The Role of Vietnam in the Global Coffee Value Chain

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ABSTRACT

Coffee is one of Vietnam's key agricultural products, with its export volume taking second place in the world. This industry creates many jobs, brings high economic value, creates stable income for employees in Vietnam, especially develops the local economy, and contributes a significant part to the country's development. The article analyzes the role of Vietnam’s coffee industry in the global coffee value chain through a variety of steps: from production, collection, and processing to domestic consumption and export; This paper also draws out the advantages and disadvantages of Vietnam’s participation in the world coffee market. It has a very important meaning in affirming the position of Vietnam’s coffee industry and helping the Government, businesses, and employees to take reasonable measures to improve product quality as well as the proportion of Vietnamese coffee in the world market.

Keywords: coffee, collection, consumption, global coffee value chain, production.

I. INTRODUCTION

A value chain is a set of activities required in the production of a product or service from the time the product is created to the time it is delivered to the consumer. Thus, the value chain includes some activities such as design, production, marketing, distribution, and customer service. If chain activities take place in many countries on a global scale, the value chain is a global value chain. Global value chain analysis is a useful tool in assessing the level of competition, role and position of each country in the global value chain, thereby making appropriate trade strategies. Today, the coffee trade has been liberalized, the coffee value chain management system is mainly about enhancing the brand for products and businesses. The world coffee market has many distinctive characteristics compared with other agricultural products due to both objective and subjective reasons on the supply side and the demand side. These causes create many market areas. In the region's stable and high-value markets, transactions are mainly conducted between multinational coffee corporations and consumers in developed countries. In volatile and low-value markets, transactions are mainly conducted between coffee exporters in developing countries and multinational coffee corporations. As Vietnam is located in an unstable and low value market area, any bad fluctuations in the world coffee market will immediately affect all actors in the coffee industry.

The added value of Vietnamese coffee in the global value chain is mainly in the production of raw coffee, which is the stage with the lowest added value. Despite being one of the world's leading coffee exporters, Vietnam has not really focused on coffee processing to enhance the added value of this item. The proportion of processed coffee with high added value in Vietnam accounts for only 10% of the total production of green coffee, while the export of raw coffee accounts for 90%. Analyzing the role of Vietnam in the global coffee value chain is an urgent requirement to find solutions to improve the added value of Vietnamese coffee in the world market. The enhancement of added value not only helps Vietnamese coffee improve its share in the global coffee value chain, but also brings benefits and effective impacts in many aspects for the Vietnamese economy.

II. RESEARCH METHODS

A. Collect Data

The author has collected secondary data and documents on Vietnam’s participation in the global coffee value chain through the performance reports of the Vietnamese coffee industry by the Ministry of Agriculture and Rural Development; Ministry of Industry and Trade; Department of Crop Production and related documents. From there, the author has a database and information to serve the analysis of the coffee market in Vietnam.

Research period: Vietnam's participation in the global coffee value chain in the period 2015-2020.

B. Data Analysis

The author uses analytical methods, comparative methods, and synthetic methods: Analytical methods to find out the basic problems of the Vietnamese coffee value chain; the comparative method shows the difference in the participation of Vietnam and other countries in the world in different value-added stages in a chain; The integrated approach offers solutions for the State and businesses to promote added value and enhance Vietnam's role in the global coffee value chain.

In addition, the author also uses descriptive statistical methods to describe the socio-economic characteristics and natural conditions of Vietnam. From there, the article points out the advantages, disadvantages, limitations, and challenges of Vietnam when participating in the global coffee value chain.
III. THE ROLE OF VIETNAM IN THE GLOBAL COFFEE VALUE CHAIN

A. Vietnam’s Role in Production in the Global Coffee Value Chain

Nowadays, there are about 75 coffee growing countries, mainly concentrated in South America, Africa, and Asia. The total world coffee area is about 10 million hectares, with an annual output of about 8 million tons and income for about 100 million people. For the main coffee growing countries, this item accounts for about 25% of the country's export turnover. Statistics show that by the end of 2020, the world has 55 coffee exporting countries.

According to the World Coffee Organization, in 2020, the total global coffee production is 169.6 million bags (60 kg/bag), of which 87% come from the top 10 largest coffee producing countries in the world. Particularly, 5 countries including Brazil, Vietnam, Colombia, Indonesia, and Ethiopia account for 75% of the total global coffee production in 2020. Coffee output in Vietnam reached 30.48 million bags in crop year 2019/2020, standing 2nd in total global coffee production, just behind Brazil. It can be seen that in the production stage, Vietnamese coffee has a high position in the global coffee production value chain.

A remarkable feature is that Vietnam has only focused on growing coffee products with low product value. In the international market, the two most traded types of coffee beans are Arabica and Robusta. In particular, Arabica has a higher product value due to the stronger flavor that coffee beans bring. However, 90% of coffee beans produced in Vietnam are Robusta, only 10% are Arabica. Thus, Vietnam is still focusing mainly on the segment of products that bring lower value. The reason for this phenomenon is that most of the arable land and climate of Vietnam are suitable for the living conditions of Robusta beans.

B. Vietnam’s Role in the Collection and Processing in the Global Coffee Value Chain

In Vietnam, the main activity of collecting and processing coffee is collecting green coffee. Processing is carried out in households, private collectors, and enterprises.

Processing at home: Households after harvesting fresh coffee will dry them. This method leads to low and uneven product quality. Therefore, although this method is easy to implement, it brings low cost. In Dak Lak province, over 90% of households use the method of drying or selling fresh fruit. In Vietnam, machinery, and equipment for processing in small processing establishments and within households are still lacking and sketchy, so the harvested coffee is mainly dried in the yard. However, the area for the drying yard is not adequate, leading to the coffee being dried too thickly or piled up, not ensuring the drying and preliminary processing of coffee within 24 hours after harvest. In addition, the level of processing workers is low, mainly based on available experience, which greatly affects the final coffee quality.

Processing at private collectors: The role of private collectors is as an intermediary to transport goods from coffee growers to coffee processing and exporting enterprises. Some private purchasers are also involved in the processing, but only in the form of simple dry processing such as cleaning, drying, and polishing.

Processing at enterprises: Processing enterprises mainly follow the dry processing method. Post-harvest processing is still simple for export green coffee, mainly additional drying, grading, mixing, and polishing. In which, the amount of polished green coffee is not much, accounting for only about 6-7% of exported coffee.

In recent years, the most commonly applied processing technology in Vietnam is dry processing. Most of the farmer households dry their own coffee after harvesting in the open air and then sell it to collectors. The level of mechanization in households is very low, few farmers can dry coffee by machine. Meanwhile, domestic enterprises began to pay more attention to the use of wet processing technology. They have imported new technological equipment that helps to better classify products, so the color and taste of coffee is also better. Most businesses believe that the cost of coffee processing in Vietnam is lower than that of other countries in the world due to the advantage of labor and raw material prices.

Fig 1. Ten countries with the largest coffee production in the world in the 2019/2020 crop year.
Currently, Vietnam has about 113 coffee processing and exporting enterprises, including 13 FDI enterprises. Only one third of enterprises have factories processing green coffee for export, the rest still have to buy coffee through a system of traders and agents. For green coffee processing, the country currently has 100 coffee processing facilities with a total designed capacity of 1.5 million tons/year. For powdered coffee, there are about 600 establishments with a total capacity of more than 73,000 tons/year. In which, 50% of establishments are small-scale. There are 7 instant coffee processing factories with a capacity of 52 tons/year.

Fig. 2 reflects the level of coffee processing technology in Vietnam. For the advanced technology group, it accounts for about 12.7%, equivalent to 8 enterprises. Medium-advanced technology accounts for 54%, equivalent to 34 enterprises, mainly state-owned companies, and limited liability companies. Medium technology is used by about 21 small-scale enterprises. Thus, it can be seen that our country's coffee processing technology is still mainly using advanced medium technology and medium technology.

In Vietnam, there are a few enterprises that have invested in the deep processing industry such as Vinacafe, Trung Nguyen, and Nestcafe. Brands producing roasted and ground coffee products such as Dac Ha (Kon Tum), Thu Ha (Gia Lai), Vinacafe, Trung Nguyen. However, processing technology is still at a low level due to large investment capital and low financial conditions of Vietnamese enterprises. Machinery and equipment of factories are mainly produced domestically, in addition, some equipment is imported from abroad. Most factories only preliminarily process green coffee, the technology used for processing high quality coffee and for export is still quite limited.

Thus, Vietnam's participation in the collection and processing stages in the global coffee value chain is still very limited. Deep processing methods to increase added value for products have not been applied much, the processing capacity of instant coffee and roasting remains low.

\[\text{Market value (Unit: million VND)}\]

\[\text{Market value (Unit: million USD)}\]

**Fig. 3. Coffee retail value in Vietnam's coffee market.**

**Fig. 4. Coffee export turnover of Vietnam.**

**D. Vietnam's Role in Exporting in the Global Coffee Value Chain**

Vietnam's coffee exports make a very important contribution to the welfare of the people. Vietnam has only joined the coffee export market since the 1990s. According to statistics of the General Department of Customs, although Vietnam's coffee exports in 1995 only reached 3.53 million bags, Vietnam has become the second largest coffee exporter in the world in 2000. Vietnam's coffee industry has undergone many changes over the years. In addition to exporting green coffee, Vietnam has stepped up processing and exporting roasted and ground coffee. In the FTAs that Vietnam has signed, all markets are open to Vietnamese...
processed coffee products with preferential tax rates from 0-5%. Export turnover has always achieved a growth rate of over 3 billion USD. Brand positioning has helped Vietnamese coffee products increasingly assert their position in the international market. Coffee is one of the 10 key products of Vietnam that are exported to 80 countries and territories. In 2020, due to the impact of the Covid-19 pandemic, the demand for coffee in the world market decreased, so Vietnam's coffee exports did not exceed 3 billion USD. According to statistics of the General Department of Customs, in 2020, the whole country exports 1.57 million tons of coffee, with a turnover of 2.74 billion USD and the average price reaching 1,751.2 USD/ton. This number decreased by 5.6% in volume and 4.2% in turnover but increased slightly by 1.4% in price compared to 2019.

Germany is Vietnam’s largest coffee consumption market, accounting for 14.3% of the total volume and 12.8% of the country’s total coffee export turnover, reaching 223,581 tons, equivalent to 350.41 million USD, the average price is 1,567 USD/ton. This figure has decreased by over 4% in both volume and value but increased by 0.4% in price; Southeast Asia market ranked second in turnover, reaching 160,997 tons, equivalent to 328.36 million USD, down 9.8% in volume and 8.6% in turnover. Followed by the US market reached 142,482 tons, equivalent to 254.89 million USD, down 2.6% in volume but up 3.2% in turnover (Table I).

In addition to the advantages, the Vietnamese coffee industry also faces many difficulties. In the export market, Vietnamese coffee is only known for its output, but its quality has not been recognized and the value of coffee beans in Vietnam is not high. The reason is that Vietnamese coffee is affected by the world coffee market; coffee products with low added value; Export of green coffee accounts for the majority, only 12% for deep processing. Moreover, there is a shortage of containers for export, so freight rates are likely to increase in the near future. This has a significant impact on coffee exports. In addition, Vietnam will continue to have to compete with other exporting countries, especially Brazil. With a sharp increase in area, coffee output of Brazil - the world’s largest coffee producer, will also cause significant difficulties for Vietnam’s coffee exports.

Along with the difficulties of the export market, there are also internal difficulties of the Vietnamese coffee industry such as: The production and business efficiency of the coffee industry is low and precarious; businesses that purchase, process and export depend entirely on coffee exchanges; processed coffee products and Vietnamese coffee brands in the world export market have not met expectations; degradation of coffee trees is increasing rapidly; Coffee production suffers many disadvantages due to climate change.

### IV. CONCLUSION

Over the years, Vietnam has quickly established its position as the second largest exporter and the largest exporter of Robusta coffee in the world. However, the ability of Vietnamese coffee products to participate in the global coffee value chain is still very limited and the added value of Vietnamese coffee in the current stages is still low compared to other countries. in the region and around the world. Especially, it is far behind the potential and advantages of Vietnam. Accordingly, Vietnam only participates mainly in the stages of low added value such as production, collection, and preliminary processing, which negatively affects the sustainable development of the industry in the future.

From the analysis of the current situation, the author also points out the solutions belonging to the State, the Vietnam Coffee and Cocoa Association and businesses to improve the role of Vietnam in the global coffee value chain. If successfully implemented, Vietnam will become a powerhouse in coffee in the world, making a significant contribution to the global coffee value chain. This is also a lesson for coffee producing and exporting countries in Southeast Asia in particular and the world in general.

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**TABLE I: VIETNAM COFFEE EXPORT MARKET**

| Market       | Quantity (ton) | Price (USD) | Compared to 2019 (%) | Proportion (%) |
|--------------|----------------|-------------|----------------------|---------------|
| Total        | 1,565,280      | 2,741,048,091 | -5.57               | -10.00        |
| Germany      | 223,581        | 350,409,667   | -4.68               | -14.28        |
| Southeast Asia | 160,997       | 328,361,375   | -9.83               | -10.29        |
| USA          | 142,482        | 254,891,472   | -2.58               | 9.1            |
| Italia       | 141,535        | 224,152,609   | 0.24                | 8.18           |
| Japan        | 102,215        | 180,503,027   | 2.18                | 6.53           |
| Spain        | 95,689         | 162,183,605   | -28.59              | 5.92           |
| Philippines  | 72,512         | 158,097,906   | -3.7                | 5.77           |

**FOOTNOTE**

| Market       | Quantity (ton) | Price (USD) | Compared to 2019 (%) | Proportion (%) |
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