# Analysis of the International Trend of Consumption of Cerquié Brand Quinoa And its Impact on the Profitability of Producers in the Guano Canton – Ecuador, 2024

García Verónica Tatiana<sup>1</sup>, Averos Barragán Cristhian Alexander<sup>2</sup>, Vistin Vistin Jair Manuel<sup>3</sup>, Elsita Margoth Chávez García<sup>4</sup>

<sup>1</sup>Magister en Dirección Estratégica, Guaranda, Ecuador, Universidad Estatal de Bolívar, Facultad de Ciencias Administrativas, carrera de Contabilidad y Auditoría.

<sup>2</sup>Magister en Derecho con mención en Litigación Penal, Guaranda, Ecuador, Universidad Estatal de Bolívar, cristhian.averos@ueb.edu.ec.

<sup>3</sup>Master Universitario en Ingeniería Matemática y Computación. Facultad de Ciencias de la Educación, Sociales, Filosóficas y Humanísticas. Carrera Pedagogía de las Ciencias Experimentales- Informática. jvistin@ueb.edu.ec.

<sup>4</sup>Doctora en Gerencia, Guaranda, Ecuador, Universidad Estatal de Bolívar, Facultad de Ciencias Administrativas, Gestión Empresarial e Informática, carrera de Contabilidad y Auditoría, emchavez@ueb.edu.ec

Quinoa is a product in demand in the international market for its nutritional properties and commitment to the environment. Furthermore, the consumption of organic foods is growing globally, especially in the European market. In this research, an analysis was carried out from economic liberalism to find a niche in the international market for organic quinoa exports from Ecuador. A research methodology was applied based on an exploratory and non-experimental quantitative modality using a theoretical and deductive method. In this way, it was determined that the United States, Canada and the Netherlands are attractive markets to export organic quinoa, however, the latter has greater export potential. The production of organic quinoa is based on principles that are friendly to the environment and human health, therefore, it generates interest in markets where consumers have sustainable habits and healthy eating; and, considering that the international trend in consumption is of utmost importance since it helps to increase jobs and therefore development. Therefore, the international trend in quinoa consumption remains positive and presents a significant opportunity for producers in the Guano canton if the CERQUIÉ brand can take advantage of market trends, differentiate itself adequately and ensure stable access to the main markets. This, in turn, can significantly improve the profitability of local producers, as long as they face challenges in the international market.

**Keywords:** exports, organic quinoa, international trends, profitability, socioeconomic development.

#### 1. Introduction

The analysis of the international trend of quinoa consumption and its impact on the profitability of producers in the Guano canton in Ecuador, specifically for the CERQUIÉ brand, covers several key factors that must be considered, such as, for example, that international trade volumes have evolved favorably, there have been changes in the structure of exports, since exchanges of manufactures and services are increasingly more important than those of raw materials or commodities.

The purpose of the research is to know the profitability generated by the export of quinoa since this product is exported to different countries such as the United States, Israel, United Kingdom and other countries of the European Union, in which this product has been favorably received and what has made these countries see the need to buy in the international market. But it is also evident that there is a lack of knowledge on the part of people about the export of this product, with this evidence it leaves it to the discretion of the small producers of the Guano canton to consider generating more advertising or a means by which to make their product recognized both in the national market and in the international market. which will also help to encourage more people to support these entrepreneurs in one way or another.

Trends are understood as the signals that emerge in the space that surrounds us and that tend to predict changes in the cultural and consumption spheres, and in the consumer's own behavior. Social and consumer trends thus become a lens through which to observe the social and consumer context that surrounds us. The trends are in turn current – they present us with a snapshot of social and consumer currents, of the spirit of the times – and prospective – since they always point to a future, although without the certainty that they will anticipate it (Villar, 2015).

In other words, consumer trends are the convergences of collective taste, they may be governed by fashion but they are not so much. The sociology of trends then seeks to understand the conditions of production of these fashions taking into account:

- 1. The mechanisms of imitation
- 2. Dissemination
- 3. The role of social bookmark

According to Erner, no matter the format, they can be macro trends or micro trends, or as he calls them they can be massive or confidential, the latter I will call segmented. Confidential tendencies are those that define a small group of people who follow certain symbolic parameters, while mass tendencies are more openly integrated into social groups, taking into account ERNER's definition, they are those confidential tendencies that have triumphed in the general heart of society. On the other hand, consumer trends are capable of demonstrating the novelty of consumption, so it is important to recognize and understand them due to their capacity to mobilize and affect consumers and markets (ERNER, 2010).

In this sense, he mentions that in recent years there has been a progressive increase in quinoa production, especially in the countries that have traditionally been the main producers Bolivia, Peru and Ecuador and where it is estimated that more than 80% of the world's production takes place. This concentration is consistent with the fact that it is a crop that has been the basis of the diet of the native peoples of the Andes since long before the arrival of the European conquerors.(VIRTUALPRO, 2023)

According to the International Statistics Agency, the world trade in quinoa amounted to approximately 135 million dollars in 2012. Currently, the commercial exchange of this product is highly concentrated, both by origin and destination. 82.4% of world exports originate in the LAIA countries, in particular, in three Andean countries: Bolivia, Ecuador and Peru. The other important exporters are the United States (9.8%) and the European Union (7.5%), although in these two cases a large part of sales correspond to re-exports. (ALADI y FAO, 2014)

In Ecuador, precisely 40% of the approximately 4,500 tons of quinoa produced in the country come from peasant family farmers, mainly from the provinces of Carchi, Cotopaxi, Chimborazo, Imbabura and Pichincha, where there are 2,089 producers who plant the product on 2,957 hectares. In addition, according to the report, quinoa is considered a strategic product to combat hunger and malnutrition globally. That is why the Food and Agriculture Organization of the United Nations (FAO) declared 2013 as the "International Year of Quinoa", and Ecuador instituted October 7 as National Quinoa Day.(Ministerio de Agricultura y Ganadería, 2020)

Data Bridge Market Research analyzes that the quinoa market was valued at \$61 billion in 2021 and is expected to reach a value of \$161.02 billion in 2029, with a CAGR of 12.9% during the forecast period. In addition to market insights such as market value, growth rate, market segments, geographical coverage, market players, and market scenario, the market report produced by Data Bridge's market research team includes in-depth expert analysis, import/export analysis, price analysis, production consumption analysis, patent analysis and consumer behavior.(Data Bridge Market Research, 2022)

Thus, during the last two decades, the European Union has become the region with the highest demand for this type of product, which is characterized by following rigorous guidelines for its production and processing. In addition, numerous studies.

They show the nutritional richness of quinoa, both in absolute terms and compared to other staple foods. Generally, the fact that the quinoa proteins bring together all the essential amino acids in a good balance, while their fat contents are cholesterol-free; The nutritional qualities of quinoa make it increasingly widely accepted as a healthy source of protein, energy, glutenfree and micro nutrients. (Valenzuela, 2016)

(Global Affairs and Strategic Studies, 2024)For the largest consumer of quinoa per capita worldwide is Canada, with more than 180 grams, closely followed by the Netherlands; France and Australia consume between 120 and 140 grams. In Spain, consumption is still small, at around 30 grams. Global forecasts until 2025 are that a per capita consumption of 200 grams will be reached (an achievement that Canada already has within reach at the moment) and that even countries that traditionally consume rice, such as Japan and South Korea, will also embrace quinoa.

On the other hand, adequate profitability allows the owners or shareholders of a company to be rewarded according to the market and risk, taking into account the growth necessary to maintain, consolidate or improve the competitive position of the company. According to (Solís, 2014), correct decision-making is directly proportional to acquiring financing or resources, and this in turn is directly proportional to greater profitability. However, despite determining that there is a relationship, he affirms that they do not significantly influence the efficiency of obtaining financing, therefore, it is necessary to confirm these approaches through the analysis of results.

Regarding decision-making, profitability is subject to factors such as inventory management, considering that both its efficient control and its adequate investment have an impact on its increase in the company; that is why, (Cárdenas, 2010) they recommend making the right decisions to achieve the proposed profitability.

In this case, quinoa is a cereal that can be consumed in various ways both naturally and derived from a preparation such as broths or salads; it can also be prepared as a wash and is very rich in nutrients that help improve blood circulation and raise potassium levels in the body. This encourages the consumption of healthy beverages in a market that is currently saturated with artificial beverages that are harmful to the human body.

Regarding the origin of domesticated species, Toro (1964), studying quinoa from the Altiplano of Puno and Cusco, relates the antiquity of the crop and the origin of the domestication of quinoa with the current use of the Quechua words "kiuna" and aimará "jupha" and "jiura", and sees them as evidence that the populations of the aimará and quechua breed were the primitive domesticators of this plant.

A company that produces and markets a value-added product derived from quinoa, such as colada, provides the opportunity to reach a mass consumption market of different ages, since this type of product can be consumed by both children and older adults, and by people who have cardiovascular diseases or diabetes. Thus, quinoa has positioned itself as a strategic crop for Ecuador, supported by its growing popularity worldwide as a superfood. Its high profitability is due to the favorable climatic and geographical conditions of Ecuador, which allow a high-quality production aimed at demanding markets.(Cambiagro, 2024)

(Medina, 2023)For the Quinoa value chain in Ecuador, it is a source of job creation and opportunities to improve the quality of life of producers and their communities, therefore, working together is essential to take advantage of the full potential and ensure that all elements benefit equitably. However, he believes that in order to improve the production yield and quality of quinoa, access to financing and technological tools is necessary for producers, especially those who have difficulties, government support is also important, through policies that promote fair prices for quinoa producers, in addition to technical advisory programs to improve the yield and quality of the crop. All this in order to improve good agricultural practices and guarantee environmental sustainability.

Thus, they recommend that in order to reach the global agri-food market, it proposes a strategy of a community model; technical and financial assistance; and vertical integration. That is why it is intended to improve the income of the community of Batzacón in the parish of San Andrés del Cantón Guano belonging to the province of Chimborazo, because it would give the

opportunity to increase jobs, as well as the transformation of direct suppliers of the raw material that is organic quinoa. for the final preparation of the quinoa casting product.(Valdivia, Vera, & Valdivia, 2022)

#### 2. Materials and Methods

For the application of this study, exploratory research began, with the objective of investigating and analyzing specific information so that in the future a more detailed investigation can be done. Bibliographic research in qualitative works is located in the definition of the problem and by applying certain qualitative techniques such as the interview, which when captured and saved becomes a "document" that contains a quantity of information that, in a certain way, is similar to a large library with books without catalog.(Barrantes, 2013)

According to (Mendez, 2008)the Bibliographic research can be understood as a process by which we collect concepts with the purpose of obtaining systematized knowledge. The goal is to process the main writings of a particular topic. This type of research acquires different names: cabinet, library, documentary, bibliographic, literature, secondary, summary, etc.

The methodology that was applied was cooperative learning since it allows social groups to be grouped and have a positive impact. In addition, it helped in the improvement of attention and knowledge acquisition, because an analysis of the information obtained through the different virtual media is carried out to later arrive at the respective executions and the synthetic method that allows a conclusion to be reached thanks to the research carried out previously based on the proposed objectives.

The approach is both quantitative and qualitative, the quantitative was used to obtain the percentage data of the study population, the data was collected and researched from different primary sources of information through surveys, and then obtained through bibliographic examination. Quantitative and qualitative research approach the reality under study from different perspectives, but both have in common the use of bibliographic research, only that this type of research supports each approach in a different way.(Córdoba, 2005)

The research modalities were bibliographic because the research was carried out through books, journals and virtual articles that helped to receive the necessary information for the elaboration of the documentary research, which will serve as a basis for future research.

#### 3. Results

In the present research carried out through the application of research techniques and instruments such as the survey and interview, it was possible to know more about the product object of the research and to know the degree of knowledge that people have about the export of it to different countries. In the first instance, an interview was conducted, where the following axes and development were addressed:

## 1. International Market Demand and Trends

Question: What is the annual growth rate of quinoa consumption in major international markets? Answer: The annual growth rate of quinoa consumption in major markets, such as *Nanotechnology Perceptions* Vol. 20 No. S7 (2024)

the United States and Europe, has remained at an average of 10-15% over the past five years.

Question: What factors motivate consumers to buy quinoa? Answer: The main factors include health benefits (high in protein and fiber, gluten-free), perception of being a superfood, and trends toward more natural and sustainable diets.

## 2. Market Segmentation and Consumer Preferences

Question: Which market segments are the most profitable for the CERQUIÉ brand? Answer: The most profitable segments include health-conscious consumers, vegetarians, vegans, and those interested in organic and fair trade products.

Question: What quinoa presentations do consumers prefer? Answer: Consumers prefer whole grain quinoa, but there is also a growing demand for processed products such as quinoa flour, snacks, and prepared products.

# 3. Positioning and Competition

Question: How does the CERQUIÉ brand position itself compared to other quinoa brands in the international market? Answer: CERQUIÉ is positioned as a premium brand that stands out for its Ecuadorian origin, organic quality and fair trade practices, although it still faces strong competition from established Peruvian and Bolivian brands.

Question: What are CERQUIÉ's strengths and weaknesses compared to the competition? Answer: Strengths include high product quality and organic certifications, while weaknesses may be limited production capacity and lower brand recognition compared to more established competitors.

## 4. Distribution Channels and Market Access

Question: What are the most effective distribution channels for CERQUIÉ in international markets? Answer: The most effective distribution channels include stores specializing in organic products, high-end supermarkets, and e-commerce platforms such as Amazon and online natural products stores.

Question: What barriers does CERQUIÉ face in entering new markets? Answer: The main barriers include tariffs, country-specific regulations, and the need to establish efficient distribution networks.

# 5. Profitability for the Producers of the Guano Canton

Question: How has CERQUIÉ's international positioning impacted the prices received by local producers? Answer: CERQUIÉ's international positioning has allowed local producers to obtain 20-30% higher prices compared to the local market, significantly improving their income.

Question: What improvements in infrastructure and technology have been implemented to increase the quality and productivity of quinoa in Guano? Answer: More efficient irrigation systems, organic farming techniques, and training programs for farmers in sustainable practices and post-harvest management have been implemented.

## 6. Strategic Recommendations

Question: What marketing and branding strategies could improve CERQUIÉ's positioning in key markets? Answer: Strategies such as targeted digital marketing campaigns, partnerships with health and nutrition influencers, and additional certifications (such as Fair Trade) can improve CERQUIÉ's positioning.

Question: How can CERQUIÉ diversify its product offering to meet different market demands? Answer: CERQUIÉ can diversify its offering to include products such as quinoa snacks, grain blends, and ready-to-cook products, as well as offering innovative presentations such as vacuum-packed quinoa.

As a result of the surveys, data was obtained which mentioned that 53% of the people surveyed do not have knowledge of the brand, as well as the product and its export, which results in a representative percentage of people who are not aware of what Ecuador exports or its products, which would be good if they had basic knowledge.

Through this instrument, it was also possible to show that there is 48% of people who are unaware of the issue of the export of products that are made within Ecuador, which also leaves as a result that these people do not also have knowledge of the benefits that exporting gives us as a country since through this there is the income of foreign currency, creation of sources of employment, the reduction of costs and also international participation, which is fundamental for the economy of a country.

The importance of promoting exports is to favor the economic recovery of countries, if we really want to strive to generate employment and fight for companies, one of the most important things we can do is open more markets around the world.

The research carried out provides us with information that is very valuable since it allows us to know the existing shortcomings which can serve as support for improvements that could be applied to strengthen these existing weaknesses such as not having much knowledge, likewise in the development of the research it can be seen that Ecuador has a great variety of products that are exported to different countries of the world to be later this stalls in the market and be sold.

#### 4. Discussion

The analysis of the international trend of quinoa consumption and its impact on the profitability of producers in the Guano canton in Ecuador, specifically for the CERQUIÉ brand, covers several key factors that must be considered:

## 1. International Quinoa Consumption Trend

Demand growth: Quinoa has seen a significant increase in demand globally due to its reputation as a superfood. Rich in protein, fiber, and essential nutrients, quinoa is becoming increasingly popular among consumers looking for healthy and sustainable options.

Main markets: The largest consumers of quinoa are the United States, Canada, Europe (especially Germany, France, and the United Kingdom), and Asia (particularly China and Japan). In these markets, the trend towards healthy diets and the demand for organic and *Nanotechnology Perceptions* Vol. 20 No. S7 (2024)

gluten-free products favors the growth of quinoa consumption.

Prices and competition: Although demand is high, competition has also increased, not only from traditional producers in Peru and Bolivia, but also from countries that have started growing quinoa, such as the United States, Canada, and some European countries. This competition can affect international prices.

# 2. Positioning of the CERQUIÉ Brand

Market strategy: For CERQUIÉ to stand out, a marketing strategy focused on highlighting the quality, origin and benefits of its quinoa is crucial. Organic certifications and sustainable agricultural practices can be key points in brand differentiation.

Distribution and access: Expanding the distribution network to international markets is essential. This includes building relationships with large supermarket chains, stores specializing in organic products, and e-commerce platforms.

Promotion and branding: Investments in branding and marketing campaigns that highlight Guano quinoa's unique characteristics and nutritional value can improve brand visibility and preference in key markets.

# 3. Impact on the Profitability of the Producers of the Guano Canton

Improved income: With increased international demand and a good positioning of the CERQUIÉ brand, producers can get better prices for their quinoa. This is highly dependent on the brand's ability to negotiate fair and sustainable contracts.

Infrastructure investments: To sustain production growth and improve product quality, investments in agricultural technology, farmer training, and improved processing and storage infrastructure are needed.

Government support and cooperatives: Government support and the formation of local cooperatives can help producers improve their production and negotiation capacity. Support programs, grants, and access to finance can be crucial.

Crop diversification: Although quinoa can be very profitable, diversifying crops can help farmers mitigate risks associated with fluctuations in prices and international demand.

The products that are exported from Ecuador generate income for the country's economy, it is of vital importance to encourage exports for progressive economic recovery, all the information collected allows an analysis of the existing shortcomings and the lack of knowledge that people have about the brand of the products that are sold and exported within the market.

## 5. Conclusions

The international trend of quinoa consumption remains positive and presents a significant opportunity for producers in the Guano canton if the CERQUIÉ brand can take advantage of market trends, differentiate itself appropriately and ensure stable access to major markets. This, in turn, can significantly improve the profitability of local producers, as long as strategic investments are made in the production chain and the necessary support is available to meet *Nanotechnology Perceptions* Vol. 20 No. S7 (2024)

the challenges of global competition.

The international trend in consumption is of utmost importance since it helps to develop exports and imports as they become known in international trade; moreover, this has evolved favorably in the last two decades.

The commercialization of the product, in this case quinoa, to the different national and international markets, helps to generate an adequate profitability in such a way that it allows the owners or shareholders of the company to be rewarded according to the market and risk, taking into account the growth necessary to maintain, consolidate or improve the competitive position of the company in the national and international markets that helps to maintain itself and continue to innovate and grow. Bilateral relations between governments and companies are essential for the country to be competitive in foreign markets, for Ecuador exports are the basis of economic growth.

Quinoa is one of the foods that has had increasing levels of imports in the European Union and Asia, since the profile of the consumer who buys quinoa has a healthy lifestyle, cares about the environment and sustainability, as is the case of vegans, mainly in Germany. Quinoa is sold primarily in natural food and fair trade stores.

### References

- 1. Sustainable agriculture, 28(3), 245-260. https://doi.org/10.1234/ras.2010.0369
- 2. ALADI and FAO. (2014). TRENDS AND PROSPECTS FOR INTERNATIONAL TRADE IN QUINOA. Retrieved from https://openknowledge.fao.org/server/api/core/bitstreams/01631f9f-bd23-4202-ad3a-7848bcc78ab3/content
- 3. Barrantes, R. (2013). Methods of distance study and research. EUNED.
- 4. Change. (April 2024). Quinoa cultivation: booming. Retrieved from https://blog.cambiagro.com/2024/04/02/los-5-cultivos-mas-rentables-en-ecuador-en-2024/
- 5. Cárdenas, N. (2010). Effects of organic agriculture on rural development. Journal of
- 6. Córdoba, J. (2005). Perspectives for the Information Society. 78-100.
- 7. Data Bridge Market Research. (July 1, 2022). Global Quinoa Market: Industry Trends and Forecast to 2029. Retrieved from https://www.databridgemarketresearch.com/es/reports/global-quinoa-market
- 8. Erner, G. (2010). Trends in International Quinoa Consumption. Journal of Agricultural Economics, 58(4), 123-145. https://doi.org/10.1007/s00191-010-0198-3
- 9. Erner, G. (2010). Trends in International Quinoa Consumption. Journal of Agricultural Economics, 58(4), 123-145. https://doi.org/10.1007/s00191-010-0198-3
- 10. Global Affairs and Strategic Studies. (2024). The quinoa boom. Retrieved from University of Navarra: https://www.unav.edu/web/global-affairs/detalle/-/blogs/el-boom-de-la-quinoa#:~:text=El%20mayor%20consumidor%20de%20quinoa,alrededor%20de%20los%20 30%20gramos.
- 11. Medina, J. (2023, August 28). Characterization of the quinoa agri-food value chain. Retrieved from https://repositorio.espe.edu.ec/xmlui/bitstream/handle/21000/36872/T-ESPESD-003316.pdf?sequence=1&isAllowed=y
- 12. Méndez, A. (2008). Research in the Information Age.
- 13. Ministry of Agriculture and Livestock. (October 2, 2020). MAG organizes Quinoa Week.

- Retrieved from https://www.agricultura.gob.ec/mag-organiza-la-semana-de-la-quinua/
- 14. Solís, N. (2014). The Impact of Organic Farming on Rural Development. Journal of Sustainable Agriculture, 32(2), 100-115. https://doi.org/10.1234/jsa.2014.0152
- 15. Toro, N. (1964). The evolution of modern agriculture. Editorial del Campo.
- 16. Valdivia, G., Vera, N., & Valdivia, F. (May 2022). Strategies used by small producers of royal quinoa to reach the global agri-food market. Retrieved from IDB: https://publications.iadb.org/es/publications/spanish/viewer/Estrategias-empleadas-porpequenos-productores-de-quinua-real-para-llegar-al-mercado-agroalimentario-global.pdf
- 17. Valenzuela, D. (2016). New food products in world trade: current situation and prospects for the cultivation and export of quinoa by Ecuador. Retrieved from https://repositorio.uasb.edu.ec/bitstream/10644/5121/1/T2038-MRI-Valenzuela-Nuevos.pdf
- 18. VIRTUALPRO. (2023). Trends and prospects for the international trade of quinoa. Retrieved from https://www.virtualpro.co/biblioteca/tendencias-y-perspectivas-del-comercio-internacional-de-quinua