Analysis of covid-19 impact in the exports of the cocoa sector APROCAM 2019 – 2021

Análise do impacto da covid-19 nas exportações do setor cacauêiro APROCAM 2019 – 2021

Análisis del impacto del covid-19 en las exportaciones del sector cacaotero APROCAM 2019 – 2021

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ABSTRACT

Exports are one of the main and influential sectors that contribute to the development of each country. The general objective was to analyze the exports of the cocoa sector of the APROCAM cooperative during the years 2019–2021; therefore, an applied quantitative methodology was used, non-experimental, whose data obtained were from SUNAT and ADUANET which were analyzed through the periods 2019–2021, whose results showed a decrease of 5.4% in FOB value exported for the year 2020, but for 2021 showed a growth of 14.5%, on the other hand mentioning the volume exported in the year 2021 indicated a growth of 15.7% in annual variation compared to 2020, likewise in the cooperative APROCAM recorded a value of $354,521.33 in terms of its exports in 2020, instead in the year 2021 reported a value of $487,684.41 thus noting a growth of 17%, where it showed that more is exported to Italy and Belgium. It is concluded that exports are fundamental to the economy of each country and to the development of nations. It is suggested to the president of the cooperative to diversify its market since with this it will be able to export its products to more countries.

Keywords: Export, cocoa, pandemic, sanitary measures.

RESUMEN

La exportación es uno de los sectores principales e influyentes que aportan el desarrollo de cada uno de los países. El objetivo general fue analizar las exportaciones del sector cacauero de la cooperativa APROCAM durante los años 2019–2021; por ende, se utilizó una metodología cuantitativa aplicada, no experimental, cuyos datos obtenidos fueron de SUNAT y ADUANET lo cual se analizaron a través de los periodos 2019–2021, cuyos resultados manifiestaron decrecimiento del 5.4% en valor FOB exportado para el año 2020, pero para 2021 mostró un crecimiento del 14.5%, por otra parte mencionando el volumen exportado en el año 2021 indicó un crecimiento del 15.7% en la variación anual comparado con el año 2020, así mismo en la cooperativa APROCAM registró un valor de $354,521.33 en cuanto sus exportaciones en el año 2020, en cambio en el año 2021 se reportó un valor de $487,684.41 notando así un crecimiento del 17%, donde demostró que más se exporta a Italia y Bélgica.. Se concluye que, la exportación es fundamental para la economía de cada país y al desarrollo de las naciones. Se sugiere al presidente de la cooperativa diversificar su mercado puesto que con ello podrá exportar sus productos a más países.

Palabras clave: Exportación, cacao, pandemia, medidas sanitarias.

RESUMO

A exportação é um dos principais e influentes setores que contribuem para o desenvolvimento de cada um dos países. O objetivo geral foi analisar as exportações do setor cacauêiro da cooperativa APROCAM durante os anos 2019–2021; portanto, foi utilizada uma metodologia quantitativa aplicada, não experimental, cujos dados obtidos foram da SUNAT e ADUANET, que foram analisados ao longo dos períodos 2019–2021, cujos resultados mostraram uma diminuição de 5,4% no valor FOB exportado para o ano de 2020, mas para 2021 apresentou um crescimento de 14,5%, por outro lado, mencionando o volume exportado no ano de 2021 indicou um crescimento de 15,7% na variação anual em relação ao ano de 2020, da mesma forma na cooperativa APROCAM registrou um valor de $ 354.521,33 como suas exportações no ano de 2020, no entanto, no ano de 2021 foi reportado um valor de $ 487.684,41, notando assim um crescimento de 17%, onde mostrou que mais é exportado para Itália e Bélgica.. Conclui-se que as exportações são essenciais para a economia de cada país e para o desenvolvimento das nações. Sugere-se ao presidente da cooperativa diversificar seu mercado, pois com isso poderá exportar seus produtos para mais países.

Palavras-chaves: Exportação, cacau, pandemia, medidas sanitárias.
1. INTRODUCTION

This topic tries to analyze and explain how export performance has been varying in recent years, before, during and after the COVID-19 pandemic. Exports in Peru are important because they provide economic support to the country since a large part of these exports contribute to the GDP. However, due to sanitary restrictions, many companies dedicated to this area had to slow down or put their production systems on hold in order to comply with government regulations.

At the international level, according to the Directorate of Agricultural and Forestry Chains, in February 2021 exports decreased by 60%. (2021) in February 2021 exports decreased by 60%, and these recorded 743 tons compared to 1,874 tons in 2020, these data reflect that in 2021 there was a reduction in cocoa exports compared to 2020. It is expected that these figures will change and end the year with approximately 12,000 tons of cocoa exports, also has the main export destination is Mexico with only 400 tons and having a 53.8% share in the international market.

The Covid-19 during 2020-2021 caused major changes in the global industry, companies that worked with half of its capacity, and others who decided to pause their exports since the low demand and restrictions that caused extremely considerable losses, currently still struggling and trying to improve the export sector of cocoa, at the same time identified the delay in the progress of the international market (exports) in many countries, which caused a high rate of unemployment in many companies in our country. (Mena & Gutiérrez, 2021).

Similarly, Palomino (2020) mentioned that the main elements affecting cocoa producers and traders in general are movement restrictions, curfews and business closures. Never before have chocolate manufacturers experienced such a severe crisis, which affected all cocoa suppliers and all world chocolate markets. In particular, Latin American governments faced the challenge of dealing with a multi-level crisis (international, national, regional, local) from different sectors of society, exposing irregularities in the region as well as market distortions.

Likewise, ECLAC (2020) considered that trade and exports of cocoa this year have decreased by 23%, and similarly, in one of its reports stated that Latin American countries were the most affected during the pandemic, since being considered countries in full progress are forced to wait for raw materials and supplies that industrialized countries provide.

In the local context, this paper presents the case of the cocoa bean exporting cooperative, APROCAM where exports have varied in recent years under the influence of Covid-19, due to the lack of a contingency plan to address the problems caused by this pandemic since March 2020.

With respect to the social justification in this research work, it was considered that knowing in more detail the effects caused by the Covid-19 in the export systems both nationally and internationally, would be of great relevance because it gave us more wisdom on how this pandemic greatly influenced the economic status of many Latin American countries, who was the most damaged, since being underdeveloped countries needed much of the benefits and economic resources that gave them exports of oil, minerals and cocoa sectors.

As for the theoretical justification was seen the need to apply the theory and basic concepts of classical management, exports, finance, human relations, and organizational climate, finding explanations to cases of internal conditions such as low number of jobs, lack of motivation, low productivity, etc.. And in the export environment, marketing, competition, among others, how it affected local trade. Because this will allow us to find different concepts and management theories in a more concrete reality.

Therefore, for methodological justification this work was conducted by the need to improve the productivity and competitiveness of cocoa exports in the city of Bagua. The results of the study were based by the effects of COVID-19 on exports of the cocoa sector, so it allowed the development of specific strategies to significantly improve the existing gap in export and import activities.

Finally, the course of the work allowed us to visualize a deeper approach to exports during the time of the pandemic based on studies written and published in very important articles, to add importance more information was collected by making visits and interviews with members of the company APROCAM as they were the basis for the study of our research, thus facilitating an analysis and comparison of exports before the pandemic, during and after it.
2. THEORETICAL FOUNDATION

2.1. International background

With respect to the international background Zihus (2018) indicated in one of his published papers, whose objective was to study the importance of direct and indirect impacts of government policies on the promotion of cocoa exports by small and medium enterprises in Cameroon, using a questionnaire as a self-administered research tool using snowball sampling at 101 and structural equation modeling techniques to examine. The direct and indirect effects of the above government policies in the South and Central regions of Cameroon, have resulted in lower operating costs and better performance. However, the only way that matters is by providing information on commercial exports, it was concluded that there is still a need to continue to communicate through the different means most suitable for SMEs, which will increase transparency, awareness, usage and export performance.

Similarly, Artan & Bangmarigu (2018) aimed to analyze the productivity and competitiveness of cocoa exports in Ghana, coming to review cocoa productions and exports through the time from the year 1995 to 2016, making use of empirical and descriptive approaches using multivariate statistical analysis, whose results experienced an average year on year increase of 5.3% and 5.7% respectively, concluding that despite having favorable statistical indicators, further improvements can be achieved with integration and increased government support.

While, Panak, et al. (2018) in their research on the various industrial applications of cocoa shells, aimed to find specific solutions for the utilization of such raw material in the most efficient way possible in the industrial process, obtaining favorable results in experimental tests conducted with poultry, among others, concluding that such by-product contains a rich source of dietary fiber and protein, as well as valuable bioactive compounds (theobromine, caffeine, flavonoids, etc.) and, due to its composition, can be used for various applications as an ingredient in food processing, or in other industries such as pharmaceuticals, cosmetics or agriculture, with a constant increase of new applications.

Accordingly, Gladia, (2018) indicated that in the research conducted aimed to conduct an analysis about the development of cocoa commodity exports in Indonesia, using time series data from 2002 to 2016, making use of SPSS software application. The results of these tests showed that the quantity produced of cocoa, world cocoa prices, exchange rates and cocoa export rates have in parallel a very significant impact on cocoa exports, where it can be concluded that the domestic price of cocoa does not affect the export volume of cocoa beans, because such volume is not so much affected by the price of domestic cocoa but also influenced by the quality, taste and fermentation of cocoa beans is correct.

On the other hand, Muhammad et al., (2021) noted that in the study conducted on cocoa exports from Nigeria, they aimed at discovering the main factors affecting the export flows of the said commodity, for which they used the product specific gravity model with three different analytical approaches: Heckman sample selection model, generalized least square and Poisson pseudo-maximum likelihood. The results showed that a p-value of 0.071, indicating that we accept our null hypothesis that generalized least squares are the appropriate models. These two tables showed the causal factors affecting cocoa outflows from Nigeria. It is concluded that the conditions are now in place to be able to offer some recommendations for the development of Nigeria's agro-exports to the world.

2.2. National background

Similarly in the national antecedents concorde Mendoza and Quispe (2017) conducted a study with the objective of determining the relationship between foreign trade boundaries and marketing development in Peruvian quinoa exporting companies. Collecting data from a random sample of 52 companies in five regions of Peru, giving that the export boundaries have a negative connection with the realization or implementation of marketing in exporting companies of quinoa, concluding that for a successful internationalization requires formulating and implementing strategies effectively in exports.

On the other hand, Espinoza and Pacheco (2018) in their research work conducted, whose objective was to characterize cocoa exports from Peru through a systematic review of the scientific literature during the last decade. This theoretical review was carried out with secondary sources using a systematic review method based on the PRISMA strategy. Applying the inclusion and exclusion criteria, a total of 129 articles.
were obtained between 2008 and 2018, of which 5 articles were duplicated and 21 research articles were excluded using the EndNote reference manager. Without taking into account any results, a total of 102 papers were reviewed, where it was determined that the countries to which most of The publications belong are: Bolivia, Colombia, Costa Rica, Ecuador, United States, Spain, Peru and Mexico, with the majority of outstanding Peruvian publications. They concluded that there is a growing gap between international supply and demand in addition to the relevant of the product in question.

In another nature, in the research conducted by Atúncar and Soto (2019) where the objective was to know the efficiency of the value chain for the export of cocoa produced in Tocache, San Martin Region to Belgium. The results of the study were very important, since it was discovered that there is a good training and technical requirement by the cooperatives to cocoa producers, to achieve an optimal harvest, collection and post-harvest of this raw material for export purposes, according to the required quality standards. As for the conclusions and recommendations, it was determined that the efficient management of the chain of advantages presented in the production process helped to correct and improve several aspects, leading to a good final result.

On the other hand, Castillo and Hilarion (2020) in their research work focused on the production and/or marketing of Peruvian cocoa, aimed to determine the causes that impact the export of Peruvian cocoa and the level of competition, thus taking a quantitative approach. The quantitative description was analyzed, as explanatory variables that can be measured and computed, in particular the variables of Peruvian cocoa exports to the international market. The results obtained have a high standard deviation, highlighting variables such as Peruvian cocoa exports is 21605.44, national cocoa production is 33901.79 and the exchange rate is 0.954. It was concluded that the production of cocoa beans in Peru had a positive impact on international sales to all parts of the supply chain.

Therefore, Rivera (2021) took into account a qualitative research with the aim of investigating what is the current situation in which is the exportable supply of cocoa beans from the province of Leoncio Prado to the European community, through the research conducted identified the key factors that are compromising the exportable supply of cocoa which are the shortage of investment, employment of unqualified personnel for each area required, the disinterest on the part of cocoa farmers, Concluding that limited the success of this activity.

2.3. Scientific approaches

Within the scientific approaches, the theory of absolute advantage of Smith was taken into account (1776) which is concerned with the cost of production, that is, the state compares what is more convenient for it; if the cost of acquiring goods is lower than our cost of production, it is more appropriate to buy them than to produce them and vice versa, reason why countries specialize in goods in which the cost of production is low. Likewise, David Ricardo (1817) found that even if one country has an absolute advantage in the production of goods it must be more efficient than another. This is what he called the principle of comparative advantage. One country can be more efficient than another in the production of different goods, but only one should perform as a better producing country. It also inherits the theory of wealth to understand how international trade flows work, emphasizing the interrelationship between the proportions of factors of productivity apt in different nations; and the rates of production used to produce different goods. It assumes that each economy produces two goods and requires two factors of production to produce those goods. Both industries use the same factors, in this sense, it is argued that while international trade can be partially explained by dissimilarity in labor productivity, it can also be explained by inequality in factor allocation across countries. (Heckscher & Ohlin, 1977).

2.4. Conceptual definition

Exports, according to Montes (2015) basically is any legitimate good or service that the territory of the producer (exporter) sends as merchandise to a third party (importer) to buy or use. It is an important tool for national records of all goods and services sold and imported by a country abroad and used in the country.
Meanwhile, De la Cruz (2020) mentioned that Covid-19 was transcendent all over the world, but in the case of Peru, it intervened very alarmingly in all social, economic, cultural and educational activities; he recognizes the good actions taken by both citizens and the state to prevent the contagion of Covid-19, actions such as self-isolation, curfew, border closures, bonds, etc., on the other hand, it is important to recognize the work of those people working in the health sector, those who risked their lives to try to save lives.

In terms of dimensions, Fischer (2011) reported that he sees sales as one of the functions of the systematic marketing process, so they come to define it as any activity that generates a momentum of exchange with the customer.

While, Quispe (2019) pointed out that a good satisfies the needs of people, they have physical characteristics (tangible), and we can notice other concepts such as an object or a commodity, some are in low demand (scarce) and with an undetermined value and are usually transferable by buying and selling.

Therefore, Reyes (2021) mentioned that the restrictions come to occur in a health emergency, are those state measures, refers to the power of the state to dictate the state of health emergency as well as the state of national emergency, this applies when there is a health risk to people and seeks to control the spread and reduce contagions optimally.

2.5. Legal framework

Regarding the legal basis of the present investigation, we have as a key point the analysis of the following articles, firstly, as mentioned, article 63º of the CPP (1993) First, as mentioned, Article 63 of the CPP states that both national and foreign investments are subject to the same conditions, which is why the production of goods and services, as well as international trade are expeditious.

On the other hand, Article 4 of the General Customs Law, (SUNAT) deals with the general principles of trade facilitation as a general principle that customs services are necessary to facilitate foreign trade, promote national growth and ensure customs administration and financial interests. In order to develop and facilitate customs operations, the customs authority shall issue rules regulating the release, transfer, use and control of information related to such actions, could be through documents with full legal force or electronically supported.

Therefore, Article 63 of the Political Constitution of Peru (1993) mentions that the State guarantees the freedom of foreign trade in Peru, in the same way it is mentioned in the previous writing, the general law of Customs - Legislative Decree Nº1053 where it alleges that it is in charge of controlling and supervising the activities of foreign trade, and its own functions that no other agency, agency or institution of the country can perform.

3. METHODOLOGICAL PROCEDURES:

During the elaboration of this work, applied research has been taken into account, since it focused on the obtained researches that allowed to perform an analysis and to reach the comparison of results suitable for this article. For Arroyo, (2020) an applied level research helps to solve issues that arise, in effect come to meet more efficient solutions on the facts in our reality, where a theoretical basis is considered and seeks applicability in a concrete reality to establish the research factors which is suitable to the present study.

A quantitative approach was selected, according to Saavedra (2015) conceptualizes that seeks to quantify or measure problems or facts, building new theories or hypotheses about the variables that are part of or fit in order to know the reality with a more neutral approach.

The present research was conducted at a descriptive level, which was considered in this work so it allowed us to clarify that this article has a non-experimental design, therefore, Cauas (2015) states that this type of study aims to describe social and / or educational phenomena in a time frame, it is a method that is used to develop an inquiry that can be used for all types of work and services, this study was presented under a non-experimental design because they do not address several variables that could determine some change that could be critical in this whole context.

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In order to carry out this document, the use of the documentary analysis technique has been seen convenient, due to the statistical reports from 2019 to 2021 of cocoa sector exports extracted from Aduanet. According to Campos et al. (2021) they mention that this type of analysis aims to obtain data, performing certain techniques that facilitate the identification of documents that are consistent with the type of research being conducted, taking into account aspects such as the necessary information, libraries, books, or in our case articles needed in order to successfully develop this study. On the other hand, companies that were engaged in the cocoa export business were obtained as population, therefore, some data and documents with events elapsed between the years 2018 -2021 were taken from sources such as SUNAT and Aduanet. For Hernandez and Mendoza (2018) reveal that the universe is the set of individuals, documents or reports that represent the research. Also, they mention that the sample is a subset of the population to be studied, where relevant data will be collected in which should be representative of this group (most likely it can be generalized and the results found in the sample transferred to the population), our sample includes the specific data found in our population.

At first the reason for the research was because the exports in these years had some declines therefore in the process for the choice of the topic was by the affinity that has with our professional career in international trade, specifically in the field of exports of the cocoa sector, then, we proceeded to narrate the introduction and develop the theoretical framework, methodology and documentary analysis guide, based on the information obtained from databases of reliable sources such as SUNAT and Aduanet, in addition to resorting to commercial and academic sources, from which the results obtained through this research led us to draw conclusions from this work. As a statistical method in this research, the descriptive statistical method was taken, since hierarchical information collected in pages such as SUNAT, Aduanet, articles and thesis is mentioned that the sample is a subset of the population to be studied, where relevant data will be collected in which should be representative of this group (most likely it can be generalized and the results found in the sample transferred to the population), our sample includes the specific data found in our population.

The ethical aspects considered in this research work of which actual information has been obtained from statistical data acquired from the SUNAT and Aduanet pages of the companies analyzed in this study. Again, the above information is for academic purposes only. Likewise, the guidelines granted by the standards of the APA Norms (American Psychological Association) are respected. Where the author is cited in each paragraph when writing this article, describing the introduction, results and discussion of the work until reaching the final conclusions about our topic conducted.

4. RESULTS AND DISCUSSION

4.1. Results

Table 1

<table>
<thead>
<tr>
<th>Month</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Var. % 2020/2019</th>
<th>Var. % 2021/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>8,679,607</td>
<td>7,215,491</td>
<td>10,648,992</td>
<td>-16.9%</td>
<td>47.6%</td>
</tr>
<tr>
<td>February</td>
<td>8,398,591</td>
<td>9,891,772</td>
<td>10,814,738</td>
<td>17.8%</td>
<td>9.3%</td>
</tr>
<tr>
<td>March</td>
<td>7,772,294</td>
<td>6,824,640</td>
<td>8,232,532</td>
<td>-12.2%</td>
<td>20.6%</td>
</tr>
<tr>
<td>April</td>
<td>5,867,646</td>
<td>3,141,614</td>
<td>6,987,148</td>
<td>-46.5%</td>
<td>122.4%</td>
</tr>
<tr>
<td>May</td>
<td>8,501,008</td>
<td>7,470,508</td>
<td>7,455,745</td>
<td>-12.1%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>June</td>
<td>16,015,019</td>
<td>11,215,502</td>
<td>10,485,691</td>
<td>-30.0%</td>
<td>-6.5%</td>
</tr>
<tr>
<td>July</td>
<td>23,794,598</td>
<td>16,990,917</td>
<td>13,391,567</td>
<td>-28.6%</td>
<td>-21.2%</td>
</tr>
<tr>
<td>August</td>
<td>19,352,054</td>
<td>19,545,142</td>
<td>13,188,200</td>
<td>1.0%</td>
<td>-32.5%</td>
</tr>
<tr>
<td>September</td>
<td>10,334,001</td>
<td>19,383,044</td>
<td>20,826,214</td>
<td>87.6%</td>
<td>7.4%</td>
</tr>
<tr>
<td>October</td>
<td>12,109,421</td>
<td>12,342,393</td>
<td>23,068,049</td>
<td>1.9%</td>
<td>86.9%</td>
</tr>
<tr>
<td>November</td>
<td>7,808,652</td>
<td>8,083,334</td>
<td>12,003,705</td>
<td>3.5%</td>
<td>48.5%</td>
</tr>
<tr>
<td>December</td>
<td>10,262,272</td>
<td>9,328,264</td>
<td>13,441,797</td>
<td>-9.1%</td>
<td>44.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>138,895,163</td>
<td>131,432,619</td>
<td>150,544,306</td>
<td>-5.4%</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

Var. % Annual -5.4% 14.5%

Note: this table shows the FOB value of cocoa exported at the national level.
Figure 1

FOB Exported Value (US$ Millions) from 2019 to 2021.

Note: this figure shows the FOB value of cocoa exported in millions of dollars.

Description: In the data contained in table 1 we can notice that they are distributed during the 12 months of the year, each value assigned in three years (2019, 2020 and 2021), according to the comparative analysis by month of each year (Jan-Dec), it is necessary to make an analysis of the variation with the following model; 2019/2020 and 2020/2021, for the exported FOB value it is seen that for the month of March of the year 2019 a value of shipment is registered in US$ 7.7 million showing a decrease of 12.2% compared to March 2020 whose shipment value was US$ 6.8 million, on the other hand for the month of April 2019 a shipment value is recorded at US$ 5.8 million showing a decrease of 46.5% compared to March 2020 whose shipment value was US$ 3.1 million, then adding and analyzing the month to month variations between these two years it is noted that for the year 2020 there was some decrease, since if we analyze the last month of 2019 and 2020 (December) a shipment value was recorded in US$10.2 million showing a decrease of 9.1% compared to December 2020 whose shipment value was US$9.3 million, this highlights the changes in FOB value before and during the Covid-19.

Table 2

Volume exported (Kilograms).

<table>
<thead>
<tr>
<th>Month</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Var. % 2020/2019</th>
<th>Var. % 2021/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3,574,624</td>
<td>2,540,078</td>
<td>3,910,283</td>
<td>-28.9%</td>
<td>53.9%</td>
</tr>
<tr>
<td>February</td>
<td>3,393,823</td>
<td>3,379,300</td>
<td>3,992,682</td>
<td>-0.4%</td>
<td>18.2%</td>
</tr>
<tr>
<td>March</td>
<td>3,210,594</td>
<td>2,341,225</td>
<td>2,914,015</td>
<td>-27.1%</td>
<td>24.5%</td>
</tr>
<tr>
<td>April</td>
<td>2,440,522</td>
<td>1,106,305</td>
<td>2,576,943</td>
<td>-54.7%</td>
<td>132.9%</td>
</tr>
<tr>
<td>May</td>
<td>3,466,721</td>
<td>2,746,800</td>
<td>2,796,228</td>
<td>-20.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>June</td>
<td>6,283,797</td>
<td>4,209,552</td>
<td>3,881,964</td>
<td>-33.0%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>July</td>
<td>9,281,126</td>
<td>6,607,550</td>
<td>5,298,376</td>
<td>-28.8%</td>
<td>-19.8%</td>
</tr>
<tr>
<td>August</td>
<td>7,626,597</td>
<td>7,437,464</td>
<td>5,167,293</td>
<td>-2.5%</td>
<td>-30.5%</td>
</tr>
<tr>
<td>September</td>
<td>4,014,297</td>
<td>7,630,052</td>
<td>8,057,781</td>
<td>90.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>October</td>
<td>4,638,589</td>
<td>4,823,925</td>
<td>8,498,393</td>
<td>4.0%</td>
<td>76.2%</td>
</tr>
<tr>
<td>November</td>
<td>2,857,385</td>
<td>2,975,706</td>
<td>4,604,803</td>
<td>4.1%</td>
<td>54.7%</td>
</tr>
<tr>
<td>December</td>
<td>3,722,929</td>
<td>3,261,572</td>
<td>5,071,552</td>
<td>-12.4%</td>
<td>55.5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>54,511,003</td>
<td>49,059,527</td>
<td>56,770,312</td>
<td>-10.0%</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

Note: this table contains the volume exported per kilogram of cocoa beans at national level.
Figure 2

*Volume exported (Kilograms) from January to December during 2019 to 2021.*

Note: this figure shows the volume exported per kilogram of cocoa in million tonnes.

**Description:** As for table 2 show the exported FOB value where the month of March of the year 2020 is recorded a shipment value in US$ 6.8 million, showing a growth of 20.6% compared to March of the year 2021 whose FOB value was US$ 8.2 million, likewise, for April 2020 was recorded a shipment value in US$ 3.1 million, showing a growth of 122.4% compared to April 2021 whose FOB value was US$ 6.9 million, we can mention that these growths in FOB value is due to the adaptability in exports during and after Covid-19, to be clearer we can mention as an example the month of December 2020 and 2021 where for the year 2020 was recorded a FOB value of US$ 9.3 million showing a growth of 44.1% compared to December 2021 whose shipment value was US$ 13.4 million, these variations, in this occasion growths; indicates an improvement of the FOB value in exports, since as we could notice that for the year 2020 compared to 2019 there was a considerable decrease, but already for 2021 compared to 2020 there was growth, framing the before, during and after the pandemic Covid-19.

With respect to the volume exported, making an interpretation comparing the years (2019-2020) At the beginning of 2019 in the month of January shipments are reported by 3.5 million tons compared to consecutive year, which reports shipments of 2.5 million in Peru, this means that there was a decrease of 28.9%. For the month of April 2019 shipments of 2.4 million are reported in contrast to the same month of the following year whose reported shipments were 1.1 million tons, thus presenting a decrease of 54.7%, this being the month and year where a greater drop in the volume exported is appreciated (period where the Covid-19 pandemic began).

At the end of the year for the month of December 2019 shipments of 3.7 million tons are recorded unlike the following year which shows us that shipments of 3.2 million tons were reported, which means that there was a decrease of 12.4%.

In the period of analysis of the whole year shipments were recorded by 49.1 million tonnes in 2020, showing a decrease of 10% compared to 2019 which presented shipments of 54.5 million tonnes.

Interpreting and comparing the data of the years (2020-2021) For the beginning of the year in the month of January 2021 shipments were reported for 3.9 million tons, instead the same month of the previous year reports shipments of 2.5 million, which meant a growth of 53.9%. For the month of April 2021 shipments of 2.5 million tons were recorded compared to the same month last year whose reported shipments were 1.1 million tons, thus presenting a growth of 132.9%. By the end of the year, the month of December 2021 recorded shipments of 5 million tons compared to the previous year which showed that shipments of 3.2 million were reported, thus giving a decrease of 55.5%.

Analyzing the entire year 2021 shipments were recorded by 56.7 million tons, indicating that there was a growth of 15.7% compared to 2020 which only recorded shipments of 49.1 million tons.

If we analyze the total volume variation in kilograms for the years 2019 to 2021, for the total volume value January to December 2019 we have a total of 50.8 million, on the other hand for the year 2020 at the height of the Covid-19 pandemic a volume of 45.8 million tons was recorded showing a decrease of 5 million in the
annual variation in volume exported with respect to 2019, finally, for the year 2021 we have a total of 56.7 million tons indicating a growth of 5.9 million in the annual variation in volume with respect to 2020.

Table 3  Unit values FOB/Kilogramme of cocoa. Expressed in dollars and its annual variation

<table>
<thead>
<tr>
<th>Month</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Var. % 2020/2019</th>
<th>Var. % 2021/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>3.72</td>
<td>3.71</td>
<td>3.93</td>
<td>-0.3%</td>
<td>5.8%</td>
</tr>
<tr>
<td>February</td>
<td>3.40</td>
<td>4.01</td>
<td>3.47</td>
<td>18.1%</td>
<td>-13.4%</td>
</tr>
<tr>
<td>March</td>
<td>4.39</td>
<td>3.95</td>
<td>4.18</td>
<td>-10.0%</td>
<td>5.7%</td>
</tr>
<tr>
<td>April</td>
<td>4.03</td>
<td>4.60</td>
<td>4.03</td>
<td>14.1%</td>
<td>-12.4%</td>
</tr>
<tr>
<td>May</td>
<td>3.26</td>
<td>3.74</td>
<td>3.68</td>
<td>14.6%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>June</td>
<td>4.21</td>
<td>3.62</td>
<td>3.75</td>
<td>-14.0%</td>
<td>3.6%</td>
</tr>
<tr>
<td>July</td>
<td>3.39</td>
<td>3.54</td>
<td>3.45</td>
<td>4.3%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>August</td>
<td>3.92</td>
<td>3.51</td>
<td>3.44</td>
<td>-10.4%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>September</td>
<td>3.82</td>
<td>3.38</td>
<td>3.27</td>
<td>-11.7%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>October</td>
<td>4.11</td>
<td>3.22</td>
<td>4.01</td>
<td>-21.6%</td>
<td>24.3%</td>
</tr>
<tr>
<td>November</td>
<td>3.80</td>
<td>4.70</td>
<td>3.23</td>
<td>23.5%</td>
<td>-31.3%</td>
</tr>
<tr>
<td>December</td>
<td>4.02</td>
<td>4.71</td>
<td>4.31</td>
<td>17.2%</td>
<td>-8.5%</td>
</tr>
<tr>
<td>Avg. ANNUAL</td>
<td>3.84</td>
<td>3.89</td>
<td>3.73</td>
<td>1.3%</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Var. % Annual</td>
<td></td>
<td>1.3%</td>
<td></td>
<td>-4.2%</td>
<td></td>
</tr>
</tbody>
</table>

Note: this table covers the FOB unit value of cocoa from 2019 to 2021.

Description: As shown in Table 3 of the unit values of cocoa, in the month of January of the three periods is a decrease of 0.3% coming to cost 3.72 US$ / kg for the year 2019 compared to 2020 a 3.71 US$/kg within 2019/2020; in the same way it is appreciated that within 2020/2021 a growth of 5.8% was obtained reaching a cost of 3.93 US$/kg in 2021 compared to the previous period; consecutively in the month of March during the three periods within 2019/2020 a fall of 10.0% was presented having as unit value 4.39 US$/kg in the year 2019 compared to the previous year (2020) that came to have as unit value a 3.95 US$/kg, otherwise within the 2020/2021 there was an increase of 5.7% where it came to cost 4.18 US$/kg in the year 2021; finally in the month of December during three periods is a growth of 17.

Finally in December during three periods there is a growth of 17.2% reaching a cost of 4.02 US$/kg in 2019 compared to 4.71 US$/kg in 2020 within the years 2019/2020, on the other hand we have the years 2020/2021 that obtained a decrease of 8.5% where its unit value came to cost 4.31 in 2021 with respect to 2020.

According to the data analyzed above we can say that in the year 2019/2020 during the months of January and March were obtained minorities in their unit values due to the scenario that was being experienced worldwide by the pandemic that resulted in the products have a high demand but due to a low price which will not get higher profits on the contrary in the month of December there is a growth which means that the price and profits could be balanced, we have that in the years 2020/2021 during the months of January and March growth was obtained this means that during these years the unit value of cocoa began to balance and to rise which allowed exporting companies of this product to generate more profits but unfortunately in December a decrease was detected.
Table 4
Cumulative export movement report by exporter, period, agent, customs and country of the cooperative APROCAM to 2019.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>EXPORTER</th>
<th>MONTH</th>
<th>AGENT</th>
<th>CUSTOMS</th>
<th>COUNTRY</th>
<th>FOB $</th>
<th>FOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>April 2019</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$60,686.96</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>December 2019</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>BELGIUM</td>
<td>$67,117.44</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>July 2019</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>BELGIUM</td>
<td>$61,701.12</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>July 2019</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$62,355.89</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>October 2019</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$62,715.16</td>
<td></td>
</tr>
</tbody>
</table>

Total records: 5 $314,576.57

Note: this figure includes data on exports of the APROCAM cooperative in 2019.

Description: As shown in Table 4 for the year 2019 the cocoa bean exporting cooperative APROCAM, presents 5 records of exports to the destinations of Italy and Belgium, in the customs headquarters of the city of Paita, where the month of April was recorded $ 60,686.96 being this the month where less exported, compared to the month of December which recorded a $ 67,117.44, finally the value of exports gives a total of $ 314,576.57.

Table 5
Cumulative export movements report by exporter, period, agent, customs and country of the APROCAM cooperative as of 2020.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>EXPORTER</th>
<th>MES</th>
<th>AGENT</th>
<th>CUSTOMS</th>
<th>COUNTRY</th>
<th>FOB $</th>
<th>FOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>August 2020</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$79,265.24</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>December 2020</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>BELGIUM</td>
<td>$71,460.48</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>July 2020</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$71,706.18</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>March 2020</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$56,039.43</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>May</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$76,050.00</td>
<td></td>
</tr>
</tbody>
</table>

Total records: 5 $354,521.33

Note: this table includes data on exports by the APROCAM cooperative in 2020.

Description: The data set out in table 5 during the year 2020, at the height of the Covid-19 this cooperative also presented 5 records of exports to the destinations of Italy and Belgium, in the same customs
headquarters mentioned above, where the month of March recorded $56,039.43 being this the month where they report less level of cocoa beans exported, after this the month of August recorded a growth in exports with a total of $79,265.24, while the value of cocoa beans exports in 2020 gives a total of $354,521.33.

Table 6
Cumulative export movements report by exporter, period, agent, customs and country of the APROCAM cooperative up to 2021.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>EXPORTER</th>
<th>MES</th>
<th>AGENT</th>
<th>CUSTOMS</th>
<th>COUNTRY</th>
<th>FOB $ FOB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>April 2021</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$77,549.60</td>
</tr>
<tr>
<td>2</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>August 2021</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$158,815.56</td>
</tr>
<tr>
<td>3</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>July 2021</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$77,487.60</td>
</tr>
<tr>
<td>4</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>March 2021</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$92,894.60</td>
</tr>
<tr>
<td>5</td>
<td>20480458550 - COOPERATIVA DE SERVICIOS MULTIPLES - APROCAM</td>
<td>September 2021</td>
<td>GRUPO PML S.A.C. CUSTOMS AGENTS</td>
<td>PAITA</td>
<td>ITALY</td>
<td>$80,937.05</td>
</tr>
</tbody>
</table>

Total records: 5 $487,684.41

Note: this figure includes data on exports of the APROCAM cooperative in 2021.

Description: The data obtained in table 6 in the year 2021, after pandemic, the cooperative, in its 5 export records with the country of Italy as the main importer of cocoa, presents that the month of July was the month they exported the least during this year with a total of $77,487.60, compared to the following month that records a $158,815.56 giving as a significant difference a $81,327.96, and to culminate the total exports recorded from January to December 2020 is $487,684.41 being this the best year for the FOB level of export.

Figure 1
FOB value of cocoa exports expressed in dollars.

Note: This figure contains the FOB value of cocoa exports of the APROCAM cooperative from 2019 to 2021.

Description: The data set out in Figure 3 you can analyze the FOB value of exports and we can see that the year 2019 presents a decrease of $39 thousand compared to 2020, where it can be seen that during the pandemic of Covid-19, the cooperative APROCAM despite the sanitary restrictions, were able to overcome the exported level with a total of $354,521.33; however this does not compare to value obtained post
quarantine of Covid-19, where they significantly exceed $133 thousand of exports, being its main market the country of Italy.

4.2. Discussion

As for table one, it shows data distributed during the 12 months of the year, each value assigned in three years (2019, 2020 and 2021), according to the comparative analysis by month of each year (Jan-Dec), it is necessary to make an analysis of the variation with the following model; 2019/2020 and 2020/2021, for the FOB exported value it is seen that for the month of March of the year 2019 a value of shipment is recorded in US$ 7.7 million showing a decrease of 12.2% compared to March 2020 whose shipment value was US$ 6.8 million, on the other hand for the month of April 2019 is recorded a shipment value in US$ 5.8 million showing a decrease of 46.5% compared to March 2020 whose shipment value was US$ 3.1 million, then adding and analyzing the variations month to month between these two years it is noted that for 2020 there was some decrease, since if we analyze the last month of 2019 and 2020 (December) a shipment value was recorded in US$ 10.2 million showing a decrease of 9.1% compared to December 2020 whose shipment value was US$ 9.3 million, this highlights the changes in the FOB value before and during the Covid-19. The FOB value exported for the month of March 2020 is recorded a shipment value in US$ 6.8 million, showing a growth of 20.6% compared to March 2021 whose FOB value was US$ 8.2 million, likewise, for April 2020 was recorded a shipment value in US$ 3.1 million, indicating a growth of 122.4% differentiated with April 2021 whose FOB value was US$ 6.9 million, we can mention that these growths in FOB value is due to the adaptability in exports during and after Covid-19, to be clearer we can mention as an example the month of December 2020 and 2021 where for the year 2020 was recorded an FOB value of US$ 9.3 million showing a growth of 44.1% compared to December 2021 whose shipment value was US$ 13.4 million, these variations, in this occasion growths; indicates an improvement of the FOB value in exports, since as we could notice that for the year 2020 compared to 2019 there was a considerable decrease, but already for 2021 compared to 2020 there was growth, framing the before, during and after the pandemic Covid-19.

Such results we can relate to Zihus (2018) concluding that there is still a need to continue communicating through different media that best suits SMEs, which will increase transparency, awareness, use and export performance. According to the mentioned by Arroyo, (2020) raises indeed come to meet more efficient solutions on the facts in our reality, where a theoretical basis is considered and seeks applicability in a concrete reality to establish the research factors which suits the present study.

As we see in our results in table two on the exported volume of cocoa in 2020 which show us that exports of this product were affected in that year where the pandemic of the coronavirus (covid-19) which with the restrictions and security measures that were implemented to curb its spread, hindered the flow of exports of the product. For that year 2020 shipments were recorded by 49.1 million tons, making a comparison with the previous year which presented shipments of 54.5 million tons, where we can clearly show that there was a decrease of 10% of shipments recorded. In contrast, for the year 2021 our results show us that there was a great recovery of cocoa exports as shipments of 56.7 million tons were recorded, compared to 2020 which only recorded shipments of 49.1 million tons. This means that there was a recovery of 15.7% of exports compared to the previous year, which has a very positive impact on the growth and development of the country.

These results are supported by a previous research already present in this article, this research was carried out by Castillo & Hilarion (2020) which aimed to perform an analysis of the effects of explanatory variables such as domestic production of cocoa, whose results were that the outflow of domestic goods of cocoa beans in the period of analysis are affected by domestic production of this product, concluding that cocoa production in Peru has a positive impact on international sales of cocoa beans.

Also, we considered the following scientific approach to our research about the comparative advantage of the prestigious David Ricardo (1987) which tells us about the efficiency that has a country over another in the production of various goods or services, but only one should develop as a better producer country. This advantage places it at a more competitive level in the international market and has a direct impact on profitability and economic growth.

The results obtained in table three, showed that the unit values of cocoa, in the month of January of the three periods is a decrease of 0.3% coming to cost 3.72 US$ / kg for the year 2019 compared to 2020 a 3.71 US$/kg within 2019/2020; in the same way it is appreciated that within 2020/2021 a growth of 5.8%
was obtained reaching a cost of 3.93 US$/kg in 2021 compared to the same month of the previous year; consecutively in the month of March during the three periods within 2019/2020 a fall of 10.0% was presented having as unit value 4.39 US$/kg in the year 2019 compared to the previous year (2020) that came to have as unit value a 3.95 US$/kg, otherwise within the 2020/2021 there was an increase of 5.7% where it came to cost 4.18 US$/kg in the year 2021 compared to the same month of the previous year; Finally in the month of December during three periods there is a growth of 17. Finally in December during three periods there is a growth of 17.2% reaching a cost of 4.02 US$/kg in 2019 compared to 4.71 US$/kg in 2020 for the years 2019/2020, on the other hand we have the years 2020/2021 that obtained a decrease of 8.5% where its unit value came to cost 4.31 in 2021 with respect to the same month of the previous year. According to the data analyzed above we can say that in the years 2019/2020 during the months of January and March were obtained minorities in their unit values due to the scenario that was being experienced worldwide by the pandemic that resulted in the products have a high demand but due to a low price which will not get higher profits on the contrary in the month of December there is a growth which means that the price and profits could be balanced, we have that in the years 2020/2021 during the months of January and March growth was obtained this means that during these years the unit value of cocoa began to balance and rise which allowed exporting companies of this product to generate more profits but unfortunately in December a decrease was detected, therefore have been varying their unit values where the episode experienced by the pandemic greatly influenced in this regard, since a growing demand was detected in both periods.

Which has different aspects in each of its background, it is so the values or unit prices of cocoa according to Gladia, (2018), who mentions us about the development of cocoa product exports in Indonesia, where whose results obtained revealed, the amount produced cocoa and its world prices and cocoa export rate, which during the pandemic had an alarming scene, as prices or unit values varied which allowed high demand to be created and sometimes hurt this sector. On the other hand, Smith's theory of absolute advantage (1776) considers that the cost of production is the main source of development of a country, this means that the state ensures the product that generates less costs, considering that due to the cost of production will leave the unit value which this theory allows us to detect the costs and be efficient when choosing what suits, us, it is necessary that this theory helps in the different scenarios that caused the pandemic.

Knowing the results, it is recommended to the APROCAM Cooperative to consider the utility in the unitary variations of its product which will allow to know the cost of production linked to the demand, carrying out this action will be generating efficiency with the costs and therefore better results related to the exports will be obtained, this will imply that the company consolidates and expands to the biggest possible market. According to the findings obtained in table four, reveals that the movements recorded by the cooperative APROCAM for the year 2019 and in its collection, which was a total of $314,576.57, compared to 2020, where $39 thousand more in net profits; it was found that a factor that affected the exportable supply of cocoa beans was the price set for sales of cocoa, while in April 2019 which was the month where they exported less with $60,686.96 profit, the price per kilogram of cocoa was set at 7.70 soles unlike 2020 which was set at 7.72, also the month of December is where their profits showed a growth of more than 7 thousand dollars and for that same month the price per kilogram of cocoa was arranged in S/. 8.20.

The results are defended by the study that Rivera (2021) concluded that the situation in which the exportable supply of cocoa beans, key elements that harm it were discovered, concluding that these factors such as shortage of investment, employment of unqualified personnel for each area required, disinterest on the part of cocoa farmers limits that this activity comes to develop successfully. On the other hand, in terms of size, Fischer reported that he sees sales as one of the most important factors in the development of cocoa production. (2011) reported that he sees sales as one of the functions of the systematic marketing process, so they come to define it as any activity that generates a momentum of exchange with the customer.

Therefore, in table five reveals that during the year 2020, at the height of covid-19 this cooperative also presented five records of exports to the destinations of Italy and Belgium, in the same customs headquarters mentioned above, where the month of March was recorded $56,039.43 being this the month where they report less level of cocoa beans exported, after this the month of August recorded a growth in exports with a total of $79,265.24, while the value of cocoa beans exports in the year 2020 gives a total of $354,521.33.

Through these results we can mention some relationship with the research provided by Artan & Bangmarigu (2018), reaching the conclusion that, despite having favorable statistical indicators, further improvements can be achieved with integration and greater government support. Likewise, we express that
the mentioned interpretation bears relation with the theory of wealth of nations whose author is Smith (1776), by which he emphasizes the rate of production in different nations as well as he mentions the flow of international trade.

According to the data reached in table six it can be seen that in the year 2021, after pandemic, the cooperative, in its 5 export records with the country of Italy as the main importer of cocoa, presents that the month of July was the month that exported less during this year with a total of $ 77,487.60, compared to the following month that records a $158,815.56 giving as a significant difference a $81,327.96, and to culminate the total exports recorded from January to December 2020 is $487,684.41 being this the best year for the FOB level of export.

These findings are supported by the study of Reyes (2021) that tells us that the restrictions came to be given in a health emergency that were state measures, that is very fundamental because it tells us about the power of the State to dictate the state of health emergency as well as what is the state of national emergency, that was used when there was health risk for people and also sought to control the announcement and thus be able to reduce the contagions in the best possible way. In the same way Quispe (2019) indicates that a good satisfies the needs of the people, likewise he explains to us that they are physical characteristics (tangible), and that other concepts can be appreciated more as an object or a merchandise.

5. CONCLUSION

It is concluded that during the pandemic exporting companies have been one of the most representative sectors in terms of the flow of international trade, through which emphasizes the interrelationship and productivity between different nations, despite economic changes, instability or crisis that may go through any country contribute considerably to GDP and development of nations. It is suggested to the president of the board of the cooperative to diversify its market since this will be able to export their products to other countries, as this allows internationalize the institution, also, they should promote their products that are derived from cocoa through agreements with national and international airlines because through this the products will be known worldwide as this measure allows to facilitate foreign trade and increases the efficiency of the international logistics chain. In addition, it is recommended to the exporting company to maintain the levels of efficiency to increase the FOB value in their exports in the current year, since, through this they can get the absolute advantage of the competition, since with this they will achieve continuous improvement.

In summary, although for the year 2020 a considerable decrease was noted, the cocoa exporting companies were able to adapt and take advantage of the obstacles presented by the pandemic, where they were efficient and implementing new strategies and contingency plans, they managed advantageously all this, and for the year 2021, after the health crisis a significant increase in exports was captured. Knowing the results, it is suggested to the APROCAM Cooperative to consider the utility in the unitary variations of its product which will allow to know the cost of production linked to the demand, performing this action will be generating efficiency with the costs and therefore better results related to exports will be obtained, this will imply that the company consolidates and expands to the largest possible market.

At the end, that there are internal and external barriers, which identified government policies or possible problems as was the Covid-19 at the beginning, where new standards for each exporting company were noted, so the restrictions and / or sanitary measures were part of the decrease in both the volume of exports and economic income that were generated in 2020. It is suggested to the cooperative Aprocam not only focus on the three countries that currently has as a destination, but to conduct market research to open a path of expansion to countries like USA, Portugal, or countries of the same continent as is Argentina and Bolivia, that is to monopolize the global market in order to increase their profits and improve their commercial positioning. It is also suggested that agro-exporting companies in our country apply different marketing strategies such as increasing the participation of existing products in the markets through greater marketing efforts, the introduction of goods in new geographical areas and increase sales through the improvement of products, the implementation of all these strategies will help the growth of the volume of exports, which will provide benefits such as ensuring that companies have a higher profitability, helping the country to have a higher economic growth and achieving good international trade.

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