

THE IMPACT OF COVID-19 IN THE AGRI-FOOD COMPANIES IN EXTREMADURA (SPAIN)

Beatriz Corchuelo¹ 
Pedro E. López-Salazar² 
Celia Sama-Berrocal³ 

DOI: <https://doi.org/10.31410/EMAN.2021.263>

Abstract: *The coronavirus pandemic is having an economic impact, previously non-existent, on the world economy. The objective of this study is to analyze the impact of COVID-19 on agri-food companies in the Autonomous Community of Extremadura (Spain). A qualitative methodology is used through interviews with 15 managers of agri-food companies and a technology center for the period February 2020 - January 2021. The results reveal the existence of differentiated impacts, both financial and operational, depending, principally, on the nature of the products, the changes generated in consumer behavior, and mobility problems. Likewise, changes were observed in the processes and procedures in the companies to overcome the obstacles imposed by the new situation. In conclusion, the change in environmental conditions, as well as the characteristics of the spread of the pandemic, has impacted the strategies, behavior, processes, dynamics and results of organizations regardless of their size and the nature of their work product or service.*

Keywords: *Agri-food companies, COVID-19, Case study, Impact, Actions.*

1. INTRODUCTION

The coronavirus pandemic is having an economic impact, previously non-existent, on the world economy. According to Gjaja et al. (2020), it is a crisis of a historical scale and complexity that is putting to the test health care systems, the fiscal capacity of governments, and the ability of many organizations to cope with and respond to the changes caused by the virus.

In the case of Spain, the strict confinement measures in force from mid-March to early May 2020, as well as restrictions on international tourism, have led to a historic drop in the gross domestic product (GDP) in the second quarter of the year 2020 of 17.8% quarter-on-quarter (21.5% inter-annual), the largest decrease observed since 1995 (National Institute of Statistics).

The agri-food sector groups together a very heterogeneous set of activities that range from the first transformation of raw materials of animal and vegetable origin to the production of sophisticated products such as functional foods. A whole series of variables interact in the sector that has a very direct influence on the well-being of society as a whole. One of its functions is to respond to the needs of obtaining enough food to meet the demand of citizens. In this sense, at present, the agri-food sector, worldwide, faces a challenge not previously contemplated of new consumption patterns and consumer perceptions and concerns. In Spain, the agri-food sector has been one of the least affected by the crisis caused by the pandemic. However, there has been a decline

¹ University of Extremadura, Avenida de Elvas S/N. Faculty of Economics and Business Studies. Código Postal (06006) Badajoz, Spain

² University of Extremadura, Avenida de Elvas S/N. Faculty of Economics and Business Studies. Código Postal (06006) Badajoz, Spain

³ University of Extremadura, Avenida de Elvas S/N. Faculty of Economics and Business Studies. Código Postal (06006) Badajoz, Spain

in production and sales. Likewise, the change in consumption patterns during confinement and commercial restrictions have also affected the sector (CaixaBank, 2020). The agri-food sector is also one of the main economic activities in the Extremadura region. The weight of the agricultural sector and its associated industries are substantially higher than the national average.

In this framework, the objective of this study is to analyze the impact of COVID-19 on agri-food companies in Extremadura. The following questions are posed: What has been the impact of the pandemic? And what are the performances that it has brought with it? The analysis is carried out through the assessments of managers of 15 agri-food companies belonging to different branches of activity and size, as well as the director of an agri-food technology center. This study aims to contribute to the still scarce literature on the impact of the pandemic in the agri-food sector (Barcaccia et al., 2020; Patterson et al., 2020; Montanari et al., 2020; Scorza et al., 2020) in this case referring to a specific region.

2. METHODOLOGY

A qualitative methodology is used from a multiple cases study. An exploratory approach is used, according to the phases established by Yin (1989). This methodology is appropriate to the objectives of the study. In Tell et al. (2016) a literature review was carried out analyzing 505 articles and they obtained that the studies of the agri-food sector are mainly empirical and qualitative studies focused on one or a few companies (case studies).

For this, a previous activity was the preparation of a report/directory of the agri-food companies of Extremadura obtained through the crossing and analysis of different databases (National Institute of Statistics, Extremaduran Agri-food Cooperatives, and SABI). The report contains data from a total of 734 agri-food companies of various legal forms and sizes.

Based on this information, the companies contacted to carry out the study were selected. In-depth interviews were conducted with the managers of 15 Extremaduran agri-food companies and an agri-food technological center with an important weight in the region. Among the issues raised, those related to the impact of COVID-19 on their activities are analyzed in this study. Specifically, they were asked: What are the consequences of the pandemic? What actions are being carried out? Subsequently, the responses provided by the interviewees were analyzed.

Table 1 shows the characteristics of the organizations interviewed (activity, number of employees, turnover, whether it is an exporter or not), as well as information about the person interviewed and the date of the interview. The numbering of the companies corresponds to the order in which the interviews were carried out.

Table 1. Characteristics of the organizations interviewed

Companies	NCEA 2009 ¹	Number of employees	Turnover	Export	Interviewed	Date
Company 1	103	600	> 10,000,000€	Yes	CFO	28/02/2020
Company 2	104	3	1,000,001-2,000,000€	Yes	CEO	13/03/2020
Company 3	110	3	0-500,000€	Yes	Commercial Director	08/06/2020
Company 4	110	10	1,000,001-2,000,000€	Yes	CEO	18/06/2020

Company 5	108	1	0-500,000€	No	CEO	25/06/2020
Company 6	109	70	>10,000,000€	Yes	CEO	06/07/2020
Company 7	103	60	>10,000,000€	Yes	Operations Director	07/07/2020
Company 8	104	35	>10,000,000€	Yes	CEO	08/07/2020
Company 9	101	9	500,001-1,000,000€	Yes	CEO	18/07/2020
Company 10	109	10	6,000,001-10,000,000€	Yes	Department manager	20/07/2020
Company 11	101	66	>10,000,000€	Yes	Operations Director	28/09/2020
					CEO	06/10/2020
Company 12	101	<200	>10,000,000€	Yes	Department manager	05/10/2020
Company 13	103	110	>10,000,000€	Yes	CEO	15/10/2020
Company 14	103	55	>10,000,000€	Yes	CEO	30/10/2020
Company 15	103	6	6,000,001-10,000,000€	Yes	CEO	12/01/2021
Technological center	721	49	>2,000,000€	Yes	CEO	07/10/2020

Source: Own elaboration, 2020.

Notes: (1) National Classification of Economic Activities (NCEA) 2009: 101: Processing and preserving of meat and elaboration of meat products; 103: Processing and preserving of fruits and vegetables; 104: Manufacture of vegetable and animal oils and fats; 108: Manufacture of other food products; 109: Manufacture of products for animal feed; 110: Manufacture of beverages; 721: Research and experimental development in natural and technical sciences.

The first two interviews (Company 1 and Company 2) were conducted at the company's headquarters. The lockdown situation from mid-March to early May 2020 paralyzed the interviews that were resumed at the beginning of June. Since then, the interviews have been carried out by videoconference using the Zoom tool.

By size, only one of the companies has more than 200 workers. 33% of the companies are micro-companies (they have less than 10 workers). Four of the companies interviewed are agri-food cooperatives (companies 4, 6, 13 and 15). Except for one company, all the organizations declared to be exporters. Regarding activities (according to NCEA-2009), 33.3% correspond to "Processing and preservation of fruits and vegetables", 20% to "Processing and preservation of meat and meat products", 13.3% to groups of activity "Manufacture of vegetable oils and other animal fats", "Manufacture of beverages" and "Manufacture of products for animal feed", and 6.7% to "Manufacture of other food products".

3. RESULTS

Once the transcripts of the interviews were made and the responses analyzed, the impact that COVID-19 is having on the activity of companies, as well as the actions carried out in this period due to the pandemic, were analyzed.

In general, the following negative consequences were observed: decrease in turnover and sales; reduction/displacement in the demand for products; difficulties in marketing activities; slowdown in the development of R&D&I projects; lack of staff (quarantine); decrease in activities carried out; and supply problems by suppliers. The agri-food industries that have suffered the most and that have decreased the turnover the most are those that direct the commercialization

of their products to the Horeca channel, which has remained closed during the months of lockdown and which has been conditioned by the successive restrictive measures adopted by the regional government during the new normal. On the contrary, the companies that have been least affected are those that have diversified sales channels. In the case of products associated with celebrations, such as sparkling wines, they have suffered a sharp decline in demand since March 2020. Likewise, the economic instability experienced by consumers caused by the pandemic has caused the consumption of those products of higher value and demand shifts towards those with a similar positioning and lower price, as is the case in companies that process and manufacture Iberian meat products. Marketing activities, development of R&D&I projects, and the supply by suppliers have also been affected.

However, in some activity groups, such as that of companies dedicated to the processing and preservation of fruit and vegetables, there was an increase in demand for their products that led the management of the companies to adopt measures to increase the production of the same. Likewise, it has occurred in other branches where there has been a shift in demand towards other products, produced mainly by the change in consumption patterns.

Based on the consequences caused since the state of alarm was decreed in Spain, the companies interviewed have accelerated and carried out a series of actions to alleviate its effects. The analysis of the responses allowed us to know these actions, such as the search and diversification of customers and suppliers in other markets, as well as an increase in the range of products. Likewise, the reorganization of activities, personnel, and the introduction of additional hygienic protocols in work centers to guarantee the safety of their workers and avoid contagion. In addition, the majority of those interviewed highlighted that, since March 2020, they increased the use of technology in their activities both in marketing activities through the creation or remodeling of web pages and online stores, as well as in the development of activities. communication through videoconferences.

4. FUTURE RESEARCH DIRECTIONS

Future research is seeking to expand the sample of companies interviewed to complete the research. It is also proposed to combine the qualitative methodology with quantitative methods.

5. CONCLUSION

The health crisis produced by COVID-19 is having important consequences on the economy as a whole and the sectors and branches of global economic activity. The agri-food industry belongs to an essential and strategic sector in the Extremadura economy, and although the pandemic has had negative consequences in some aspects, a series of actions are being developed that means that the impact has not manifested itself with the same magnitude as in other sectors.

In general, the change in environmental conditions, as well as the characteristics of the spread of the pandemic have impacted the strategies, behavior, processes, dynamics and results of organizations regardless of their size and the nature of their work. product or service.

ACKNOWLEDGMENTS

This research was funded by the Junta de Extremadura (Spain) and European Regional Development Fund grant number IB18040 and GR18058 (SEJ022-Research Group INVE).

REFERENCES

- Barcaccia, G., D'Agostino, V., Zotti, A., & Cozzi, B. (2020). Impact of the SARS-CoV-2 on the Italian Agri-food Sector: An Analysis of the Quarter of Pandemic Lockdown and Clues for a Socio-Economic and Territorial Restart. *Sustainability*, 12. DOI: doi:10.3390/su121456511
- CaixaBank Research (2020). Informe Sectorial Agroalimentario 2020. Resiliencia y crecimiento del sector agroalimentario durante la pandemia.
- Gjaja, M., Faeste, L., Hansell, G., & Hohner, D. (2020). COVID 19: Win the Fight, Win the Future. Recuperado de: <https://www.bcg.com/publications/2020/covid-scenario-planning-winning-the-future-series> (accessed: 11/01/2021).
- Montanari, F.; Arayess, S.; Toma, B.; Clavarino, A.; Ferreira, I.M.; Aude, M.; Stelios, M. A.; Schröck, C.; Servé, A.; Wesolowska, V.; Velázquez, P. (2020). The Response of the EU Agri-Food Chain to the COVID-19 Pandemic: Chronicles from the EU and Selected Member States. *European Food and Feed Law Review*, 15(4):336-356.
- Patterson, G.T.; Thomas, L.F.; Coyne, L.A.; Rushton, J. (2020). Moving health to the heart of agri-food policies; mitigating risk from our food systems. *Global Food Security*, 26. DOI: <https://doi.org/10.1016/j.gfs.2020.100424>.
- Scorza, F.; Murgante, B.; Pilogallo, A.; Saganeiti, L.; Santarsiero, V.; Faruolo, G; Fortunato, G.; Izzo, C.; Piro, R.; & Bonifazi, A. (2020). Best Practices of Agro-Food Sector in Basilicata Region (Italy): Evidences from INNOVAGRO Project. *INTERNATIONAL SYMPOSIUM: New Metropolitan Perspectives (NMP 2020)*, 1706-1713.
- Tell, J., Hoveskog, M.; Ulvenblad, P; Ulvenblad, P-O.; Barth, H.; & Ståhl, J. (2016). Business model innovation in the agri-food sector: a literature review. *British Food Journal*, 118 (6), 1462-1476. DOI: 10.1108/BFJ-08-2015-0293.
- Yin, R. K. (1989). *Case Study Research: Design and Methods (Applied Social Research Methods)*; Newbury Park CA, Sage, 1989.