



Faculty of Legal Sciences

School of International Studies

**Economic, financial, and social analysis of the  
impact of the Covid 19 pandemic on a floriculture  
company in the province of Azuay**

Project prior to obtaining a Bachelor's Degree in International  
Studies

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First of all, my graduation work is dedicated to my parents, Marcelo and Mariela, and my siblings Andres and Sofia, who were always by my side these four years, supporting me. Secondly, to my classmates and friends for giving me the confidence to finish my professional career. Moreover, to all professors who were my guide and support with the knowledge for my degree work.

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# **Análisis económico, financiero y social durante la pandemia del Covid 19 en una empresa floricultora de la provincial del Azuay**

## **Resumen**

El Ecuador es uno de los países que encabeza la lista de las exportaciones de flores, ya que es un país netamente agrícola, consolidándose este sector como uno de los rubros más significativos para los ingresos del país, dando como resultado que el sector florícola representa el 4,8% de las exportaciones no petroleras totales del país. Es por ello que mediante este estudio descriptivo se analiza el impacto del Covid-19 en el ámbito económico, financiero y social en una empresa floricultora llamada Malima, ubicada en la provincia del Azuay, en el periodo del 2019 al 2021. La presente investigación emplea una metodología cualitativa ya que usamos referencias bibliográficas de diferentes gerentes de la empresa para fundamentar el estudio, además se recopiló datos de las exportaciones de Malima para revisar los efectos del Covid-19 en el sector. De los datos se obtuvo que la empresa en el año 2020 perdió 6 millones de dólares debido a 4 meses de cierre.

## **Palabras clave**

Covid-19, Floricola, Factores, Exportaciones, Impacto

# **Economic, financial, and social analysis of the impact of the Covid 19 pandemic on a floriculture company in the province of Azuay.**

## **Abstract**

Ecuador is one of the countries that top the list of flower exports, as it is a purely agricultural country. This means this sector is one of the most important items for the country's income. The result is that the flower sector represents 4.8% of the country's total non-oil exports. For this reason, this descriptive study analyzes the impact of Covid-19 on the economic, financial, and social areas in a flower company called Malima, located in the province of Azuay, from 2019 to 2021. The present research employs a qualitative methodology through bibliographic references from different company managers to ground the study. In addition, data was collected from Malima's exports to review the effects of Covid-19 in the sector. As a result, it was observed the company lost US\$6 million in 2020 due to 4 months of closure. It is recommended that the company protect sources of employment and lay the foundations for a solid economic recovery, and on the financial side, to manage long-term financial debts as much as possible. Finally, to create contingency plans for atypical situations on the social side.

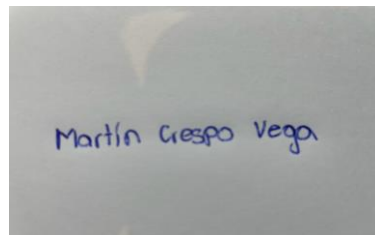
## **Keywords:**

Covid-19, Floricola, Factors, Exports, Impact

Reviewed by



Translated by:



Martin Crespo Vega

# **Economic, financial, and social analysis of the impact of the Covid 19 pandemic on a floriculture company in the province of Azuay**

## **1. Introduction**

The world economy has been experiencing unprecedented health, human and economic crises in the last century and is ever-evolving. Faced with the pandemic disease of covid-19 pathology (COVID-19), economies are shutting down and paralyzed. As a result, communities are entering into more or less strict quarantines, measures comparable only to those in wartime situations. However, it is uncertain how long the crisis will last or how the recovery might take shape. The pandemic with its first variant, the coronavirus, has triggered a series of events never seen before in history. As a result, quarantine, or social confinement, was a widespread norm in all countries. Some governments made it more rigid than others, but the rule was the slowing down of social dynamics. The primary objective of this type of decision was to slow the spread of the virus and avoid the collapse of the health system (Buteler, 2020).

The impact of the pandemic on the Ecuadorian flower sector was drastically affected since the decrease in the demand for flowers was caused by the economic downturn in the significant flower-demanding countries such as the United States, Europe, and China, coupled with the decrease in production, the interruption of working hours of public and private companies and market closures have generated financial crisis. (digital publisher, 2021).

Next, the concept of floriculture and its global competitiveness will be explained. Since the 80s, the floriculture sector has been progressively consolidating and experimenting with new types of sown varieties, greenhouses, and procedures that are strengthening the activity within the sector. However, it was not until the end of the '90s that this activity accelerated its development, leading the sector to be the first non-classical export activity in our region. In conclusion, the floricultural sector is a very competitive market since around 150 countries around the world are dedicated to the exploitation and commercialization of flowers, production is significantly concentrated in North America and Japan, but especially in the European Union, where the highest consumption is registered being these the traditional markets due to their antiquity and their greater relevance in production volumes and demand, however, in the last two decades, new producers have emerged that are positioning themselves in the market, located in Latin America and Central Africa (Ramírez & Avitia, 2017).

Ecuador is an essential participant in the production and export in this sector, what differentiates it from the others is that the Ecuadorian flower has unique properties that period as a premium product in markets around the world, thus being recognized and demanded by Premium markets. In the same way, other producers in the area generate flowers with similar properties to the Ecuadorian ones without having a similar quality; however, they have certain advantages in the production and sale. Undoubtedly, this has caused the area to have an accelerated increase, consolidating itself as an example for the national economy and the development of the country. It is essential to note the importance of the Paute canton specifically since it has a temperate climate, which is very beneficial for producing these plants.

### **1.1 Objectives**

Conduct an economic, financial, and social analysis of the impact of the Covid 19 pandemic on a floricultural company called Malima in the province of Azuay. (2019 to 2021)

### **1.2 Theoretical Framework**

According to the World Health Organization, coronavirus is an infectious disease caused by the SARS-CoV-2 virus. Most people infected with the virus will experience mild to moderate respiratory illness and recover without requiring special treatment. However, older people and those with underlying illnesses, such as cardiovascular disease, diabetes, chronic respiratory disease, or cancer, are more likely to develop severe illnesses. Therefore, the best way to prevent and slow down transmission is to be well informed about the disease and how the virus is spread.



It is essential to be clear about what it means to have the concept of impact, which demonstrates a situation that negatively affects Ecuadorian flower companies, so this research will discuss three fundamental aspects. First, the economic and financial effect of the Plan's actions in the region to , indicators such as the variation in production curves, conflicts with active economic sectors, financial profitability indexes, sensitivity analysis, and expected changes in economic and productive indicators are being used.

Paute, Azuay is a perfect site for its outstanding agricultural potential. It has an optimal natural, geographical and climatic characteristics for production, where agriculture contributes significantly to the most important items of the Ecuadorian economy (Camino, Andrade, Pesántez, 2016). Plantations MALIMA Cía. Ltda. is a company legally incorporated in 1990 and has been operating since 1991. The company is represented by Mr. Marcelo Crespo Vega and his sons Mauricio and Marcelo Crespo. Plantations MALIMA is dedicated to cultivating and exporting flowers. Its farm, the name "Monjas Huaico," is located in the Paute canton in Azuay province. MALIMA is a leading farm in the cultivation and export of flowers and is proud to produce the best varieties of Gypsophila and, since April 2015, Dianthus or "Green Ball."(Cordero, 2016).

In order to clearly understand the effects caused by the pandemic on the economic and financial structure of the flower sector. One of the issues affecting flower exporters is the price of transportation, especially the value of international freight, which, like the cost of raw materials and intermediate goods, is part of the production and directly affects the competitiveness of the sector in the international market. Furthermore, the value of freight affects tariff rates, and there is a variation in the values of the transportation of products. This is reflected in the levels of exports and imports. (Campo Verde & Salazar, 2018).

The information related to the economic and financial part is divided into three important dates: the 2018-2019 pre-pandemic, 2020 during the pandemic, and the current scenario counting all the information provided by Juan Pablo Malo, financial manager of the company.

In order to know how the company was and its annual turnover, it is necessary to know what it means and how it is applied. "Turnover can be defined as the total amount of sales of goods or services carried out by a company throughout its accounting year. The latter usually lasts for one year. The organization's turnover corresponds, therefore, to all services rendered and goods sold, after deducting any credit memos, discounts, and rebates that the organization may have allocated to its consumers" (Welink, 2022,p.6).

On the other hand, using the current ratio is important because the current ratio is part of the financial causes of liquidity, which will give us a vision of the payment function of a company's short-term obligations. This "indicator seeks to evaluate if the company can afford the obligations that will be defeated in one year or less with the resources it has in its current assets. In this situation, the assumption is that the company can transform into cash all its current assets because all its current liabilities became affordable." (V, 2020,p.3).

In order to be able to know if a company has the ability to pay, the acid test is used. The acid test is an indicator that establishes the organization's function to produce cash flows in the short term, excluding inventories. "The acid test establishes the company's payment function without the need to make its inventories or fixed assets, that is, without selling them. The company's available cash or assets and rights readily convertible into cash is represented by cash, short-term investments, portfolio, and inventories." (Gerencie, 2022,p.4).

On the other hand, the percentage of indebtedness on sales, since in this situation, it is necessary to know how much a company is indebted on sales and what its percentage is. "It is the percentage of external debt concerning the total resources of the company, own and external, which also gives us an idea of the solvency of the company's balance sheet." (SME Templates, 2020,,p8).

Financial leverage is using debt to increase the expected return on equity. As a result, it is possible to finance the acquisition of assets without the need to resort to immediate money taken from the company's operations (QUINTERO, 2011).

Finally, the gross profit margin "Represents the percentage of total sales revenue that your company retains after incurring the direct costs associated with the production of goods and services sold. The higher the margin, the more the company will be able to retain each euro of sales to fix its other costs and obligations." (Efficy, 2022,p1.).

According to Agencia De Noticias Públicas Del Ecuador (Andes)(Ecuador Public News Agency), "the proportion between public and private employees keeps the same trend where the number of private workers been prominent since 2007, revealed a study of the union market presented by the National Institute of Statistics and Census (Inc). Private employees represent 80.3% (1,930,593 people) of the nation's fully employed before 19.7% (472,380 people) of public workers." (Agencia De Noticias Públicas Del Ecuador (Andes), 2012) In 2007 the proportion was similar, as private workers represented 81.2% and public workers 18.8%. This alteration is contemplated in the urban field. INEC obtained this result after surveying 127 towns. It also shows that last month the number of workers affiliated with the Ecuadorian Institute of Social Stability represented 59.8% compared to 38.59%, which was the percentage of affiliates in 2007; that is, the increase of affiliations in 5 years has increased by 21.21%.

## **2. Literature review**

According to the Interamerican Journal of Medicine and Health, the World Health Organization declared a pandemic on March 11, 2020, in China, there were 81,181 cases with 3,277 deaths with a mortality rate of 4.04%. At the moment, Italy and Spain are the European countries that collapsed their health systems; even Italy surpassed China in the number of deaths (Santilán, Palacios 2020). From the point of view of the economy, these political decisions produced a supply shock and demand shock that lowered all the projections and forecasts that individuals, companies, and governments had in mind for the current year and the immediate future. The shock implied an almost total paralysis of the world economic flow and is bringing great upheavals in societies, with an increase in unemployment, cuts in benefits and salaries, and an increase in poverty (Buteler, 2020).

This situation makes it very difficult to foresee short-term destinies since it is an increasingly uncertain and volatile scenario, triggering a wave of distrust, which significantly affects stock markets worldwide (Gutiérrez, 2020). According to Campoverde & Salazar for economic theory, in imports, when the price of transportation increases, the cost of goods increases and, with it, the total production cost; but in the case of exports, there is a disadvantage because when the value of transportation rises there is less income for the exporter. (Campoverde & Salazar, 2018).

According to the Ministry of Production, Foreign Trade, Investment, and Fishing, the flower sector was one of the most manufactured products due to their loans to the financial sector. However, they suffered the loss of production due to the pandemic, making the payment of credits difficult and, therefore, the impossibility of obtaining new financing for their reactivation.

Classic authors such as March and Simon (1958) point out that strategy is related to the social thinking of human beings, who make decisions based on available information.

Therefore, it can be assumed that one of the social effects can be considered. The moment, when was the time to decide to dismiss the company's employees because there is not enough money to continue paying them, it is the decision that is made at that moment since they have that information for their decision. This means that the decision to talk to the workers who could be dismissed as having a social impact related to the company would be related to the theory since the decision was taken with the available information.

According to Cordero(2016), thanks to MALIMA plantations are open sky plantations, the plants are exposed to the significant variability of climates and a natural luminosity of approximately 12 hours of light per day; these characteristics impact the plants, providing them with firm and thick stems, more intense colors, and more outstanding durability. Furthermore, the greenhouses are covered with multilayer polyethylene plastic, which helps to better control the transmission of light and heat to the plants grown inside the greenhouse. On the other hand, the other plantations are open fields. That is to say, the type of material does not cover them. This way, they get the advantage of having such unique flowers.

## **3. Methods**

This article aims to conduct a descriptive economic, financial and social analysis of the impact of the Covid 19 pandemic to Malima, a floricultural company in the province of Azuay, taking into account the periods from the years 2019, 2020, and 2021. First, the year 2019 would show a normal year for the company. Second, the year 2020 talks about the world economic paralysis and finishes the year 2021, which would be a post-pandemic explanation.

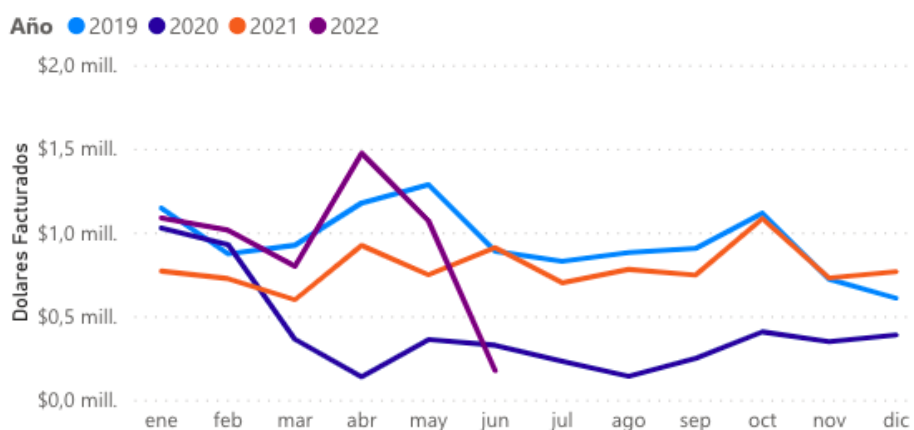
Firstly, the use of data on flower exports, and statistics of the flower company for the years 2019, 2020, and 2021, were analyzed quantitatively. A qualitative methodology was used. Secondary sources obtained through interviews with the respective financial manager Juan Pablo Malo provide the necessary information to develop this research. Secondly, as a secondary source, Jessica Barreto was interviewed, human resources manager of the company Malima. The criteria and opinions of the executives were related in function to the problems that occurred during the pandemic. Finally, sources such as Expoflores (National Association of Flower Producers and Exporters of Ecuador) were used to obtain information from 2019 to 2021 in order to explore the effects caused by the pandemic in the Ecuadorian flower sector.

The statistics and graphs were obtained from a primary source, the web page called APP powerbi, where the information was obtained to demonstrate the pandemic's effect on the company. Further information was gathered from the National Financial Corporation, which will provide the necessary information to continue developing the proposed scientific article. In addition, the use of theses of other authors will be used as support. For example, one of the theses used to obtain information was the thesis of Historical analysis of the floriculture sector in Ecuador and market study to determine its current situation written by Carolina Gómez Rea Augustin Egas Chiriboga.

## 4. Results and Discussion

Information on how the pandemic affected exports in Ecuador was obtained from the Central Bank of Ecuador (see Figure 7), which explains the losses in dollars of the Ecuadorian floriculture sector. Also, the flower company Malima's results were obtained from the power bi report Malima, which explains the economic loss due to the pandemic and how it is recovering.

**Figure 1**  
*Annual Billing of Malima in the year 2019*



Note: this figure shows the company's annual turnover for 2019 through 2022.

Source: Adapted from the Malima floriculture database.

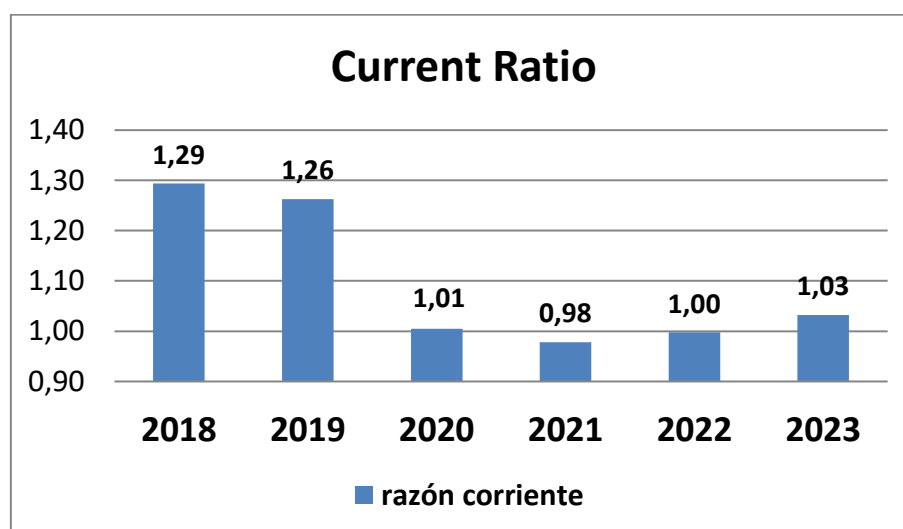
According to figure 1, in 2019, monthly, the turnover was close to one million dollars, that is, between 10 and 12 million total 2019. However, as can be seen in November, there was a significant drop since the national strike that occurred on that date. According to Juan Pablo Malo, there was a loss of 350 thousand dollars for this situation. The losses began in November. The pandemic began in March 2020. As can be seen, the blue line, representing the year 2020, began to fall, so April was the most challenging month for the company since it meant an economic loss of approximately 1 million dollars since all the varieties of flowers were lost because they could not be exported, causing the flower to die. The losses the company had in that year were the worst economic fall that the company has gone through since it opened its doors in 1993. After 2020, the company remained in a state of loss. As mentioned previously, what helped the company stay afloat and not close its doors, was the purchase of gypsophila from other flower farms in Ecuador, specifically from Quito.

On the other hand, it is vital to the portfolio's recovery. The main objective of recovering an overdue portfolio is to eliminate the negative impact of non-compliance or non-payment of customers' financial obligations due to the pandemic to maintain adequate cash flow. If time is devoted to the collection, then how

much more quality time is spent to recover the amounts, the client has in an overdue portfolio: Administrative time, time dedicated to the portfolio department within the company. For example, Juan Pablo Malo, the company's financial manager, comments that at the moment, in order to be able to reestablish its economic level due to the lack or delay of payment of its clients due to the pandemic. Therefore, the review of the client portfolios for the years 2020-2021 is carried out to guarantee the payment of these clients mentioned above. This way, recover that money, which is essential for the company in order to be able to recover that money.

Therefore, the current ratio, acid test, percentage of indebtedness over sales, financial leverage, and gross profit margin are shown in the following section to know how the economic effect of the pandemic was on the company.

**Figure 2**  
*Current Ratio*

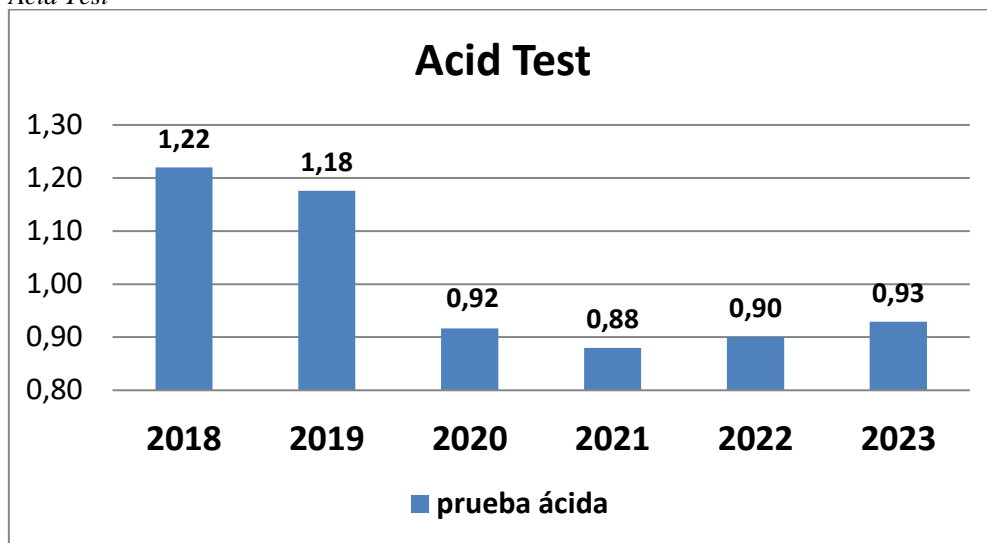


Note: Adapted from the Malima floriculture database.

According to the data analyzed in the current ratio index for 2019 and 2020 (see Figure 2), it can be determined that the value available for immediate payment minimizes simultaneously after the pandemic covid-19. Therefore, for the year 2020, it is 1.01, while for the year 2019, it was 1.26 that is to say, it reduces by 0.25, which means that its availability for the fulfillment of current obligations reduces in this value more. However, it is observed that for the year 2021, it reduces even more to 0.98 but the recommended for this index is 1, being found in 0.02 points less than what is required.

The acid test determines the company's ability to pay without the need to realize its inventories or its fixed assets, that is, without selling them. For 2019, this value corresponds to 1.18, while for 2020, after the effect of the pandemic, covid-19 decreases to 1.01, representing a reduction of 0.17 points. Despite the pandemic, the company still maintains ease of payment without the need to sell its inventories. (see Figure 3)

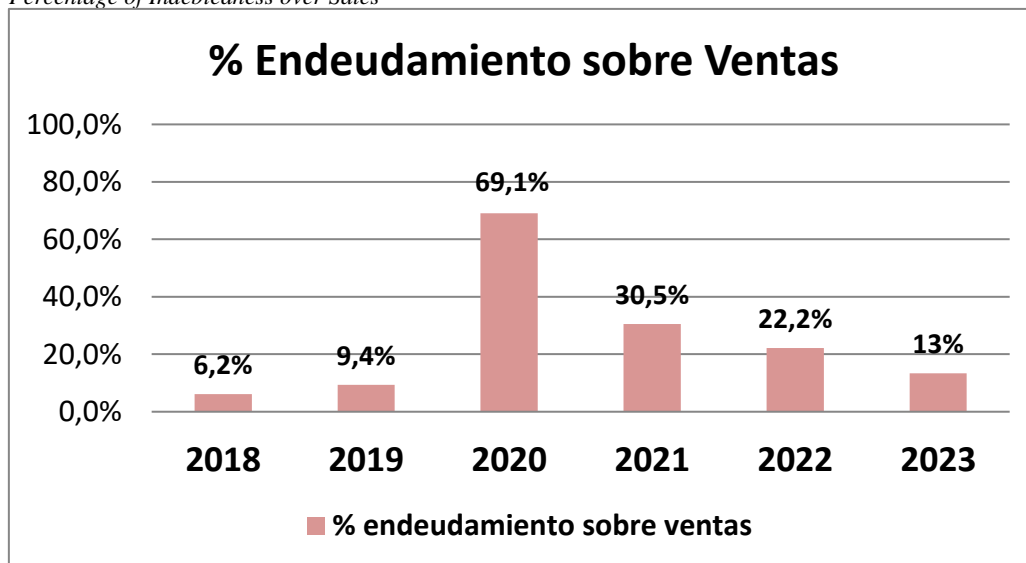
**Figure 3**  
*Acid Test*



Note: Adapted from the Malima floriculture database.

The percentage of sales indebtedness has increased due to the lack of payment by customers after the pandemic made it difficult for customers to comply with their obligations. Thus, the increase to 69%, almost 60 points, puts the company in urgent need to implement strategies that allow it to mitigate the risk of lack of liquidity. (see Figure 4)

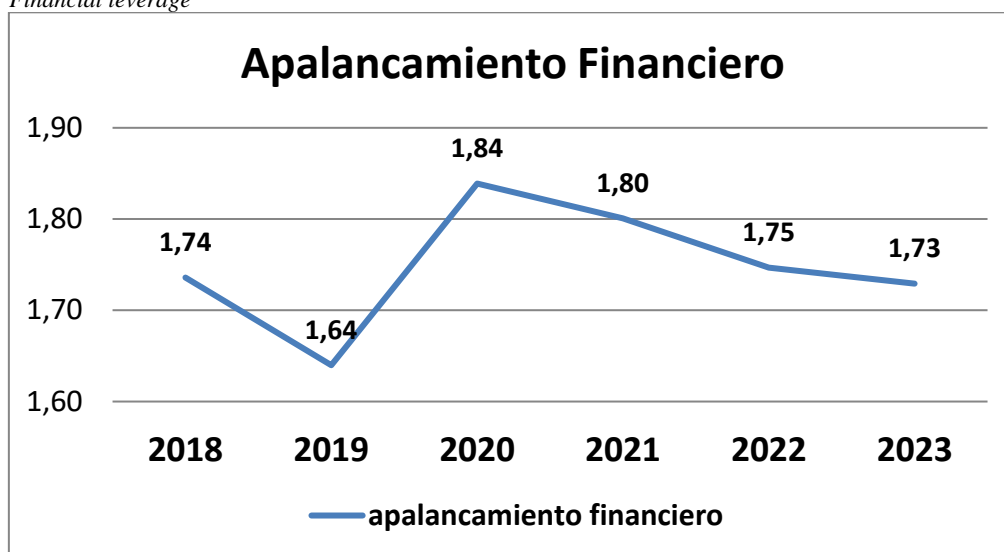
**Figure 4**  
*Percentage of Indebtedness over Sales*



Note: Adapted from the Malima floriculture database.

For the year 2020, after the year of the pandemic covid-19, the company had the urgent need to apply financial leverage in financial investment, obtain loans from new banking institutions or otherwise mutual contracts due to the need to meet obligations to its suppliers and the same internal customers, in this case, would be considered employees hence the urgent need for leverage applied by the company,(see Figure 5) to inject cash flow to the entity.

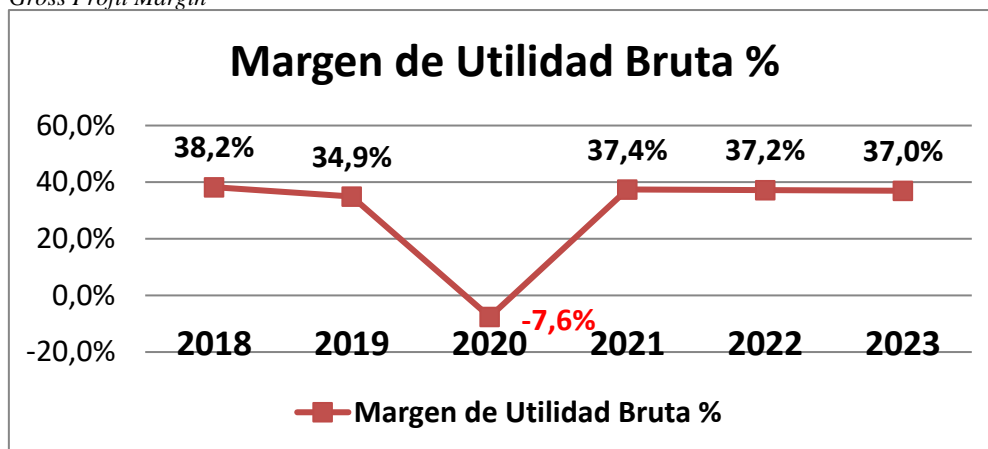
**Figure 5**  
*Financial leverage*



Note: Adapted from the Malima floriculture database.

Finally, it can be observed that due to the effect of covid-19 and therefore the decrease in sales and increase in accounts receivable, the company at the close of its fiscal year had a loss of 7.6% versus 2019, which had a profit. (see Figure 6) Therefore, it is clear that the pandemic directly affected many companies' economic performance, hence the need to implement strategies to mitigate the risk.

**Figure 6**  
*Gross Profit Margin*



Note: Adapted from the Malima floriculture database.

At the same time, the increase in financial debt that occurred as a consequence of the coronavirus disease pandemic (COVID-19) has magnified the structural gaps of the company, especially flower plantations, concerning collection decreased due to lack of personnel. Therefore, until today it is not possible to recover 100% and maintain a healthy portfolio.

Financial restructuring is used with customers with a moderate level of delinquency or difficulty of payment in the short term. The pandemic caused this situation to grow for different customers at that time. The debt can be partialized in certain installments, depending on the segment to which they belong. The second applies to insurance contracts, 90% is recovered, and 10% is not recoverable. The implementation of financial and operational performance indicators and the establishment of collection guidelines and policies can improve the execution and performance of processes. For example, acquire billing and collection systems that alert the customer of non-payment on the first day of delinquency, which provides an opportunity for reminders. There are also tools to automate and improve collection processes, such as a comprehensive collection system and predictive dialers to improve customer relations.

In 2021, the floricultural company was recovering its income, recovering the 1 million dollars that were lost in the period 2020, so in this way, it is verified that there was a significant improvement compared to the blue line that represents the year 2020; For April as can be seen that sales risen significantly exceeding the million dollars, following October which exceeded the economic peak of April considering Figure 1. Juan Pablo Malo, the financial manager, tells us that for this year, of the 100% of the flower that is exported, 80% is from the same flower company, and the remaining 20% is purchased from another flower company in Ecuador. Therefore, compared to 2020, in 2021, the company was in the process of economic recovery. In the interview with the general manager, he commented that it is a process that takes time, but the company will continue to move forward.

The social impact is fundamental since the company is at risk due to the pandemic, and its workers may lose their jobs. These families needed that money no longer have the possibility to buy food, and they could not pay for their children's studies. It is relative to what happened and is happening because of the Covid 19 pandemic. Consequently, due to the mandatory confinement, because of the sanitary emergency that had been established by a state of exception, which brought with it the restriction of movement, curfew, suspension of classes, and closure of airports and borders (Executive Decree No. 1017 of March 17, 2020).

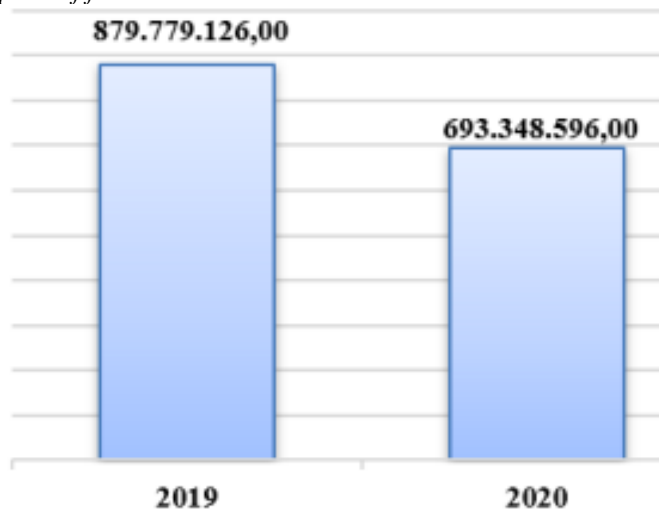
Considering the data presented according to the National Institute of Statistics and Census (ENEMDU) through statistics during the global pandemic, the economic hibernation was not only reflected in a sharp increase in unemployment but also in the fall in the labor participation rate. Which by reducing the pressure on the labor market partially offset the increase in the unemployment rate. "Between June 2019 and June 2020, the gross employment rate fell 11.1 percentage points (pp) to 52.8%. Faced with the impossibility of labor reinsertion during the crisis, many of those who lost their jobs withdrew from the labor market." (Esteves, 2020). Due to the pandemic, the flower producer Malima was unable to work, resulting in the paralysis of the labor area of the company. It is worth noting that in an interview with Jessica Barreto, head of safety, environment, and quality of the human resources department, she provided us with information relevant to the case.

Barreto comments that the company suffered several problems due to the COVID-19 pandemic. First, Malima is a very important source of work for the Paute sector, as it employs several people and families living in the area. Jessica comments that the company employs people between 18 and 60. At Malima, of the 500 people who worked in the different areas of the company, only 13 people remained who were essential for the company to continue.

## **Exports of flowers from 2019-2020**

Within the previously mentioned research, it is essential to clarify the country's loss in its exports. In the graph (see figure 7), for the year 2019, Ecuador collected 879,779,126.00 million dollars, but in the year 2020, the profit was reduced to 693,348,596.00 had a loss of 186,430,530.00 for the year 2020. Being a very significant loss, as mentioned above, it represents 4.8% of total exports of non-oil exports.

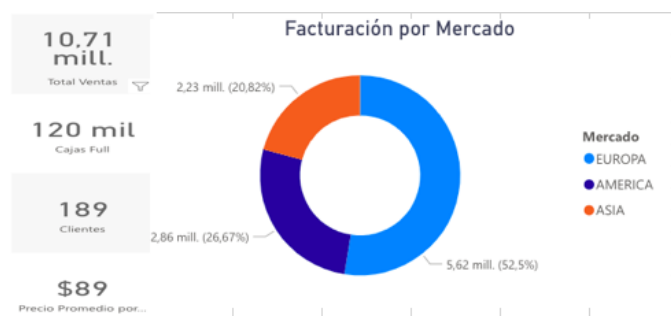
**Figure 7**  
Exports of flowers 2019-2020



Note: Obtained from Banco Central del Ecuador.

For 2019, the company's total sales were 10 million 71 thousand dollars. They sold different types of flowers to 189 customers around Europe, which its percentage is 52.5 % of its sales, with a profit of five million sixty-two thousand dollars. ( see figure 8) This represents the majority of the profits Malima receives from this market. America is in second place with 26.67 % of the company's sales, with a profit of two million eighty-six thousand dollars. And finally, the Asian market with 20.82% of the company's total sales and a profit of two million twenty-three thousand dollars. 2019 represents an excellent year for the company since the average price of its boxes is 89 \$. In conclusion, the company maintains a relatively stable year.

**Figure 8**  
Turnover by market and 2019 sales information

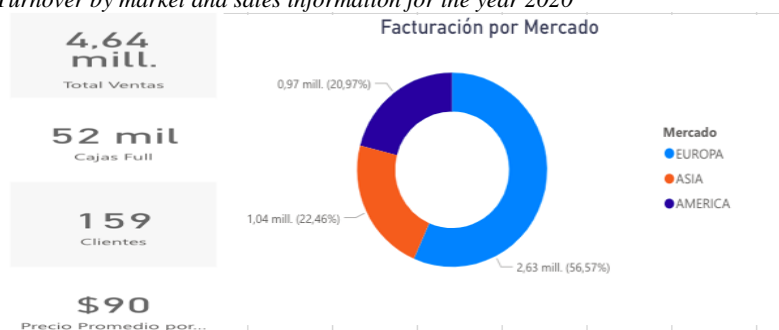


Note: Obtained from power bi report Malima.

In 2020, with the arrival of the covid-19 pandemic, Malima exports dropped drastically; total sales reached 4 million 64 thousand dollars, compared to 2019 were 10 million 71 thousand dollars. In this case, the decrease was 56, 67% of its sales for this year. ( see figure) On the other hand, the number of customers reduced to 159. Furthermore, their sales percentages in Europe, Asia, and America were also affected by not being able to reach their destination and the lack of flowers due to the closure of the plantation that was previously explained. Furthermore, finally, the box price rose a dollar compared to 2019; due to the pandemic, floriculture had to raise its price so that it could stay afloat and not close its doors.



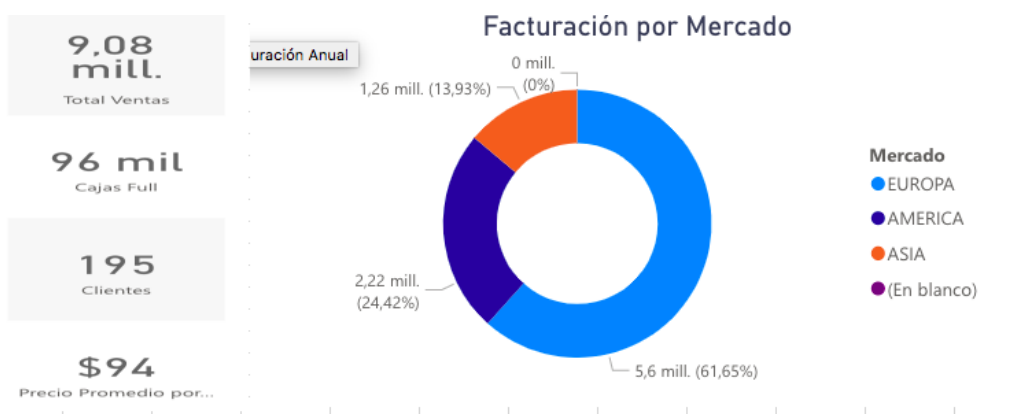
**Figure 9**  
Turnover by market and sales information for the year 2020



Note: Obtained from power bi report Malima.

In 2020, with the arrival of the covid-19 pandemic, Malima exports dropped drastically; total sales reached 4 million 64 thousand dollars, compared to 2019 were 10 million 71 thousand dollars. In this case, the decrease was 56, 67% of its sales for this year. On the other hand, the number of customers reduced to 159. Furthermore, their sales percentages in Europe, Asia, and America were also affected by not being able to reach their destination and the lack of flowers due to the closure of the plantation that was previously explained. Furthermore, finally, the box price rose a dollar compared to 2019; due to the pandemic, floriculture had to raise its price so that it could stay afloat and not close its doors.

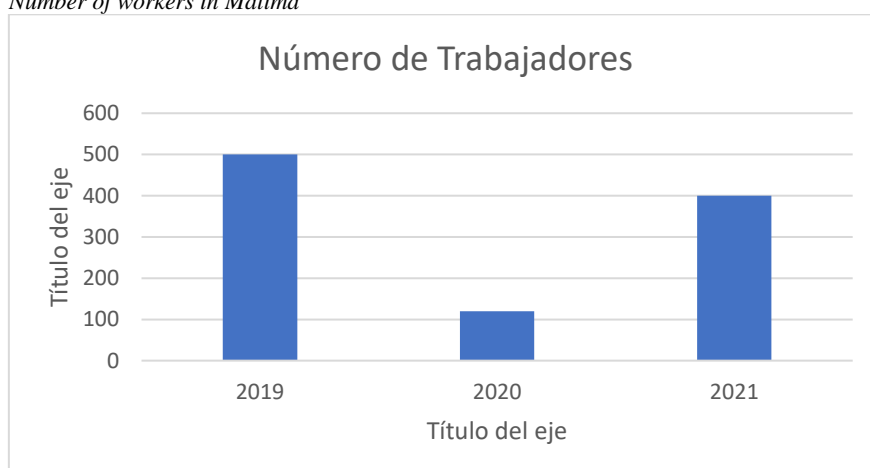
**Figure 10**  
Turnover by market and sales information for the year 2021



Note: Obtained from power bi report Malima.

The turnover by market and sales information for 2021, among the important markets for Malima, Europe increased 10% compared to 2020, the largest buyer of Malima flower, in second place. Now America takes second place with 24.42% with the purchase of \$ 2.22 million. In third place, Asia drops its purchase percentage to 13.93%.(see figure 10) In conclusion, in the year 2021, it can be noticed that the company recovered, but not completely. It is still working to recover and have a better year for 2022 to recover the company fully.

**Figure 11**  
*Number of workers in Malima*



The results were obtained within the Malima floriculture company to know the social impacts suffered by the company during the year 2020. Jessica Barreto commented at the time of the layoffs, in order to maintain a relationship with the workers and the company, a decision was made to hold meetings with each person who was laid off, but with hiring for the future until the company is economically stable so that they could be rehired. Even so, socially, there were problems. As seen in Figure 11, in 2019, 500 people were working in the company. For 2020 approximately 380 were dismissed from different departments of the company since it was necessary to reduce costs so that the company could continue. The people not laid off were technicians or people who were essential to the company since they could maintain the farm, the greenhouses, and all the productive parts without being damaged. As seen in Figure 11, in the year 2021, most of the people were hired back, and the company is doing better economically.

## 5. Conclusion

Over the years, the floriculture area has achieved enormous prestige and recognition for the quality and beauty of its flowers, becoming one of the main pillars of the Ecuadorian economy, as it generates employment for families and is one of the essential items for the income of foreign currency for the territory. The fight against Covid-19, the world economic crisis, and the new normality that the planet is going through directly harmed exports of the Ecuadorian flower sector, which declined by 7.39% in 2020 compared to the previous year. The components that intervened in this fact were the decrease in the cost of flowers, the increase in the cost of transportation and production prices, and the crisis generated by the pandemic disease, so those flower producers reflected economic losses that were not estimated for the year 2020. The decrease in demand due to the covid-19 crisis led to a restructuring of the company, which forced the company to lay off people in the different production areas, which are so crucial for the company to continue meeting its demand to all its international customers. This blow was created a reduction in costs, reduction of plantations, and loss of jobs. The economic reactivation of the flower sector will depend primarily on the political and economic measures taken by the Ecuadorian government to get the economy moving and get out of this financial crisis. For the floriculture company, the malima was a blow that, little by little, is recovering. It still feels like those four months without any production. In 2022, we are increasing sales and recovering lost customers. Malima continues to grow to leave the year 2020 in the past since the floriculture sector continues to grow and will become one of the largest non-oil industries in Ecuador.

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## 7. Appendices

### Appendix 1

#### *Interview with Jessica Barreto*

Attached are the questions used for the interview of Jessica Barreto, human resources manager of the company Malima, to obtain information on the company's social impact.

1. How many years of experience do you have in Human Resources?

Jessica Barreto has been working in the company for seven years.

2. What is your professional profile?

Jessica is the manager of human resources, safety, environment, and quality of workers.

What was it like before, during, and after the pandemic?

Jessica commented that before the pandemic in 2019, it was a typical work environment, charged that all workers were paid correctly and that there was no lousy work environment among the company workers. Nevertheless, when the pandemic arrived in 2020, the situation changed. First, they did not know if their staff was infected with the virus, then the layoffs because, without them, the company could not stay afloat and had to be the bad guy in the story, says Jessica. She also commented that it was the saddest year having to see their workers being fired. To end the year, 2021 comments that it was pretty slow initially because they did not know what would happen with the company. However, when she was informed that she could start calling the people who had been fired, Jessica commented that it was one of the best moments she had lived in a workspace.

4. What is the importance of Malima in the Paute sector?

Malima is very important for the paute sector, since 30% of Malima's workers live there, so it welcomes many families from the sector, allowing them to work.

5. How many of the family members work on the paute plantation?

20% of the 100% that work in Malima

What is the gender distribution, and what is the age range of the people working on the plantation?

There is a gender distribution in which 60% are women, and 40% are men. The age range is from 18 years old to 60 years old.

7. How many people from abroad work at Malima?

Jessica comments that about 20 people are foreigners from Peru.

8. How did the layoffs generated by the pandemic affect the families?

Jessica comments that it affected the families quite strongly since many of them worked in Malima and were laid off. They were left without their only economic support, or there were other cases where only the mother or the father was left. However, with their salary, they could not feed their whole family.

Finally, from an economic point of view, it can be recommended to protect the sources of employment and lay the foundations for a solid economic recovery. On the other hand, from a financial point of view, it can be said that the company should manage, as far as possible, long-term financial debts and try to reduce the financial leverage with more money from equity. Finally, on the social side, it is possible to create contingency plans for atypical situations and generate a provision for layoffs, as was generated in the company Malima in 2020.