

Socially Responsible Consumption Of Agricultural Food In The City Of Guayaquil

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Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the variable Socially Responsible Consumption of Agricultural Food. The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in Scopus database during the period 2015-2020 in Latin American countries, achieving the identification of 18 publications. The information provided by said platform was organized by means of graphs and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics were described, the position of different authors regarding the proposed topic was referenced by means of a qualitative analysis. Among the main findings of this research, it is found that Brazil, with 10 publications, is the Latin American country with the highest production. The area of knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of the socially responsible consumption of agricultural food was environmental sciences with 9 published documents, and the type of publication that was most used during the period mentioned above was the journal article, which represents 72% of the total scientific production.

Keywords; responsible consumption, agricultural products

1. Introduction

The responsible consumption of agricultural food, arises as a theme aimed at mitigating damage to the environment taking into account that it is one of the problems that affect humans globally, so the industry seeks to make their processes more sustainable each time without affecting the productivity of these. Therefore, responsible consumption is a way to acquire what is necessary as a means to conserve natural resources for future generations. For Vásquez (2016)fair trade is also necessary for responsible consumption, as it aims to reduce the size of distribution channels, eliminating as many intermediaries as possible and giving priority to products made from raw materials obtained through sustainable processes.

A clear example of responsible consumption is presented by Salazar Rangel in his thesis "Responsible consumption: factors influencing the perception of organic food in men and women aged 45 to 54 years in the city of Guayaquil and Samborondón" (2020)in which he studied the perception of organic food consumption in Guayaquil in people aged 45 to 54 years, where it was found that their consumption did not depend on the demographic aspects studied: sex, age, education, profession, income and place, are predominant or directly affect the perception of organic food consumption, concluding that this responsible consumption of agricultural food was primarily due to COVID 19 as people in this age range were buying foods beneficial to health and that could counteract this virus. This is also shown by Gonzalez Quimbayo(González Quimbayo, 2020) which analyzes the effect of Covid 19 on the responsible consumption of agricultural food in people between 25 and 34 years old, reaching the conclusion that the consumption of responsible food is closely linked to the benefits it provides to the health and immune system. Therefore, it is important to know in terms of bibliographic resources, the current state of research on the socially responsible consumption of agricultural food in Latin America, so a bibliometric analysis of the scientific production registered in Scopus database during the period 2015-2020 is proposed to answer the question: How has been the production and publication of research papers related to the study of the variable Socially responsible consumption of agricultural food during the period 2015-2020?

2. General objective

7933

To analyze from a bibliometric and bibliographic perspective, the production of high impact research papers on the variable Socially Responsible Consumption of Agricultural Food during the period 2015-2020.

3. Methodology

Quantitative analysis of the information provided by Scopus is carried out under a bibliometric approach on the scientific production concerning the socially responsible consumption of agricultural food. Also, from a qualitative perspective, examples of some research papers published in the area of study mentioned above are analyzed from a bibliographic approach to describe the position of different authors on the proposed topic.

The search is carried out through the tool provided by Scopus and the parameters referenced in Table 1 are established.

3.1 Methodological design

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 18 publications were identified.	Papers published whose study variables are related to the socially responsible consumption of agricultural food. Research papers published during the period 2015-2020. Limited to Latin American countries. Without distinction of area of knowledge. Without distinction of type of publication.

		The information	
		identified in the	
PHASE 2		previous phase is	Word Co-occurrence.
	CONSTRUCTION	organized. The	Year of publication
	OF ANALYSIS	classification will be	Country of origin of the
	MATERIAL	made by means of	publication.
		graphs, figures and	Area of knowledge.
		tables based on data	Type of publication
		provided by Scopus.	
		After the analysis	
PHASE 3		carried out in the	
		previous phase, we	
		proceed to the drafting	
	DOCUMENT	of the conclusions and	
		the preparation of the	
		final document.	

 Table 1.
 Methodological design.

Source: Own elaboration (2021)

4. Results

4.1 Co-occurrence of words

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.



Figure 1. Co-occurrence of words

Source: Own elaboration (2021); based on data provided by Scopus.

As shown in Figure 1, one of the keywords most used in research related to the socially responsible consumption of agricultural food are environmental impact, sustainability, food safety, food consumption, where reference is made to the implications of generating a conscious consumption of agricultural products that are marketed in order to minimize damage to the environment in the processes of elaboration of these foods, thus making the agricultural industry more sustainable. Also, key words such as agricultural products, carbon footprint, fertilizer and buyer-seller relationship can be identified, which are related to one of the consequences that the agricultural industry generates in the environment, which is the carbon footprint in its procedures, so it is considered important to create a culture of responsible consumption, both in the person who sells these products as well as in the final consumer.

4.2 Distribution of scientific production by year of publication.

Figure 2 shows how the scientific production is distributed according to the year of publication, taking into account the period from 2015 to 2020.





2018 was the year with the highest number of publications registered in Scopus related to Socially responsible consumption of agricultural food having a total of 7 papers, among which is "Local food: benefits and shortcomings due to modern agriculture" (Coelho, Coelho,, & Egerer, 2018). This research aims to examine the problem posed by the consumption of locally produced food in all its various aspects and, in particular, addresses how this practice contributes to local and global sustainability. After analyzing the process that these products go through, from the agricultural companies to the final consumer, it was concluded that the technologies used for agricultural production are the most responsible for the degree of sustainability in the production and supply of food to the population, so that local consumption does not mean that greenhouse gases are lower, but that technologically developed agricultural sectors are beneficial for local consumption. The growth in the number of publications referring to the variables under study was not in a linear way, so the second year with the highest number of publications were 2020 and 2015 with 3 registered documents each, followed by 2019 and 2016 with 2 documents and finally there is the year 2017 with 1 document registered in Scopus.

4.3 Distribution of scientific production by country of origin.





Figure 3. Distribution of scientific production by country of origin.Source: Own elaboration (2021); based on data provided by Scopus.

Brazil is the Latin American country with the greatest contribution in research on the socially responsible consumption of agricultural food, with 10 publications in Scopus, including the article entitled "Contributions of life cycle assessment to the sustainability of milk production" (Carvalho, Willers, Maranduba, Robra, & Almeida, 2018). This study considers that the food processing sector is responsible for negative impacts on the environment, which increase with more intensive production and for these reasons have been sought mechanisms that can increase agricultural productivity causing minimal damage to the environment, so a life cycle assessment is performed, which is a method for evaluating the environmental impacts of products during their life cycle, and taking into account that the livestock industry is one of the industries that causes the greatest emission of greenhouse gases. These studies can help to improve the use of resources and productivity and, consequently, the environmental performance of the sector and help to make dairy farming processes more sustainable.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or from different nationalities, so that the production of an article co-authored by different authors from different countries of origin allows each of the countries to add up as a unit in the overall publications. This is best explained in Figure 4, which shows the flow of collaborative work from different countries.





Figure 4. Co-citations between countries.

Source: Own elaboration (2021); based on data provided by Scopus.

As mentioned above, Brazil is the Latin American country with the largest number of publications on the variables under study, also presenting documents in collaboration with authors from countries affiliated with organizations that do not belong to Latin American countries such as Bangladesh and the United States, showing the importance of discussing these issues and offering us a broader view of this problem. Mexico is in second place with 2 publications, in which it collaborates with authors affiliated with organizations mainly from Australia and the United States, among which is "Achieving the objectives of sustainable development in agriculture: the crucial role of nitrogen in cereal-based systems"(Ladha, y otros, 2020),where the link between agricultural productivity and the achievement of the UN Sustainable Development Goals is defined, this link is established through the efficient use of nitrogen in cereal production systems, where the agricultural system with sub-optimal nitrogen application is characterized by low crop productivity, entering a vicious circle of poverty, malnutrition and poor economy, a case more common in sub-Saharan Africa. So optimal nitrogen use meets Sustainable Development Goals 1 (no poverty), 2 (zero hunger), 3 (good health and well-being), 8 (decent work and economic growth) and 15 (life on land) but causes great damage to the land. Therefore, this study seeks to raise awareness of a balanced use of nitrogen as a way to increase agricultural productivity without damaging the environment or degrading the land.

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.



Figure 5. Distribution of scientific production by area of knowledge.Source: Own elaboration (2021); based on data provided by Scopus.

nvironmental sciences is the area of knowledge with the greatest contribution through the theories that are framed in it, in the search for new knowledge of socially responsible consumption of agricultural food, with a total of 9 publications, among which is the one entitled "The enigma of the sustainability of the substitution of fishmeal by vegetable ingredients in shrimp food" (Malcorps, y otros, 2020).his study focuses on the aquaculture industry and the consumption of shrimp, and consequently, the increased use of feed is the main responsible for the overall environmental impact of aquaculture production, so the incremental substitution of fishmeal for vegetable ingredients in shrimp feed was studied and the effects on marine and terrestrial resources such as fish, land, freshwater, nitrogen and phosphorus were evaluated as a mechanism to mitigate environmental damage, including both the shrimp seller and the obligation of suppliers to offer sustainable alternatives. Therefore, this study helps to demonstrate the importance of mitigating the use of marine and terrestrial resources and replacing them with more environmentally friendly alternatives.

4.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.



Figure 6. Distribution of scientific production by type of publication **Spource:** Own elaboration (2021); based on data provided by Scopus.

As shown in Figure 6, within the different types of publications, 72% of the total number of documents identified through Phase 1 of the Methodological Design correspond to Journal Articles, among which is the one entitled "Territorial development and national school feeding program in rural territories of the rural territories of the Litoral and Campos de Cima Da Serra, in RIO Grande do SUL"(Da Silva, Rockett, & Coelho-De-Souza, 2018). This study analyzes the local consumption of agricultural products as a way of responsible consumption, so that the National School Feeding Program (PNAE) complies with this policy by requiring the mandatory purchase of at least 30% of food from family farmers in the municipalities of School Feeding, giving priority to local farmers thus trying to mitigate the emission of greenhouse gases. Therefore, it is concluded that this practice of local consumption helps both the revitalization of the economy and responsible consumption having municipal managers as a strategy to strengthen territorial development.

And finally, there are book chapters with 28% of the documents registered in Scopus where it is possible to identify "Intergenerational justice and innovation for long-term agricultural sustainability" (Timmermann, 2020) this book chapter highlights how innovation affects the consumption of non-renewable or slowly renewable resources that are essential to guarantee the human right to food in the future, thus evidencing the importance of responsible food consumption. By implementing new production measures. It destroys the effectiveness of resources that were not created by the inventor or by those who bought the inventions. Although the destruction of these resources is inevitable when these inventions are used, there are several measures that can be taken to prolong the active life of these resources and mitigate the harmful effects on the environment for future generations.

5. Conclusion

Thanks to the bibliometric analysis proposed in this research, it can be determined that Brazil is the Latin American country with the largest number of bibliographic records in Scopus database during the period between 2015 and 2020 with a total of 10 documents. The scientific production related to the study of Managerial Accounting for Decision Making has presented an irregular growth in the creation of bibliographic resources that are related to the variables under study, having 3 documents in the year 2015 and 3 documents in the year 2020 reaching the highest number of published documents in 2018 with a total of 7 documents, the need for the creation of research that seeks to determine the responsible consumption of agricultural food and its

7942

importance for the conservation of resources, the minimization of damage to the environment and the greater use of these foods as this is one of the industries that generates most greenhouse gases.

Socially responsible consumption is a way for the final buyer to contribute to the conservation of natural resources by being aware of the food purchased and the procedures by which it was obtained. Responsible consumption helps to conserve resources for future generations by consuming agricultural products in a conscious way, as this is one of the main causes of land degradation. Agricultural procedures represent a challenge for the suppliers of these inputs, since over time, for biological reasons, the soil becomes more resistant to pesticides and all kinds of fertilizers, which is why there must be continuous innovation, innovation that is almost always reduced to a great environmental impact, so that responsible consumption seeks to achieve a balance between production and economic dynamization with environmental conservation. Therefore, there is a need for the development of more bibliographic resources on the socially responsible consumption of agricultural products as a way of making people aware of the effects of poor handling and treatment of these products. This is why the need for studies such as the one presented in this document is emphasized, carrying out a review of those texts that address the aforementioned topic, in order to give the reader a broad view of the current situation of the literature on socially responsible consumption of agricultural products and its implication in the balance between innovation in industry and conservation of the environment.

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7943

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