

Exporting cocoa in times of the COVID 19 pandemic and its impact on the value chain

La exportación de cacao en tiempos de pandemia COVID 19 y su repercusión en la cadena de valor

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ABSTRACT

This article provides an overview of the impact of the health emergency on the value chain and exports of the cocoa sector in Ecuador during the course of the year 2020. Although Ecuador has been considered one of the main producers and exporters of cocoa in the world, with vast recognition and prestige, it has been affected by the Covid-19 pandemic, which has impacted all economic activities at the international level.

Keywords: Cocoa, value chain, productivity, marketing, pandemic.

RESUMEN

El presente artículo ofrece una panorámica global acerca de la incidencia que ha tenido la emergencia sanitaria relacionado a la cadena de valor y las exportaciones del sector cacaotero de Ecuador durante el transcurso del año 2020. Si bien Ecuador ha sido considerado uno de los productores y

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exportadores principales de cacao en el mundo, con vasto reconocimiento y prestigio, sí ha sufrido las afectaciones a causa de la pandemia por Covid-19, la cual ha impactado a todas las actividades económicas a nivel internacional.

Palabras clave: Cacao, cadena de valor, productividad, comercialización, pandemia.

INTRODUCTION

Exports are considered one of the most important items for the dynamics of any country's economy. However, the crisis experienced as a result of the COVID-19 pandemic in early 2020 has had unprecedented repercussions on people, the economy itself and society. The exact impact of the pandemic on economies on an international scale will not be known as long as this situation persists, but only after Covid-19, since, according to assessments by the World Bank and the International Monetary Fund (IMF), the consequence of this pandemic in terms of the economy has been, above all, the worsening of already existing fiscal deficits.... (García, Pico, & Jaimez, 2021).

Related to this, the Economic Commission for Latin America and the Caribbean (ECLAC) has revealed that the consequences of the pandemic on international trade have shown a decrease of more than 17% to date, in the same way that export and trade operations have also reflected a considerable decrease of more than 23%, with Latin America being the most affected region after the pandemic. In the case of Ecuador, international trade is the area that provides the greatest economic returns, benefiting traders and all agents involved in exports, from small producers to other channels involved in bringing the product to the exporter. (García, Pico, & Jaimez, 2021)..

Among the main agricultural products that Ecuador markets abroad is cocoa. Mendoza, Cervantes and Vásconez (2020) state that cocoa is a crop whose role has been relevant in Ecuador's history and economy, being one of the export products that has managed to insert the country in the international context. For this reason, this article is oriented to offer an overview of the incidence of the pandemic on the level of exports of the cocoa sector in this country compared to previous periods. The COVID-19 pandemic has affected every segment of the population, but has been especially harmful to the most vulnerable groups, especially the poor, the elderly, the disabled, youth and indigenous populations. In addition, this crisis in the social aspect as a consequence of the pandemic has increased the inequalities that already existed, as well as unemployment and exclusion. (Vargas, Vite, & Quezada, 2021)..

Although the level of non-immediate impact caused by the pandemic is not fully known, a large number of cocoa producers are now in a "critical situation" of food security and may be disproportionately affected. Cocoa is a primary agricultural crop grown by millions of smallholder farmers around the world, who are often living below the poverty

line, facing market volatility and with few options for earning income. (Vargas, Vite, & Quezada, 2021).

According to Albán (2021), prior to the COVID-19 crisis, cocoa had a high world demand, growing its average annual rate at 0.13% in the period from 2011 to 2019, achieving about 3.82 million tons annually internationally. This production grew in Ecuador by 24% in 2018 and 14% in 2019. However, when the crisis appeared due to the pandemic, demand changed radically. The countries with the highest demand in Europe, for example, considerably decreased the consumption of this quarantined product, such as Spain, Italy, Great Britain and France, among others, thus impacting the demand for cocoa and chocolate from processing plants.

Thus, the pandemic has caused various difficulties in production and supply chains, as well as job losses, and has dealt a severe blow to food price dynamics, particularly in the most food insecure regions, where the consequences have been significant.

MATERIALS AND METHODS

This article has a qualitative and descriptive approach based on the search for and collection of information related to the subject and the problem posed, thus offering a global overview of the subject. The data obtained for the study and discussion were obtained from various sources and current publications of high scientific rigor and value, which allowed to obtain a characterization of the main aspects related to the subject.

The theoretical methods used were the historical-logical, through which it is possible to establish trends on the subject; analysis and synthesis, which enables the development of the research process; abstraction-concretion, used to synthesize concepts and theoretical aspects; and documentary analysis, through which the bibliographic exploration of quality contents was carried out.

RESULTS

In Ecuador there is currently a marked interest in the production and marketing of cocoa, its consumption at the international level is relevant, not only as chocolate, but also as a basic ingredient for food, given the revaluation of the delicacy of its beans (Mendoza, Boza & Gonzalez, 2020). In terms of the market, this crop originated with colonization; currently its consumption at the international level is considered relevant, not only as chocolate, but also as a basic ingredient for a healthy diet, given the revaluation of the exquisiteness of its grains, according to what they say (Mendoza, Cervantes & Vásquez 2020).

In Ecuador, the importance of cocoa is combined with the economic aspect. The historical significance of this crop is relevant, consolidated in periods of growth and affected in stages of production decline (Mendoza, Boza & Rodríguez 2021). On the other hand, sustainable management of environmental resources and reversing resource

degradation are key factors in cocoa production systems. Ecuador has taken a lead in this endeavor (Mendoza, Cervantes & Vásquez, 2021). Traditionally, companies belonging to this sector have acted under certain norms of controls or public standards, entering into projects that promote compliance with environmental and social objectives and biodiversity conservation (Mendoza, Boza & Manjarrez, 2022).

Ecuadorian cocoa is internationally recognized. Historically, this production has involved more than one hundred thousand families, which represent about 5% of the economically active population, for which they have occupied more than six hundred thousand hectares of land for this crop, an activity that is also developed in all provinces, generating jobs and added value to the product, as it has a high quality, making Ecuadorian cocoa one of the best products for the international chocolate industry. (Abad, Acuña, & Naranjo, El cacao en la Costa ecuatoriana: estudio de su dimensión cultural y económica, 2019)..

Several crops are grown in Ecuador, favored by the country's climate and soils. The two varieties of cocoa commonly grown are the national cocoa (the most highly valued) and CCN-51 cocoa. The production chain of this crop is based on the grouping of producers that form three groups: the group that includes small farms and households, representing 37%, which do not have irrigation systems and market cocoa to associations and retailers; another group representing 54%, which have irrigation systems and market the product to retailers, and a third group that sells this product to wholesale warehouses, representing about 8.3%, some of which have irrigation systems. The country's cocoa producers are classified as small, medium and large producers. This difference is determined by the type of cocoa they produce and the extent of land dedicated to cultivation, labor, end buyers, product diversification and irrigation. (Alcívar, Quezada, Garzón, & Garzón, 2021).

The truth is that the level of cocoa production has a great impact on the social, political and economic aspects of the country, given the increase in jobs, the agricultural reactivation and the development of new agricultural production alternatives.

Regarding the export of cocoa in Ecuador

Ecuador's cocoa production has become one of the most important pillars for trade and export. This product has gained worldwide recognition for its special characteristics of aroma and color, valued for the preparation and/or coating of fine chocolates, coatings, etc., which is considered one of the country's economic strengths (Mendoza, Cervantes & Zamora, 2021).

The international cocoa market gives Ecuador the opportunity to supply and optimize production options and, therefore, to increase exports. Ecuador is one of the world's leading exporters of cocoa, so it is necessary to diversify and generate new ventures that encourage the participation of a greater number of producers. Many regions of the world do not have the climate or soil characteristics necessary to grow cocoa, so they

tend to import it from Ecuador, as in the case of the People's Republic of China (Abad, Acuña, & Naranjo, 2020).

On the other hand, Ecuadorian cocoa has established itself in fourth place internationally, with a share of 63%. Likewise, Ecuador, in terms of cocoa bean exports, is in first place in the Latin American region, followed by Peru, Dominican Republic and Colombia. For this reason, this is considered one of the fundamental items at the national level, which provides a high boost to the country's economy (Abad, Acuña, & Naranjo, 2020).

There are two aspects of the marketing of Ecuadorian cocoa: the one that goes through intermediaries until it reaches exporters, which is called the domestic market, and the direct aspect where it is marketed directly abroad, an activity carried out by very few companies. In the world market, cocoa beans are divided into two main divisions: "common or ordinary" cocoa and "fine or aroma" cocoa (Mendoza, Boza & Manjarrez, 2021). External marketing is based on the sale of domestic cocoa beans and the CCN51 clone. (León, Calderón, & Mayorga, 2016)..

The different links in the marketing chain are mainly dedicated to the handling and sale of the grain, which is marketed in a higher percentage. It is worth mentioning that there are few processing initiatives in the country, characterizing this chain as not generating added value. The following figure shows the overall cocoa production and marketing chain. (León, Calderón, & Mayorga, 2016)..

Small producers and large companies make up this chain; the latter have plantations based on the CCN51 clone and national clones. These companies, in part, market cocoa to domestic exporters or do so directly with external companies. (León, Calderón, & Mayorga, 2016)..

COVID-19 and its impact on cocoa exports

The sanitary emergency experienced since the beginning of the year 2020 caused great changes in industries worldwide. In Ecuador this situation was no different. As a result of the COVID-19 pandemic, many companies were forced to operate with half of their capacity, while others were unable to continue their activities. Similarly, international trade was seriously affected as demand for certain products was reduced, leaving thousands of people without income and others unemployed. (Moreno, Vite, & Carvajal, 2022).

In this situation, companies face a number of challenges due to the post-COVID scenario. Some need to implement new strategies and improve the link with demand. Others have been obliged to implement biosecurity measures to balance the situation and ensure continuity of operations in a safe manner for workers and, above all, for customers. (Moreno, Vite, & Carvajal, 2022)..

The pandemic caused the collapse of the exchange of products and affected supply and demand in many countries, and the financial impact that COVID-19 had on exports became evident. In Ecuador, it should be noted that cocoa exports are of great socio-

economic value, although they have overcome the difficulties that affected productivity in the past, which caused certain declines in the quantities traded. Therefore, maintaining the quality and levels of production and marketing of Ecuadorian cocoa is highly important, since this product gives it a high distinction in the market and in the face of competition, giving it international prestige. (Moreno, Vite, & Carvajal, 2022)..

As a result of the pandemic, and despite the fact that demand from cocoa importing countries decreased somewhat, the export rate of Ecuadorian cocoa was quite acceptable in 2020, compared to what other regions went through. Some countries completely paralyzed their production in processing plants, which is why purchases and imports were reduced. (Moreno, Vite, & Carvajal, 2022)..

However, Ecuador already presented financial difficulties before the beginning of the pandemic in 2020, since several events were marking for years the economy, such as the fall of cocoa prices in 2017; the absence of regulations and a more efficient management carried out by the State regarding this sector; likewise, on several occasions there was political, social and economic instability that evidently affected the welfare of citizens. For these reasons, when COVID-19 arrived, the impact it generated on oil prices was high, circumstances before which exports of products considered non-oil, including cocoa, are usually a lifesaver. (Quintero & Diaz, 2004)..

Even so, the sanitary emergency did not stop the internal and external cocoa trading activities, although there was a reduction compared to other periods, as mentioned above, as a result of which, after the worst period of the pandemic, there are short and long term forecasts, such as the contraction of staff, increased layoffs, business closures, fiscal deficit, economic recession, and some other negative events in the nation. Likewise, during this period, many companies were seriously affected by the sanitary emergency, especially those exporting raw materials such as cocoa, so they have had difficulties in marketing their products outside the country, since international demand was reduced and some of the main importers such as China and European countries decided to close their production plants. (Albán, 2021)..

Regarding cocoa exports in 2020, the cocoa sector in Ecuador continued to work during the quarantine, carrying out its activities under biosafety measures and meeting the demand for the product in different international destinations. According to data from the National Customs Service of Ecuador (SENAE), the nation exported around US\$700 million for cocoa alone in 2019. By contrast, about 325,000 metric tons were exported in 2020, which represented about \$850 million, a figure that surpassed expectations at the height of the pandemic. On the other hand, between January and May 2021, cocoa exports reached USD 266.4 million, an amount that is expected to be exceeded this year with the contribution of the 161 commercial appointments programmed within the framework of the Aromas of Ecuador project. (Macías, Mero, Montalvan, & Granoble, 2020)..

According to information from the National Institute of Statistics and Census (INEC), the cocoa product occupies a large number of hectares, representing 37% of the permanent crops planted. In addition, cocoa cultivation contributes with approximately 5% of the economically active population at the national level, which implies 15% of this rural population, reasons why this crop acquires great importance, as well as the undertaking of actions in order to mitigate losses due to the COVID-19 pandemic in the cocoa chain. (Macías, Mero, Montalvan, & Granoble, 2020)..

Anecacao, the National Association of Cocoa Exporters, faced a great challenge when the pandemic occurred at the beginning of 2020, since it had to promote the massive acceptance of biosafety protocols, and this change was experienced throughout the production chain, while at the same time promoting quality production destined for international markets. The MOCCA program made a considerable contribution by promoting the continuity of training for producers, who were given access to the Mobile Cocoa platform and workshops with internationally renowned specialists. (Véliz, 2020).

Due to the support provided by the MOCCA program, 69 workshops on cultivation techniques were held in times of pandemic, reaching a total of 644 producers, with which specialists from countries such as Peru, Nicaragua, Colombia and Honduras, among others, exchanged knowledge with the producers of the chain. (ANECACAO, 2020).

Anecacao, for its part, has continued to promote the sector's actions in times of pandemic, implementing significant incentives for producers such as campaigns and contests, adapted to the digital context and promoted with the support of the Belgian Development Cooperation and MOCCA. In addition, Anecacao has managed several donations from international organizations to which the World Cocoa Foundation (WCF) has called, having also delivered during the pandemic period, approximately 3,000 biosafety and food kits, thus highlighting the joint work of the entire chain to face this emergency. (ANECACAO, 2020).

The success of the cocoa production chain in Ecuador has attracted the attention of national institutions, which have also joined the support, given the potential of the sector. For this reason, new lines of credit and opportunities have been created to develop training and other plans to help the sector progress in these difficult times. The interest of institutions such as the INSOTEC Foundation, CAC Futuro, BanEcuador, CAC Hermes Gaibor, the Ministry of Agriculture of Ecuador (MAG), among others, has been attracted in order to offer greater access to credit at preferential rates to those who produce cocoa and who also participate in the program. (ANECACAO, 2020).

The MOCCA program and Anecacao have greatly boosted the cocoa sector and its production chain in times of pandemic, where all its members have been joining efforts towards a cocoa with sufficient quality to be exportable. (ANECACAO, 2020).

However, there is a very important issue to consider, and it is related to the environment in which the producer lives and the quality of life with which he subsists. It can be said that, in the rural context, approximately one third of cocoa producers do

not have farmer insurance, which means that there are about one hundred and twenty thousand workers who do not have health insurance or a social security system for unemployment, and their income to maintain and survive depends on their daily work. (Albán, 2021).

This leads us to believe that the situation of these producers has been extremely vulnerable to the existence of this pandemic and to the probability of an increase in contagions in these areas due to COVID-19 or other diseases. Likewise, this vulnerability is increased by the scarcity or distance of health centers.

For these reasons, it is necessary to improve the living, working and health conditions of the producers of this important sector for the country's economy. In other words, there should be a plan that prioritizes the improvement of basic services such as electricity, water and communications, which would favorably modify the living conditions of these types of workers in the countryside. (Albán, 2021).

It is also necessary to be aware of the limitations of farmers, such as problems with production infrastructure, where aspects related to limited access to resources and inputs, lack of advice to human capital, scarce financial resources, etc., play a role. Another reality that could become restrictive is the age of the owners of cocoa farms, who represent almost 70% of people in these areas, and who lack a generation to relieve them, as many young people often migrate to other regions, cities or are located in the realization of different activities. (Ulloa, Fajardo, González, & Solórzano, 2021)..

Therefore, it is now time to encourage the return of young people to the countryside, but not before providing better guarantees and services to ensure the improvement of their quality of rural life. It is also important to value and prioritize the food security of small producers, which could be affected depending on the measures that the State determines to prevent the high spread of COVID-19. All these factors reflect how the cocoa producer is the first and main link in a production and marketing chain that has a historical trajectory and deserves special attention, given its vulnerability and the importance of optimizing its environment and working and living conditions. (Carrión, Álvarez, & Olivo, 2020)..

CONCLUSIONS

Ecuadorian cocoa is one of the most internationally traded products and, therefore, one of the most traded to countless international destinations such as Indonesia, Malaysia, United States, among others, which demand the product given its aroma, quality and particular flavor, which is why this is one of the most important indicators and items in Ecuador, influencing its economy on a large scale as it is one of the most exported products and contributes millions of dollars a year to the nation's economic growth.

In early 2020 Ecuador, like other countries in the world, had to face a pandemic that impacted much of the production. However, producers continued to deploy their

activities even at risk, in order to generate a livelihood for their families. This pandemic has affected the production chain and the marketing of cocoa in many ways, resulting in a reduction of personnel and limitations in the acquisition of inputs for production activities. However, despite this, the international cocoa market was not greatly affected by the pandemic, although internally Ecuador suffered major changes that it had to face and that harmed agricultural activities and small producers, but despite this, the cocoa sector and its exports have continued to strengthen and obtain economic benefits from this important activity.

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