Papers

Scientific production on tourism-related rural entrepreneurship

Produção científica no empreendedorismo rural relacionado ao turismo

Producción científica sobre emprendimiento rural relacionado con el turismo

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Abstract

This study aimed to understand the scientific production on Rural Entrepreneurship and its connection to the Tourism sector. For that, the text mining method with articles and reviews was used. Through a specific analysis structure, dimensional words were extracted that characterize the themes: Social Entrepreneurship, Business Strategies, Gender, Local Socioeconomic Impact, Innovation and Competitiveness, Migration, and Technologies. These themes were previously selected from a systematic review. The results indicate India as the country that most studies on Rural Entrepreneurship, and where the theme of Gender has greater relevance. However, it was noted that the tourism sector is not significant in this region. It is in Spain that tourism activity shows a stronger link with entrepreneurship in rural areas. The areas of knowledge show that the studies are concentrated in Social Sciences and Business, Management, and Accounting. In short, this work presented a study to assist in a better understanding of the evolution of research on tourism as a way of undertaking in rural areas.

Resumo

Este estudo teve como objetivo compreender a produção científica sobre o Empreendedorismo Rural e a sua ligação ao setor de Turismo. Para tanto, foi utilizado o método de mineração de texto com artigos e reseñas. Por meio de uma estrutura de análise específica, extraíram-se palavras dimensionais que caracterizam as temáticas: Empreendedorismo Social, Estratégias de Negócio, Gênero, Impacto Socioeconômico Local, Inovação e Competitividade, Migração e Tecnologias. Esses temas foram previamente selecionados a partir de uma revisão sistemática. Os resultados indicam a Índia como o país que mais estuda sobre Empreendedorismo Rural, e onde a temática Gênero tem maior relevância. Contudo, notou-se que o setor do turismo não é expressivo nesta região. É na Espanha que a atividade turística demonstra uma ligação mais forte com o empreendedorismo no meio rural. As áreas do conhecimento evidenciam que os estudos estão concentrados em Ciências Sociais e Negócios, Gestão e Contabilidade. Em suma, esse trabalho apresentou um estudo a fim de auxiliar na melhor compreensão da evolução das pesquisas sobre turismo como forma de empreender no meio rural.

Resumen

El objetivo de este estudio fue comprender la producción científica sobre emprendimiento rural y su conexión con el sector turístico. Para eso, se utilizó el método de minería de texto con artículos y reseñas. A través de una estructura de análisis específica, se extrajeron palabras dimensionales que caracterizan los temas: emprendimiento social, estrategias empresariales, género, impacto socioeconómico local, innovación y competitividad, migración y tecnologías. Estos temas fueron seleccionados previamente de una revisión sistemática. Los resultados indican la India como el país que más estudia sobre emprendimiento rural, y donde el tema de género tiene mayor relevancia. Sin embargo, se observó que el sector turístico no es significativo en esta región. En España donde la actividad turística muestra un vínculo más fuerte con el espíritu empresarial en las zonas rurales.

Keywords:
Rural development;
Rural sustainability;
Rural management;
Agribusiness;
Rural multi-functionality.

Palavras-chave:
Desenvolvimento Rural.
Sustentabilidade rural.
Gestão rural.
Agronegócio.
Multi-funcionalidade rural.

Palabras clave:
Desarrollo Rural.
Sostenibilidad rural.
Manejo rural.
Agronegocios.
Multifuncionalidad rural.

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1 INITIAL CONSIDERATIONS

The agribusiness scenario has been changing over time. Such a change does not only occur in the economic context, but also in the social and environmental context, and ends up bringing new elements to rural spaces. According to Liang (2017), agricultural growth has been dampened by competition, intensification, and specializations, resulting in a gradual decline, making agriculture, therefore, to adapt to society's transitions in the economy and to respond to government policies to develop more sustainable practices.

Before these transformations, the rural environment was traditionally seen as a space for agricultural production and recognized as a place with limited dynamics and low diversification in technologies and products when compared to urban centers. This could lead one to believe that entrepreneurship in rural areas would be less developed, and with little innovation. However, the constant changes in the markets started to induce rural producers to adapt to the new dynamics and new consumption habits, which modified the demand, imposing the need for environmental protection, the concern with socioeconomic impacts and the management of the supply chains as a whole, among other strategic factors that are necessary for business sustainability.

Given this, it is recognized by professionals, scientists, and politicians that field workers increasingly need entrepreneurship, good management, and skills that are effective for the sustainability of their respective activities (Mcelwee, 2008; Pyysiäinen, Alistair, & McElwee, 2006).

It is now perceived that entrepreneurship in rural areas is not just an illusion or a simple advertising campaign, but has a profound impact on business growth and survival (Lans, Verstegen, & Mulder, 2011; Verhees, Kuipers, & Klopcic, 2011). In this way, rural entrepreneurship is defined as a strong element for rural economic development, ensuring added value to resources in rural areas, which includes different activities, such as agriculture, trade, and industry (Alabi & Famakinwa, 2019). In other words, the rural context started to make room for the development of non-agricultural activities. Thus, the productive function, previously restricted only to agriculture, started to encompass several other activities, such as handicrafts, the processing of natural products, and others related to environmental conservation and rural tourism (Kageyama, 2004).

Thus, there is an increase in the relevance of tourism as a way of undertaking in rural areas. Through rural tourism, it is possible to combine agricultural production with visitations, promoting, according to Sharpley and Vass (2006), the effective use of agribusiness labor and the generation of an additional source of income. Therefore, rural tourism has become a promising segment within agribusiness, being an interesting option for rural entrepreneurs.

Due to the importance of tourism in rural areas, it is necessary to understand the evolution of knowledge and scientific production, as this is the main basis for progress. Based on scientific evolution, human beings can overcome their problems and evolve in different ways. Understanding this evolution of knowledge is essential, as it is necessary to detect what the problems are and to understand them, to be able to solve them or, at least, control them.

Because of that, the present work aimed to address the scientific evolution of the theme of rural tourism as a way of the undertaking, so that it was possible to deepen the knowledge about some elements that are inserted in these topics. It is noteworthy that the development of science demonstrates that difficulties can be faced and solved constantly, making the role of science in humanity important for the progress of the world population.

2 MATERIAL AND METHODS

This study used the Text Mining process, based on the division proposed by Hippner and Rentzmann (2006). The process used consists of six steps, which can be seen in greater detail in Figure 1.
2.1 Definition of Tasks and Delimitation of Research

The concept of entrepreneurship related to the rural context is back to being studied more recently and, throughout the changes that took place in the field, “rural entrepreneurship” was proposed. This concept started to encompass more activities, in addition to agricultural ones, which includes and highlights tourism as an activity in rural areas. Because of this, the present study chose to use “Rural Entrepreneurship” and its relationship with “Rural Tourism” as the object of study. At first, Rural Entrepreneurship was analyzed, and then the research related to tourism within this theme.

After defining the research design, the search was carried out, in June 2019, in the SciVerse Scopus® databases, owned by Editor Elsevier® and by the Web of Science® (Institute for Scientific Information Knowledge). For this purpose, the expression Entrepreneur * And Rural was used in the English language, as the SciVerse Scopus® is an international base. The asterisk is used to search for derived words with the same radical. The “And” has the function of adding so that both words must be present in the searches found.

The research was delimited from the period of 1999 to June 2019, when the theme was most expressive in research. Besides, all documents in the form of a scientific article or review were included.

2.2 Selection of documents

In this research, 2,532 documents related to rural entrepreneurship were found and then went through a filtering process, by the reading of the titles, abstracts, keywords, and methodology. Out of these, 184 studies were eliminated, as they did not address the theme of rural entrepreneurship, leaving a total of 2,348 documents, which were tabulated and classified.

Also, there was a verification of which documents addressed only the rural environment and which also addressed the urban environment. There were 1,981 studies found in the first case and 351 in the second, demonstrating that most were focused exclusively on rural areas. Out of these documents, 288 were related to the tourism sector and, soon after, this data set was also analyzed separately (Figure 2).
After this stage of the research, the readings revealed that there were seven expressive themes because 1,220 documents were related to them, more than half of the total. Given this, it was decided to use Text Mining, as it is considered an intelligent technique for the treatment of a large volume of information (Talamini, Wubben, Padula, & Dewes, 2013). From it, it was possible to better understand how the themes in question are arranged within the scientific production on rural entrepreneurship and tourism.

After selecting and organizing the data, it was necessary to adjust the documents for the software and to make the word dictionaries (d-words). Lists of keywords that occur frequently within a given theme are called dictionaries. The present study analyzed seven expressive themes previously identified through a systematic review and, thus, seven distinct word dictionaries were created to characterize each of these topics. The analyzed themes were: Social Entrepreneurship, Business Strategies, Gender, Local Socioeconomic Impact, Innovation and Competitiveness, Migration, and Technologies. To make the dictionaries, a search was made in the databases for each of these subjects, using the same delimitations as previously done, but changing the search terms.

The documents found were tabulated using the title, summary, and keywords of all of them, thus obtaining seven different tables, which were separately adjusted and transferred to the QDA Miners ® software. Then, a word count was obtained with the WordStat® module of SIMStats ®. This software calculated the frequency of each word and the TF * IDF rate (frequency of the term multiplied by the inverse frequency of the document). According to Provales (2006), the more often a term occurs in a document, the more representative it is in the document's content.

From the analysis of these frequency lists, the words that most characterized each of the themes were selected and included in the rule sets. These are based on the joint occurrence of the terms, the WordStat ® software allows the construction of the rules in the dictionaries from operational commands, using Boolean operations with AND, OR and NOT and the proximity operations BEFORE, AFTER and NEAR. The “@” symbol is present before the word to indicate that a rule has been inserted.

This way, it was possible to create seven different lists, which were adjusted according to the context, and, later on, each one of them was tested. To perform this test, the classification performed with the documents found in the first search, related to rural entrepreneurship, was used, as previously described. These documents were revised based on a previous reading and 51 different themes were identified.

Thus, the sets of documents that were classified in the seven most expressive themes were selected and, with the aid of the WordStat® software, analyzed from the word dictionaries. The crossing of these data was made to verify that the dictionaries had the words adjusted to the theme, demonstrating whether they would be effective for their identification. The words that appeared in common in all the sets were excluded.
2.3 Text Mining

In the Text Mining process, the Wordstat ® module scans the electronic texts that make up the databases to be analyzed, identifying the presence of the terms in the Word Dictionaries. In this process, it is possible, from these quantitative results generated by the software to dimension the themes within these documents.

After the construction of the seven dictionaries, the knowledge of scientific production on rural entrepreneurship was extracted. In this extraction, in addition to the temporal analysis, it was possible to relate the themes to the countries where the studies took place, the area of knowledge, and the business sectors.

After this step, the group of documents linked to the tourism sector was analyzed. In other words, all articles and reviews that studied any activity or enterprise directly related to tourism were selected from these rural entrepreneurship data.

3 RESULTS AND DISCUSSION

In the last four years of the study period, there has been a significant increase in scientific interest in the theme of entrepreneurship linked to the rural context. The evolution of the amount of research on the topic can be seen in Figure 3.

![Figure 3](image_url)

**Figure 3** - Evolution in the number of publications of scientific papers on Scopus and Web of Science platforms, on the theme of Rural Entrepreneurship.

**Source:** Elaborated by the authors (2019).

3.1 Rural Entrepreneurship

Thus, we chose to study the theme of tourism in the context of rural entrepreneurship. The first analysis was related to the most discussed themes in Rural Entrepreneurship. The frequencies of these themes were dimensioned in the scientific production analyzed (Figure 4).

![Figure 4](image_url)

**Figure 4** - Frequency of the seven main themes in the documents referring to Rural Entrepreneurship, in the SciVerse Scopus® and Web of Science® databases, from January 1999 to June 2019.

**Source:** Elaborated by the authors (2019).

The most expressive theme was the Local Socioeconomic Impact. The majority of articles and reviews discuss or evaluate changes in society and the economy based on entrepreneurship. According to Baumol (1996), entrepreneurship is seen as an economic mechanism that can induce socioeconomic growth. For this reason, entrepreneurship becomes the mainstay of political campaign speeches (Honig, 2016). The Local Socioeconomic Impact is the
most frequent theme since articles also usually bring cases of specific localities and studies on the transformation of society and the economy in these regions.

The second most popular term is Business Strategies, a theme that is often present in entrepreneurship books. Analyzing recognized books in the field of entrepreneurship and with a significant number of citations in scientific articles, such as “Handbook of Entrepreneurship: Research, Entrepreneurship: An Interdisciplinary Survey and Introduction” of Acs and Audretsch (2005), “Creativity and Innovative Business Models” of Burger-Helmchen (2012) and “Entrepreneurship and Economic Growth” Audretsch, Lehmann and Keilbach (2006). The topic is present in studies in the area, possibly because these books are aimed at entrepreneurs or aspiring entrepreneurs, who tend to prefer more practical teachings about how business works.

Acs and Audretsch (2005), Burger-Helmchen (2012) and Audretsch, Lehmann and Keilbach (2006) highlight the dimensions of innovation and competitiveness and technologies. However, in articles and scientific reviews on Rural Entrepreneurship, the themes of Gender and Migration come first. Therefore, there is a greater interest in these social issues within the academy.

According to Tomazzoni (2016), entrepreneurs can be volunteers, those who are motivated to undertake, or involuntary, those who are forced to undertake for reasons beyond their control. People can be driven to undertake due to social circumstances.

We found a set of studies that puts entrepreneurship as a kind of tool, which would have the function of helping to solve or reduce social problems. Gender inequality and rural exodus are the most evident social problems within the research that addressed migration in the research analyzed on Rural Entrepreneurship.

For Dias, Rodrigues and Ferreira (2019), there are several interesting questions to analyze within the literature of agricultural entrepreneurship. The most important topics for these authors would be precisely these themes cited. In this sense, the aim was to analyze other aspects within scientific studies, such as the evolution of these themes over the years. In this case, it was counted until 2018, because 2019 has not yet ended before the end of this research (Figure 5).

**Figure 5** - Evolution of the seven main themes that occurred in the documents referring to Rural Entrepreneurship, in the SciVerse Scopus® and Web of Science® databases from 1999 to 2018.

**Source:** Elaborated by the authors (2019).

The theme of the Local Socioeconomic Impact remained the most discussed in most years and it is rarely covered by the topic of Business Strategies. The transformations in society and the economy of a locality through entrepreneurship have been the subject of greatest scientific interest for years.

From 2014, the theme of Gender was highlighted along with Socioeconomic Impact Local and Business Strategies themes. This may be related to the international context regarding social movements linked to feminism - a theory that supports the political, social, and economic equality of both sexes.

Throughout history, women have been organizing themselves in different ways and at different times. As a result, there was an accumulation of demands and achievements, being called “feminist waves” - relevant historical moments of effervescence in society and in the academy, where certain agendas and women's issues rise and dominate the debate.
The “first feminist wave” refers to the initial suffragist movement, originating in the 1850s, which fights for the right to vote for women (Crawford, 1999). The “second feminist wave” refers to the radical feminist movement from the 1960s to the 1980s, strongly influenced by Friedan’s “The Feminine Mystique” (1963), with a series of studies focused on the condition of women and against stereotypes. The “third feminist wave” is from the 1990s in defense of each woman’s freedom and freedom of choice (Gillis, Howie, & Munford, 2004).

In 2012, the “fourth feminist wave” emerged, which is defined by technology. The internet associated with social networks, such as Facebook, Twitter, Instagram, YouTube, Tumblr, and blogs used to contest misogyny and other examples of gender inequality (Chamberlain, 2017; Cochrane, 2014; Maclaran, 2015; Risman, 2017).

The gender theme starts to rise within the present study of Rural Entrepreneurship, two years after this emergence of the “fourth feminist wave”. The influence of women's social movements is also notable within other scientific productions due to the growing number of documents related to the theme of Gender in several areas of knowledge. Including entrepreneurship studies in general, research focuses on rural areas.

In addition to the time variable (years), the business sectors were also analyzed. We identified 77 different sectors by reading the selected documents on Rural Entrepreneurship. Based on this, the ten sectors with the highest frequency were chosen. Therefore, we dimension the distribution of the seven main themes within these data sets, thus making a relationship between themes and sectors (Figure 6).

Figure 6 - Frequency of the seven main themes within each of the ten business sectors that most occurred in the documents referring to Rural Entrepreneurship, in the SciVerse Scopus® and Web of Science® databases in the period from January 1999 - June 2019

Source: Elaborated by the authors (2019).

The main theme of the food sector, cooperatives, and communities, industries, social and educational programs, tourism, and universities was the local socio-economic impact. Thus, we see a closer relationship between these sectors and the social area. Bioenergy, internet, and digital technologies sectors presented technologies as their main object.

The most traditional sector of the rural environment, agricultural production, presented the main topic of Business Strategies. Besides, it was one of the sectors that most indicated an interest in Innovation and Competitiveness, demonstrating that agricultural entrepreneurship has a greater interest in the functioning of markets and companies.

The Banking and Financing sector differs from the others in its greater attention to gender. We identified several surveys that analyzed credit programs that aim to encourage female entrepreneurship, especially in developing countries. According to Patil and Kokate (2017), there was a rapid growth in these developing countries, such as China and India. However, progress has been uneven, making women more prone to poverty and having more difficulty accessing the labor market, education, and property rights.

Several studies have analyzed financing programs, such as the “Self-Help Group-Bank Linkage Program” of the National Bank for Agriculture and Rural Development (NABARD) in India, as instruments to solve the problem of gender inequality in entrepreneurship. These studies aim at the development of entrepreneurship and / or entrepreneurial characteristics that can be developed by the groups of women who received assistance to undertake.
From this analysis, we better understand the dynamics that occur in some countries. For this reason, we also verified the geographic distribution of the studies found. We found a total of 140 different countries spread across five continents: Africa, America, Asia, Europe, and Oceania. Some studies covered more than one region and others did not address specific regions.

The countries with the highest number of searches were: India (225), United States (203), China (175), Spain (86), South Africa (74), England (54), Italy (53), Australia (52), Sweden (52), Brazil (52), Bangladesh (48) and Finland (48). The twelve most frequent countries in the set of documents on Rural Entrepreneurship were related to the seven main themes from Text Mining (Figure 7).

![Figure 7 - Frequency of the seven main themes within each of the twelve countries with the highest occurrence in the documents related to Rural Entrepreneurship found in the SciVerse Scopus® and Web of Science® databases in the period from January 1999 - June 2019](image)

**Source:** Elaborated by the authors (2019).

We perceive a high Human Development Index (HDI) in the developed countries present on this list which addressed the theme of Local Socioeconomic Impact. According to Human Development Report Office (2018), Australia (HDI: 0.939), Sweden (HDI: 0.933), United States (HDI: 0.924), England (DH: 0.922) and Spain (HDI: 0.891), are ranked respectively in 3rd place, 7th, 13th, 14th and 26th in the list of the most developed countries in the world.

Brazil, Malaysia, and Italy are places that most approach Business Strategies. Research in these countries is closer to entrepreneurship books, that is, more focused on the functioning of markets and companies and less focused on the impacts caused to society.

The theme of Technology was the most discussed in studies in South Africa. According to Todd and Javalgi (2007), advances in information technology and improvements in communication infrastructure increase the opportunities for Small and Medium Enterprises (SMEs) to participate in global markets in developing countries. Abor and Quartey (2010) indicate that in the Republic of South Africa about 91% of formal business entities are SMEs, which contribute between 52 to 57% to GDP and provide about 61% of jobs.

The development of these companies is largely restricted by factors such as the lack of access to appropriate technology, limited access to international markets, and the existence of laws, regulations, and rules that impede the development of the sector (Lekhanya, 2014). Thus, the technology in this region is the object of interest for several researchers.

India also expressively addresses the theme of Technologies. According to the report by the *Associação Nacional de Empresas de Software e Serviços* (2017), India was ranked as the third-largest startup ecosystem in the world and the second most connected nation to the internet in the global ranking. Obviously, it is necessary to think about these data considering the high population density of this country, estimated at 1.37 billion people in 2019, second only to China (World Population Review Privacy, 2017). However, the topic of greatest interest in India was Gender and not technology. Just like Bangladesh, a country that is geographically and culturally similar.

According to Thomson Reuters Foundation (2017), a survey by 550 experts on women's issues found that India is the worst country for women to live in, being the most dangerous. According to Bortamuly, Goswami and Hazarika (2015), although women make up about half of the country's total population, their participation in formal economic
activities is low. Therefore, research on gender in this region is important. Studies demonstrate a relationship between entrepreneurship and the search for better social and economic conditions for women.

Another social problem found in the studies was Migration, a topic that stood out in studies in China. According to Ning and Qi (2017), several rural workers have migrated to work in urban areas since the beginning of China's economic reform in the late 1970s. The proportion of urban residents increased from 17.92% in 1978 to 49.86% in 2010 (Qin & Zhang, 2014). This number is even greater if taking into account workers who live in rural areas but work in urban centers, a situation that occurs due to institutional barriers and restrictions, such as the resident registration system called Hukou. In this system, most of these migrants cannot live in cities permanently without converting their rural Hukou to urban.

The expansion of rural-urban migrants in the country has also increased the number of self-employed workers. In view of this, a variety of policies emerged to encourage innovation and entrepreneurship. Due to this scenario, scientific production on the topic of Migration in China increased. Thus, in addition to the countries, the areas of knowledge, and distribution of themes in the studies were analyzed (Figure 8).

The concentration of studies in Rural Entrepreneurship was in the areas of Social Sciences and Business, with emphasis on the theme of Local Socioeconomic Impact, and Management and Accounting, where the Business Strategies theme stood out.

Social Sciences are the set of knowledge in the areas of Anthropology, Sociology, and Political Science. They differ from Physical or Natural Sciences in that they deal with people and social behavior. People are less predictable than non-human phenomena (Veal, 2006).

The same characteristics can be found in Business, Management, and Accounting studies, as they are inserted in the Administration area, which is defined by the Conselho Nacional de Desenvolvimento Científico e Tecnológico (2019) as an Applied Social Science.

The areas of knowledge of research on Rural Entrepreneurship are mostly linked to the behavior of man and society. Due to the complexity of these researches, they are considered less precise when compared to the areas of Exact Sciences, although they are relevant to society.

### 3.2 Rural Entrepreneurship and Tourism

When analyzing the sectors, tourism sector stood out within the studies on rural entrepreneurship (Figure 9), surpassing more traditional activities in the rural environment, such as agricultural production. According to Kageyama (2004), changes in the rural environment have given rise to the development of non-agricultural activities on rural properties. In other words, activities such as rural tourism are becoming more relevant in rural areas.
We performed the analysis of 288 documents related to the tourism sector, which were found in the first search on Rural Entrepreneurship literature. Thus, we conducted a study similar to the previous one on rural tourism in rural entrepreneurship, regarding the dimensions of the seven themes found in the documents (Figure 10).

The Local Socioeconomic Impact is also the most prominent theme within the group on tourism and rural entrepreneurship. Most are case studies that analyze the transformations that occurred from the insertion of tourist activities in a rural location, such as, for example, the transformations from the creation of jobs and income for residents of the region, and from that, socioeconomic development (Adefila & Yusuf, 2012; Mitchell & Shannon, 2018), the empowerment of these residents (Ajagunna, Pinnock, & Kerr, 2014; Jaafar, Dahalan, & Asma Mohd Rosdi, 2014; Pradono, Faisal, Adriani, Rikeu, & Fajriasanti, 2016), the improvement in the quality of life (Boukas, 2019), the reduction of local poverty (Mthembu & Mutambara, 2018), the impact caused to the environment (Varela & Gil, 2011; Vargas-Vargas & Mondéjar-Jiménez, 2010), the changes brought about by the implanted infrastructure (Currie & Falconer, 2012), among other impacts.

These analyses are important because, according to Varela and Gil (2011), it is necessary to invest in tourism models that have a low environmental impact, but that provide jobs, income, and fundamental services that improve the quality of life of the local community.

After the theme of the Local Socioeconomic Impact are the topics on Business Strategies and on Innovation and Competitiveness, both related to the activity of tourism. These topics analyzed, for example, variables of the financial
system (Sgroi, Donia, & Mineo, 2018) and marketing (Carlisle, Kunc, Jones, & Tiffin, 2013), as well as on management and operation (Matilainen & Lähdesmäki, 2014), among other factors that directly contribute to the development of the activity. We also analyzed the evolution of the seven themes over the years (Figure 11).

We also analyzed the evolution of the seven main themes that occurred in the documents related to the Tourism sector within the data on Rural Entrepreneurship found in the SciVerse Scopus® and Web of Science® databases in the period 1999-2018.

Figure 11 - Evolution of the seven main themes that occurred in the documents related to the Tourism sector within the data on Rural Entrepreneurship found in the SciVerse Scopus® and Web of Science® databases in the period 1999-2018.

Source: Elaborated by the authors (2019).

The topic of Local Socioeconomic Impact has grown steadily, especially in recent years. When compared with the evolution of the general Rural Entrepreneurship. We note that the theme of Local Impact related to the tourism sector has even greater prominence in the recent scenario of scientific production.

According to Zai and Sahr (2019), the identification of tourism impacts is part of their monitoring and evaluation system, since they can be positive or negative. Thus, entrepreneurs in the tourist area must know these elements for a more adequate management of the activity.

It is important to note the expressive number of documents produced in the year 2018, showing a spike in interest. Demonstrating that Rural Entrepreneurship in the Tourism sector and its possible Local Socioeconomic Impacts are relevant today. The increase in the number of publications in this sector may reflect the global growth of Rural Tourism.

During the Conference of Ministers of Agriculture of the Americas in 2019, the Inter-American Institute for Cooperation on Agriculture (IICA) signed an agreement with the United Nations World Tourism Organization (WTO) to support assistance in the areas of agrotourism and rural tourism in Americas. Indicating the year 2020 as the International Year of Agrotourism and Rural Tourism, to implement projects to promote the development and diversification of digital products and skills, with financial assistance from international agencies (The Inter-American Institute for Cooperation on Agriculture, 2019).

In London, tourism leaders from the public and private sectors met at the World Travel Market (WTM) to discuss the role of tourism in rural development. The event brought together 75 ministers and deputy ministers of tourism, members of the global media, and senior travel professionals to discuss tourism innovation and technology and their place in the empowerment of rural communities. (Daily travel & tourism news, 2019). At the opening of this event, Zurab Pololikashvili, a politician and diplomat from Georgia and Secretary-General of the World Tourism Organization, spoke:

"Globally, poverty is overwhelmingly rural. This means, if we are serious tourism being a driver for growth and development, we must look outside of our cities: We need to work together to help even the smallest community enjoy the many and varied benefits that tourism can bring." (World Tourism Organization, 2019).

In a recent General Assembly, the WTO announced "Rural Development and Tourism" as the theme of World Tourism Day in the year 2020, proving that Tourism and the Rural Environment have been attracting the attention of international bodies and leaders. The theme Local Socioeconomic Impact is highlighted in scientific production and the main events, audiences, and various meetings related to tourism.
In addition to the temporal distribution, we analyze the geographic distribution of these surveys. The countries were identified from a previous reading of the set of documents referring to the tourism sector within Rural Entrepreneurship. We found a total of 91 different countries. The regions with the highest number of searches were: Spain (24), United States (19), Sweden (18), China (17), Italy (13), Romania (11), Finland (10), Portugal (8), South Africa (8), England (8), Malaysia (8), New Zealand (7), Canada (7), Brazil (7) and Greece (7).

We analyzed the seven most relevant topics within these fifteen countries in the documents on Rural Entrepreneurship related to the tourism sector (Figure 12). We selected fifteen countries and not twelve, as was done previously, to include Brazil and because there are a significant number of countries with the same number of studies.

![Figure 12 - Frequency of the seven main themes in the fifteen countries that most present documents on Tourism related to Rural Entrepreneurship found in the SciVerse Scopus® and Web of Science® databases in the period 1999 - June 2019.](image)

Source: Elaborated by the authors (2019).

When comparing with the graph that analyzed the countries most frequently found concerning the total data on entrepreneurship, we noticed differences, such as the departure of countries like India, Bangladesh, and Australia, demonstrating how these places do not research so much about tourism-related rural entrepreneurship. In the analysis of data related to tourism, countries such as Canada, Greece, Malaysia, New Zealand, Portugal, and Romania were included.

India, the region of greatest prominence in the rural entrepreneurship data, did not obtain as much frequency when the subject included the tourism sector. The country previously had high concerns about gender, but studies do not identify tourism as a possible solution to this type of problem.

The theme of Business Strategies is the main highlight perceived in this analysis. Besides, Spain is the country with the largest scientific production on Rural Entrepreneurship related to tourism. This region has a study object to the aspects and strategies within the tourism sector. Perhaps this is a result of Spain being considered one of the most representative and significant tourist destinations in the world.

In Spain, the tourism business has experience in carrying out management activities, such as marketing planning. In this context, the rural tourism sector can also be considered one of the most representative (Polo-peña, Frías-jamilena, & Rodríguez-Molina, 2012).

Rural tourism development strategies offer potential solutions to problems in rural areas. For example, job creation associated with the development of tourist businesses brings an increase in income for the creation of new agricultural markets, activating competitiveness among local entrepreneurs. (Fleischer & Tchetchik, 2005; Frochot, 2005; Getz & Carlsen, 2005). The growth of tourism in rural areas can be a strategy to trigger a significant role in the performance of “value creation” and “added value” in the local economy (Phelan, 2014).

The Strategies theme also appeared as a highlight for countries like China, the United States, and Finland. Demonstrating that these places address strategies as the main factor in tourism. China, which had prominence in the theme of Migration previously, in the studies referring to tourism the theme of Strategies had greater prominence.
Canada, in turn, has a greater relationship with this issue of Migration, when we include tourism in Rural Entrepreneurship.

However, most countries such as Brazil, Greece, England, Italy, Malaysia, Portugal, Romania, and Sweden, focused more on the Local Socioeconomic Impacts linked to Rural Entrepreneurship with the Tourism sector. In the scientific production of Brazilian academic journals, for example, it is easy to find studies that present rural tourism as a form of positive impact on the local economy (Campanhola & Silva, 2000; Motta, 2013; Silva & fran, 2010; Vasconcelos, 2011).

In addition to the countries of study, the areas of knowledge of the documents related to tourism were also analyzed (Figure 13).

**Figure 13** - Frequency of the seven main themes within each of the eight areas of knowledge that occurred in the documents related to the Tourism sector inserted within the data on Rural Entrepreneurship found in the ScVerse Scopus® and Web of Science® databases in the period of January 1999 - June 2019.

We note a similarity to the previous distribution, repeating a concentration in the areas of Social Sciences and Business, Management, and Accounting. However, there was a highlight of the theme Local Socioeconomic Impact, demonstrating that when data on Rural Entrepreneurship are linked to the Tourism sector, this topic has an even greater number of scientific productions that deal with the transformations of local society and its economy.

The reality of Brazilian tourism research follows a similar trend. According to Nonato (2010) the field of study of Tourism in Brazil dialogues with areas such as Sociology, Anthropology, Geography, Architecture and Urbanism, Administration, Economics, Law, among others.

**4 FINAL CONSIDERATIONS**

The history of entrepreneurship is linked to the rural environment, due to its concept arising at a time when the agricultural sector obtained undisputed supremacy and practically exclusive of business and market. However, over time, studies and understandings about entrepreneurship have distanced themselves from the rural environment and have concentrated on more urban sectors. Recently, studies of entrepreneurship in the rural context started to develop again.

Rural Entrepreneurship contains particular characteristics, such as the strong expansion of the tourism market. In this sense, the present work aimed to address the evolution of scientific production on this Rural Entrepreneurship, as well as its connection to the Tourism sector, so that it was possible to deepen knowledge.

First, basic information about scientific production was identified. Thus, we obtained the main themes of studies in the area, which were: Social Entrepreneurship, Business Strategies, Gender, Local Socioeconomic Impact, Innovation and Competitiveness, Migration, and Technologies.
In the second part of this research, we analyzed the studies on Rural Entrepreneurship and the set that contained links with the tourism sector. From this, we identified the growth in the number of articles and reviews and, mainly, the concern with Local Socioeconomic Impacts.

In both analyzes the dimension of the Local Socioeconomic Impact was present. Both the general analysis of rural entrepreneurship and the analysis related to tourism. We identified that within scientific production this is one of the greatest interests, given the transformations and development that entrepreneurship could take to places.

Other aspects were noticed when we analyzed the geographic distribution of these studies. India, for example, is a country that is often studied when approaching Rural Entrepreneurship and, in this region, the most relevant theme is that of Gender, as a result of the social problems faced in the place. However, it is noted that the tourism sector is not significant in these surveys. India does not see tourism entrepreneurship in rural areas as related to a solution to gender problems.

Spain demonstrates a strong link with entrepreneurship related to tourism in rural areas. The country does not appear among the most frequent in the general settings, but it moves to the first place when analyzing only the set that has a connection with the tourism sector. In other words, the studies show the development of tourism in rural areas in the region of Spain, which also shows a greater interest in Business Strategies.

From the analysis of studies in each country, we better understand how the dynamics of rural entrepreneurship and the tourism sector occur in regions with different contexts and characteristics. Entrepreneurship can be seen from different points of view depending on the place.

When analyzing the areas of knowledge, it is evident that the studies are still concentrated in Social Sciences and Business, Management, and Accounting. This scenario is normal due to Entrepreneurship being linked to these areas. However, we verified the need to expand these studies, as it is a broad topic researched from different views, being addressed in different disciplines in order to understand and explain entrepreneurship and entrepreneurs.

The theoretical contribution of this study is to present an analysis to better understand the evolution of research on Rural Entrepreneurship and its connection with the Tourism sector. We analyzed the characteristics of the countries and sectors that were the object of research and observed that there is still space to expand research in different areas of knowledge, mainly in Brazil. The country presented only 52 international articles on the topic.

One of the limitations of this research is the use only of articles and reviews of two scientific databases. It would be interesting to expand this data set, including other forms of documents from different sources, for example, non-scientific data and media documents. In addition, we suggest conducting a survey on Brazilian national databases for an analysis of the reality of scientific production in Brazil.

Another limitation was the preparation of dictionaries, as there were many words similar in frequency lists used for their manufacture. For this reason, we exclude several words, and we use a small number of terms in this work. We suggest the inclusion of a greater number of terms with the appropriate rules to maintain the accuracy of this research. In addition, there is the possibility of including new themes, that is, finding topics that were left out of this analysis, but that are relevant to Rural Entrepreneurship and Tourism.

Finally, this work presented as a strong point the extraction of knowledge from a significant amount of data and information on Rural Entrepreneurship and Rural Entrepreneurship in Tourism. This has enabled a deeper understanding of these issues and their aspects over the past 20 years and demonstrating their importance within science.

The contribution of science to society is unquestionable. Scientific production allows advances in the most diverse fields in order to improve the quality of human life and the environment. In short, producing knowledge is important, but knowing what to do with that knowledge is essential.

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