailers, companies, and consumers (Mardalisa & Varwasih, 2025). The product flow in this supply chain runs smoothly because there are no delays. The flow of products began from organic rice farmers, after the harvest period, then farmers carried out the post-harvest process and sold the crop to cooperatives. The co-operation will pay the entire cost with the cash system. After the payment process is carried out, the organic rice is subsequently sorted and packaged by the cooperative, which is then sold by the cooperative to distributors/agents and partner companies. The cooperative works with the company (exporting) to export organic rice to several countries such as Yemen, Jordan, and the Netherlands.

Marketing channels refer to the distribution network of products from farmers to end consumers. In this study, there are five patterns of organic rice marketing channels. Figure 1 illustrates five marketing channels for organic rice distribution:

- a. Pattern Channel I: Farmer – Cooperatives – Companies – Exporters – Consumer
- b. Pattern Channel II: Farmer – Cooperatives – Companies – Consumer
- c. Pattern Channel III: Farmer – Cooperatives – Distributors/Agents – Consumer
- d. Pattern Channel IV: Farmer – Cooperatives – Consumer
- e. Pattern Channel V: Farmer – Consumer

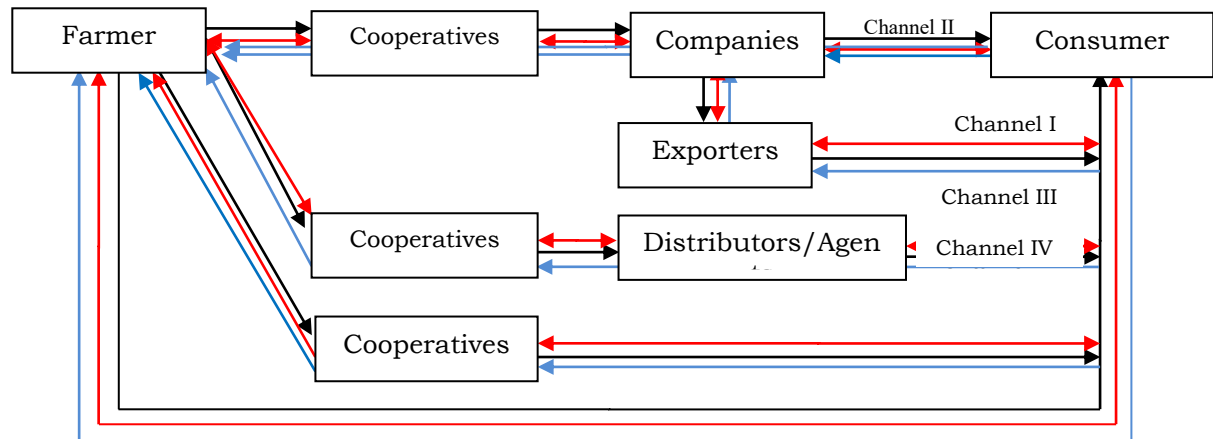


Figure 1. The Flow of Product, Financial, and Supply Chain Information

Source: Research Primary Data (2025)

Information:

- Product Flow
- Financial Flow
- Information Flow

Financial Flow

The financial flow in the organic rice supply chain in Association Al-Barokah is the payment of money for products sold to members of the partner chain. The financial flow is smooth because the transaction system applied is very easy in returning business capital. Financial flows in the organic rice supply chain generally move from consumers, exporters, traders, and companies directly to farmers through upfront cash payments. Most transactions occur directly between retailers, wholesalers, collectors, and farmers, with payments predominantly made in advance and in cash (Mardalisa & Varwasih, 2025). The money that comes in will be used again for business turnover thus forming a cycle. The financial flow starts from exporters to farmers (Figure 1).

Information Flow

In the Al-Barokah organic rice supply chain, the flow of information tends to move in reverse, beginning with farmers and continuing to distributors, agents, and major resellers. In general, information flow within a supply chain refers to the exchange of data between upstream and downstream actors, including prices, demand volumes, and product distribution. The integration of information and communication technology strengthens this process by enabling farmers to access market information, adopt improved cultivation practices, and connect with broader markets, thereby improving both efficiency and competitiveness (Indriana & Putra, 2025). Information obtained from distributors to large companies/resellers is passed on to farmers through Association and coordinated through farm groups. Information transmitted between members of the supply chain is pricing information, product quality, and results of renewal of organic certification. Information

emphasized to farmers includes standardization of organic quality, technology, sustainability/natural management, the physical condition of products according to consumer wishes, and market demand (Figure 1).

Support Chain Members

Organic rice farmers need raw materials such as peanut seeds, production machinery, milling, and milling machines. The input was obtained by farmers through the facilities offered by each farm group under the shadow of Association. Farmers can borrow from a group of farmers by giving rents by the agreement with the group. The facilities offered by a group of farmers or organizations help farmers to obtain important information related to business such as information about the type of seeds used, and the amount of demand for additional capital needed, so that it can improve the quality of internal relationships as well as the common vision of the mission in the course of business (Alam et al., 2021).

Supply Chain Performance

Marketing Margins

Based on the analysis, it can be seen that marketing as a business activity aimed at creating products and delivering them to consumers (Rahayu et al., 2021). Marketing margin analysis is done to find out which marketing channels are efficient to run (Fatima et al., 2022). The marketing margin is calculated from the purchase price component and the selling price of each member of the organic rice supply chain. Farmers sell products in the form of organic rice to cooperatives according to the agreed price of IDR. 14,000 /kg This price already includes the cost of production from the cultivation to the entire milling process that is issued by farmers plus the profits obtained. The organic rice marketing margin can be seen in Table 2.

Table 2. Marketing Margin of Organic Rice, Al-Barokah

No	Description	Channel				
		1	2	3	4	5
1	Farmer Selling price	-	-	-	-	14,000
2	Cooperative Selling price	-	-	-	21,000	-
3	Distributors/agents Selling price	-	-	26,000	-	-
	Purchase price	-	-	21,000	-	-
	Margins	-	-	5,000	-	-
4	Company Selling price	42,500	30,260	-	-	-
	Purchase price	26,000	17,000	-	-	-
	Margins	16,500	13,260	-	-	-
Total Margins		16,500	13,260	5,000	-	-

Source: Research Primary Data (2025)

Table 2 shows that the total margin in each channel has different results. In the first channel chain, the total margin earned is IDR 16,500. In the second marketing channel, the total margin obtained was IDR 13,260, in the third marketing chain, the total margin obtained was IDR 5,000, while the fourth and fifth marketing channels have a marketing margin value of 0 rupiahs. The lowest marketing channels are owned by channels IV and V with a marked small value of marketing margins and at least involved marketing chain actors. The shortest marketing channel will produce the smallest marketing margin value (Karimudin, 2020).

Farmer's Share

Farmer's share analysis was carried out to determine the extent of involvement of each supply chain actor (Sima, 2023). A farmer's share is a comparison of the prices received by farmers with the prices paid by consumers (Karimudin, 2020). The more supply chain actors involved, the greater the value of the marketing margin and the smaller the profits received by farmers. Farmer's share in this study is the percentage (%) of the selling price of organic rice received by farmers against the selling price of rice paid by end consumers. The selling price from farmers is IDR 14,000/kg, while the selling price paid by the final consumer to other members of the supply chain varies.

Table 3. Farmer's Share Value of Organic Rice from The Al-Barokah

	Farmer's share (%)
Channel I	61.18
Channel II	56.18
Channel III	80.77
Channel IV	100
Channel V	100

Source: Research Primary Data (2025)

In this study, five supply chain channels had different farmer's share values. All farmers' shares are worth more than 50 percent. On the first channel of 61.18 percent, the second channel has a farmer's share value of 56.18 percent, the third channel has a farmer's share of 80.77 percent, the fourth channel and the fifth channel have farmers' share of 100 percent. The more agencies involved in the marketing stream, the less the share of farmers will be. Channel I and Channel II are considered fairly efficient while Channel III, channel IV, and Channel V are rated efficient because they have a low marketing margin value and a short marketing chain so it can be said that the fewer marketing institutions involved then the profits obtained by farmers are increasing. The greater value of a farmer's share reflects an efficient market chain and, on the contrary, if the larger value of farmers' share then the value of the marketing margin will be smaller. If the value of the farmer's share is greater then it can be said that the supply chain in Association Al-Barokah is more efficient and the greater the value of the farmers' share, then the marketing margin value obtained will be smaller (Waridin & Al-Hafidz, 2021).

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that the Association Al-Barokah cooperative operates five supply chain channels for organic rice, encompassing farmers, cooperatives, distributors/agents, companies, and exporters. The FSCN approach demonstrates that supply chain conditions, management, business processes, and resources are interconnected and mutually dependent. Performance analysis using marketing margins and the farmer's share indicates that the marketing activities are generally efficient, with the farmer's share exceeding 50% across the supply chain, although values differ by channel and the fourth and fifth channels show zero margins due to direct purchases by consumers. These results highlight that the cooperative's operations are aligned with its vision and mission of empowering farmers. To further enhance efficiency, cooperatives are advised to calculate production costs in detail to set appropriate selling prices, while farmers and supply chain participants should strengthen secondary marketing channels, optimize the participation of all marketers, and consider product, financial, and information flows. Enhanced communication among all actors is essential to foster trust, strengthen commitment, and ensure sustainable, long-term collaboration throughout the supply chain.

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