

Challenges Faced by Cocoa-based Industries from Indonesia in Global Value Chains

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DOI: <https://doi.org/10.54099/hbr.v2i2.288>

Abstract

Purpose – Products originated from cocoa are globally popular. Therefore there is an economic significance in developing the cocoa-based industry. Indonesia, as one of the countries having good quality cocoa specimens, should benefit from this commodity. However, the cocoa-based industry has not contributed much to Indonesia's GDP. Thus, this paper seeks to understand Indonesia's cocoa industry's position within the cocoa industry's global value chain and any difficulties that prevent the cocoa-based industry from flourishing in Indonesia. **Approach** - This paper drew from the literature on the cocoa industry in Indonesia and the cocoa global value chain. **Findings** - This research shows that Indonesia's underdeveloped cocoa industry lacks an understanding of Indonesia's cocoa value in the global value chains. This lack of understanding is prevalent in the Indonesian economic bureaucracy and local cocoa industrial actors' perspective. **Novelty** – In the study of political economy, the optimization of economic benefits can be achieved through good synergy in political policies to support the achievement of maximum value added for a leading commodity in a country. When the synergy among the stakeholders is optimal, the implemented regulations can be adequately implemented.

Keywords: cocoa, global value chain, Indonesia

I. INTRODUCTION

Indonesia is one of the largest producers of cocoa. According to the International Cocoa Organization (ICCO), Indonesia can produce 200,000 tons of cocoa beans yearly (International Cocoa Organization, 2020b). Indonesia's Bureau of Statistics (BPS) provides an even larger production capacity. According to BPS, Indonesia produced 577,038 tons of cocoa beans in 2018 (BPS, 2018: 32–33). In 2016, Indonesia was the fifth-largest cocoa producer globally (Voora et al., 2019: 7). Together with other top eight cocoa producer countries such as Côte d'Ivoire, Ghana, Ecuador, Cameroon, Nigeria, Brazil, Peru, and the Dominican Republic, Indonesia produces 93% of the world's cocoa output (International Cocoa Organization, 2020a).

Indonesia yearly produces 200,000 tons of cocoa beans. Up to 92.34% is produced from traditional plantations. There are 1,400,636 small plantations operated by families of farmers all around Indonesia (Shandri, 2017: 2). These traditional plantations are the source of cocoa supply that become one of Indonesia's most featured products. Indonesia's cocoa products are mostly exported to Malaysia, the United States of America, China, India, and the Netherland (BPS, 2018: 52–54). In total, in 2018, Indonesia exported 380,827 tons of cocoa products with value as high as USD 1,245,794,000 (BPS, 2018: 54).

Despite the high volume and high value of Indonesia's cocoa export in 2018, the potential value of Indonesia's cocoa export is higher than what is achieved by current trade relations. This lower than potential value is because Indonesia mainly exports cocoa as intermediate goods such as cocoa butter, cocoa powder, or cocoa paste. Out of 380,827 tons of Indonesia's cocoa export in 2018, only 14,586 tons (3.83%) were exported as consumable goods (BPS, 2018: 43–44). The value of cocoa-based consumable goods exported by Indonesia in 2018 was USD 43,832,000, or only 3.51% of the total cocoa export value in the year. This condition describes how Indonesia has not fully utilised global value chains in cocoa-based commodities production. If only Indonesia could increase its cocoa-based consumable goods, then the value of Indonesia's cocoa export will also increase (Nurhadi et al., 2019: 53–55).

This condition is not profitable enough for Indonesia. Indonesia needs to increase its efforts in optimising Indonesia's role in cocoa-based GVC. Therefore, it requires policymakers' understanding as well as from industrial players regarding the benefits that can be enjoyed by Indonesia when fully utilising global value chain approach to cocoa-based industrialisation. Thus, Indonesia will be able to produce economic and trade policies to support the contribution of cocoa products in building global supply chains. In the end, Indonesia can develop its economy more optimally and get more optimal value-added.

The analysis conducted on the cocoa-based global value chain will be able to provide a more in-depth picture of the strengths and weaknesses of Indonesia's cocoa sector. GVC analysis examines the overall process that takes place in each value chain in a sector, from the input chain, production to the final product chain. GVC analysis allows more optimal discovery of a strategic plan in order to select a competitive advantage for the development of the sector.

The urgency of this research is based on the presence of great opportunities for cocoa product commodities to be developed in Indonesia. Indonesia's domestic cocoa processing industry players can develop their business by increasing their production capacity. Moreover, there has been policy support in the form of Regulation of the Minister of Finance of the Republic of Indonesia No. 67/PMK.011/2010, which contains regulations on restrictions on the export of cocoa products in the form of raw materials. This support provides an opportunity for the availability of cocoa raw materials for domestic industrial needs. The domestic industry can increase added value optimally so that its contribution to the GVC can be maximised. As a result, cocoa bean exports can be replaced by processed cocoa products in the global market.

The research aims to get an overview regarding the cocoa-based global value chain and Indonesia's cocoa industry's position in the GVC. This research seeks to describe the opportunities and challenges for Indonesian cocoa commodities in the cocoa-based global value chain. The result of this research might be valuable in mapping the challenges faced by cocoa-based industries in Indonesia and also supporting the policy of optimising cocoa product opportunities in the global market. As a result, the research output is in the form of details on the opportunities and challenges for cocoa-based GVC to be implemented in Indonesia.

II. LITERATURE REVIEW

Global Value Chain or GVC is a concept that describes a series of activities carried out by companies and workers to increase the added value of certain products so that they are able to optimally meet final use needs (Gereffi and Fernandez-Stark, 2011: 4). In general, the GVC series involves research and development, design, production, sales, marketing, consumption and recycling. A GVC approach sees a global economic approach as a complex network involving suppliers and buyers integrated by multinational companies. GVC becomes an integral part of the global economy, which builds a particular pattern on the series of international production and trade (Gereffi and Fernandez-Stark, 2011: 5).

Data from UNCTAD (2013) states that up to 80% of world trade currently takes place under the GVC scheme. However, unfortunately, there are significant differences between the contributions of developing and developed countries. The contribution of developing countries in the effort to increase added value in the GVC scheme only fulfils between 20 and a maximum of 40%. The contribution of GVC to job creation is quite large. Studies conducted in 39 countries estimate that the GVC has increased up to 88 million jobs (Jiang and Milberg, 2013: 2).

For developing countries, an increase in the contribution of the GVC can provide benefits in terms of increasing product value-added, employment, income, and increasing export value. However, the majority

of developing countries experience limitations in increasing their contribution to the GVC (Harding and Javorcik, 2011). In addition, a study on GVC also shows that the focus that needs to be considered in GVC is global buyers rather than multinational companies. This condition means that the contribution to GVC will be more optimal when focusing on efforts to meet the needs of global consumers. However, policies related to the development of multinational companies can also encourage the potential to increase the role of the state in the GVC (Murakami and Otsuka, 2017: 4).

Based on the conceptual framework of the GVC study conducted by Sato and Fujita (2009) in Murakami and Otsuka (2017), GVC can be carried out through efforts to improve business functions from production to management. For example, the more active participation of local companies in pre-production activities, such as through marketing research activities, technology and development options, production design, to designing post-production activities such as advertising and marketing. However, in the GVC concept, when there is a global company that has dominated a certain commodity market, it will try to maintain its position. The lead firm usually prevents local firms from participating in pre and post-value added production activities. This situation is because this activity is considered to be the core of the GVC (Murakami and Otsuka, 2017: 9).

Other studies show the role of the GVC in shaping economic and social improvements for developing countries. The distribution of improvement opportunities usually occurs unevenly in favour of the leading firm. The leading company has the opportunity to make a final market shift with a strong strategy. In order to dominate the market, extra efforts are needed to increase the state's contribution to the GVC. GVC is carried out to encourage socio-economic improvement. The steps needed are synergistic governance through the cooperation of private, public and social actors, both at the global and local levels (Lee and Gereffi, 2015).

As GVCs develop into multi-tier structures, companies in each tier outsource. At the same time, the main companies use their standards to regulate the chain and the behaviour of other chain actors involved (Mayer and Gereffi, 2010). Recent studies show that in fact, the role of leading companies is more limited in facilitating an increase and shift in consumer orientation, especially concerning the social dimension (Locke, 2013; Mayer and Gereffi, 2010). Here, there is an opportunity for businesses that are built synergistically between private, public and social government (Gereffi, 2014; Mayer, 2014).

The overall analysis of the literature review, as has been described, indicates that there are developments in the GVC study. A significant development in the study was an increased understanding of attempts to organise the environment as concepts and phenomena. Another significant development lies in the effort to improve the environment, which is empirically proven to be based on the relationship and power structure in the GVC (Khattak and Pinto, 2018).

In this study, the GVC scheme can be classified into a development typology at the local level, according to the conditions of the cocoa commodity, which is the subject of the study. This typology is developed through the scheme (a) GVC-led Innovators, consisting of innovative local companies, which intensively use sources of knowledge from within the GVC; (b) Autonomous Innovators are groups that make innovations based on external learning sources; (c) Marginal Innovators, which are the largest group and are characterised by a low level of innovation and some use of the knowledge available in the GVC, but rarely use external sources (De Marchi et al., 2018).

III. RESEARCH METHOD

This type of research related to the GVC of cocoa commodities is descriptive qualitative research. Qualitative research is a type of research to produce social and political research analysis, by containing descriptions of phenomena in order to capture meanings, processes, and contexts that are not standardised by numbers. This type of descriptive qualitative research is considered suitable for researching problems in social science studies that explore issues, thoughts or narratives (Burnham, 2008; Creswell and Poth, 2018).

This study chose a descriptive qualitative method because according to Stake (2005), the qualitative method allows this study to describe the opportunities that Indonesian cocoa commodities might have in the Global Value Chain. This study employs the method to understand the information through descriptive analysis and narrative. The description of the research is described in the study of meaning and context, which includes process analysis. Data collection was carried out by collecting information from selected and relevant works addressing the issues in global value chains and the commodification of cocoa in

Indonesia. The research stage was carried out through the exploratory stage, literature study, data collection, data reduction, and continued data analysis.

IV. RESULT AND DISCUSSION

Cocoa is one of the most popular commodities in the world. This commodity is considered a luxury product because it has a unique attraction for its connoisseurs. Cocoa can be consumed in various variations. Cocoa-based products, which are products from cocoa beans produced by cocoa plantations, can be enjoyed as candy bars, consumed as drinks, mixed drinks, food and even as a mixture of cosmetic products, as well as various other special products (Del Prete and Samoggia, 2020: 1). The cocoa sector is projected to continue to experience growth. Its broad worldwide appeal drives the growth, popularity and wide use in the food and beverage industry, to cosmetics industry (Voora et al., 2019: 1).

The cocoa industry operates broadly along global supply chains across countries and continents. The intricate production process makes the cocoa industry involve a lot of various parties, from farmers, buyers, shipping organisations, processors, chocolate makers, and distributors (WFC, 2012: 1). In GVC analysis, the idea of a value chain is built on the series of activities required to convert raw materials into finished products and sell them, and on the added value in each link (Gereffi, 1999). Currently, it is increasingly rare for companies to carry out various activities in this value chain individually. In fact, the current value chain involves many cross-country players. Activities that were previously handled internally involved more roles of other parties who were considered to have better core competencies (De Marchi et al., 2018: 6).

In terms of the cocoa production chain, Indonesia has a large role as a producer that produces raw goods. Indonesia has a large number of cocoa plantations. Indonesia only started to enter the cocoa industry in the 1980s and continues to show an increase in the number of cocoa plantations. The area of Indonesian cocoa in 1980 was only around 47,082 hectares (Ministry of Agriculture, 2017). Indonesia's cocoa land area in 2018 was 1,611,014 Ha (BPS, 2018). In terms of cocoa plantation area, Indonesia is still in second place with the largest cocoa land area in the world. The country with the largest cocoa plantation in Ivory Coast which has an average of 2.64 million ha. This area is around 26.04% of the total area of all cocoa plantations in the world, while Indonesia contributes 17% (Ministry of Agriculture, 2017). Despite that, Indonesia's cocoa production is only in the fifth place, lower than Cote d'Ivoire, Ghana, Cameroon, and Nigeria (Voora et al., 2019: 7).

The gap between Indonesia's large cocoa plantation area and its not too high cocoa production is caused by most of the Indonesian cocoa plantations are run traditionally, with farmers are having low skills and limited knowledge (BPS, 2018: 7). Thus, the government felt the need to encourage the adoption of technologies and to increase the farmers' skills to boost cocoa production in Indonesia. Started in 2018, the production of cocoa in Indonesia started to increase. Most of these products are then sent to the export market. At least about 80% of the total Indonesian cocoa products are sent to the international market, mainly to Malaysia, the United States of America, China, India and the Netherland. The total volume of exports to Malaysia reached 100.54 thousand tons or 26.40% of the total export volume of Indonesian cocoa with a value of US \$ 187.31 million. The United States is in second place with an export volume of 73.31 thousand tons or 19.25% of Indonesia's total cocoa volume with a value of US \$ 345.69 million (BPS, 2018: 52–54).

So far, Indonesian cocoa exports are still dominated by cocoa beans or cocoa butter. In connection with the broad cocoa product value chain, Indonesia's cocoa product exports are still classified as in the low-value chain. In 2018, exports of cocoa butter, amounting 40.72% of total Indonesia's cocoa export or amounting to 155.1 thousand tons, dominated the total volume of Indonesia's cocoa exports. Furthermore, consecutively exports of Indonesian cocoa products in the form of cocoa flour amounted to 23.60% or 89.9 thousand tons, cocoa paste amounted to 17.08% or 65.1 thousand tons, and cocoa beans amounted to 7.31% or 27.8 thousand tons (BPS, 2018).

At the same time, the volume of Indonesian cocoa imports has increased. In 2000, Indonesia's cocoa imports were recorded at 19.31 thousand tons. In 2016, this value increased to 105.15 thousand tons, and in 2018 it increased again to more than double or at 288.9 thousand tons (BPS, 2018). In the last five years, the total volume of cocoa imports has fluctuated greatly. In 2014, the total volume of cocoa imports was recorded at 139.99 thousand tons with a value of USD 469.01 million. In 2015 there was a very drastic decrease in cocoa imports by 39.68%. However, in 2016, imports increased by 24.53% from 2015. In 2017,

cocoa imports again experienced a substantial increase, up to 156.93%. From 2017 to 2018, the increase was 6.94% with a value of USD 706.09 million (BPS, 2018: 55). The largest part of Indonesia's cocoa import in 2017 and 2018 were in the form of cocoa beans (83.88% in 2017 and 82.85% in 2018) (BPS, 2018: 56). This situation is because of Indonesia's cocoa-based industries' demands of cocoa beans with higher quality than cocoa beans produced by Indonesia's cocoa plantations.

Based on the first GVC typology, GVC-led Innovators consist of innovative local companies, who intensively use GVC's in-house knowledge resources. This typology is deemed not entirely representative of conditions in Indonesia. In Indonesia, we can see that the majority of cocoa plantations are produced by smallholder plantations or small scale farmers. About 90% of the total cocoa plantation land in Indonesia is cultivated by farmers or under community plantation schemes. In 2018, cocoa plantations cultivated under the smallholder plantation scheme were estimated at 1.63 million hectares (98.38%), while large private plantations cultivated 14.49 thousand hectares (0.87%) and large state plantations only cultivated 12, 38 thousand hectares (0.75%) (BPS, 2018: 10).

This condition shows that Indonesia's role in the global value chain of cocoa products is still meagre. This low productivity is also accompanied by low value-added for cocoa products. To be able to take opportunities in the cocoa production value chain, the analysis can be seen from the extent of market opportunities in producing cocoa according to consumer interests. Therefore, Indonesia can see how market opportunities are from market behaviour and interest in cocoa products. Furthermore, adjustments can be made to opportunities for these cocoa products.

In this case, one of the efforts made by the government in order to increase the role of cocoa products in the GVC is to prepare regulations. The government ratified the Regulation of the Minister of Home Affairs No. 9/2014 on superior products which contain restrictions on the export of processed products. This regulation is intended to strengthen local economic planning. It is targeted that cocoa products based on the local economy and smallholder plantations can be developed as a commodity with careful planning.

Referring to the second GVC typology, Autonomous Innovators, are groups that make innovations based on external learning sources. Innovations can be made by considering adjustments to global cocoa needs. Research conducted by Del Prete and Samoggia (2020: 13) found that there are four categories of factors that influence consumer behaviour in chocolate consumption. These factors are in the form of personal preferences, chocolate product attributes, socio-demographic factors, and economic attributes. Based on these factors, it can be seen to what extent the global market may accept the development of Indonesian cocoa products. Learning from external sources, we can see that globally the GVC involves various types of companies: multinational companies (MNE) as well as independent suppliers, including small and medium enterprises (SMEs). In general, the majority of GVCs are led by large MNE from developed countries. In total, 92% of cases were GVCs led by developed country companies. This condition is related to the ability of developed countries to developing modern technology to increase value-added products (Sturgeon and Kawakami, 2011).

In the cocoa market, the relationship between the country of origin and the market interest itself is not very influential. Consumers do not really care about the country of origin of chocolate products. Research conducted by Ahmed et al. (2012) found that within Lebanese society, the impact of the country of origin (COO) attribute on chocolate consumption was small. Consumers actually look more at the product's brand instead of the "made in" or country of production attribute. This research, while conducted in a specific community, is in line with other research conducted by Poelman and Rousseau (2016). This research was conducted in Belgium to understand buyers' perspective on fair price chocolates. This research concludes that factors most influencing consumer buying decisions are brand and price. With similarities between the results of these two studies, it is possible that this condition, brand and price are the most important variables affecting chocolate buyers' buying behaviour, might also apply elsewhere.

In order to study this relationship, the concept of governance is central to the analysis. Countries need to increase the country's "brand" to encourage further involvement in GVC and enjoy high value-added. At any point in the chain, a level of governance or coordination is required to make decisions. Decisions are not only about what to do, or how something should be produced, but also about when, how much, and at what price. This strategy is done by adjusting to market interest. Coordination can occur through markets, hierarchies and network relationships (De Marchi et al., 2018: 8).

In Indonesia, the cocoa industry is mostly played by SME players. This situation makes the typology of Autonomous Innovators in Indonesia still low. In global value chain analysis, there are two business activities carried out in the form of primary activities and support activities. Primary activities are all activities that are directly related to adding value to inputs and transforming them into products needed by customers. Primary Activities include the supply of production facilities, services, marketing and sales. Support activities are all activities that support or allow all significant activities to function effectively. Support activities include infrastructure, human resources, and science and technology.

In Indonesia, primary activities and support activities are still not optimal. Cocoa product input from supply to selling is carried out in a broad chain. The value chain in post-harvest trading is divided into several parts, starting from traders at the village level, traders at the district and provincial levels. Village traders usually receive the harvest from farmers who produce a small amount of cocoa. Village-level traders also usually enter into a buying pattern that binds the farmers through debt loans. They sell the un-harvested cocoa beans to intermediaries, known in Indonesia as *tengkulak*, at a low price. Thus, when the harvest time comes, the farmers only gain small fortune while the *tengkulak* then sell the cocoa beans at a higher price to the industries or exporters.

This condition is hampering the development of the local cocoa industry since the majority of cocoa beans in Indonesia are the result of traditional plantations, which is synonymous with low capital and capability. They prefer to sell their crops directly, without providing post-harvest processing to increase added value. Indonesian cocoa farmers produce non-fermented cocoa beans. For farmers, this is considered more profitable because the price of fermented cocoa beans is not much different from the selling price of non-fermented cocoa beans. For example, in Sulawesi, the difference is only around IDR 2500/kilo. Farmers still need fermentation costs of up to IDR 2000/kilo. Farmers need 5-6 days to get a good fermentation of cocoa. This condition is what makes farmers happier to sell cocoa beans to *tengkulak* intermediaries in a non-fermented form (KPPOD, 2016: 25).

In the cocoa cultivation value chain, three main parts play a role, namely cocoa production, farmer institutions, and human resources. Human resources, in this case, cocoa farmers, are essential players here. However, as smallholders, they need broader support to be able to develop a global value chain for the cocoa business. This development cannot be separated from the active role of stakeholders in fostering farmer institutions and supporting human resource quality improvement. These stakeholders include farmer groups, local government, traders/entrepreneurs, financial institutions and academics. Each stakeholder can take on their respective roles to be able to encourage the addition of the cocoa value chain.

In an effort to optimise added value, capital is another essential variable other than human resources. In terms of capital, cocoa farmers also experience limitations. This limitation is made worse by the role of financial institutions, which have not been optimal in supporting the farmers' efforts to raise their capital. Farmers' access to capital in the form of a bank loan or financial aid is still difficult. Financial institutions generally have demanding criteria for cocoa farmers to meet. Only farmer group cooperatives are easily accessible to cocoa farmers to meet their capital needs. Cooperatives have limited capital so that the credit capital that can be obtained by farmers is also minimal. This lack of capital then affects the farmers' inability to purchase more advanced technology for their plantations and also their inability to train their human resources to employ more advanced techniques (KPPOD, 2016: 29).

Optimisation of the downstream cocoa industry has the most significant opportunity in optimising value added in the global value chain. Referring to the second GVC typology, or Autonomous Innovators are groups that make innovations based on external learning sources. In this condition, Indonesia is still minimal in applying learning resources or external knowledge. The upstream cocoa industry, which is still based on smallholders with limited capital and human resources, has made the cocoa beans produced less than optimal. Meanwhile, the downstream cocoa industry in the country is still not optimal, so that more than 80% of cocoa products are still used to meet the export market, with the majority being cocoa beans exports.

In the third GVC typology, Marginal Innovators, which are the largest group and are characterised by a low level of innovation and some use of the knowledge available in the GVC, but rarely use external sources. This situation represents the majority condition of the cocoa industry in Indonesia. Indonesia still needs a lot of development of the cocoa processing industry at the downstream level. Most actors in the

cocoa industry are marginal innovators, so they have a low level of innovation. Efforts are needed to develop the cocoa processing industry and increase its added value.

The downstream cocoa industry in the form of cocoa and chocolate-based food products has great potential to be developed. Food products have high added value and can be realised with low technology access. Most important in this development is the application of innovative ideas to capture consumer appeal. De Marchi et al. (2018: 13) stated that efforts to increase the role in GVC do not have to be through the application of technological breakthroughs. Without having to be the initiator of breakthrough technology, the industry can develop and play a vital role in the application of innovative ideas.

In this case, synergy from various parties is needed to generate innovative ideas in cocoa development. The current obstacle in developing cocoa products is the lack of knowledge of cocoa industry players, from upstream to downstream. This obstacle has made cocoa productivity less than optimal starting from the upstream industry. Farmers are only oriented to crops that are considered “enough” to generate money to make ends meet. They do not have an orientation in capturing global value chain opportunities that might encourage the increase of the national cocoa industry.

For this reason, efforts are needed to encourage the promotion of processed Indonesian cocoa and chocolate products as well as trying to increase the involvement of more parties to produce new innovations in cocoa products. The emergence of players in the downstream cocoa industry with innovative ideas will be beneficial. One aspect that can be utilised is to bring organic labelling to gain consumer appeal in the global market. Carrying products with organic labels can be done with small capital and limited technology. However, observing the international market’s interest in chocolate, this aspect has excellent opportunities.

A study conducted by Bullock et al. (2017) shows that cocoa consumers are much interested in organic labelling as a form of assurance for human health and protection of the environment. Health attributes have a significant effect on consumer choice. Consumers also admit that promotions carried out also have a more significant impact when it is associated with protecting the health of themselves and their families, rather than being associated with ethical values. Another research by Tagbata and Sirieix (2010) also showed that the printing of organic labels on cocoa products that are ready for consumption by consumers could provide added value. Consumers perceive organic labels as better quality, so they do not hesitate to pay more.

This study can become a basis for Indonesia to seize opportunities for more suitable cocoa downstream products. As a country that is dominated by marginal innovators, Indonesia has the opportunity to increase its role in the GVC of cocoa products even with low technology. To make it happen, it requires synergy from upstream to downstream industries to produce high-quality organic cocoa products. Farmers need adequate information and sufficient capital to be able to cultivate their land or cocoa gardens to produce final high-quality products according to the interests of the global consumer.

Moreover, the price of cocoa is more influenced by the quality of the cocoa itself. A study conducted by Wardhany and Adzim (2018) emphasised that the largest volume of cocoa exports is influenced by the quality and taste and the correct fermentation process of cocoa beans. The export volume is not so influenced by the domestic cocoa price alone. Even though the domestic price of cocoa beans fluctuates, it does not have much effect on export volume. The fluctuation in the price of domestic cocoa beans is more due to the quality produced by the farmers. When farmers can stably produce quality cocoa products, the prices they get will also be stable, and this can boost the volume of cocoa exports.

However, the expected increase in cocoa export volume is processed cocoa beans or cocoa products with high added value. As an effort to increase the competitiveness of processed cocoa beans exports, the government launched a policy on export duty rates for cocoa beans. This regulation was made through the Minister of Finance Regulation No. 67/ PMK.011/ 2010 concerning the imposition of export duties for cocoa beans. This regulation has been effective since 1 April 2010. In it, it regulates the application of the price of cocoa beans with the stipulation that the export price is USD 2,000/ton, so the export duty is 0%. The price is between USD 2,000-USD 2,750/ton, the export duty is 5%, and the price is between USD 2,750-USD 3,500/ton, the export duty rate is 10%. Meanwhile, prices above USD 3,500/ton, are subject to a 15% export duty.

This regulation was made to increase the added value of cocoa beans exports. The government is trying to encourage the processing industry or downstream cocoa industry in the country to be more optimal. With this regulation, it is hoped that it can guarantee the supply of cocoa beans for the national industry. This method is also expected to encourage the growth of the national cocoa bean processing industry. With

higher export duty rates on non-processed cocoa beans, it is hoped that this will encourage economic actors in the cocoa sector to take the initiative to process cocoa beans into processed products. Farmers, traders and exporters can do this. They can process cocoa beans into a variety of quality cocoa products according to the needs and interests of global consumers. For example, in the form of cocoa cake, cocoa butter and cocoa powder, then export them.

Each step or process involved in processing cocoa beans into processed products will have an impact on the added value of the cocoa beans. However, since the enactment of this regulation, Indonesia's cocoa bean exports are still high. The amount of land and cocoa production in Indonesia continues to decline. However, the positive impact seen is the increased number of production and increased export value.

The results of a study conducted by the Regional Autonomy Implementation Committee Team on the competitiveness of cocoa products found that the root cause of low cocoa productivity consists of four main aspects, as follow:

- a) Low access to information and technology. Farmers admit that their capability is low in processing cocoa, and do not have sufficient information on the use of technology. As a result, they only use simple tools that do not fully solve cocoa cultivation problems, such as the spread of pests.
- b) Less optimal extension of assistance. The number of cocoa cultivation instructors is considered insufficient and unable to reach all cocoa farmers. Also, knowledge about cocoa farming is still not focused, resulting in internal problems for farmers. Farmers do not focus on caring for cocoa plants.
- c) Limited supply of production facilities. Production facilities for cocoa cultivation, such as fertilisers and pesticides, are minimal and often experience scarcity. Apart from plantations, shortages of fertilisers and pesticides also occur in rice fields and livestock. So far, fertilisers and pesticides used by cocoa farmers are common types used for livestock, rice fields as well as livestock, resulting in competition for access. There is no supply of special fertilisers for plantation activities, especially for cocoa. Also, access to quality cocoa seeds is still limited and uneven.
- d) Low farmer capital. Farmers' capital relies more on limited farmer cooperatives. Farmers' access to capital in national banks is very minimal and difficult to reach (KPPOD, 2016: 41).

These obstacles need to be overcome first. Stakeholders need to work together to optimise market opportunities for cocoa products in the global market. This lack of understanding is common in Indonesia's economic bureaucracy and from the perspective of local cocoa industry players. The bureaucracy that runs less optimally results in less than optimal policies. For example, the lack of cocoa farmer extension agents shows the less optimal role of stakeholders in supporting regulations issued by the government.

In addition, there is no supply of production facilities that specifically support the cocoa industry. This condition shows that the national targets are not synchronised in increasing the global value chain of the national cocoa industry towards providing carrying capacity in the field. In fact, with the increase in the global value chain of cocoa products, Indonesia has the opportunity to earn a higher foreign exchange. Furthermore, by looking at the opportunities and also the bargaining value of cocoa in the international world, he hopes to improve the welfare of cocoa farmers in Indonesia.

V. CONCLUSION

The cocoa commodity opportunities in the global value chain can be seen from the adjustment between global needs and the capacity of the domestic cocoa industry. The global community can become an attractive market share in the cocoa industry, especially the processed cocoa industry. Even though the GVC typology is a marginal innovator, Indonesia has the opportunity to develop processed cocoa products with minimal technology. One of them is by relying on organic labels on cocoa products. However, research results indicate that the backwardness of the cocoa industry in Indonesia is the result of a lack of understanding of the value of Indonesian cocoa in the global value chain. This lack of understanding is common in Indonesia's economic bureaucracy and from the perspective of local cocoa industry players. The synergy that takes place among the stakeholders is not optimal so that the implemented regulations cannot be adequately implemented.

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