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Review

Farmers' Market Actors, Dynamics, and Attributes: A Bibliometric Study

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Abstract: Farmers' markets aim to bring producers and consumers together under direct marketing schemes, also known as alternative food networks, for local and sustainable production and consumption of food. A number of studies concerning this subject have been published, however, as yet no updated reviews exist that might allow us to understand the trends in research on farmers' markets. The objective of this study was to examine the farmers' market literature using bibliometric tools. A total of 438 peer-reviewed publications, indexed in the abstract and citation meta-database Scopus (Elsevier®), for the period of 1979 to September 24, 2018, were considered. In the second phase, publications in the area of medicine were excluded, resulting in 295 publications being analyzed for the same period. The results showed that these publications focused on three main areas: markets, health programs, and food safety. Upon exclusion of the medical publications, the remaining works focused on farmers' market actors, dynamics, and attributes: vendors (producers and others), consumers, the community, and supporting actors and institutions (government, NGOs, individuals). Therefore, it is concluded that there is no single type of farmers' market, nor of farmers' market vendors or consumers. This makes the reproduction of such spaces difficult, especially when the goals are to benefit local production systems or the nutrition of the local community.

Keywords: local production systems; consumers; vendors; community

1. Introduction

Farmers' markets emerged as a possible means to bring producers together with consumers under direct marketing, known as alternative food networks (AFN) [1–3]. This was done for several reasons: to allow producers to retain the profits resulting from the sale of their products, and to benefit the consumers, who are able to obtain fresh products directly from the production unit [4]. There are various advantages to this system; it allows producers to sell their products to their customers and to be in direct contact with them, and it also enables the producers to earn sufficient income and increases the number of socially and environmentally sustainable food systems [5]. For the consumer, the advantage is access to fresh, high-quality, healthy, highly nutritious, and locally available products [6]. There are several studies that focused on the relevance of farmers' markets in the support of local food systems,

yet the concept of local remains fuzzy for the consumer, as distance can be definied in several ways (e.g., distance from their home, produced within 100 miles, or produced in their state), as well as the seasonal limits of local food, revealing the need to have better educated customers [7].

In the United States, the Farmer-to-Consumer Direct Marketing Act of 1976, along with similar legislation in other countries, have enabled support for and the presence of farmers' markets in developed countries [1]. These spaces are essential for the implementation of public policies that aim to promote access to and consumption of fruits and vegetables so that the population may develop healthier eating habits [8,9]. A series of U.S.-funded state public health actions and food assistance programs related to farmers' markets in the United States have been documented in recent years, focusing on the cultural barriers to food access among marginalized groups [10], the challenges associated with implementing food assistance programs in farmers' markets [11], and food safety issues [12–14].

The concept of a farmers market has been present in the literature since 1940 and mainly studied by researchers from the US and the UK [15]. In recent decades, there has been a proliferation of farmers' markets outside North America and Western Europe, mainly related to the organic movement [16], becoming a global tendency documented by several researchers under a situated knowledge approach (e.g., Central and Eastern Europe [3,17], Latin America [18–21], Asia [22,23], Oceania [24–26], and Africa [27]). Due to the increase in the proliferation of contributions, there is a need for understanding the common drivers of the global research with reference to farmers' markets.

Despite the significant number of contributions regarding the topic, no extensive and updated reviews are available. Brown [15], in a review of the years 1940–2000, found that the studies could be grouped into four categories: consumers and vendors, economic impact, social impact, and farmers' markets as research sites. In consideration of some of Brown's observations regarding the documents analyzed, i.e., that the studies may have been biased toward fruit and vegetable growers and that the producers tended to understate their sales, it is difficult to make comparisons among the studies. Another review of the concept of farmers' markets is that of Saili, et al. [28], which describes a lack of consistency in classification. More recent reviews focus on specific topics regarding farmers' markets, such as: food safety [29]; U.S.-funded state public health actions [8,9,30,31]; facilitators of, and barriers to, farmers' market use [32]; and characterization of farmers' market shoppers [33]. Given the scarcity of reviews, and in order to provide a more current vision of the concept, a literature review was conducted, using bibliometric tools to analyze relevant scientific publications on the subject. The objective of this study was to examine the farmers' market literature using bibliometric tools, thereby demonstrating the need for a framework to understand farmers' markets as a unit, without over-focusing on one component or using the study as a space for proving specific theories.

2. Materials and Methods

An analysis was performed using quantitative methods: performance analysis, which analyzes publications in terms of authors, countries, and institutes; and science mapping, which utilizes bibliometric software in order to establish patterns in scientific research [34].

Keywords were used with the abstract and citation meta-database Scopus (a product of Elsevier®) (www.scopus.com). Originally, the phrase "farmers' markets" was specified for the title (double quotations marks were used which allows for wildcards and lemmatization, e.g., farmers markets, farmer's markets), abstract, and keywords, which generated 1109 documents. After a quick assessment, it was noted that several of the articles were not directly related to farmers' markets; thus, it was decided to limit the search for the phrase "farmers' markets" to the title, which reduced the number of documents to 438. The period of analysis was from 1979 to September 24, 2018. As for document type, there were 360 articles, constituting 82% of the total number of documents. Other document types were book chapters (33), reviews (24), articles in press (6), conference papers (85), editorials (2), letters (2), notes (2), surveys (2), books (1), and errata (1).

In a second analysis, publications in the areas of medicine, nursing, neuroscience, and pharmacology were excluded, resulting in 295 publications from 1979 to September 24, 2018,

comprising 235 articles (79.7%), 30 book chapters (10.2%), 15 reviews (5.1%), 5 conference papers (1.7%), 2 editorials (0.7%), 2 articles in press, 2 notes, 2 small surveys, 1 book, and 1 letter to the editor.

Content Analysis

The software VOSviewer version 1.6.9 (Centre for Science and Technology Studies, Leiden University, The Netherlands) was used [35] for science mapping analysis. An analysis of co-occurrence of keywords and academic terms in the titles and abstracts of the 438 and 295 publications was performed; this analysis shows only elements connected with other elements. To obtain the mapping and clustering of terms, the association strength (AS) normalization method was used, with a resolution of 1.00, visualization scale at 100% with total link strength (TLS) weight, 50% label size variation, and 30% kernel width. The full counting method was selected, with the number of records for each term $\geq$10, and a minimum cluster size of 15 [36]. With the retained terms, maps for visualization of the network were created. The algorithm was designed so that co-occurring terms were positioned closer to each other, and larger bubbles represented terms that occurred more frequently. Terms that were irrelevant to the map were deleted [37].

3. Results

3.1. Performance Analysis

The record comprised 438 documents from 1979 to 24 September 2018. The distribution of the publications is shown in Figure 1. The most significant number of publications on this topic starts in 2007, and maintains steady growth until reaching its peak in 2017 (44). Farmers' markets have been important initiatives for the United States government since the 1970s; however, most of the studies before the year 2000 were based on articles from the popular press [15]. The increase in the number of published articles in peer-reviewed journals indicates that this research topic has been recently studied under a more scientific approach. As mentioned before, another reason for the increase in publications is that farmers' markets have become an initiative that is followed globally, so more international cases are documented.

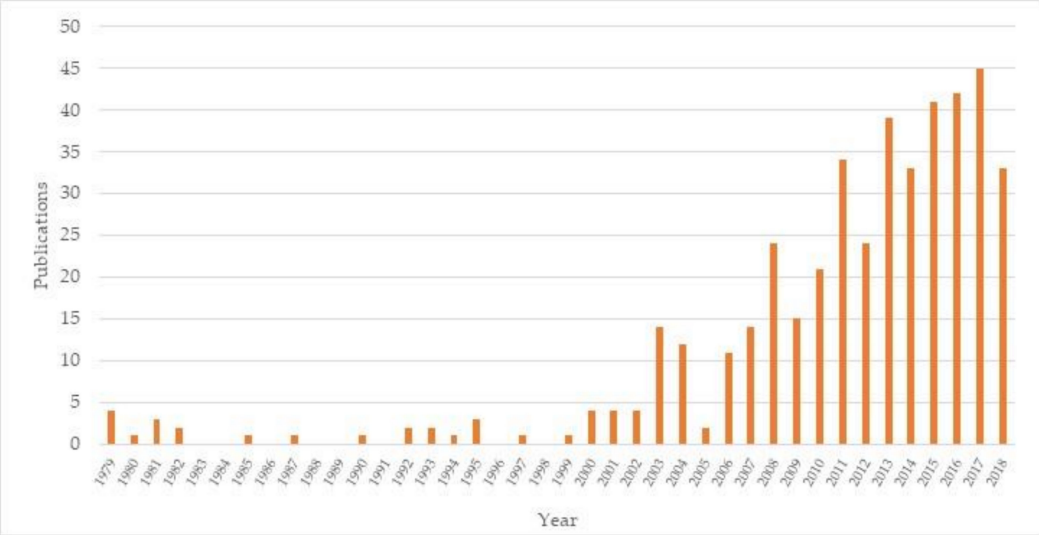

Figure 1. Distribution of publications on farmers' markets by year from 1979 to 24 September 2018.

Of the total number of documents, 328 had been cited (75% of the total), accumulating a total of 5840 citations. There were seven publications that had more than 100 citations (2%), 24 had between 50 and 99 citations (5%), 117 had between 10 and 49 citations (27%), 132 had between 2 and 9 citations (30%), and 50 publications received one citation (11%). The mean number of citations was 13.3 per document for the period analyzed.

Table 1 shows the 10 major journals, countries or regions, and institutes that are publishing on topics related to farmers' markets. The five journals with the largest number of publications on the subject are: Journal of Hunger and Environmental Nutrition, Journal of Extension, Preventing Chronic Disease, Agriculture and Human Values, and British Food Journal. Two journals place emphasis on nutrition and medicine; the publications in these journals result from the evaluation of farmers' markets as a method for improvement of the quality of the nutrition of the population, and from the analysis of the impact of public policies, such as the Supplemental Nutrition Assistance Program, the Senior Farmers' Market Nutrition Pilot Program, the Farmers Market Access Project, monetary matched incentives, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the New York City Health Bucks Program, Philly Food Bucks, and the Food Assistance Program. The rest of the journals analyze vendors, consumers, extensionists, dynamics in the markets, and the sale of organic products, among other issues.

With regard to countries or regions, it can be seen that the United States was the country with the highest number of contributions (266); this is a result of laws that encourage the establishment of farmers' markets as well as the various health programs related to the topic. There were smaller numbers of publications by researchers from Canada, the United Kingdom, Australia, New Zealand, and another 34 countries. With regard to affiliation, 160 institutions were listed, of which the United States universities represent the highest proportion, with 25 of the 30 major institutions whose academics publish on the topic. The institute with the largest number of publications was the University of California, Davis (14). The remaining five were the University of Otago and the University of Canterbury in New Zealand; the University of Guelph in Canada, Sheffield Hallam University of the United Kingdom, and Oulun Yliopisto in Finland.

Table 1. Performance analysis: Journal, country, and institute.

Rank	Journal	Pubs.	Country/Region	Pubs.	Institute	Pubs.
1	Journal of Hunger and Environmental Nutrition	22	United States	266	University of California, Davis	14
2	Journal of Extension	20	Canada	29	East Carolina University	12
3	Preventing Chronic Disease	13	United Kingdom	27	Cornell University	11
4	Agriculture and Human Values	12	Australia	18	The University of North Carolina at Chapel Hill	11
5	British Food Journal	11	New Zealand	16	University of South Carolina	10
6	Journal of Nutrition Education and Behavior	11	Czech Republic	8	Case Western Reserve University	9
7	Public Health Nutrition	11	Italy	8	Pennsylvania State University	9
8	International Journal of Consumer Studies	8	Japan	6	University of Washington, Seattle	8
9	Journal of Food Products Marketing	8	Netherlands	5	Michigan State University	8
10	Food Protection Trends	7	Spain	5	East Tennessee State University	7

Pubs.: Publications. Source: SCOPUS (24 September 2018).

3.2. Most-Cited Articles

Despite the fact that there are several publications documenting markets in various parts of the world, such as France [38], Norway [39,40], Austria [41], Lithuania [42], Taiwan [23,43], Argentina [6], Peru [18], Costa Rica [16,44,45], and Africa [46,47], the most frequently cited publications are, primarily, documented cases in North America and Western Europe (Table 2). Most of them are research papers focusing on specific case studies, food safety, and some with some theoretical contribution to existing theories.

Table 2. The 15 most-cited articles on farmers' markets.

Rank	Authors	Year	Title	Type	Journal	Cited by
1	Holloway and Kneafsey [48]	2000	Reading the space of the farmers' market: A preliminary investigation from the UK	Research paper: Conceptualization based on a pilot study on Stratford farmers' market	Sociologia Ruralis	187
2	Kirwan [49]	2004	Alternative strategies in the UK agro-food system: Interrogating the alterity of farmers' markets	Research paper: Examines engagement based on farmers' market case studies in the UK	Sociologia Ruralis	177
3	Brown and Miller [7]	2008	The impacts of local markets: A review of research on farmers' markets and community supported agriculture (CSA)	Review	American Journal of Agricultural Economics	174
4	McCormack, Laska, Larson and Story [9]	2010	Review of the nutritional implications of farmers' markets and community gardens: A call for evaluation and research efforts	Review	Journal of the American Dietetic Association	151
5	Trobe [50]	2001	Farmers' markets: Consuming local rural produce	Research paper: Focused on customers at the Stour Valley Farmers' Market	International Journal of Consumer Studies	139
6	Brown [15]	2002	Farmers' market research 1940-2000: An inventory and review	Review	American Journal of Alternative Agriculture	129
7	Kirwan [2]	2006	The interpersonal world of direct marketing: Examining conventions of quality at UK farmers' markets	Research paper: Non-economic benefits based on 5 case studies	Journal of Rural Studies	121
8	Alkon and McCullen [51]	2011	Whiteness and farmers' markets: Performances, perpetuations... contestations?	Research paper: How whiteness is performed and perpetuated in farmers' markets	Antipode	97
9	Smithers, et al. [52]	2008	Unpacking the terms of engagement with local food at the Farmers' Market: Insights from Ontario	Research paper: Empirical analysis (sellers, shoppers and managers) at 15 markets in Ontario, Canada	Journal of Rural Studies	97
10	Porten, et al. [53]	2006	A super-spreading ewe infects hundreds with Q fever at a farmers' market in Germany	Research paper: Epidemiological outbreak due to sheep	BMC Infectious Diseases	93
11	Larsen and Gilliland [54]	2009	A farmers' market in a food desert: Evaluating impacts on the price and availability of healthy food	Research paper: Examines the impact of the introduction of a farmers' market	Health and Place	88
12	Slocum [55]	2008	Thinking race through corporeal feminist theory: Divisions and intimacies at the Minneapolis Farmers' Market	Research paper: Racial division and intimacy at the Minneapolis Farmers' Market	Social and Cultural Geography	83
13	Hunt [56]	2007	Consumer interactions and influences on farmers' market vendors	Research paper: A survey of 216 shoppers at eight farmers' markets in Maine	Renewable Agriculture and Food Systems	81
14	McGrath, et al. [57]	1993	An ethnographic study of an urban periodic marketplace: Lessons from the Midville farmers' market	Research paper: Case study to capture patters of farmer/vendor behaviors and buyer-seller interactions	Journal of Retailing	75
15	Hinrichs, et al. [58]	2004	Social learning and innovation at retail farmers' markets	Research paper: Survey of vendors in California, New York and Iowa	Rural Sociology	74

Source: SCOPUS (24 September 2018).

3.3. Science Mapping

Term co-occurrence word analysis provides an overview of the trends in research, as it reflects the topics covered. The analysis was performed using VOSviewer software. The VOSviewer results established 779 terms; of these, those with occurrences greater than 10 were retained, and generic terms related to the process of research (review, introduction, sample) were excluded. Thus, 94 items were retained and organized into 3 clusters with 2966 links (Figure 2). The three clusters were as follows: cluster one, relating to consumers and farmers' markets in general; cluster two, relating to health programs; and cluster three, relating to the concept of food safety.

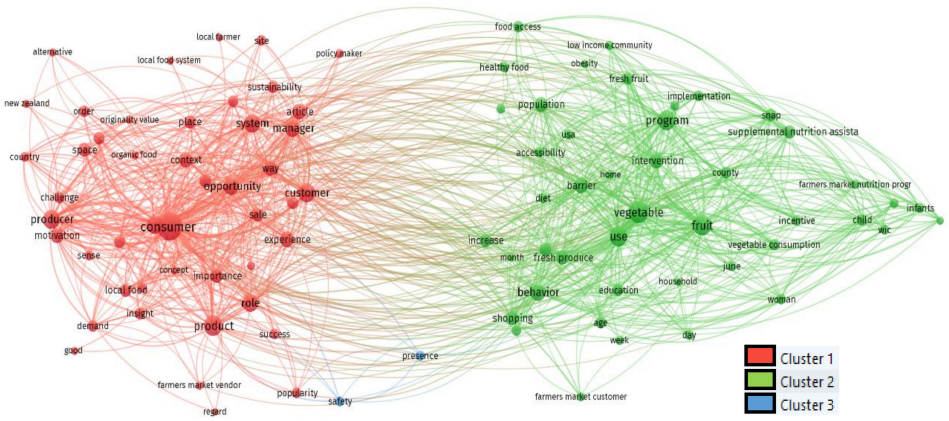

Figure 2. Network visualization using the VOSviewer program (own elaboration).

When the analysis was performed after excluding the publications related to health, with a total of 295 publications, the VOSviewer results showed 68 terms; of these, those that had occurrences greater than 10 were kept, and generic terms related to the process of research (sample, farmers market, problem, literature, purpose, interview, participant, case study) were excluded. In total, 60 items were retained and distributed into 4 clusters with 1300 links (Figure 3). The first cluster relates to shoppers, the second to the manager and support programs, the third cluster deals with the product, and the axis of cluster four is the community. In the case of shoppers or consumers, the focus has been on understanding their motivations, attitudes, and interests, which allows for insights and segmentation. The manager has been related to access and participation at the market, the uses of the areas, and the public programs they manage. The product cluster integrates research related to prices, information, marketing, products, variety, and vendors as factors related to success. The final cluster includes topics linked to health and sustainability. The findings show the relevance of consumers, vendors, the community, and the manner in which the market is managed.

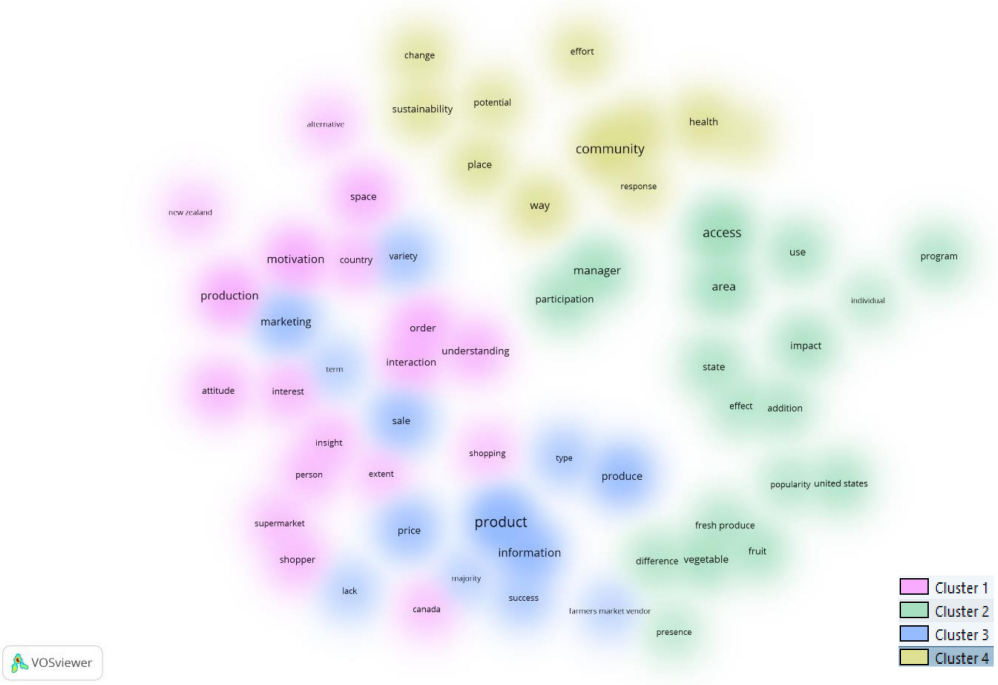

Figure 3. Density visualization using the VOSviewer program, excluding publications in the field of health (own elaboration).

4. Discussion

This study used bibliometric tools in order to provide further understanding regarding research on farmers' markets. The results show that this research topic has been studied in three major aspects: the market and consumers, population health support programs, and food safety. The first major aspect is divided into five areas: consumer, community, product, administrators, and support programs.

Based on the results obtained, Figure 4 shows a partial framework for understanding farmers' markets. It does not consider population health support programs or food safety publications, yet these publications can be categorized under government actions that influence both the community and the rest of the components of the farmers' markets. The important components of the system represent the starting point: vendors, intrinsic attributes of the market, consumers, support organizations/institutions/individuals, and the community, which relate to all of the components at different levels. In the case of vendors or sellers, studies have documented that markets do not only have the participation of farmers, but also food, groceries, prepared food, and even arts and crafts [59]. As the researchers had focused mainly on consumers, there is a lack of systematic information regarding the proportion of farmers compared to other type of sellers—under such conditions, should these markets should still be considered farmers' markets? One of the main reasons for the reduced participation of farmers might be the seasonality and availability of local fruits and vegetables, allowing the participation of food processors, some of them being both processors and farmers, as a strategy for income diversification [38].

On the other side of the framework are the consumers, where their characteristics and motivations have been well studied. The third main component is the community that supports the farmers' market. A combination of these three main components define the markets' attributes, which gives them particular traits. Approaching farmers' markets under a system view is not common in literature, so there is a research gap. Some characteristics of each of these components follow individually.

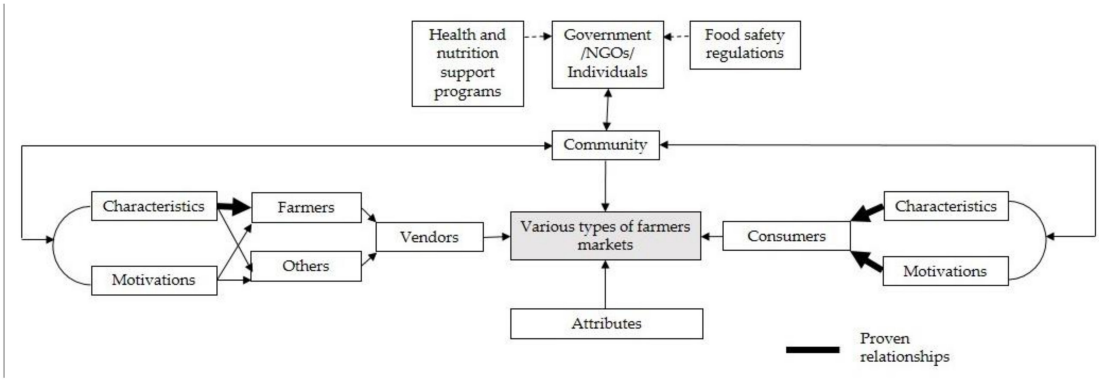

Figure 4. Partial framework for understanding farmers' markets.

4.1. Intrinsic Attributes of the Market

Farmers' markets are public areas where fruit and vegetable producers gather to sell their produce directly to consumers; unlike supermarkets, which are structured, closed spaces, farmers' markets do not show defined patterns. One of their characteristics is that the consumers believe that these markets have a special atmosphere, as they are considered friendly, personal, and smaller places compared to supermarkets [60], so they are considered to be more focused on people [2]. This aspect is reinforced by the manner in which the vendors are attired: jeans and t-shirts, which fits the stereotype of producers, and it is common for the consumers to ask the producers for advice [57].

Some of the attributes of the markets that have been analyzed are the origin of the products (local distinctiveness vs. no distinctiveness of origin), the type of property (public vs. private), and location (urban, semi-urban, or rural) [28]. Other aspects that have been documented are the convenience factors for the consumer: distance (time); hours and days of operation; size (number of

stands); type of items offered (vegetables and fruits, meat products, bread, fresh meat, dairy products, handicrafts); and, whether there are picnic areas and live music [61,62].

4.2. Vendors

According to the literature, the majority of participants in farmers' markets are agricultural producers of fruits and vegetables who have permanent stalls in the market; however, in some cases it has been documented that in larger markets, up to 40% of the stalls offer non-agricultural products, such as handicrafts [13,63]. One of the reasons why processed products are sold is to provide the consumer with greater variety; otherwise, the markets would be limited to the seasonality of primary production and would lose viability [49]. Furthermore, it has been shown that vendors prefer to participate in larger markets that might attract more consumers [64], which becomes a reason to accept vendors offering other types of products than fruits and vegetables. The number of vendors in the markets is highly variable and can be between 20 and 100 [63].

4.3. Consumers

This section can be divided into two major sub-concepts: characteristics and motivations (Table 3). It has been established that the consumers who frequent these markets in the United States are generally Caucasian and that they are older, more educated, and earn a higher income than the average city resident, and that women attend more frequently than men [57,65]. For consumers who are interested in purchasing local foods, price is not a limiting factor [66]; consumers usually travel a maximum of 10 kilometers in order to shop in these types of markets, and they are described as frequent customers who tend to go to the farmers market every week [67–72]. As a result of the limitations and unpredictability in the availability of products at this type of market, consumers tend to complement their supermarket shopping by shopping in farmers' markets, which they do in an impulsive manner [57].

The main motivations for consumers to go to farmers' markets are listed in Table 3. The table was based on the most-cited articles that focused on consumer characteristics and motivations. The possibility to interact with farmers and vendors as well as the freshness of the products are the main factors, followed by quality, support of the local economy, and to a lesser extent the search for prepared food or arts, crafts, and prepared food. A more recent study based on consumer experience through self-expression on social networks found that consumers valued six major characteristics: #Organic, #Fresh, #Food, #Local, #Vegan, and #Healthy [73], indicating that some consumers had introduced new tendencies in their food choices according to a vegan and zero waste lifestyle.

Another one of the contributions that have been made is consumer typology. For example, McGrath, Sherry Jr and Heisley [57] classify them by the time of day they arrive to the market and by their behavior—whether they shop right away or socialize first, and Hunt [56] divides them according to their motivations—lifestylers, seasonal shoppers, and utilitarians. Pilař et al. [73] classify them according to their orientations. Therefore, there is not a single accepted typology of farmers' market consumer.

Table 3. Characteristics and motivations of consumers studied based on selected papers.

	Brown and Miller [7]	Brown [15]	Alkon and McCullen [51]	Smithers, Lamarche and Joseph [52]	Hunt [56]	McGrath, Sherry Jr and Heisley [57]	Dodds, et al. [74]	Spilková, Fendrychová and Syrovátková [17]	Gumirakiza, Curtis and Bosworth [61]
Characteristics									
Age	*	*		*	*	*	*		*
Sex	*			*		*	*	*	*
Visits to market	*	*	*			*			*
Education	*	*	*		*		*		
Residence (km)		*	*			*	*		
Income					*	*		*	*
Family size		*		*	*			*	
Occupation		*							*
Ethnicity						*	*		*
Marital status		*						*	
Amount spent								*	
Family members			*						
Motivations									
Support/interact with producers		*	*	*	*	*	*		
Fresh products	*	*			*	*		*	*
Producer origin	*		*	*	*	*		*	
Atmosphere	*	*	*			*		*	
Fun/distraction	*				*		*	*	*
Environment friendly	*				*			*	*
Food safety	*				*		*		*
Social interaction	*		*			*			*
Price/value for money		*			*		*	*	
Quality		*					*	*	
Health/diet					*			*	*
Organic products			*		*				
Improve local economy					*		*		
Exclusive					*				
Variety							*		
Prepared food									*
Crafts, art, and packaged foods									*
Other		*		*	*	*	*	*	*
Number of respondents	N/A	N/A	N/A	237	216	N/A	300	24	1488
Typology †	Yes		No	No	Yes	Yes	Yes	No	Yes

N/A: Not Available. (*) Studied (†) It establishes if the author made a consumer typology; Source: Own elaboration.

4.4. Government/Non-Governmental Organizations (NGO)/Individual Support

The internal organization of the markets varies in the literature; according to McGrath, Sherry Jr and Heisley [57], the vendors with the most seniority tend to establish themselves in selling locations near the center of the market, while new and sporadic vendors are concentrated on the outskirts near the street. These authors have documented that there is a certain degree of competition among vendors and that they are not formally organized; any dispute is brought before the director of the market or the city's Farmers Market Commission. In countries such as the United States, the markets are regulated by municipal councils, which issue the vendor permits and resolve disputes between vendors [57]. In other countries, the government does not keep records regarding farmers' markets and it does not regulate them. In many of these cases, non-profit organizations monitor and promote such initiatives, for example NALOK in the Czech Republic [63].

In some cases, neither the vendors nor the organizers of the markets want to invest in the development of the market, so most of the initiatives depend on a small number of enthusiasts who set out to solve problems related to infrastructure, parking, selling space, or space rent payment [63]; this creates problems with "free riders", i.e., non-paying beneficiaries [27].

4.5. The Community

The community aspect has been dealt with in these studies as the relationship between the producers and the well-being of the community, since these markets contribute to the sustainability of local food systems by promoting the viability of the production units, for example by increasing the number of jobs and increasing income from sales [7,15,63]. They also contribute to the improvement of public health through the availability to the community of natural and healthy foods [65]. In addition, they are social places where people can interact and develop a sense of community, which is another aspect that is important to the local authorities [64]. Thus, the concept of community is presented in several ways; with respect to the producers, to the consumers, and to the interactions between the two groups [75].

Farmers' markets were created with the idea of providing spaces for direct sale from the producer to the consumer, and they were started in communities where the interactions would promote collective identification, based on common interests and needs, creating a sense of belonging [76]. However, it has been observed that sometimes these markets do not work because producers do not participate, so there is a lack of vendors which makes the market unattractive for customers [77]; thus, they do not become places where the producers actually manage to form a community with the consumers as expected.

Another aspect of the term "community" that has emerged in previous studies is the sense of community that is generated within the same market dynamic. According to McGrath, Sherry Jr and Heisley [57], farmers' markets are socially constructed spaces where the producers interact in different ways; they support each other when one of them has problems and they can even act as collaborators, not always as competitors. This dynamic is not observed in supermarkets, differentiating the farmers' markets somewhat from the massive retail sale involved in the former.

4.6. Applied Theories

Most of the studies on farmers' markets are qualitative and descriptive, lacking a theoretical framework. However, some studies have used farmers' markets in order to analyze and discuss theoretical concepts. The following are some examples of the theories addressed: cultural domination, e.g., spaces dominated by Caucasians [51], embeddedness [49,56], conventions theory, e.g., social construction of the definition of food quality [2], feminist theory on the body and racism [55], social networks [78], governance [79], social support, exchange, and resilience [80], transaction cost analysis [81], and planned behavior [23]. Invariably, farmers' markets are good scenarios where it is

possible to assess or even develop theories, so it is likely that in the future this type of study will be more common.

5. Conclusions

Farmers' markets are an initiative that has been implemented at the global level but not uniformly so; some place greater emphasis on agricultural producers while others offer a variety of products, which is evidence for the assertion that there is no single type of farmers market. These spaces differ from supermarkets in the atmosphere that they provide to their consumers, who shop there for various reasons, from buying fresh and nutritious products to socializing with vendors. This allows us to understand that there is not a single type of consumer at these markets, either. The motivations for shopping at farmers' markets cannot be described as the same as the reasons why consumers go to a supermarket; it is for this reason that they have continued to be an option for shopping in several countries, as well as a subject of research that remains relevant.

In recent decades, researchers have advanced in studying the social and non-economic factors that impact farmers' markets, but the main focus has been on their economic impact and profiling the consumer. From the publications available, we can conclude that farmers' markets are white, urban, middle-class oriented spaces. Originally, they played an important role in providing raw fresh fruits and vegetables, and nowadays they also provide nutritious and homemade prepared, packaged, and ready to-eat food for urban and rural communities. Still, they need more public-private councils to facilitate planning of market operations and increase opportunities for the attendance of new customers. These spaces tend to rely on volunteer managers who must devote their time to operating the market, becoming a central piece for its success or failure.

An important limitation of this study was that the publications related to state-funded public health actions and food assistance programs associated with farmers' markets were not included in the analysis. In the United States, these programs have expanded farmers' markets and allowed low-income minorities to attend these spaces. The way this type of consumer interacts with vendors, as well as the social impact on shaping the space compared to a "traditional" consumer, should also be discussed in future research [10]. As this study concentrates on reviewing the literature from 1979 to 2018 in order to create a partial framework for understanding farmers' markets, it mainly considered the most-cited articles that were generally not the most recent contributions. Therefore, a continued review focusing only on the latest contributions under a systemic view will be important in order to increase our contemporary knowledge of alternative food networks for local and sustainable production and consumption of food.

Promotion of farmers' markets by policymakers has been a good way to improve the availability of fresh and nutritious food for communities, yet there are some issues to consider. One of them is to ensure food safety regulations; this has become an important issue for governments and society, combined with a reduced availability of resources for inspection and market deregulation, as well as an increase in prepared, packaged, ready to-eat products available at these spaces [13]. Another important issue is that governments need to help educate the consumer regarding the differences between alternative agriculture and large-scale or conventional agriculture; this will increase the demand for more nutritious and environment-friendly food [82]. Finally, public policy should attempt to promote a green economy, and one way to achieve this is to connect small farmers with alternative food networks.

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References

1. Brown, A. Counting farmers markets. *Geogr. Rev.* **2001**, *91*, 655–674. [CrossRef]
2. Kirwan, J. The interpersonal world of direct marketing: Examining conventions of quality at UK farmers' markets. *J. Rural Stud.* **2006**, *22*, 301–312. [CrossRef]
3. Fendrychová, L.; Jehlička, P. Revealing the hidden geography of alternative food networks: The travelling concept of farmers' markets. *Geoforum* **2018**, *95*, 1–10. [CrossRef]
4. Zikiene, K.; Pileliene, L. Research of factors influencing customer switching behaviour in farmers' markets in Lithuania. In Proceedings of the 22nd Annual International Scientific Conference—Research for Rural Development, New York, NY, USA, 18–20 May 2016; pp. 150–157.
5. Malagon-Zaldua, E.; Begiristain-Zubillaga, M.; Onederra-Aramendi, A. Measuring the economic impact of farmers' markets on local economies in the basque country. *Agriculture* **2018**, *8*, 1–14. [CrossRef]
6. Leslie, I.S. Improving farmers markets and challenging neoliberalism in Argentina. *Agric. Hum. Values* **2017**, *34*, 729–742. [CrossRef]
7. Brown, C.; Miller, S. The impacts of local markets: A review of research on farmers markets and community supported agriculture (CSA). *Am. J. Agric. Econ.* **2008**, *90*, 1296–1302. [CrossRef]
8. Kahin, S.A.; Wright, D.S.; Pejavara, A.; Kim, S.A. State-level farmers market activities: A review of CDC-Funded state public health actions that support farmers markets. *J. Public Health Manag. Pract.* **2017**, *23*, 96–103. [CrossRef] [PubMed]
9. McCormack, L.A.; Laska, M.N.; Larson, N.I.; Story, M. Review of the nutritional implications of farmers' markets and community gardens: A call for evaluation and research efforts. *J. Am. Diet. Assoc.* **2010**, *110*, 399–408. [CrossRef] [PubMed]
10. Larimore, S. Cultural boundaries to access in farmers markets accepting Supplemental Nutrition Assistance Program (SNAP). *Qual. Sociol.* **2018**, *41*, 63–87. [CrossRef]
11. Mino, R.; Chung, K.; Montri, D. A look from the inside: Perspectives on the expansion of food assistance programs at Michigan farmers markets. *Agric. Hum. Values* **2018**. [CrossRef]
12. Bellemare, M.F.; Nguyen, N.J. Farmers markets and food-borne illness. *Am. J. Agric. Econ.* **2018**, *100*, 676–690. [CrossRef]
13. Behnke, C.; Gaulke, C.; Almanza, B. State health department directors' insights into farmers' markets inspection practices and resources. *Food Prot. Trends* **2016**, *36*, 183–191.
14. Li, K.; Weidhaas, J.; Lemonakis, L.; Khouryieh, H.; Stone, M.; Jones, L.; Shen, C. Microbiological quality and safety of fresh produce in West Virginia and Kentucky farmers' markets and validation of a post-harvest washing practice with antimicrobials to inactivate Salmonella and Listeria monocytogenes. *Food Control* **2017**, *79*, 101–108. [CrossRef]
15. Brown, A. Farmers' market research 1940–2000: An inventory and review. *Am. J. Altern. Agric.* **2002**, *17*, 167–176. [CrossRef]
16. Aguirre, J.A. The farmer's market organic consumer of Costa Rica. *Br. Food J.* **2007**, *109*, 145–154. [CrossRef]
17. Spilková, J.; Fendrychová, L.; Syrovátková, M. Farmers' markets in Prague: A new challenge within the urban shoppingscape. *Agric. Hum. Values* **2013**, *30*, 179–191. [CrossRef]
18. Fan, Q.; Salas Garcia, V.B. Information access and smallholder farmers' market participation in Peru. *J. Agric. Econ.* **2018**, *69*, 476–494. [CrossRef]
19. Michelson, H.C. Influence of neighbor experience and exit on small farmer market participation. *Am. J. Agric. Econ.* **2017**, *99*, 952–970. [CrossRef]
20. Montoya, P.A.T.; Valencia, N.M. Collective action and association of heterogeneities in agroecological farmers' markets: Asoproorgánicos (Cali, Colombia). *Rev. Colomb. Sociol.* **2018**, *41*, 83–101.
21. Vélez, C.A.G.; Riveros, M.M.; González, D.F.G. "I buy farm products": An approach to the social representations of farmers' market consumers. *Rev. Colomb. Sociol.* **2018**, *41*, 61–81.
22. Chen, Y.; Liu, C.Y. Self-employed migrants and their entrepreneurial space in megacities: A Beijing farmers' market. *Habitat Int.* **2019**, *83*, 125–134. [CrossRef]
23. Lee, T.R.; Liao, Y.C.; Li, J.M. Marketing strategies of fishery products for supermarkets and farmers' markets in Taiwan. *J. Food Prod. Mark.* **2011**, *17*, 420–440. [CrossRef]
24. Burns, C.; Cullen, A.; Briggs, H. The business and politics of farmers' markets: Consumer perspectives from Byron Bay, Australia. *Australas. J. Reg. Stud.* **2018**, *24*, 168–190.

25. Forné, F.F. Local cheese in farmers' markets: Community and tourism development in Canterbury, New Zealand. *e-Rev. Tour. Res.* **2015**, *12*, 281–289.
26. McNeill, L.; Hale, O. Who shops at local farmers' markets? Committed loyals, experiencers and produce-orientated consumers. *Australas. Mark. J.* **2016**, *24*, 135–140. [CrossRef]
27. Lutz, C.; Tadesse, G. African farmers' market organizations and global value chains: Competitiveness versus inclusiveness. *Rev. Soc. Econ.* **2017**, *75*, 318–338. [CrossRef]
28. Saili, A.R.; Rola-Rubzen, M.F.; Batt, P.J. Review of farmers' markets. *Stewart Postharvest Rev.* **2007**, *6*, 1–6. [CrossRef]
29. Young, I.; Thaivalappil, A.; Reimer, D.; Greig, J. Food safety at farmers' markets: A knowledge synthesis of published research. *J. Food Prot.* **2017**, *80*, 2033–2047. [CrossRef]
30. O'Dare Wilson, K. Community food environments and healthy food access among older adults: A review of the evidence for the Senior Farmers' Market Nutrition Program (SFMNP). *Soc. Work Health Care* **2017**, *56*, 227–243. [CrossRef]
31. Byker, C.J.; Misyak, S.; Shanks, J.; Serrano, E.L. Do farmers' markets improve diet of participants using federal nutrition assistance programs? A literature review. *J. Ext.* **2013**, *51*, 6FEA5. Available online: https://www.joe.org/joe/2013december/a5.php (accessed on 29 January 2019).
32. Freedman, D.A.; Vaudrin, N.; Schneider, C.; Trapl, E.; Ohri-Vachaspati, P.; Taggart, M.; Ariel Cascio, M.; Walsh, C.; Flocke, S. Systematic review of factors influencing farmers' market use overall and among low-income populations. *J. Acad. Nutr. Diet.* **2016**, *116*, 1136–1155. [CrossRef]
33. Byker, C.; Shanks, J.; Misyak, S.; Serrano, E. Characterizing farmers' market shoppers: A literature review. *J. Hunger Environ. Nutr.* **2012**, *7*, 38–52. [CrossRef]
34. Tang, M.; Liao, H.; Wan, Z.; Herrera-Viedma, E.; Rosen, M. Ten years of sustainability (2009 to 2018): A bibliometric overview. *Sustainability* **2018**, *10*, 1655. [CrossRef]
35. Centre for Science and Technology Studies. *VOSviewer*; Leiden University: Leiden, The Netherlands, 2018.
36. Van Eck, N.J.; Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics* **2010**, *84*, 523–538. [CrossRef]
37. Kan Yeung, A.W.; Goto, T.K.; Leung, W.K. The changing landscape of neuroscience research, 2006–2015: A bibliometric study. *Front. Neurosci.* **2017**, *11*, 120.
38. Tchoukaleyska, R. Regulating the farmers' market: Paysan expertise, Quality production and local food. *Geoforum* **2013**, *45*, 211–218. [CrossRef]
39. Åseb, K.; Jervell, A.M.; Lieblein, G.; Svennerud, M.; Francis, C. Farmer and consumer attitudes at farmers markets in Norway. *J. Sustain. Agric.* **2007**, *30*, 67–93. [CrossRef]
40. Veidal, A.; Flaten, O. Why do farm entrepreneurs sell at farmers' markets? Insights from Norway. In *The Handbook of Research on Entrepreneurship in Agriculture and Rural Development*; Alsos, G.A., Carter, S., Ljunggren, E., Welter, F., Eds.; Edward Elgar Publishing: Cheltenham, UK, 2011; pp. 199–217.
41. Klimek, M.; Bingen, J.; Freyer, B. Metropolitan farmers markets in Minneapolis and Vienna: A values-based comparison. *Agric. Hum. Values* **2018**, *35*, 83–97. [CrossRef]
42. Blumberg, R. Placing alternative food networks: Farmers' markets in Post-Soviet Vilnius, Lithuania. In *Ethical Eating in the Postsocialist and Socialist World*; Jung, Y., Klein, J.A., Caldwell, M.L., Eds.; University of California Press: Berkeley, CA, USA, 2014; pp. 69–92.
43. Wang, E.S.T. Do Farmers' Market and Specialty Food Store Customers Differ in the Effects of Perceived Utilitarian and Hedonic Shopping Values? *J. Mark. Channels* **2014**, *21*, 77–86. [CrossRef]
44. Díaz-Knauf, K.; Vargas, D.; Aguilar, F.; Sommer, R. A comparison of produce prices in Costa Rica: farmers' markets, produce markets and supermarkets. *J. Consum. Stud. Home Econ.* **1992**, *16*, 109–117. [CrossRef]
45. González, J.A.A. Market trends and consumer profile at the organic farmers market in Costa Rica. *Br. Food J.* **2009**, *111*, 498–510. [CrossRef]
46. Eriksen, S.; Lutz, C.; Tadesse, G. Social desirability, opportunism and actual support for farmers' market organisations in Ethiopia. *J. Dev. Stud.* **2018**, *54*, 343–358. [CrossRef]
47. Suarez-Balcazar, Y.; Martinez, L.I.; Cox, G.; Jayraj, A. African Americans' views on access to healthy foods: What a farmers' market provides. *J. Ext.* **2006**, *44*, 31–43.
48. Holloway, L.; Kneafsey, M. Reading the space of the farmers' market: A preliminary investigation from the UK. *Sociol. Rural.* **2000**, *40*, X–299. [CrossRef]

49. Kirwan, J. Alternative strategies in the UK agro-food system: Interrogating the alterity of farmers' markets. *Sociol. Rural.* **2004**, *44*, 395–415. [CrossRef]
50. Trobe, H.L. Farmers' markets: Consuming local rural produce Farmers' markets: Local rural produce. *Int. J. Consum. Stud.* **2001**, *25*, 181–192. [CrossRef]
51. Alkon, A.H.; McCullen, C.G. Whiteness and farmers markets: Performances, perpetuations . . . contestations? *Antipode* **2011**, *43*, 937–959. [CrossRef]
52. Smithers, J.; Lamarche, J.; Joseph, A.E. Unpacking the terms of engagement with local food at the Farmers' Market: Insights from Ontario. *J. Rural Stud.* **2008**, *24*, 337–350. [CrossRef]
53. Porten, K.; Rissland, J.; Tigges, A.; Broll, S.; Hopp, W.; Lunemann, M.; Van Treeck, U.; Kimmig, P.; Brockmann, S.O.; Wagner-Wiening, C.; et al. A super-spreading ewe infects hundreds with Q fever at a farmers' market in Germany. *BMC Infect. Dis.* **2006**, *6*, 147. [CrossRef]
54. Larsen, K.; Gilliland, J. A farmers' market in a food desert: Evaluating impacts on the price and availability of healthy food. *Health Place* **2009**, *15*, 1158–1162. [CrossRef]
55. Slocum, R. Thinking race through corporeal feminist theory: Divisions and intimacies at the Minneapolis Farmers' Market. *Soc. Cult. Geogr.* **2008**, *9*, 849–869. [CrossRef]
56. Hunt, A.R. Consumer interactions and influences on farmers' market vendors. *Renew. Agric. Food Syst.* **2007**, *22*, 54–66. [CrossRef]
57. McGrath, M.A.; Sherry Jr, J.F.; Heisley, D.D. An ethnographic study of an urban periodic marketplace: Lessons from the midville farmers' market. *J. Retail.* **1993**, *69*, 280–319. [CrossRef]
58. Hinrichs, C.C.; Gillespie, G.W.; Feenstra, G.W. Social learning and innovation at retail farmers' markets. *Rural Sociol.* **2004**, *69*, 31–58. [CrossRef]
59. Morckel, V. Patronage and access to a legacy city farmers' market: A case study of the relocation of the Flint, Michigan, market. *Local Environ.* **2017**, *22*, 1268–1289. [CrossRef]
60. Sommer, R.; Herrick, J.; Sommer, T.R. The behavioral ecology of supermarkets and farmers' markets. *J. Environ. Psychol.* **1981**, *1*, 13–19. [CrossRef]
61. Gumirakiza, J.D.; Curtis, K.R.; Bosworth, R. Who attends farmers' markets and why? Understanding consumers and their motivations. *Int. Food Agribus. Manag. Rev.* **2014**, *17*, 65–82.
62. Hofmann, C.; Dennis, J.H.; Marshall, M. Factors influencing the growth of farmers' markets in Indiana. *HortScience* **2009**, *44*, 712–716.
63. Spilková, J.; Perlín, R. Farmers' markets in Czechia: Risks and possibilities. *J. Rural Stud.* **2013**, *32*, 220–229. [CrossRef]
64. Schmit, T.M.; Gómez, M.I. Developing viable farmers markets in rural communities: An investigation of vendor performance using objective and subjective valuations. *Food Policy* **2011**, *36*, 119–127. [CrossRef]
65. Conner, D.; Colasanti, K.; Ross, R.B.; Smalley, S.B. Locally grown foods and farmers markets: Consumer attitudes and behaviors. *Sustainability* **2010**, *2*, 742–756. [CrossRef]
66. Darby, K.; Batte, M.T.; Ernst, S.; Roe, B. Decomposing local: A conjoint analysis of locally produced foods. *Am. J. Agric. Econ.* **2008**, *90*, 476–486. [CrossRef]
67. Besik, D.; Nagurney, A. Quality in competitive fresh produce supply chains with application to farmers' markets. *Socio-Econ. Plan. Sci.* **2017**, *60*, 62–76. [CrossRef]
68. Carey, L.; Bell, P.; Duff, A.; Sheridan, M.; Shields, M. Farmers' Market consumers: A Scottish perspective. *Int. J. Consum. Stud.* **2011**, *35*, 300–306. [CrossRef]
69. Godfray, H.C.J.; Beddington, J.R.; Crute, I.R.; Haddad, L.; Lawrence, D.; Muir, J.F.; Pretty, J.; Robinson, S.; Thomas, S.M.; Toulmin, C. Food security: The challenge of feeding 9 billion people. *Science* **2010**, *327*, 812–818. [CrossRef] [PubMed]
70. Jilcott Pitts, S.B.; Gustafson, A.; Wu, Q.; Mayo, M.L.; Ward, R.K.; McGuirt, J.T.; Rafferty, A.P.; Lancaster, M.F.; Evenson, K.R.; Keyserling, T.C.; et al. Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutr. J.* **2014**, *13*, 1. [CrossRef] [PubMed]
71. Szmigin, I.; Maddock, S.; Carrigan, M. Conceptualising community consumption: Farmers' markets and the older consumer. *Br. Food J.* **2003**, *105*, 542–550. [CrossRef]
72. Yu, H.; Gibson, K.E.; Wright, K.G.; Neal, J.A.; Sirsat, S.A. Food safety and food quality perceptions of farmers' market consumers in the United States. *Food Control* **2017**, *79*, 266–271. [CrossRef]
73. Pilař, L.; Balcarová, T.; Rojík, S.; Tichá, I.; Poláková, J. Customer experience with farmers' markets: What hashtags can reveal. *Int. Food Agribus. Manag. Rev.* **2018**, *21*, 755–770. [CrossRef]

74. Dodds, R.; Holmes, M.; Arunsopha, V.; Chin, N.; Le, T.; Maung, S.; Shum, M. Consumer choice and farmers' markets. *J. Agric. Environ. Ethics* **2014**, *27*, 397–416. [CrossRef]
75. Connell, D.J.; Smithers, J.; Joseph, A. Farmers' markets and the good "food" value chain: A preliminary study. *Local Environ.* **2008**, *13*, 169–185. [CrossRef]
76. Ander-Egg, E. *Metodología y Práctica del Desarrollo de la Comunidad*, 2nd ed.; Lumen: Buenos Aires, Argentina, 2003; p. 286.
77. Stephenson, G.; Lev, L.; Brewer, L. 'I'm getting desperate': What we know about farmers' markets that fail. *Renew. Agric. Food Syst.* **2008**, *23*, 188–199. [CrossRef]
78. Alia, K.A.; Freedman, D.A.; Brandt, H.M.; Browne, T. Identifying emergent social networks at a federally qualified health center-based farmers' market. *Am. J. Community Psychol.* **2014**, *53*, 335–345. [CrossRef]
79. Betz, M.E.; Farmer, J.R. Farmers' market governance and its role on consumer motives and outcomes. *Local Environ.* **2016**, *21*, 1420–1434. [CrossRef]
80. Garner, B. Communicating social support during crises at the farmers' market: A social exchange approach to understanding customer-farmer communal relationships. *Int. J. Consum. Stud.* **2017**, *41*, 422–430. [CrossRef]
81. Tankam, C. Supplying Nairobi with organic products: Some insights on farmer markets' organization. *Cah. Agric.* **2017**, 26.
82. Leiper, C.; Clarke-Sather, A. Co-creating an alternative: The moral economy of participating in farmers' markets. *Local Environ.* **2017**, *22*, 840–858. [CrossRef]