

ENHANCING SME PARTICIPATION IN GLOBAL VALUE CHAINS



Edited by Shujiro Urata

Enhancing SME Participation in Global Value Chains: Determinants, Challenges, and Policy Recommendations

Edited by

Shujiro Urata

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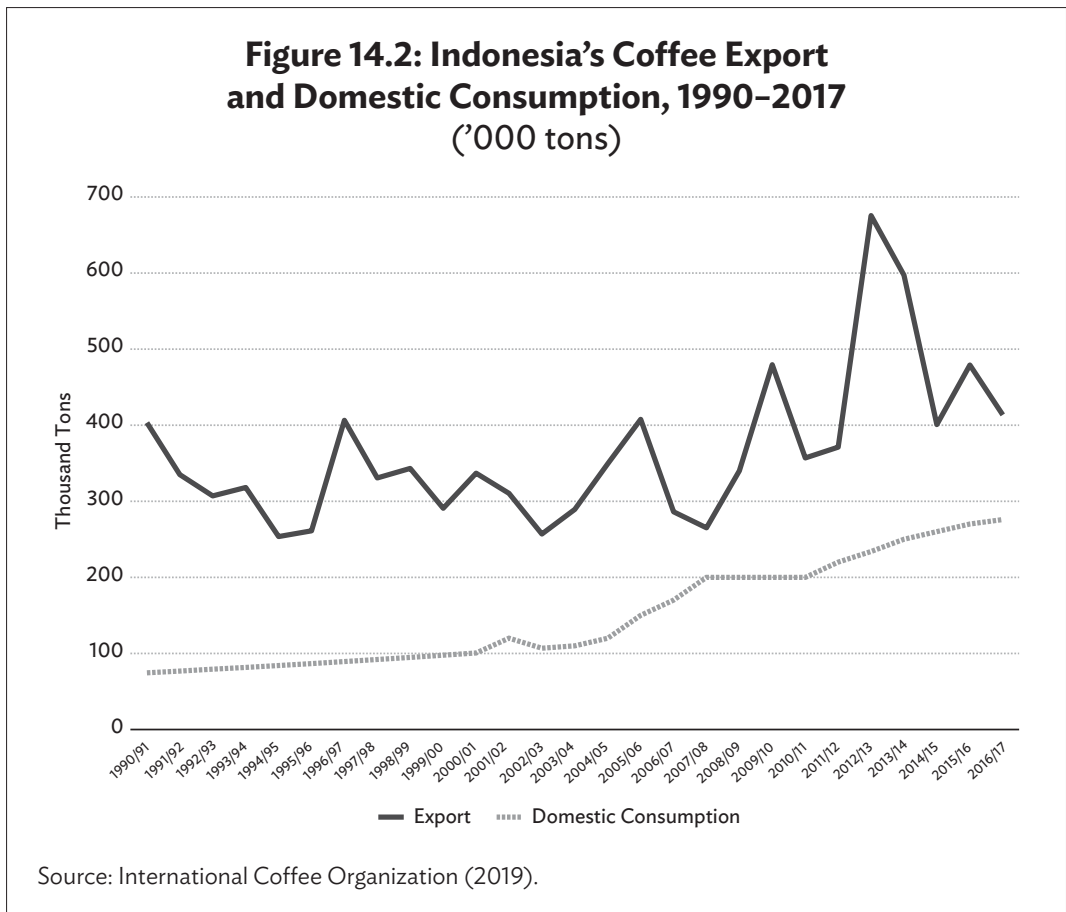
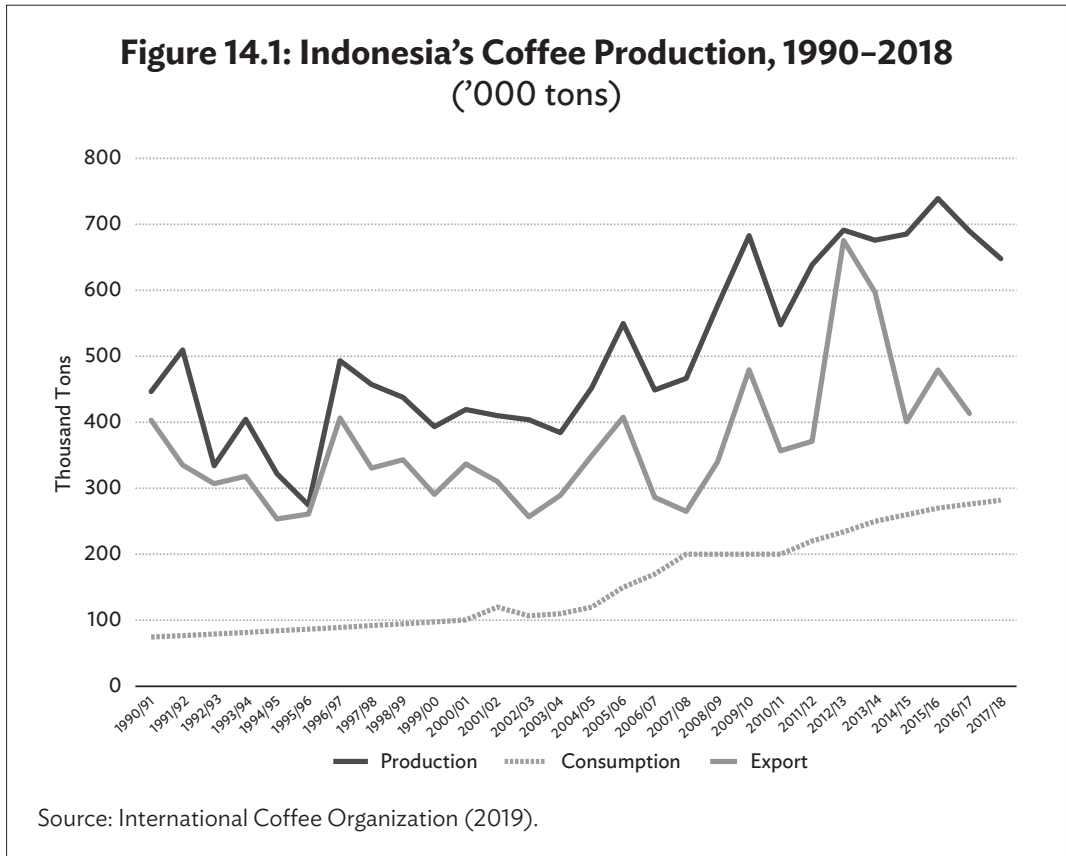
Impacts of Involvement in the Global Value Chain on Coffee Farmers in Indonesia: Case Study of Margamulya Coffee Producer Cooperative and Mitra Malabar Cooperative, Bandung, Indonesia

Amzul Rifin and Dahlia Naully

14.1 Introduction

Indonesia is the fourth-largest producer of coffee in the world, contributing 7% of the world's production in 2017/18 (ICO 2019). There was an increase in annual production of 3.6% between 1990 and 2018 despite its average fluctuation (Figure 14.1) (ICO 2019). This increase was caused by an average increase in land area of 2.35% between 1980 and 2017, with the land being used for farming (Statistics Indonesia 2018). In recent years, several local governments have intensified efforts in distributing coffee seedlings to farmers, especially in mountainous areas, with a view to replacing horticultural products with coffee and supporting land conservation.

The coffee produced in Indonesia is either consumed domestically or exported. In 2016/17, 60% of Indonesia's coffee production was exported and 40% was consumed domestically. The percentage of exports is still larger, but the share has decreased significantly. In 1990/91, the share of exports had reached 84%, reflecting a significant increase in domestic consumption over the years (Figure 14.2). Between 1990 and 2017, the



average increase in domestic consumption was 5.4% while exports grew by 3.1% in the same period (Figure 14.2).

Coffee producers in Indonesia can be divided into three categories: smallholder, government, and private. In 2018, 95% of coffee was produced by smallholders, followed by private and government enterprises with 3% and 2%, respectively (Ministry of Agriculture 2018). The increase in production in recent years has also been dominated by the smallholder. During the period from 1980 to 2017, smallholder production increased by an average of 2.17% and land area by 1.62% (Ministry of Agriculture 2018). The data imply an increase in productivity by smallholders. In addition, there has been land expansion in recent years, especially in the mountainous areas, to enable the planting of coffee in place of previously grown crops. On high-altitude land, most farmers planted arabica, which made up 28% of the country’s coffee production. Meanwhile, the lowland area was used to plant robusta, which accounted for 72% of Indonesia’s coffee production in 2018.

The coffee supply chain involves several institutions before the product reaches the consumers (Figure 14.3). Farmers sell their coffee



to traders, farmers' groups, or in some cases a cooperative. They can sell in the form of red cherry or peeled red cherry. The traders either sell the coffee to an intermediary, usually located in the urban areas or the capital of the regency, or they sell the product directly to a broker and/or an exporter. The traders usually sell in the form of green beans. These brokers and exporters are usually located in the capital city of the province. They are normally members of the Association of Indonesian Coffee Exporters and Industries (AICE or AEKI), which is also a member of the International Coffee Organization (ICO). The exporters also usually sell in the form of green beans, which are more processed than the green beans received from the traders. The exporters do not always sell the coffee to the international market, especially if the quality does not meet the minimum standard of export requirements. Instead, the coffee is sold to local processing companies to produce a typical fine-ground coffee with a strong flavor (*kopi kampung*) under locally well-known brands (Arifin 2010).

Besides multinational companies (e.g., Nestlé), there are several small and medium-sized enterprises (SMEs) involved in this supply chain (e.g., roasters). These roasters have supplied the international market, although the amount given to large trade exporters is much smaller. These roasters have an advantage compared to the traders because they have direct contact with the farmers through the farmers' groups. In addition, there are also cooperatives that have direct contact with the domestic and international markets. These cooperatives usually sell their coffee in the form of roasted coffee, although the quantity is smaller than that of other traders or exporters, especially for the international market.

Coffee farmers have a close relationship with so-called collector traders, who provide cash during the production process without the complicated procedures of moneylending. In return, the farmers must sell their products to the traders, leaving the smallholders with limited choices in terms of marketing channels. This creates an interlocking trading system at the village level. These traders encourage the farmers to harvest low-quality coffee beans, leaving the value added to be accumulated among the traders. Given their high dependency on traders due to moneylending, the coffee farmers are in a weak bargaining position. Due to the monopsony behavior of the traders and their distortion of price transparency, the market structure of the coffee marketing system at the village level has become relatively unfair.

At the global trade level, coffee exporters attempt to obtain a fairer price from their partners overseas. Exporters, affiliated directly with global roasting companies, usually do not have complicated procedures in business negotiations. In the growing global value chain (GVC)

initiatives, buyers tend to establish subsidiary trading and roasting companies in coffee-producing regions in developing countries. These companies generally apply certification costs to capture the interest of smallholder farmers who could not afford the extra costs. The small farmers interlock with such supply chain systems as a result of the influence of global buyers even at the farm level in rural areas.

Among the institutions involved in the coffee supply chain are cooperatives, although there are relatively few of these. According to Statistics Indonesia (2014), only 0.78% of Indonesia's coffee farmers sell their majority product to cooperatives and the majority of coffee farmers sell their coffee to traders (88%). In terms of quantity, 2.6% of cherry beans or peeled cherries are sold to cooperatives and 84% are sold to traders (Statistics Indonesia 2014). Despite this small role of cooperatives in the coffee supply chain, there are several advantages to their involvement (Hendar 2010):

- (1) A cooperative is a member-based organization; in other words, cooperatives gather people with a common economic activity, and together they form an enterprise owned collectively by members.
- (2) An unforeseen consequence of a cooperative is that every member has the same rights regardless of size. In addition, a cooperative is controlled democratically by its members, and members have equal voting rights (one member, one vote).
- (3) A cooperative brings together people who have a common economic business activity. Therefore, the business must support the economic activity of its members. The cooperative must provide the products or services that are most needed by its members, including the owners and consumers of the cooperative.

The objectives of forming an agricultural cooperative are (Saragih 2000, 2010a, 2010b):

- (1) to increase the bargaining position of its members;
- (2) to increase competitiveness in pricing through optimal economies of scale;
- (3) to provide products or services to its members;
- (4) to increase market opportunity;
- (5) to improve product and service quality; and
- (6) to increase its members' income.

This chapter analyzes the impact of GVC involvement of cooperatives for coffee farmers. Although the involvement of cooperatives in the coffee supply chain is relatively small, since the main

characteristic of a cooperative is that it provides benefits to its members, its involvement in the supply chain hopefully benefits members more than other organizations. The profit received by a cooperative will be distributed annually to the members (i.e., farmers); therefore, the inclusion of the cooperative in the GVC will benefit farmers more than firms. In addition, as members, the farmers have the right to control the cooperative, especially in terms of purchasing price and the service received by members. An agricultural cooperative is a firm jointly owned by individuals that support the farmers' activities, and the farmers benefit from the economies of scale when facing competition from more established firms in the coffee GVC (Bijman 2010).

We compare two cooperatives in different situations are compared. The first, Margamulya Coffee Producer Cooperative, currently exports its product, while the second, Mitra Malabar Cooperative, previously exported its coffee crop, but currently sells the coffee domestically. A study of the experience of the two cooperatives can suggest policy aimed at increasing the involvement of cooperatives in the coffee supply chain in Indonesia.

14.2 Literature Review

Several studies have discussed the impact of involvement in the coffee global supply chain on stakeholders. A cooperative's involvement in the global supply chain has underlying consequences. In the case of coffee, such involvement pushes the producers to meet several standards set by international buyers. These standards mainly surround the aspect of sustainability through certification, traceability, and other quality-related factors. The impact is evident on the farmers, farmers' groups, and even society as a whole.

Astuti et al. (2015) analyzed the impact of coffee certifications on the economic performance of Indonesian players (farmers, traders, exporters, and Indonesian roasters) and how economic rent is distributed among them. The article indicates that the economic rent from the certification is distributed unequally along the coffee value chain, with roasters receiving 95.46% (robusta) and 83.66% (arabica) of the total economic rent (retailers excluded). Economic rent is calculated as the difference between the price of certified coffee and conventional coffee divided by the price of conventional coffee. The highest price difference occurred on the roaster level (Rp28,000 or \$2.39 per kilogram for robusta and Rp32,500 or \$2.77 per kilogram for arabica), with roasters receiving the highest proportion of economic rent.

Overall, farmers enjoy a small portion of the direct benefit from certification in the form of a higher price per kilogram for their coffee

and of possible benefits regarding increased productivity and quality, resulting from training in, and advice on, crop management. The price difference on the farmer level between certified and conventional coffee was Rp400 or \$0.03 for robusta and Rp2,200 or \$0.19 for arabica. In addition, the choice of certification is based on the economic benefit that the farmers receive (Ibnu et al. 2015).

On the farmers' group level, involvement in the global supply chain has increased the capacity of the farmers' groups and cooperatives to meet quality standards (Arifin 2010). Meanwhile, on the society level, Neilson, Wright, and Aklimawati (2018) found that the geographical indication (GI)¹ of coffee has had limited tangible economic benefit for coffee farmers, who have only gained intangibly in terms of promoting a sense of regional pride and cultural identity. In addition, this benefit is only received by key individual farmers who are able to consolidate wealth and their social position (Vicol et al. 2018).

In regard to the involvement of cooperatives, several are actively involved in the coffee supply chain, especially ones related to the international market. Several cooperatives are ultimately involved in two ways (Stiyawan, Fadli, and Effendy 2016). First, the cooperatives are actively involved in connecting the farmers with the global buying channels through exporters. The function of these cooperatives is mainly to increase the bargaining power of farmers in dealing with traders and exporters (Yanuar and Feryanto 2013). Other functions include collective marketing, collective input purchasing, risk sharing, market information sharing, decreasing asymmetric information, and processing (Yanuar and Feryanto 2013). Nevertheless, the cooperatives are insufficient to help coffee farmers to increase coffee prices, and coffee farmers act as the price taker rather than the price maker (Putri, Fariyanti, and Kusnadi 2013).

Second, cooperatives help farmers to obtain certification. In addition, these cooperatives play a role in coordinating the coffee value chain (Ita 2015). Several cooperatives in Gayo, in Aceh Province, function as a hub between farmers and a certification institution, such as Fairtrade. The cooperative facilitates the certification through inspecting and monitoring the farm management process, which is required by the certification institution. With the certification, farmers receive a premium price for their coffee beans that are sold on the international market. The objective of Fairtrade certification is making trade fair,

¹ A geographical indication is a sign of the place of origin of goods and/or products, which, due to geographical environment factors, including nature, humans, or a combination thereof, indicates a specific reputation, quality, and certain characteristics of the produced goods and/or products.

empowering small producers, and fostering sustainable livelihoods (Fairtrade 2020). Besides certification, these cooperatives also perform a function in agricultural extension, distribution of agricultural inputs such as seedlings and fertilizer, processing, and marketing (Hasan 2014; Stiyawan, Fadli, and Effendy 2016).

There are several benefits of the Fairtrade certification, such as more stable prices and better farm management (Fogelberg 2012). However, several research articles have found that noncertified farmers had a higher income than certified farmers (Almqvist 2011; Fogelberg 2012; Lochner 2018) and that the benefits of certification were only received by exporters and collectors (Gunarsson 2009; Andriadi et al. 2019). Meanwhile, in terms of business, the cooperatives in Aceh have been able to make a profit and distribute their profits to their members (Agustia, Kusnadi, and Harianto 2016).

14.3 Cooperative Policies in Indonesia

Agricultural cooperatives were first established in 1973 and were called village unit cooperatives, or Koperasi Unit Desa (KUD). They were given responsibilities for farm credit regulations, agricultural input and incentive distribution, marketing of farm commodities, and other economic drivers associated with a cooperative. The government specifically guaranteed both high-quality marketing and top market price to encourage the growth of farm cooperatives.

The rapid development of KUDs led the government to expand the scope of agricultural cooperatives by issuing Presidential Decree No. 2/1978. Thus, the KUDs not only became institutions that support agricultural production but also rural economic institutions. Under the government program, cooperatives provided food, particularly rice, and through the KUD played a significant role. The KUD distributed farm credit in the form of fertilizer, seed, and other inputs to farmers, which are outlined by farm lending programs. However, for the development of other agricultural commodities, the KUD role was still minimal.

In order to strengthen the presence of cooperatives, the government issued Presidential Decree No. 4/1984 regarding their development of the KUD. This decree established the KUD as a center of economic activity in rural areas, an integral part of national development, which would be supervised and developed in an integrated manner through an intersectoral program. At the same time, the Presidential Decree confirmed that the KUD was the only cooperative in rural areas. With the exception of those with permits obtained from the Ministry of Cooperatives, all existing cooperatives in rural areas had to be merged into the newly established KUDs or be required to disband. Some

farmers set up other forms of organization, such as a farmers' association, since setting up a cooperative was not permitted (Baga 2016). The associations include the Cocoa Farmer Association, the Coffee Farmer Association, etc. One of the permitted agricultural cooperatives was a dairy cooperative (Baga 2016). During the New Order period, the KUD acted as an intermediary for the Board of Logistics to buy rice from farmers in support of the government policy for rice price stabilization, which guaranteed both marketing and market price (Suradisastira 2006; Purwaatmoko 2018). The function was abolished in 1999 when Indonesia signed an agreement with the International Monetary Fund.

The development of the KUD destroyed several well-established cooperatives, such as the rubber and copra cooperative (Aziz 1987). In addition, the KUD's involvement in monopolistic practices obliterated the clove agribusiness in Indonesia, causing farmers to no longer have the desire to plant cloves. As a result, many farmers cut down their clove trees (Soedjono 1997).

The issuance of Presidential Decree No. 18/1999 removed the monopoly of the KUD as the only cooperative in rural areas. This regulation also forced the KUD to become independent and no longer dependent on government programs, in addition to preparing for competition with other rural economic institutions or actors. Many KUDs were experiencing difficulties in their new position, and they could not properly exploit the wide-open opportunities of the domestic and foreign markets during the economic crisis (Widjajani and Hidayati 2014). In fact, between 1997 and 2000, there was a 15% decline in the number of KUD members, and in 2007 the number fell by 58% compared to 2000 (Baga 2016). The unsatisfactory number of KUD developments led to negative perceptions among the public toward the members of KUDs (Baga 2016). These negative appraisals were due to the misperceptions about cooperatives among Indonesian people.

Nasution (2007) mentioned three misperceptions about cooperatives in Indonesia. First, cooperatives are undeveloped because the main characteristic of a cooperative is that it is a nonprofit-making organization, with the decision-making mechanism being one member, one vote. This perception is evidently flawed. Many cooperatives in other countries perform better than non-cooperative businesses. Second, cooperatives are only efficient if continuously supported by the government. However, government interference in cooperatives can result in inefficiency and a lower quality of service. Cooperatives need government aid, though not much, since the problems they face are structural. Government assistance should be in the form of programs that support and create favorable conditions, so that the cooperative movement is responsible for its own development (Soedjono 1997).

Third, cooperatives in Indonesia are considered to have a traditional nature and character, which makes them difficult to grow and sustain. The failure of cooperatives in Indonesia was because they abandoned the true cooperative nature. Cooperatives were established without applying the cooperative principles, resulting in pseudo-cooperatives. They failed to apply their principles and rules and used the term “cooperative” in name only.

After the abolishment of the KUD monopoly, several agricultural cooperatives focusing on a single commodity, including coffee, were established. The establishment of the Coffee Institution was mostly an initiative of private or nongovernment organizations, especially in regions that have been involved in the GVC and with specialty coffee such as Gayo (Aceh) and Toraja (South Sulawesi). This cooperative was established as a requirement in the coffee certification process, and the involvement of the government during the New Order regime was minimal. Therefore, the establishment of a cooperative in the coffee sector in these areas was mostly welcomed (Neilson 2008).

14.4 Methodology

This chapter has utilized a case study approach with descriptive analysis. Two cooperatives are compared: Margamulya Coffee Producer Cooperative (MCPC) and Mitra Malabar Cooperative (MMC). The two cooperatives were selected based on their current export activities. MCPC is currently conducting export activities, while MMC is currently selling coffee beans to the domestic market but previously conducted exports.

The primary data collection was conducted via in-depth interviews with the leaders of both cooperatives. For MCPC, an in-depth interview with Mr. Mohamad Aleh, the head of the cooperative was conducted on 14 December 2019. Meanwhile, for MMC, an in-depth interview with Mr. Faqih, the manager of the cooperative, was conducted on 28 February 2020. In addition to the primary data, secondary data were also collected from journal articles and from Statistics Indonesia.

Comparing the data from the two cooperatives revealed the impact of involvement on farmers in the GVC. Additionally, policy implications were also addressed in order to increase the farmers’ welfare through their involvement in the GVC.

14.1.1 Analysis and Discussion

Table 14.1 provides a summary of the comparison of the two cooperatives.

Table 14.1: Comparison between Margamulya Coffee Producer Cooperative (MCPC) and Mitra Malabar Cooperative (MMC)

Aspect	Mitra Malabar Cooperative (MMC)	Margamulya Coffee Producer Cooperative (MCPC)
Founded	2012	2014
Founder	Farmer and businessman	Farmer
Members	29 nonfarmers in the city of Bandung	200 farmers who own and operate land in a rural area
Sales	2 tons of green beans and 4.8 tons of roasted beans with a value of Rp586 million or \$41,020 in 2019 (only coffee)	120 tons of green beans and 40 tons of roasted beans with a value of Rp11.6 billion or \$812,000 in 2019
Scope	Province level	Regency level
Business	Coffee, coconut, essential oils, premium rice	Coffee
Export	No	Yes
Processing	From unhusked green beans to green and roasted beans	From cherry beans to green and roasted beans
Supply chain	Buy unhusked green beans from farmers' group	Buy cherry beans from farmers
Service to member	Members serve as facilitators	Agriculture-related services
Future plan	Focus on increasing farmers' productivity	Focus on export

Source: Compiled by authors.

14.4.2 Cooperative History

MMC was established in 2012 by a businessman named Mr. Jayagama and another businessman from the Rahayu Farmers Group named Mr. Supriatna Dinuri. Before forming the cooperative, both founders established a firm called PT Nuga Ramitra, which introduced the coffee brand Coffee Malabar in 2010. The firm also developed a coffee garden by revitalizing displaced land, planting a new coffee garden, and developing Malabar Indonesia's coffee breeding fields. They attempted to develop Malabar civet coffee by cultivating civet husbandry and developing civets.

In 2011, with the help of the Netherlands nongovernment organization PUM, MMC welcomed a coffee expert in order to increase the value added through developing processing facilities from upstream activities to downstream activities. In the same year, the cooperative

received two Malabar coffee awards, namely from Puslitkoka (a coffee and cocoa research center) in Jember, East Java, as the third-best coffee flavor and as the best cultivation of the cilantro cage management in Indonesia (Febrianny, Purwanegara, and Aprianingsih 2019).

In 2015, MMC was split between the cooperative and the farmers' group. The cooperative base moved to Bandung, the capital city of West Java, while the farmers' group was focused on the production side of the business. This farmers' group supplied the coffee beans to the cooperative. The cooperative was made up of 29 members, consisting mostly of volunteers who were concerned with the development of coffee in West Java.

In addition to coffee, MMC currently focuses on coconut, essential oils, and premium rice. Also, MMC accompanies rural villagers in agroforestry activities, which assist villagers in planting several commodities in the mountain areas that are mostly owned by the government firm Perhutani.

The development of MCPC started when Indonesia experienced a financial crisis in 1997–1998. Mr. Mochamad Aleh, the initiator of the cooperative, was removed from his current job as a construction worker in the city. In 2001, he returned to his hometown in Margamulya Village, Pangalengan, Bandung and searched for land to plant coffee. He saw coffee as a prospective commodity, while most farmers were planting other horticultural products at that time.

In addition to planting coffee on their own land, farmers planted coffee in the mountain foothills, which belonged to the government-owned enterprise Perhutani. In 2006, Mr. Mochamad Aleh received land legally from Perhutani at the village level and signed an agreement with Perhutani by forming the group Forest Village Community Institution (Lembaga Masyarakat Desa Hutan/LMDH). With this agreement, other farmers began to plant arabica coffee, and the mountain foothills were filled with coffee plants in 2008. In addition, many horticultural farmers shifted to planting coffee.

In 2010, Mr. Mochamad Aleh formed a farmers' group called the Margamulya Farmers' Group, and in 2011 he received machinery for coffee processing as a reward for conserving the land on the mountains. Due to the increase in coffee farms and members, the group needed a legal formal buyer, especially when dealing with commercial and international buyers. As a result, in 2014, the Margamulya Coffee Producer Cooperative was formed. The cooperative was officially established through Notarial Deed No. 9 dated 18 March 2014, and was located in Jl. Raya Bandung-Pangalengan Km 36.5 Margamulya Village. From an initially 20 members, there are currently around 200 members farming land covering 250 hectare (ha), consisting of 200 ha

of Perhutani's land and 50 ha of the farmers' own land. The cooperative served two villages (Margamulya Village and Tribaktimulya Village), which consisted of several farmers' groups.

Currently, MCPC focuses on coffee. Besides being involved with the coffee supply chain, the cooperative also gives training to baristas in order to teach about the characteristics of the coffee and how coffee is processed. Mr. Mohamad Aleh also shares his experience of developing coffee with others in order to increase the knowledge of the stakeholders regarding coffee.

14.4.3 Exporting

Demand for MCPC exports grew when the cooperative was invited to be involved in trade expos in the foreign market. At the time, buyers from Japan offered to buy coffee at 18 tons per shipment, but the cooperative could not fulfill the demand due to limited capital for buying cherry beans from the farmers. The Japanese buyers then offered to cooperate with an exporter called PT Taman Delta in Semarang, Central Java, Java in order to conduct indirect exporting. In 2019, MCPC exports through PT Taman Delta amounted to 60 tons, with every shipment of two tons transported to Semarang, Central Java. In addition, MCPC exported 60 tons of coffee through PT Samosir Sumatra in Medan, North Sumatra, and sent 15 tons with every shipment in 2019. The payment from the exporter was conducted through bank transfer at least three months after the exporter received the coffee beans, utilizing 90-day payment terms, which are business standard in most cases.

The cooperative also sold directly to foreign consumers. In 2019, around 20 tons of green beans were sold directly to foreign consumers using delivery companies in several countries, including the Netherlands, Norway, and Singapore. Usually, every shipment was less than 100 kilograms. The cooperative met the foreign buyers during an international expo, which was organized by the Indonesian government and at which the cooperative was representing West Java Province, so all costs for participating in the expo were borne by the West Java government. The price of selling to a foreign buyer was usually higher than selling domestically or to an exporter. The price of direct export was around Rp140,000 per kilogram or \$10 per kilogram, excluding shipping costs. The price is higher since they were grade 1 coffee beans, which has a higher value added. The coffee beans were shipped once the cooperative received the money in advance, including the shipping cost.

Direct exporting is more profitable for the cooperative because of advance payments, but the amount of available product is limited. Meanwhile, the amount sold to an exporter is supplied more frequently,

although the payment is received only after three months. A cooperative conducting direct exporting using containers will face several problems:

(1) **Continuity**

For direct exporting, a minimum of 18 tons of green beans are needed to fill a container each month. In order to fill a container, the cooperative must store more cherry beans from farmers during the annual harvest period from March to August. The cooperative will face two problems buying cherry beans from farmers: storage capacity and capital. The challenge is that farmers prefer to receive cash directly after selling to the cooperative.

(2) **Quality**

Exporting directly requires a better quality of coffee bean. The quality of coffee produced by the cooperative members must be guaranteed and fulfill the requirements. On the contrary, due to the insufficient supply, the cooperative must purchase from nonmembers, which could result in lower quality and rejection of the shipment by foreign buyers. In addition, the cooperative must fulfill the food quality and safety regulations.

The export market contributed 80% of the total sales of MCPC, making it the cooperative's main market. MCPC has a contract with two exporters and has conducted direct exporting, thus securing a guaranteed market for the cooperative's product. The guaranteed export market meant the cooperative could give its members a guaranteed price of Rp10,000 per kilogram of red cherry beans. In addition, the farmers would receive a profit or benefit from the cooperative depending on how much of their coffee they sold to the cooperative at the end of the fiscal year.

MMC currently does not go through an exporter. In 2003, however, the cooperative conducted direct exporting to Morocco in the amount of 18 tons of green beans, consisting of 9 tons of arabica and 9 tons of robusta. This export was the result of MMC's involvement in a trade expo conducted by the Indonesian Embassy in Morocco. After the expo, the buyer visited Bandung, West Java in Indonesia to check the requirements for the coffee that would be purchased. The coffee was exported conducted using a partnership system, which means both sides shared the cost. MMC bore the cost from the farmer to the shipping seaport in Jakarta (Tanjung Priok), while the Moroccan side bore the cost from Jakarta's port to the port and buyer in Morocco. The first export was conducted in November 2013 and reached Morocco in January 2014.

The export activity was conducted transparently, meaning both sides acknowledged the purchase terms, selling price, and payment terms, and the payment was made after the coffee beans had been sold to the consumers. MMC bore 67% of the cost, while the Moroccan side bore the remaining 33%. The largest cost factor was the purchasing price of the coffee beans from the farmers. MMC cooperated with investors to gather the capital and to buy 18 tons of green coffee beans from the farmers at a price of Rp27,000–Rp30,000 (\$1.9–\$2.1) per kilogram. Using this export cooperation, MMC returned profits to the farmers in the form of cash or coffee seed, amounting to 25% of the profit obtained from the export.

In 2014, MMC visited Morocco and received an order of six containers (or around 108 tons) of green coffee beans. During the negotiation, MMC asked for the following export terms:

- (1) Change in purchasing price from the farmers. From the previous price of Rp27,000–Rp30,000 (\$1.9–\$2.1) per kilogram, the cooperative asked for a price of Rp45,000 (\$3.2) per kilogram of green coffee beans, since the sales price in Morocco was the equivalent of Rp80,000 (\$5.7) per kilogram.
- (2) The price was to be based on the international prices for coffee and the world market.
- (3) The payment would be made 1 month after the Moroccan side received the green beans, whereas previously the payment terms were 4 months.

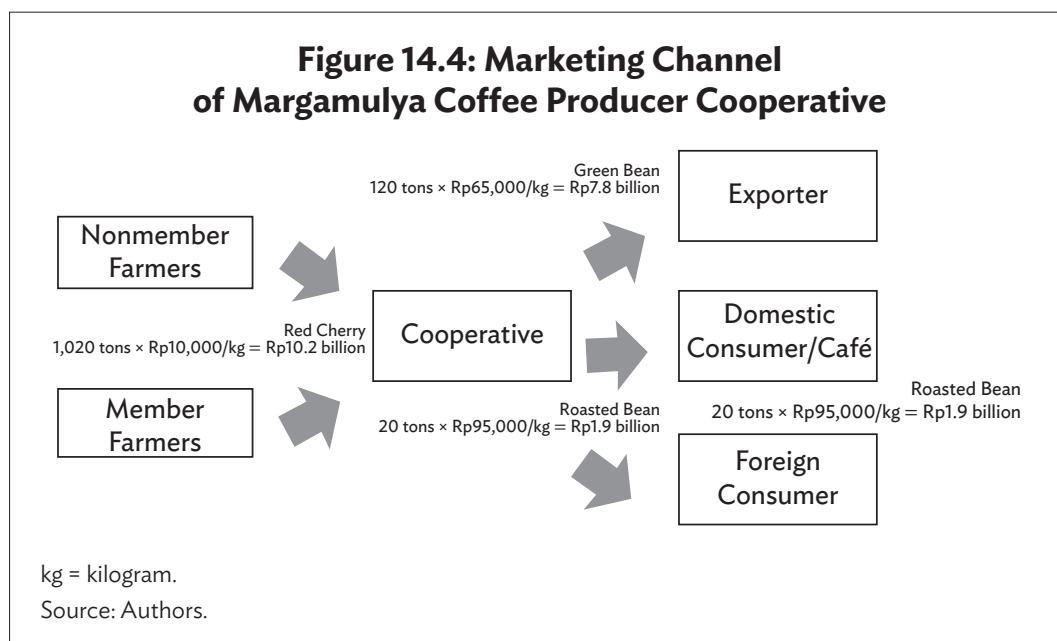
However, the Moroccan side could not agree to the first and second terms. The cooperative explained the failed negotiation to the farmers, and when the Moroccan side visited the farmers to purchase the green coffee beans directly, none of the farmers agreed to sell to them. Since then, MMC has stopped exporting because the cooperative felt that the farmers should have been receiving a higher price. Additionally, prices in the domestic market were higher than for the exports.

MMC conducted direct coffee exporting to Morocco in 2013. The benefits of exporting were being able to obtain higher prices and give a cashback to the coffee farmers. This showed that the export market can be of more benefit than the domestic market when the marketing channel is shorter or when conducting direct export rather than through exporters. Conducting direct exporting requires more capital, however, since the export amount is huge (around 18 tons of green beans or about Rp540 million or \$37,700 for each shipment) and cannot be handled alone by the cooperative.

14.4.3 Marketing Channel

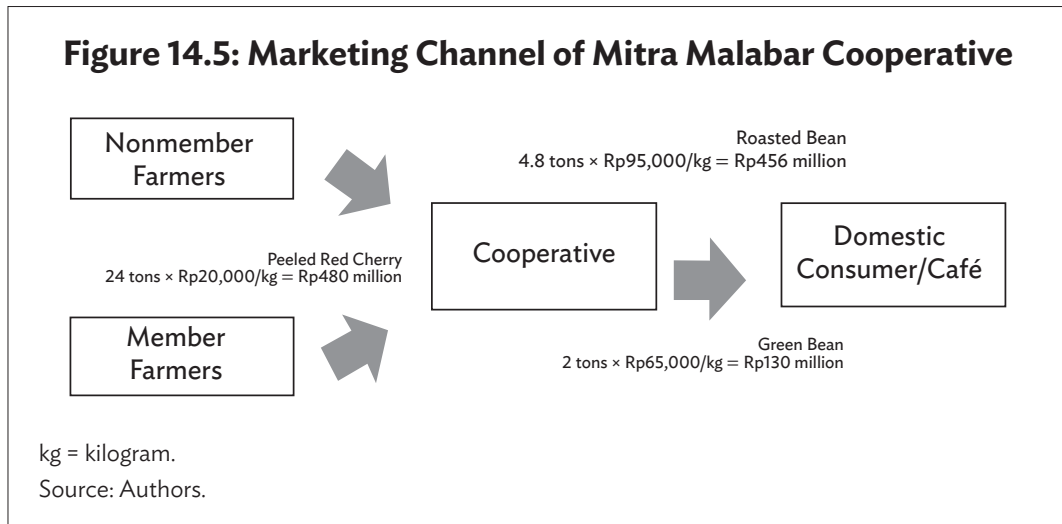
The flow of marketing channels in cooperatives can be seen in Figures 14.4 and 14.5. Coffee harvesting occurs from March to August. Farmers only harvest the red cherries to ensure the quality of the green beans, and they sell the red cherries to cooperatives at a price of Rp10,000 or around \$0.71 per kilogram. In 2019, about 1,020 tons of red cherries were purchased by MCPC from members and nonmembers.

The red cherries are processed through the cooperative at that time, becoming peeled red cherries (*gabah*). The next process is to peel the inner layer of the beans to become green beans. One kilogram of green beans is derived from 16 kilograms of red cherries. These green beans can be processed further into roasted beans or ground coffee powder. One kilogram of green beans can be processed into 0.8 kilograms of roasted beans. For exporters, the cooperative sells the green bean form at a price of Rp65,000 or \$4.64 per kilogram (Figure 14.4). The cooperative also sells in the form of roasted beans at a price of Rp95,000 or \$6.79 per kilogram.



MMC received around 24 tons of *gabah* from member and nonmember farmers in 2019. The cooperative processes the peeled red cherries to become roasted beans or green beans (Figure 14.5). The cooperative has the processor to make roasted and/or green beans. The

roasted and green beans are then sold to domestic consumers such as cafés, local shops, and retailers. The cooperative also owns a café called Café Kopi Nusantara in Cibubur, Jakarta. In 2019, the cooperative sold 400 kilograms of roasted beans per month or 4.8 tons per year and 2 tons of green beans in 2019.



14.4.4 Service to the Members

MCPC has played its role in connecting farmers with the GVC in functioning in several aspects (Djuwendah et al. 2017, 2019):

- (1) Procurement of farming inputs, which includes activities such as performing quality coffee seedling measurements, distributing free coffee seedlings to coffee farmers, aiding distribution of pest repellents to farmers, and providing loans for coffee farming capital.
- (2) Production process, which includes activities such as fostering farmers in coffee farming according to UTZ² certified Standard Operating Procedure, facilitation and assistance of the transfer of coffee farming technology, integrated pest management, harvest, and post-harvest.

² One of the largest programs and a label for sustainable farming usually for coffee and cocoa.

- (3) Coffee processing (agroindustry), which includes activities such as processing coffee cherries into green beans and roasting beans, and grinding instant coffee (ready to brew), conducting custom work on coffee (makloon) ordered by nonmembers, and increasing the quality of the products.
- (4) Product marketing, which includes activities such as buying coffee cherries from farmers, providing price guarantee, conducting market research, and increasing the product distribution network.
- (5) Financial services, which includes activities such as providing recommendations and guarantee of lending money to banks, and providing loans in limited quantities. Farmers receive loans of between Rp500,000 and Rp5,000,000 (\$35–\$357), paid during the harvest when the farmers sell the cherries to cooperatives (Karyani et al. 2019).
- (6) Minimization of farming risk, which includes activities such as providing storage facilities (warehouse), providing an information center regarding quality, price, and the coffee market, in cooperation with the Local Government Office of Cooperatives, SMEs, the Government Office of Industry and Trade, the Indonesian Creative Youth Academy, and coffee exporters.
- (7) Facilitation of human resource development, which includes activities such as using the cooperative as a place of training and supervising the transfer of technology and farming skills.
- (8) Research and development of coffee farming business, which includes activities such as building partnerships and business networks with various parties (government, local government offices, associations, entrepreneurs) and performing market research.

The cooperative members receive benefits, especially if the cooperatives are involved in the GVC in several ways. Those ways are:

- (1) the member receives high-quality coffee seedlings in order to produce high-quality cherry beans;
- (2) the buying market is guaranteed, which means the cooperative will buy all the cherry beans produced by the members at a specified quality;
- (3) the cooperative members receive training for improving the coffee productivity and quality; and
- (4) the cooperative members receive a dividend at the end of every year.

The MMC members are mostly volunteers, which gives them a unique ability to foster community development, as opposed to coffee farmers who may lack that ability. Therefore, the cooperatives give their members a network to conduct community development activities specifically for coffee farmers to improve morale and the conditions of coffee farming as a whole.

14.4.5 Future Plans

Currently, MCPC is focusing on the export market, either direct or indirect exporting. The export market has potential, with demand being huge in the international market. In addition, the cooperative is also trying to increase sales in the domestic market and is providing training for baristas who have started a coffee business.

Meanwhile, MMC is focused on increasing the coffee farmers' productivity, which will eventually increase their income. As regards the main market, MMC will focus on the domestic market since currently the domestic price is higher than the export price.

14.5 Conclusion

The objective of this chapter was to analyze the benefits to farmers of participating in GVCs through cooperatives by comparing two cooperatives (MCPC and MMC), one currently conducting export and the other not.

The results indicate that the export market is significant for MCPC. From the data, we also see that direct exporting is more beneficial than indirect exporting through exporters since a higher price is charged. The main products for indirect exporting are green beans, while roasted beans are the main products for direct exporting. However, the export market does not always have a higher price, as currently domestic market prices are higher. Due to this price situation, MMC has concentrated on selling to domestic partners rather than entering the international market.

In the future, direct exporting must be targeted by the cooperatives since it involves exporting product at a higher price than indirect exporting. In addition, direct exporting gives cooperatives more bargaining power, for them to be able to increase the price paid to farmers. There are two advantages when a cooperative conducts direct exporting. First, the cooperative's profit is higher since it got rid of the intermediary or exporter in the process. Bank Indonesia (2018) reported that the margin to the exporter was around Rp7,000 per kilogram in the

case of green beans, which can be transferred to the farmers' selling price. Second, the cooperative can sell in the form of roasted beans rather than green beans, which have a higher price and value added.

In order to conduct direct exporting, the government should support cooperatives to obtain capital for the purchase of red cherries or peeled cherries from the farmers. Assuming 18 tons of green beans per export shipment, the cooperative needs Rp1.08 billion in capital to buy red cherries, assuming a price of Rp10,000 per kilogram. In addition, the government should also arrange to collect the 18 tons of green beans per shipment since every cooperative has limited storage and is limited to buying red cherries or peeled cherries from the farmers.

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