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PLANNING IN THE DEVELOPMENT OF MULTIPURPOSE COOPERATIVES (KSU) ON COFFEE FARMING BUSINESSES IN MANDAILING NATAL REGENCY, NORTH SUMATRA PROVINCE

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Abstract

This research aims to reassess the effectiveness of the Mandailing Natal coffee farmer development empowerment program by collecting data through interview techniques, and making decisions on new strategic policies taken by the government as a stakeholder in coffee farmer empowerment activities. The research approach used is a descriptive qualitative approach. The analysis method used is descriptive qualitative analysis. The results obtained in Planning to develop Mandailing Jaya Multipurpose Cooperative include several important aspects. First, increasing coffee production by utilizing land and human resources and establishing partnerships to facilitate marketing. Second, overcoming obstacles through research and financial institutions, and expanding marketing networks with farmer organizations. Third, improve coffee quality and determine appropriate prices for farmers. Fourth, improve the marketing chain system to find the right strategy.

Keywords: Coffee Farmers Group, Local Government Policy, Multi-Bussines Cooperative



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1. INTRODUCTION

Indonesia is an agrarian country, with approximately 40% of its population working as farmers. The agricultural sector in Indonesia has significant potential to contribute to national economic development, both through abundant natural resources and available job opportunities. Agriculture plays a crucial role in meeting the basic needs of society, and as Indonesia's population continues to grow, the demand for basic necessities will also increase. Managing agricultural land as a strategic part of national policy is essential for ensuring the sustainability of the agricultural sector in food production and avoiding long-term socio-economic losses (Vikriandi, 2020).

A large portion of Indonesia's population still lives in rural areas, with many continuing to rely on agriculture for their livelihood. This is one of the key reasons the agricultural sector plays such a vital role in the nation's economic growth. Within the agricultural sector, there are several subsectors, including plantations, forestry, livestock, fisheries, and food crops. Indonesia is particularly well-

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suited for the plantation subsector, as it is located in tropical regions with a warm climate, ideal for crops such as coffee (Permatasari, 2014).

The revenue generated from agriculture's contribution to the national economy has gradually declined over time. The government aims to increase farmers' income from domestic production and reduce imports from other countries (Ningsih and Kurniawan, 2016). Therefore, it is not surprising that the government continues to promote economic growth within the agricultural sector. Regions that are major agricultural producers are continually encouraged to improve agricultural output to meet public demand while reducing dependence on agricultural commodities that are currently imported from abroad.

To stimulate increased agricultural contributions in these regions, various government programs have been implemented, such as empowering coffee farmer groups through a social entrepreneurship approach, as seen in Mandailing Natal District. Coffee is one of the most economically valuable plantation crops and plays a crucial role in both foreign exchange earnings and local income. However, in practice, only a small portion of coffee farmers have significant bargaining power compared to other business actors, such as traders and exporters. According to Suciati et al. (2012, as cited in Winarno and Darsono, 2019), coffee farmers often have the lowest profit margins because they are generally unable to produce coffee beans that meet market expectations.

Mandailing Natal District, located in North Sumatra, is known for producing Arabica coffee. The district consists of 23 subdistricts, 17 of which are major producers of Arabica coffee (Ateng coffee), including Batang Natal, Lingga Bayu, Kotanopan, Ulu Pungkut, Tambangan, Lembah Sorik Marapi, Puncak Sorik Marapi, Muara Sipongi, Pakantan, Panyabungan, Panyabungan Selatan, Panyabungan Barat, Panyabungan Utara, Panyabungan Timur, Hutabargot, Siabu, and Bukit Malintang.

Table 1. Coffee Production in Mandailing Natal District in 2018

No.	Area Name	Productions (Tons)
1.	Siabu	231.43
2.	Bukit Malintang	49.37
3.	Naga Juang	77.88
4.	Panyabungan Utara	114.65
5.	Panyabungan Kota	233.66
6.	Panyabungan Timur	4.93
7.	Panyabungan Barat	101.03
8.	Huta Bargot	44.20
9.	Panyabungan Selatan	49.63
10.	Lembah Sorik Marapi	27.54
11.	Puncak Sorik Marapi	5.67
12.	Tambangan	8.27
13.	Kotanopan	0.28
14.	Ulu Pungkut	-
15.	Muara Sipongi	1.44

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No.	Area Name	Productions (Tons)
17.	Batang Natal	-
18.	Lingga Bayu	8.37
19.	Ranto Baik	116.61
20.	Batahan	57.93
21.	Sinunukan	55.79
22.	Natal	253.79
23.	Muara Batang Gadis	70.89
	Jumlah	1.591

Source: Dinas Pertanian Kabupaten Mandailing Natal, 2018

Mandailing Sumatra coffee comes from the Bukit Barisan coffee plantations, located at an altitude of 1,500 meters above sea level. As it is an Arabica coffee, Mandailing coffee is known for its distinct acidic taste and aroma. However, compared to other Arabica coffee varieties from Sumatra, efforts are being made by the Mandailing Natal government to improve the productivity of coffee as a local commodity, aiming to reduce the acidity levels of Mandailing coffee and enhance its overall quality. One such initiative is empowering coffee farmer groups through a multipurpose cooperative system (KSU) (Susanti, Ira, 2015).

Since 1878, Mandailing Arabica coffee has been recognized worldwide for its strong flavor and aroma. In 1922, William H. Ukers described Mandailing Arabica coffee as the finest and most expensive coffee in the international market. Foreigners referred to it as "Mandheling Coffee Arabica."

Various efforts have been made by the Mandailing Natal government to improve the productivity of coffee as a prominent local commodity, thereby boosting the regional economy. One such effort is the empowerment of coffee farmer groups through the establishment of multipurpose cooperatives (KSU) (Susanti, 2015).



Figure 1. Coffee Farmers in Multipurpose Cooperatives (KSU) (Source: Antara News, 2009)

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A multipurpose cooperative (Koperasi Serba Usaha or KSU) is a cooperative that provides several services to its members simultaneously. In Mandailing Natal District, the KSU focuses on improving coffee farming businesses, and the program is named Koperasi Serba Usaha (KSU) Mandailing Jaya. Koperasi Serba Usaha (KSU) Kopi Mandailing Jaya has established a production house in Habincaran Village, Ulupungkut Subdistrict. This program is designed to absorb a greater quantity of coffee from farmers, ensuring that the benefits are felt more by the members and Arabica coffee farmers in Mandailing Natal. The establishment of this KSU unit is expected to help boost coffee productivity in Mandailing Natal.

The KSU established in Mandailing Natal is a small-scale cooperative, which brings certain limitations in terms of facilities. The facilities are small and limited, making the cooperative's capacity to absorb the farmers' produce inadequate. Despite the high demand for coffee from the cooperative, there exists a gap between the cooperative's absorption capacity and the market demand for coffee. As a result, the current efforts have not been able to maximize the farmers' income.

An appropriate planning concept is required to address these issues effectively, one of which involves the formulation of a business development strategy. The planning process must align with the business objectives and can serve as a consideration for developing the coffee farming business in Mandailing Natal. Based on the explanation provided above, the aim of this study is to develop a business development plan that aligns with the main goals of the program. This research is conducted using data analysis techniques, specifically through analytical methods.

2. METHOD

This study employed a **qualitative case study design**, which is appropriate for exploring complex institutional dynamics, farmer-cooperative interactions, and contextual challenges within a specific agribusiness setting. A case study approach enables researchers to investigate real-life phenomena in depth and within their natural context (Yin, 2018). The qualitative orientation also aligns with the objective of understanding perceptions, experiences, and organizational processes that cannot be captured through quantitative indicators alone (Creswell & Poth, 2018).

2.1 Research Site and Sampling

The research was conducted at Koperasi Serba Usaha (KSU) Mandailing Jaya, located in Ulu Pungkut Subdistrict, Mandailing Natal Regency. This site was selected purposively based on several considerations:

1. The cooperative plays a central role in managing upstream-downstream coffee agribusiness activities,
2. The cooperative faces structural problems related to price disparities, institutional capacity, and market access, and
3. The site represents a typical model of community-based coffee production in rural Mandailing highlands.

Such purposive selection is consistent with qualitative case study protocols, which prioritize information-rich cases relevant to the research objectives (Patton, 2015).

Participants (informants) included cooperative board members, active farmer members, women members, collectors, and local stakeholders. A total of key informants were selected using purposive and snowball techniques, ensuring that respondents possessed knowledge and experience relevant to cooperative operations and farmer livelihoods.

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2.2 Data Collection Techniques

This study used primary and secondary data. Primary data were obtained through:

1. Semi-structured interviews, allowing flexibility for probing while maintaining thematic consistency. Interviews explored production practices, cooperative governance, price mechanisms, risks, challenges, and development strategies.
2. Participatory observation, including direct observation of farming activities, post-harvest handling, cooperative meetings, and daily operational routines. Such observations enriched the contextual interpretation of verbal data.

Secondary data were collected from relevant books, scientific journals, cooperative documents, production reports, and government statistics. Using multi-source evidence strengthens the credibility of qualitative case studies (Yin, 2018).

2.3 Data Analysis

The data analysis followed a thematic analysis technique, consisting of:

1. Data reduction through coding and categorization,
2. Data display in the form of thematic matrices and narrative summaries, and
3. Conclusion drawing and verification through cross-checking with informants.

Thematic analysis is widely recommended for qualitative agricultural research because it facilitates pattern recognition and interpretation of socio-economic dynamics within farmer institutions (Nowell et al., 2017).

Triangulation was applied by comparing interview results, observation notes, and secondary documents to ensure validity and reliability of the findings. The final results were then synthesized into an integrated research article describing potentials, constraints, opportunities, risks, and recommended development strategies for KSU Mandailing Jaya.

3. RESULT AND DISCUSSION

3.1 General Overview of the Research Area

Ulu Pungkut Subdistrict is one of the subdistricts located in Mandailing Natal Regency, North Sumatra Province. It is 57 km away from the district capital. The area of Ulu Pungkut Subdistrict covers 29,519.06 hectares (BPS 2023). The daily temperature in the region ranges from 21°C to 34°C, with annual rainfall between 2,000 mm and 3,000 mm. The topography of the area is hilly, with moderate soil productivity.

Ulu Pungkut Subdistrict is located in the southern part, bordering Pasaman, West Sumatra. To the north, it borders Kotanopan, to the east, it borders Muara Sipongi and Pakantan, and to the west, it borders Pasaman and West Pasaman. In 2023, Ulu Pungkut Subdistrict had a total of 299 family heads with a population of 1,110 people.

3.2 General Overview of the Multipurpose Cooperative in Ulu Pungkut Subdistrict, Mandailing Natal Regency

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Cooperatives serve as a critical enabling institution for linking farmers' production to value-adding downstream processes. Recent research demonstrates that smallholder coffee farmers accessing a cooperative structure significantly improve their production capacity and welfare outcomes. For instance, Rombeallo (2024) found that farmer characteristics, knowledge, social and economic factors significantly affected the decision to join a producer cooperative, which in turn positively impacted farmer welfare. In the context of coffee agribusiness, this underscores the strategic role of a cooperative such as yours organising upstream production, coordinating processing, and enabling marketing of "Mandailing Jaya Coffee" across the chain.

Moreover, integrating upstream and downstream activities under one institutional umbrella strengthens the value chain resilience and enhances marketing outcomes. For example, Rosiana et al. (2024) developed a conceptual model of the coffee agro-industry that emphasised how improving raw material quality at the farm level, increasing processing capacity, and upgrading actors' skills are essential to link upstream and downstream systems effectively. Applying this to your cooperative context: by managing from upstream (farm production) to downstream (roasted beans, beverages, brand "BANAMON"), the cooperative is positioned to capture higher added value and reduce dependency on intermediaries.

Finally, the ability of a cooperative to design and manage value chain linkages is influenced by the structure of supply chains, the governance of marketing channels, and the institutional capacity of the cooperative itself. Mulyati (2024) compared business models in the coffee value chain and pointed out that while cooperatives empower farmers and enable shared decision-making, they also face governance and market challenges that must be proactively managed. In the case of your cooperative with 198 members in Ulu Pungkut Sub-district, recognising these governance and market aspects (e.g., brand development, quality assurance, direct coffee shop marketing) will strengthen the sustainability of both the upstream production and downstream processing-marketing functions (Aulia et al., 2023).

3.3 Coffee Farmers Profile

The coffee farmers in the area cultivate Arabica coffee varieties, including Ateng and Godang. Ateng coffee plants are short, productive, and well adapted to highland microclimates, which is consistent with recent findings showing that dwarf Arabica varieties tend to offer higher yield stability under smallholder conditions (Getachew et al., 2023). The Godang variety, which grows up to 3 meters, represents a taller local genotype that contributes to genetic diversity within community-managed agroforestry systems, supporting resilience to climate and pest pressures as emphasized by Wahid et al. (2024). Ateng coffee planted in Simpang Banyak Julu Village comes from high quality seeds distributed by the Mandailing Natal Plantation Office, while the Godang variety originates from long standing forest populations. Mandailing coffee typically begins flowering at 1.5 years and can be harvested at 2.5 years, with a flowering-to-harvest period of 7 to 8 months. These phenological patterns align with recent studies on Arabica growth cycles in tropical highlands, which highlight similar timelines for flower initiation and berry maturation (Kufa et al., 2022).

Coffee is generally harvested from September to December and again from March to May, with peak harvest seasons occurring in mid November and mid April. Such bimodal harvesting patterns are

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also reported in other Indonesian highland systems and are influenced by rainfall distribution, microclimate, and altitudinal gradient effects (Rahardjo & Nugroho, 2023). There are 118 coffee farmers who are members of the Koperasi Serba Usaha Mandailing Jaya, consisting of 11 women and 117 men. Most cooperative members fall within the productive age category, with 92 considered productive and 26 non-productive. In terms of education, 10 members completed elementary school, 10 junior high school, 54 high school, and 34 hold a bachelor's degree. Regarding coffee-farming experience, 69 members have 1 to 5 years of experience, while 49 have more than 5 years. This demographic structure reflects trends in Indonesia where education level, farming experience, and productive age significantly influence adoption of good agricultural practices and cooperative participation (Abdullah et al., 2024).

3.4 Potentials, Constraints, Opportunities, and Risks of the Mandailing Jaya Multipurpose Cooperative

Based on interviews conducted with several respondents and an in-depth review of relevant literature, it was found that the Mandailing Jaya Multipurpose Cooperative (*Koperasi Serba Usaha* or KSU) possesses various internal and external factors that influence the development of coffee farming enterprises in Mandailing Natal Regency. These factors encompass key potentials, constraints, opportunities, and risks that collectively determine the sustainability and competitiveness of the cooperative in the local coffee agribusiness sector.

The major potential of KSU Mandailing Jaya lies in its favorable natural conditions for Arabica coffee cultivation, particularly in the highlands of the Bukit Barisan mountain range, which provide optimal agroclimatic conditions for coffee growth. The availability of vast arable land allows for expansion of plantation areas and productivity enhancement. Furthermore, the region benefits from skilled human resources, as many residents have long been engaged in coffee farming as their primary livelihood. This is supported by relatively adequate infrastructure, including access roads to production centers, post-harvest processing facilities, and storage warehouses, which facilitate distribution and strengthen the value chain. Collectively, these strengths demonstrate that KSU Mandailing Jaya has a strong foundation to increase production efficiency and product quality, making Mandailing coffee more competitive in both domestic and export markets.

Despite these strengths, several constraints still hinder the cooperative's optimal performance. Many farmers continue to rely on traditional and low-technology farming practices, resulting in limited productivity and inconsistent bean quality. The lack of local financial institutions restricts farmers' access to credit and investment capital, which in turn limits technological upgrading and business expansion. Moreover, the absence of dedicated agricultural research institutions reduces opportunities for innovation and adoption of improved cultivation methods. An additional challenge is the inefficiency of the current marketing system: long and fragmented supply chains often disadvantage smallholder farmers, as they receive low farm-gate prices compared to market retail prices. These obstacles indicate the urgent need for strategic planning, including establishing local financial and research institutions, improving market linkages through farmer organizations, and adopting digital technology to optimize production and marketing processes.

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From an external perspective, the cooperative faces a range of opportunities that can be leveraged to strengthen its position in the coffee industry. Demand for Arabica coffee especially for premium and *single-origin* varieties such as Mandailing coffee continues to increase both domestically and internationally. The emergence of coffee farmer associations and collaborative networks also opens new opportunities for KSU to build partnerships and expand its market reach. Regional autonomy policies provide additional flexibility for local governments to regulate coffee pricing, offer institutional support, and facilitate empowerment programs for smallholders. The existence of stable and growing coffee markets provides an encouraging environment for the cooperative to scale up production and improve value-added activities. Strategic efforts should therefore focus on maximizing land and human resource potential, enhancing cooperative partnerships with producer groups, and developing inclusive marketing systems that connect farmers directly with buyers.

Nevertheless, several risks must be anticipated to maintain long-term sustainability. Climate variability poses a significant threat to coffee production, with irregular rainfall patterns and temperature extremes affecting yield and quality. Market competition from other coffee-producing regions both for similar and substitute products creates pressure on prices and market share. Global coffee price fluctuations and economic uncertainty further increase the volatility of farmers' incomes. Another critical risk factor is farmers' limited understanding of legal frameworks and trade regulations, which can lead to exploitative transactions or contractual disadvantages. These institutional and regulatory challenges are consistent with recent findings in Indonesian farmer organizations, which stress the importance of strengthening governance mechanisms and improving farmers' legal literacy to reduce vulnerability in marketing arrangements (Nasution & Rambe, 2023). To mitigate these risks, KSU Mandailing Jaya needs to enhance product quality, strengthen relationships with reliable and transparent buyers, and collaborate with relevant government and institutional bodies to ensure fair trade practices. Additionally, developing a climate adaptation plan and diversifying market access could help reduce vulnerability to external shocks. Such strategies align with agribusiness resilience frameworks that emphasize proactive risk management and institutional strengthening within farmer cooperatives (Syahputra et al., 2022).

Overall, the findings highlight that the Mandailing Jaya Multipurpose Cooperative possesses significant potential and promising opportunities, yet still faces notable constraints and risks that must be strategically managed. Through comprehensive business planning integrating resource optimization, institutional strengthening, market expansion, and risk mitigation, the cooperative can enhance its role as a key driver of sustainable, community-based coffee agribusiness in Mandailing Natal Regency.

3.5 Discussion

Based on the results of the SWOT mapping and field observations, four main strategic planning schemes were identified for the development of the Mandailing Jaya Multipurpose Cooperative (*Koperasi Serba Usaha* or KSU). These strategies align with the matrix of cooperative development proposed by David (2015), which emphasizes: (1) utilizing strengths to maximize opportunities, (2) using strengths to minimize threats, (3) reducing weaknesses by leveraging available opportunities, and (4) minimizing weaknesses to reduce the impact of potential threats. Each of these strategic

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approaches provides a structured foundation for guiding the cooperative toward sustainable and competitive performance in the local coffee agribusiness sector.

The first strategic plan focuses on developing the cooperative's potential by optimizing existing strengths to capitalize on available opportunities. Field observations revealed several internal strengths, including suitable natural resources for Arabica coffee cultivation, abundant farmland, skilled human resources in coffee production, and adequate infrastructure. These assets can be strategically harnessed to enhance productivity and profitability. The cooperative can therefore prioritize increasing coffee production by maximizing land use efficiency and leveraging the technical expertise of local farmers. In addition, strengthening partnerships between KSU and existing coffee producer organizations can facilitate marketing access and streamline the supply chain. By establishing mutually beneficial collaborations, the cooperative can enhance its bargaining power, improve distribution efficiency, and ensure that farmers obtain fair market prices for their products.

The second planning scheme relates to controlling business constraints by minimizing weaknesses while taking advantage of external opportunities. The primary internal weaknesses identified include the continued use of traditional technology, limited financial institutions in the study area, the absence of local research institutions, and inefficient marketing systems that disadvantage farmers. Meanwhile, external opportunities exist in the form of increasing market demand, the emergence of coffee farmer organizations, regional autonomy policies that allow local pricing flexibility, and the availability of stable markets for coffee commodities. Therefore, strategic measures to overcome these challenges include the establishment of local research and financial institutions to improve access to innovation and capital. Expanding KSU's marketing networks through collaboration with farmer organizations and the use of information technology can also strengthen market linkages and increase cooperative competitiveness. The digitalization of marketing and traceability systems would further enhance the visibility and reputation of Mandailing coffee in domestic and global markets.

The third strategic plan emphasizes risk management by utilizing the cooperative's strengths to anticipate potential threats. The identified threats include climate uncertainty, competition from other coffee-producing regions, price fluctuations, economic instability, and weak legal awareness among farmers. To address these, KSU should capitalize on its strong resource base such as fertile land, skilled farmers, and adequate infrastructure to maintain consistent production and product quality. Developing adaptive agricultural practices, such as climate-resilient coffee varieties and improved post-harvest technologies, would help mitigate the effects of unpredictable weather patterns. Furthermore, strengthening relationships with reliable trading partners can ensure fair pricing and compliance with existing trade regulations. Through these efforts, the cooperative can maintain production continuity, protect farmers' income stability, and safeguard the sustainability of the local coffee industry.

The fourth strategic plan concerns risk coordination, which aims to reduce weaknesses while anticipating external threats. The internal weaknesses identified limited technological adoption, inadequate financial and research institutions, and inefficient marketing systems require comprehensive coordination to prevent further exposure to risks such as climate variability, price instability, and market competition. To mitigate these interconnected challenges, KSU needs to improve its marketing chain system through collaboration with relevant institutions, including local

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governments, agricultural extension agencies, and market intermediaries. Establishing transparent coordination mechanisms between producers, cooperatives, and buyers can shorten the supply chain, reduce transaction costs, and ensure price fairness. In addition, regular farmer training on financial literacy, legal frameworks, and sustainable farming practices will enhance the cooperative's adaptive capacity in facing external uncertainties.

Overall, the discussion reveals that KSU Mandailing Jaya's sustainability depends on its ability to strategically balance internal and external factors through integrated planning. By developing existing potentials, controlling operational constraints, managing risks, and coordinating adaptive responses, the cooperative can position itself as a resilient and competitive institution within the coffee agribusiness ecosystem. The implementation of these strategic plans not only strengthens the economic role of KSU but also contributes to the empowerment of local farmers and the achievement of regional development goals in Mandailing Natal Regency.

4. CONCLUSION

This study concludes that the Mandailing Jaya Multipurpose Cooperative (*Koperasi Serba Usaha* or KSU) in Ulu Pungkut District, Mandailing Natal Regency, holds significant potential to strengthen the local coffee agribusiness through strategic, integrated, and sustainable development planning. The findings reveal that four interrelated strategic frameworks covering potential development, constraint control, risk management, and risk coordination are essential to enhancing the cooperative's competitiveness and long-term resilience.

In terms of potential development, the cooperative must optimize the use of its natural and human resources by expanding coffee production and fostering partnerships with producer organizations to facilitate broader market access. These initiatives will not only improve productivity and product quality but also elevate the market value of Mandailing Arabica coffee.

For constraint control, the study emphasizes the urgent need to establish specialized research and financial institutions capable of supporting technological innovation, access to capital, and knowledge transfer. Strengthening marketing networks through collaboration with farmer associations and the adoption of information technology will modernize business operations and create a more efficient and transparent value chain.

The risk management plan focuses on maintaining product quality and stability through enhanced partnerships that ensure fair and regulated pricing for farmers. This will protect farmer income from volatile market dynamics while ensuring compliance with trade and quality standards. Furthermore, the cooperative must adopt adaptive production practices to mitigate the impact of climate change and market fluctuations.

Finally, the risk coordination strategy underlines the importance of improving the cooperative's marketing and distribution systems through cooperation with relevant institutions, ensuring fair pricing mechanisms, and building an integrated marketing chain. Coordinated efforts among stakeholders farmers, cooperatives, local governments, and private buyers will increase operational efficiency and market competitiveness while safeguarding against external uncertainties. This strategic orientation is closely aligned with the Fairtrade framework, which institutionalizes

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coordination, transparency, and equitable market access within smallholder coffee value chains (Aulia et al., 2024)

In summary, the Mandailing Jaya Multipurpose Cooperative possesses the internal strengths and external opportunities to evolve into a sustainable, community-based agribusiness model that contributes significantly to rural economic growth in Mandailing Natal Regency. By implementing these strategic plans based on priority and resource capacity, KSU can transform from a traditional cooperative into a modern, adaptive, and value-driven institution that empowers local farmers, enhances regional productivity, and reinforces Mandailing's reputation as one of Indonesia's finest coffee-producing regions.

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