VALUE CHAIN MAP OF COFFEE COMMODITIES IN CENTRAL ACEH REGENCY IN THE IMPLEMENTATION OF INCLUSIVE BUSINESS MODEL

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To cite this article:

Received: November 01, 2023; Accepted: November 20, 2023; Published: November 23, 2023

ABSTRACT

This study aims to describe the Value Chain of coffee commodities in Central Aceh Regency and analyze the Value Chain Map of coffee commodities in Central Aceh Regency in the implementation of the Inclusive Business Model. This research was conducted in Central Aceh District, Aceh Province. This research was conducted in March–August 2023. The data used is in the form of primary data and secondary data. The sampling method with non-probability sampling uses the purposive sampling method. The data analysis method used is qualitative data analysis. Data analysis techniques use the Value Chain Map approach. The value chain of coffee in Central Aceh Regency is the first distribution pattern of farmers selling directly to exporters and consumers, and the second pattern is farmers to middlemen to cooperatives and consumers. The third pattern is farmers to middlemen to MSMEs Coffee Processors and consumers. Implementing an inclusive business model for coffee commodities in Central Aceh Regency involves a partnership or collaboration between coffee farmers and the Baitul Qiradh Baburrayyan Cooperative. The highest value for farmers who are members of cooperatives is in principle 2 of effective market linkage (3.8). The lowest value is principle three, fair and transparent governance (3.0). The highest value in non-cooperative farmers is principle one chain-wide collaboration (2.5). The lowest value is the six principles of Measurement of outcome (2.0). The inclusive business model is very profitable for farmers who join cooperatives because farmers get premiums, higher prices, infrastructure development, coaching and capital to improve farmer welfare.

Keywords: cooperation; inclusive business; value chain.

INTRODUCTION

Coffee (Coffeea sp.) is one of the leading commodities of Indonesian plantations as a source of foreign exchange with export attractiveness and broad market access. Coffee is the mainstay commodity of the community as a source of livelihood from the plantation sector. Aceh Province is a coffee-producing province with Indonesia's third largest land area, 126.50 thousand hectares and a production level of 74,20 thousand tons (Badan Pusat Statistik, 2022). Aceh coffee has a high taste and has received Geographical Indication certification (IKG Kopi Gayo) since 2010 (Alqarni & Hamzali, 2020). Coffee is a plantation commodity with the second largest land area in Aceh Province in 2022, 126,6 thousand hectares, with the highest production rate of 75,3 thousand tons. Central Aceh Regency has the largest land area for robusta and Arabica coffee commodities in Aceh Province in 2021, 51,500 hectares, with the largest production level of 36.534 tons (BPS Provinsi Aceh, 2023).

Coffee farmers of smallholder plantations in Central Aceh Regency who cultivate coffee amounted to 39.475 Heads of Families (BPS Provinsi Aceh, 2023). The low ability of farmers in processing the coffee business due to lack of knowledge transfer results in a low bargaining position so that farmers' welfare is not created due to the lack of optimal counselling regarding the coffee business by instructors, lack of ability to compile and documenting materials for transferring knowledge to fellow farmers, farmers also find it challenging to implement innovations provided by extension workers or related agencies due to the mindset of farmers which is trust to experience more
than renewable research. According to Permatasari (2018), Coffee farmers also face the problem of difficulty in obtaining market information related to price, processing technology to increase added value that is not available, high operational costs and marketing processes only in the form of unprocessed coffee, and low control over resources. Farmers who are not members of cooperatives will find it difficult to export coffee because farmers' coffee production does not meet export quotas, and there is no direct cooperation with exporters.

The value chain is a sequence that must contribute more to the final value of a product. The coffee commodity value chain is a series of processes starting from coffee cultivation, processing of crops, and marketing and distribution of coffee beans/coffee grounds to end consumers (Permatasari et al., 2018). The coffee value chain in Central Aceh Regency is that most farmers sell coffee crops through collecting traders, then collecting traders sell to cooperatives. Some also sell the harvest directly to the cooperative. Every coffee player has various product specification requirements, production capabilities and capital. Thus, it is necessary to identify the value chain from upstream to downstream so that gaps are known to increase coffee farmers' selling value and welfare.

Inclusive business is a practice for companies to eradicate poverty by involving people experiencing poverty to enter the company’s main business value chain (Saragih, 2021). Inclusive business patterns place farmers in the value chain together with other business actors (Wijayanti, 2021). Inclusive business with various instruments to increase the inclusiveness of low-income communities and smallholders in the commercial value chain.

Based on the formulation of the problem above, the problem-solving approach that can be applied is to make a Value Chain Map. Value chain analysis is one part of the value chain development process by providing a fundamental and comprehensive understanding of the coffee commodity value chain to identify functions, operators, value chain supporting institutions and relationships among actors/stakeholders. The value chain map provides essential quantitative information along the value chain, raw materials, turnover, assessing the distribution of income, costs, cost structure, productivity, added value and competitiveness of coffee commodities (Fauziah et al., 2015).

The Inclusive Business Model is a suitable method for developing and improving the livelihoods of smallholder coffee farms. There are opportunities for smallholders to grow and develop by increasing the bargaining value of the coffee production produced. According to (Ramadanti et al., 2017). The inclusive business model promotes smallholders to market with the underlying principle that there is mutual benefit for poor farmers and the business community. The main goal is to reduce poverty and improve food security.

An Inclusive Business Model requires strengthening the value chain of a business that involves the community. Communities that join or aggregate in intermediary institutions/cooperatives have more bargaining positions with consumers than individual farmers. The role of intermediary institutions is very important in strengthening inclusive business value chains, namely being involved in every stage of decision-making based on market demand and product supply to strengthen the role of society in social, economic and environmental aspects (Saragih, 2021). (Saragih, 2021). With research on inclusive business methods, farmers should be able to use it as a reference for choosing more effective, efficient and mutually beneficial cooperation to increase the welfare of coffee farmers. Still, research on inclusive business in Central Aceh has never been conducted.

Samsudin's research (2016) regarding coffee value chain analysis in Central Aceh Regency only examined structure, habits, and market performance. It analyzed the supply chain of the Arabica coffee market in Central Aceh Regency. Permatasari's research (2017) regarding the inclusive business model of the arabica coffee value chain in Bondowoso, East Java, only aims to create the best inclusive business model to be implemented by coffee farmers in Bondowoso, East Java. Meanwhile, this research has the novelty of reviewing the value chain map model to obtain the best value chain model after implementing an inclusive business model for the arabica coffee commodity, which has organic certification in Central Aceh Regency. This research is necessary because the implementation of an inclusive business model has been carried out since 2005. Currently, there are 11 coffee cooperatives still actively operating in Central Aceh Regency. However, farmers are still far from being prosperous. Hopefully, this research can provide information and considerations for farmers to implement a more profitable value chain model. For coffee agroindustry business players, it is hoped that this research can be used for consideration in obtaining raw materials with a more efficient value chain model for the government to make effective and efficient policies so that there is no overlapping of policies between agencies.

This study aims to describe the Value Chain of coffee commodities in Central Aceh Regency and analyze the Value Chain Map of coffee commodities in Central Aceh Regency in the implementation of the Inclusive Business Model. This research is expected to be a source of
information and input material for coffee farmers and agroindustry business actors and as a reference for policymakers related to the development of inclusive business model.

MATERIALS AND METHODS

This research was conducted in Central Aceh Regency, Aceh Province. The selection of the research site was carried out by purposive method with the consideration that Central Aceh Regency is the Regency with the largest land area for robusta and Arabica coffee commodities for smallholder plantations in Aceh Province in 2021, which is 51,500 hectares with the largest production level of 36,534 tons. This research was conducted in March–August 2023. The data used is in the form of primary data and secondary data. Primary data are in the form of respondent identity, farm inputs, coffee maintenance, post-harvest, marketing, finance, human resources, partnerships obtained from field observations, in-depth interviews, filling out questionnaires to respondents/smallholders coffee plantations and Focus Group Discussions with stakeholders. Secondary data in documents related to coffee land area, coffee production, and coffee productivity were obtained from BPS Aceh Province, BPS Central Aceh Regency, internet, books and journals. Data collection method by making direct observations of the research location by observing the coffee value chain, in-depth interviews using open questions to key informants of farmer group leaders, providing questionnaires to respondents of smallholder plantation coffee farmers, and conducting Focus Group discussions with stakeholders, namely the Head of The Central Aceh Regency Plantation Office, the head of the Central Aceh Regency Industry Office, Group leaders, Coffee farmers, cooperative leaders and coffee business actors to obtain research information.

The population in this study are Coffee farmers who cultivate coffee, amounting to 39,475 households (BPS Provinsi Aceh, 2023). The sampling method with non-probability sampling uses the purposive sampling method with the consideration of several criteria, namely: (1) Coffee farmers of smallholder plantations that have a land area of > 1.0 ha; (2) coffee farmers who did not join the cooperative and who joined the cooperative; (3) Coffee farmers who have produced coffee production; (4) Coffee farmers who have organic certification. The respondents were 30 coffee farmers, community plantations, members of cooperatives and non-cooperatives, the Head of the Central Aceh Plantation Office and the head of the Central Aceh Cooperative, small and medium enterprises Office, the chairman of cooperative management, collecting traders, and coffee processing entrepreneurs. To avoid bias in calculations, at least 30 samples must be used (Soekartawi, 2003). The variables in this research are value chain, market, and service access. Furthermore, data triangulation was carried out by coffee farmers, coffee collectors, cooperatives, and the government to test the study results and compare them with relevant theories. Research then identifies the truth of the information from various points of view by reducing as much bias as possible during data collection and analysis.

The data analysis method used is qualitative data analysis. Data analysis techniques use the Value Chain Map approach. The first stage is to know the processes from upstream to downstream of coffee commodities. The second stage maps the relationship between stakeholders and integration in various factors. The final stage is to create a new business model principle to evaluate business relations between farmers and consumers so that appropriate actions can be determined to increase the inclusiveness of smallholder farmers. The principles highlight critical success factors for improving inclusivity, fairness, durability and financial stability in business relations between small-scale producers and formal buyers. Signposts should be considered that indicate issues and topics on which care should be exercised when constructing an inclusive business model that links smallholder farmers with modern markets (Lundy et al., 2014).

Furthermore, 6 (six) principles, according to Lundy (2014), include Principle 1. chain-wide collaboration, principle 2. effective market linkage, principle 3. fair and transparent governance, principle 4. Equitable access to service, principle 5. inclusive innovation 6. measurement of outcome. The six principles are then created in a scorecard. The scorecard is separated according to the six principles, each containing several criteria. The grading to be used is a six-point scale ranging from strongly agree to disagree strongly. After that, add up the scores and average them. The aim is to develop a final average score for each principle (Lundy et al., 2014). After obtaining the calculation results from data processing, a spider web makes it easier to understand the data (Permatasari et al., 2018).
RESULTS AND DISCUSSION

General Description of the Research Area

Central Aceh Regency is one of the districts located in Aceh Province. Astronomically, Central Aceh is located at 4°10’ -4°58’ North Latitude and 96°22’ East Longitude with an area reaching 4,454.50 Km². Geographically, Central Aceh Regency is the Gayo Highland area with an altitude of 200-600 meters above sea level and is located on the Indonesian island of Sumatra between Asian and Australian Continents and between the Indian Ocean. Central Aceh Regency has 14 sub-districts of 295 villages with the following boundaries (BPS Kab. Aceh Tengah, 2022). The northern side borders Bener Meriah Regency and Bireun Regency. Southside borders with East Aceh Regency. West side borders with Gayo Luwu, West Aceh, and Nagan Raya Regency. East side borders with Pidie Regency and Nagan Raya Regency.

![Regional map of Central Aceh Regency](image)

Central Aceh Regency had a large plantation area in 2019 of 52,577.8 hectares. One of the plantations in this region is Arabica coffee, with a plantation area of 49,835 Ha or 94.82% of the total plantation area in Central Aceh Regency, so with a total production of Arabica Coffee plant of 34,609 tons, the Arabica coffee plant as the primary commodity in the region. Coffee is an Indonesian export commodity that is essential to economic growth. The agricultural sector's priority is the development of coffee and its derivative products. The export potential is very high due to the demand for coffee consumption, making coffee a lifestyle (Syakir & Surmaini, 2017). Arabica coffee is a traditional coffee with the best taste. Most of the existing coffee is made from this type of coffee (Rahardjo, 2012). Indonesia is rich in types and types of coffee. Various famous regions in Indonesia also have their specialty coffee. For example, Aceh, which is famous for Gayo Coffee (arabica), Papua, which is famous for Wamena Coffee (arabica) and Bali, which is famous for Kintamani Coffee (arabica). Gayo Coffee from Aceh is famous for its distinctive bitterness and aroma (Fahmi et al., 2013).

Value Chain Map of Coffee in Central Aceh Regency

The value chain of coffee in Central Aceh Regency can be seen from the farmers who make the most profit, which can be seen from the margin of each farmer each kilogram of coffee production, both in the form of cherry coffee and grain coffee. Based on research that has been carried out, there are two distribution patterns for coffee sales in Central Aceh Regency. The first distribution pattern is that farmers sell the coffee directly to a coffee collector rather than to exporters and consumers, and the second pattern is farmers sell the coffee to a coffee collector, then to a cooperative and then to consumers. The third pattern is that farmers sell the coffee to a coffee collector rather than to MSMEs who are processing the coffee and to consumers.

The first distribution pattern is that coffee farmers in Central Aceh Regency sell their harvests of cherry coffee directly to coffee collectors. The collectors will collect the harvest based on their respective areas, namely per sub-district. After that, further processing will be carried out by washing the cherry coffee beans, peeling the coffee skin, and drying the coffee grains. Dry grain coffee will be sold with a moisture content of 15% to exporters and to final consumers.

The second distribution pattern is almost the same as the first pattern: farmers sell cherry coffee to coffee collectors, the collectors carry out further processing into grain coffee, then sell to cooperatives, the cooperative carries out further processing, namely processing grain coffee into rice products.
coffee using advance machines, then producing green bean coffee which will be sold directly to cooperative partners and final consumers.

The third distribution pattern is that farmers sell cherry coffee to collectors, coffee collectors process it into grain coffee, and collectors sell it directly to coffee processing MSMEs for further processing into roast bean or coffee powder, then sell it to final consumers or coffee shops.

The distribution pattern of coffee in Central Aceh regency when there is no big harvest, each has the same value, where farmers will sell coffee cherries to collectors at Rp. 15,000/kg in each distribution pattern, the collector's processed green bean products will be purchased at that price. The same is true in the form of green beans for Rp. 90,000/kg. However, during the main harvest, the amount of coffee production increases. The most profitable distribution pattern is the second distribution pattern because the cooperative will buy green beans in larger quantities compared to coffee processing MSME, where the price difference can reach Rp. 2,000/kg, so the price purchased by MSME is Rp. 90,000/kg, while for cooperative, it is Rp. 92,000/kg. In the second pattern, farmers also benefit from sharing the remaining business profits from coffee sales carried out by the cooperative.

Fauziah's research (2015) results show that the target of developing the coffee commodity value chain is aimed at coffee processors, especially for collecting traders. The price of cherry coffee is Rp. 6,000/kg, after processing, the price of green beans is Rp. 55,000/kg. Permatasari's research (2018) did not include the coffee value chain distribution pattern, only describing the value chain of cooperative and non-cooperative farmers. Thus, this research can be a reference for farmers to choose a more profitable distribution pattern. Namely, the partnership pattern owned by farmers can support the sustainability of the coffee business because cooperatives have good relationships with customers so that the coffee market remains available. For cooperatives, this distribution pattern can be used to determine the price of coffee purchased from collecting traders for policymakers, especially the government, to ensure price stability during the peak harvest season. The limitation of this research is that it only uses one cooperative as a sample because it is considered to have the most coffee farmer members out of 11 active cooperatives. The idea for future research is to create a new, yet to-be-implemented, level chain map that will better the welfare of coffee farmers.

The value chain will provide an essential and comprehensive understanding of a commodity/product's value chain, including value chain mapping, quantification, and economic analysis (Fauziah et al., 2015). Mapping the coffee commodity value chain in Central Aceh Regency illustrates the coffee distribution from coffee producers/farmers to consumers. Mapping the coffee value chain consists of three parts: the primary function of the coffee commodity value chain, the main actors in the coffee commodity and related institutions that support the sustainability of the coffee commodity value chain (Julianto & Darwanto, 2017). The main functions of the value chain include distribution, collection/intermediary and distribution processes. The following is the value chain map of coffee commodities in Central Aceh Regency.

Figure 3 shows that the value chain can be mapped into three levels: core processes, partners and external influences. The main actors in the coffee value chain are coffee farmers, middlemen/collectors, and coffee MSME processors. Supporting institutions are farmer groups and KBQ Baburaryyan cooperatives that assist in marketing and collecting coffee crops. The following is a value chain map of coffee commodities in Central Aceh Regency. The core of the process includes cultivation and post-harvest. Coffee farmers in Central Aceh Regency harvest cherry coffee beans and sell them directly to middlemen or collectors. The collectors are members of the KBQ Baburaryyan from each sub-district. Some farmers also sell to their respective also sell their crops directly to middlemen.

The second level is partners. The partnership system between farmers and cooperatives comprises members and administrators. Meanwhile, KBQ Baburaryyan Cooperative is an autonomous business unit of coffee trading in operation cooperation with NCBA (National Cooperative Business Association). Operating cooperation consists of two or more bodies that combine to complete a project where the merger is temporary until the project is completed. Mutual
agreement of legal subjects to carry out financing or work with the portions specified in the agreement, then the agreement produces a business entity (Sari, 2019). Other partners are local governments that provide business establishment permits, such as the Central Aceh Regency Agriculture Office and the Central Aceh Regency Trade Office.

![Value chain map of coffee commodities in Central Aceh Regency](image)

Figure 3. Value chain map of coffee commodities in Central Aceh Regency

The business lacks the necessary resources and capabilities to create sustainable value alone. Impactful SBMs, therefore, involve multi-stakeholder management, involving informal and formal forms of collaboration with parties in and outside the value chain (e.g. government, service providers, civil society) around a common goal (Schoneveld, 2020). The third level is external influence. External influence the sustainability of the value chain. The influence of government policies is very influential, primarily related to prices and ease of doing business. Unstable prices result in difficulties for coffee farmers. Global prices influence coffee prices, so farmers who are members of cooperatives or non-cooperatives need price information from KBQ Baburrayyan. Local governments, namely the Central Aceh District Agriculture Office and The Central Aceh District Trade Office, contribute to farmers in the form of cultivation technology provided through counselling.

In Permatasari's research (2018), the actors involved in the value chain are coffee farmers, the Rejo Tani Cooperative, collectors, supporting partners and buyers. Farmers harvest the coffee and then distribute it to the Produce Processing Unit for further processing—the cooperative partners with the Regional Government, the Indonesian Coffee Farmers Association, Perhutani and Banking. However, in this study, farmers sold directly to collectors. The working partners in this research are also different from previous research, namely that the KBQ Baburrayyan cooperative directly partners with the NCBA (National Cooperative Business Association).

The limitation of this study is that it has not studied the implementation of each government policy, especially related agencies, where work programs between agencies overlap. Each agency uses farmers as objects but with similar work programs so that farmers can receive program assistance more than once if they can propose assistance.

**Inclusive Coffee Business Model in Central Aceh Regency**

Inclusive business in a business that involves poor people can create benefits by ensuring the sustainability of economic, social and ecological functions, bringing benefits to poor people in the form of job opportunities, business opportunities, increased income, increased skills, increased local capacity and products that suit their needs and affordable, will benefit the company in terms of risk management, operations, reputation and finance as well as contribute to eliminating poverty and achieving sustainable development goals (Karta et al., 2021). Inclusive agribusiness improves the livelihoods of poor farmers by integrating them into commercial value chains and thus gaining access
to markets, inputs, and services like finance and training, in commercially viable ways (van Westen et al., 2019).

Various obstacles faced by farmers related to post-harvest are the difficulty of processing cherry coffee due to the lack of farmer knowledge and technology and the initiative of farmers who want to sell their harvest faster without having to carry out further processing, the long marketing chain of the coffee harvest, the quality of the coffee production still low as well, the role of agricultural extension workers is still not well targeted where the government only assists according to the program without looking at the needs of farmers so that the distribution of aid is sometimes not on target.

An inclusive business model requires strengthening the business value chain that involves the community. People who join a business entity/cooperative have a greater bargaining position with consumers/buyers than individual small farmers (Saragih, 2021). Inclusive business models occur because of partnership relationships that support business actors. Partnerships reduce gaps between stakeholders in the value chain so that mutually beneficial relationships are established (Permatasari et al., 2018). Standard practices show that inclusive business has been modified to reflect the wide range of experiences across business models. Differences in practices demonstrate a variety of contract terms, ownership structures, and leadership impacts depending on household characteristics, land uses and livelihoods (Mulyati & Indrawan, 2021)

Implementing an inclusive business model for coffee commodities in Central Aceh Regency involves a partnership or collaboration between coffee farmers and the Baitul Qiradh Baburrayyan Cooperative. To optimize the marketing of coffee harvests from farmers to improve the welfare of coffee farmers. Inclusive businesses help farmers in marketing agricultural products by minimizing market price uncertainty and providing business sustainability.

Baitul Qiradh Baburrayyan Cooperative has 3500 organic farmer members and 6000 practical members. The area of coffee land under construction is 4500 to 8000 ha, with an average production of 720 kg/ha/year/ the cooperative was founded in 2002 by implementing cooperative operations. Baitul Qiradh Baburrayyan was formed in collaboration with the NCBA (National Cooperative Business Associating) international cooperative based in Washington, USA. The NCBA cooperation system provides capital, a market management team and overseas consumer relations. At the same time, Baitul Qiradh Baburrayyan provides licensing, recruitment of member farmers and provision of advanced processing facilities. The processing workforce is 65 seasonal people, depending on the high and low demand for world coffee exports. Then, in 2005, they started buying coffee from farmers in the form of grain coffee. The membership system initially recruited coffee farming communities with the minimum criteria of having ¼ - 1 ha, already producing coffee and being located in Central Aceh Regency. Farmers who were joint members were initially given seeds and guidance on coffee cultivation accompanied by the cooperative. Organic farmers receive organic certification from the Netherlands Control Geneane Premium Organic. Farmer sales prices are based on world coffee market prices, influenced by New York terminal prices (Blomberg), harvest conditions in other places and regions (Brazil), economic, security and political situations, and the Covid-19 outbreak.

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**Figure 4. Inclusive coffee business model in Central Aceh Regency**

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Coffee farmers in various sub-districts sell the coffee in cherry grain form to collectors. Usually, the collection process is carried out twice a week according to the farmer's harvest time. Coffee bean from farmers undergoes further processing, namely separating the skin and washing and drying the coffee beans. Collectors sell dry grain that has been processed with a moisture content of 15% in a minimum quantity of 0.5 tons. In the next step, the cooperative processes grain coffee into rice coffee and green beans. The export sales level is 19.2 tons through the FOB (Free On Board) system. The leading export country is the United States, especially the Seattle City. The type of coffee exported is Arabica coffee. The Baitul Qiradh Baburrayyan Cooperative has 70 assisted MSMEs. Which sell in the form of raw green beans. The remaining products that are not exported will be sold using specific grades. Usually, grade sorting is seen from the type of coffee, waste content, damaged bean, and bean size.

The role of institutions in improving farmers' welfare is very large, especially the Baitul Qiradh Baburrayyan Cooperative, namely by developing inclusive business, developing the capacity of members and the community, overcoming problems in coffee price uncertainty and as a forum for selling/marketing coffee production/harvests. Increasing the capacity of cooperatives to carry out a liaison or intermediary role with inclusive companies that are usually connected to global value chains will significantly impact economic growth and poverty reduction. Direct and sustainable impacts occur on cooperative members, while indirectly, they occur on families and the surrounding community (Saragih, 2021).

An inclusive business model can solve coffee farmers' problems, such as market price uncertainty and business sustainability, with cooperatives as a container for production results so that farmers can consistently sell whatever they produce. Another benefit of joining a cooperative is a farmer development program and information on coffee cultivation provided by the cooperative. Permatasari's research (2018) applies the same inclusive business approach as this research, namely that the inclusive business intermediary institution is a cooperative. The limitation of this research is that it does not cover the entire population of farmers in the Central Aceh district. It is hoped that with this research, inclusive business models in Central Aceh can be further developed by forming new cooperatives.

Business model evaluation can be seen from Lundy's 6 (six) principles using a scorecard. The following is Figure 5 of the performance of farmers who are members of cooperatives and farmers who are not members of cooperatives.

![Figure 5: The result of the inclusiveness analysis of Coffee in Central Aceh Regency](image)

Based on Figure 5, the highest value for farmers who are members of cooperatives is in principle 2 of effective market linkage (3.8). Farmers can use the existence of cooperatives to organize and improve the mechanism for forming coffee prices transparently, improve farmers' bargaining position, improve production quality, and improve grading (Putri et al., 2023). Cooperatives provide effective market links because cooperatives have collaborated with partners, so farmers' production can always be absorbed, even though cooperatives cannot meet world coffee demand. The demand for coffee for fair trade is 90%, namely 19.2 tons per export period. The advantages that farmers get by joining a cooperative are that they get a premium within 1-2 years, the price offered is higher compared to non-cooperatives, the remaining business proceeds are used for the development of clean water in each coffee farmer's area, and innovations in compost making which are socialized by cooperatives, as well as coaching from coffee cultivation in obtaining organic certificates and capital provided by cooperatives through rotating credit.

The market becomes effective when farmers do not doubt price, marketing and certainty of selling time. Cooperatives have guaranteed that farmers' crops will be marketed regardless of total...
production because world demand for coffee is very high, and cooperatives already have partners/consumers who will buy coffee products. The lowest value is principle three, fair and transparent governance (3.0). Cooperative member farmers are still not too involved in the innovations made by the cooperative management. The ability to innovate affects the direction of cooperative development (Rusyana et al., 2016). Farmers only sell coffee crops to cooperatives without playing an active role in supervising, giving criticism or suggestions, being active at annual member meetings and being involved in product innovation decisions. The highest value in non-cooperative farmers is principle 1, Chain-wide collaboration (2.5). Farmers, not cooperative members, can sell the harvest according to their wishes to middlemen, collectors or coffee-processing MSMEs at a more favourable price. The lowest value is the six principles of Measurement of outcome (2.0). Farmers who are not members of cooperatives find it difficult to measure value.

In inclusive business that occurred in Permatasari’s research (2018), cooperative and non-cooperative farmers were involved in price formation both directly and indirectly, so farmers are involved in market access and information. In contrast, in this study, cooperative and non-cooperative farmers were not involved in price formation because prices were determined based on world coffee prices. A limitation of this research is that the author cannot access data on price agreements between cooperatives and foreign markets.

CONCLUSIONS AND SUGGESTION

The value chain of coffee in Central Aceh Regency can be seen from the actors who get the most profit, which can be seen from the margins of each actor. The distribution pattern of coffee sales in Central Aceh Regency: the first distribution pattern is farmers selling directly to middlemen to exporters and to consumers, the second pattern is farmers to middlemen to cooperatives and consumers, then the third pattern is farmers to middlemen to MSMEs Coffee Processors and consumers. The most profitable distribution pattern is the second distribution pattern because the cooperative will buy green beans in larger quantities compared to coffee-processing MSMEs, where the price difference can reach Rp. 2,000/kg. Implementing an inclusive business model for coffee commodities in Central Aceh Regency involves a partnership or collaboration between coffee farmers and the Baitul Qiradh Baburrayyan Cooperative. The highest value for farmers who are members of cooperatives is in principle 2 of effective market linkage (3.8). The lowest value is principle three, fair and transparent governance (3.0). The highest value in non-cooperative farmers is principle one chain-wide collaboration (2.5). The lowest value is the six principles of Measurement of outcome (2.0). After implementing the inclusive business model, it can be seen that it is very profitable for farmers who join cooperatives because farmers get premiums, higher prices, infrastructure development, coaching and capital to improve farmer welfare.

ACKNOWLEDGMENTS

Thanks to the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia for funding the research scheme for beginner lecturer research in 2023.

REFERENCES


Pendampingan UMKM Sebagai Upaya Shifting dan Synergy dengan Desa Wisata dalam Bisnis Inklusif (Shisidewi - In ) di Kabupaten Tabanan -Bali. Pusat Data, Informasi, dan Komunikasi Kebencanaan BNPB.


Fuqara & Tanjung 142 eISSN: 2656-4270