Female Participation in Agribusiness: A Bibliometric Analysis of the Scientific Production of the Web Bases of Science and SciELO in the 2010-2020 Period

Ana Carla Pereira da Silva¹, Valdner Daizio Ramos Clementino²

¹Master Student of the Post-graduation Program in Semiarid Development Dynamics (PPGDiDeS), Federal University of Vale do São Francisco (UNIVASF)
²Phd in Management; Teacher of the Post-graduation Program in Semiarid Development Dynamics (PPGDiDeS), Federal University of Vale do São Francisco (UNIVASF)

Received: 24 Nov 2021, Accepted: 19 Dec 2021, Available online: 26 Dec 2021

Abstract - Brazilian agribusiness has played a key role in the country’s economic development in recent decades. Female participation in agribusiness showed positive results. Although there is the discourse of equal opportunities, the inequalities concerning the participation of women in relation to men in agribusiness are explicit, both in relation to remuneration, leadership, ascension and even in the opportunity to perform certain functions. Although there is still some discrimination, women are managing to overcome the various barriers imposed, seeking empowerment in the field and strengthening the importance of their role in agribusiness. This work aims to relate the quantity and quality of scientific articles that make the connection of agribusiness with female participation, through research platforms Web of Science and SciELO, bringing a positive result in the research, where it is possible to visualize the increase and importance of women’s participation and leadership in agribusiness.

Keywords— Agribusiness, Female participation, Leadership, Researches.

I. INTRODUCTION

The importance of agribusiness to the Brazilian economy is recognized worldwide. However, its conceptualization is somewhat complex, since it goes beyond the limits of the field, uniting agricultural, industrial and service activities.

Such concept can be further explained [1]:

Agribusiness is thus not limited specifically to the plantation and cultivation of agricultural commodities (sugarcane, soybean, corn, wheat, coffee, etc.), although this activity is at the center of the agribusiness network. They also integrate the production and marketing of seeds, fertilizers and other inputs, distribution, storage, logistics, transport, financing, quality conference and other services, as well as the use of waste of economic value. It is, in fact, the rational interconnection of all these economic activities that make up agribusiness, not each of them separately. Agribusiness is the network in which the rural producer (who knows how to plant and harvest soybeans, but does not understand and does not want to be exposed to the risks of price variation), and trading (whose expertise is the international market for...
agricultural commodities, and the financial instruments that can save rural producers from price fluctuations). Each one, taking care of what he knows how to do best, contributes to the full efficiency of the rational integration of the business network.

Agribusiness is the expression that results from the merger of agriculture or agriculture and business. The term business originally comes from the Latin negotium and has the meaning of occupation or work which aims at satisfying desires or needs. The term agribusiness relates to activities or work related to agriculture. It can be understood as the generation of value of the product or service through labor. [2].

Agribusiness is considered as one of the driving forces of the national economy [3].

The word agribusiness or agrobusiness, refers to the unification of various productive activities, which have direct or indirect link to the production and subproduction of agricultural and livestock products. Agribusiness is not only an isolated action in the field but a set of actions that can be observed, identified in a production chain that go beyond fences and fences [4].

It is true that development is closely linked to the modernisation of agriculture. [5], tracing a history of the modernisation of agriculture in Brazil, points out that this occurred during the military dictatorship, through the resumption of public policies focused on the creation of a very technical agriculture.

[5], this with a view to "expanding agricultural borders, granting credits and subsidies to the sector, using new technologies and privileges to export products or linked to energy programs, such as Proálcool".

Agribusiness is recognized as an important driver for Brazilian economic growth. The sum of goods generated in agribusiness reached R$ 1.55 trillion, or 21.4% of the GDP (Gross Domestic Product), Brazilian [6]. Among the segments, the largest portion is in the agricultural sector, which corresponds to 68% of this amount (R$ 1.06 trillion), and livestock corresponds to 32%, that is, R$ 494.8 billion [7].

However, in 2020, the emergence of a new disease, called COVID-19, shook the structures of several economic sectors, including agribusiness.

The GDP registered a decrease of 4.1% in 2020, compared to 2019, affected by the coronavirus pandemic. This fall stopped growth three years in a row, from 2017 to 2019, when GDP accumulated a high of 4.6%. In the fourth quarter, GDP showed an increase of 3.2% in comparison with the previous quarter, but registered a decrease of 1.1% in relation to the same period of 2019 [8].

It is added that agribusiness is a sector that has been essential to sustain economic activity during the pandemic. And according to Tereza Cristina, Minister of Agriculture, Livestock and Supply of the country, in an interview to the Program The Voice Of Brazil, in august 2020, agribusiness was the engine of the economy, and managed not to let the GDP fall, being a generator of wealth for the internal market, for exports and employment.

Agribusiness is one of the sectors that have been generating dividends in Brazil, which attracts men and women in the search for a better professional position.

There is a growing female participation in agribusiness, as they advance in leadership positions and also stimulate the use of technology in the field [9].

About 40% of agribusiness workers are women, there is an increase in the female presence in this segment by 8.3%, while male participation decreased by 11.6%, that is, about 384,582 women took new jobs related to agribusiness and, on the other hand, approximately 1.65 million men left the agricultural sector [9].

Most women work in agribusiness (34.11%), or in agribusiness (45.32%), and only 19.66% work inside the concierge. Consequently, this is related to the fact that 80.94% of women live in the urban area - where agroindustrial and service jobs predominate - and only 19.06% live in the rural area [9].

There is an increase in female participation in this activity. However, it is still possible to verify in agribusiness, their invisibility in terms of work and management, since they are important protagonists in the implementation of various activities of the property and in the maintenance of the family [9].

Considering the context, this article chose the following guiding question for the development of the study: How is the evolution of the field of study on female participation in agribusiness being presented?

The accomplishment of this work had the personal motivation to identify the profile of these women facing the challenges of leading companies and teams, given the difficulties encountered due to gender issues. And the other aspect was to demonstrate the importance of this research, related to the lack of projects and works on the proposed theme.

With this context, this article aimed to know the "State of the Art" of knowledge production related to the theme "Female Participation in Agribusiness", based on the academic production of articles published in the research
It is justified to conduct the study from two perspectives, the first academic, Brazilian research on female participation in agribusiness, which are recent and involve issues related to the difficulty of entering management positions, prejudice in the organizational environment and conflicts between the double shift, home, work, children [10].

It is noticed that the theme related to female participation in agribusiness is little explored. In addition, female leadership in agribusiness has also emerged with greater force, due to the perspective of the professional insertion of women in leadership situations.

To make the study possible, an exploratory research was carried out through the survey of articles on the female participation in agribusiness in the publications of two research bases, one of universal character, the Web of Science, where it has a huge collection of scientific productions from all over the world, and the second, SciELO, also open for research with work from several countries in Latin America.

Theoretical Reference

In this chapter, the importance of Brazilian agribusiness will be presented, the scenario of agribusiness in the São Francisco Valley. Then a general overview of women in the labour market will be reported. Finally, by connecting these two main themes, the context of women’s participation and leadership in the agribusiness labor market is explained.

1.1 The Importance of Brazilian Agribusiness

Agribusiness involves activities that take place throughout the production chain [11].

Corresponds to all economic activities related to production, presenting great importance to the global economy and is one of the economic pillars of Brazil [12].

Agribusiness functions as an economic sector, given its importance to the economy and society. This is due to the involvement between the food production chain and its intimate interaction with the most varied sectors, such as agriculture, livestock, industry and service provision [13].

In the last two decades, the development of Brazilian agribusiness, promoted an explosion in growth, driven by the dizzying increase in production, allowing Brazil to establish itself as one of the most important suppliers of food to the world [14].

The increase in production contributed to the reduction of food prices, contributing to the improvement of the population’s quality of life and health, with greater purchasing power [15].

Agribusiness is recognized as an important driver for Brazilian economic growth. The sum of goods generated in agribusiness reached R$ 1.55 trillion, or 21.4% of the Brazilian GDP [6]. Among the segments, the largest portion is in the agricultural sector, which corresponds to 68% of this amount (R$ 1.06 trillion), and livestock corresponds to 32%, that is, R$ 494.8 billion [7].

As for the Brazilian export, in 2019, 43% of the total exported were agribusiness products, demonstrating its importance and contribution to the growth of the Brazilian economy. Brazil is the largest exporter of sugar, coffee, orange juice, soy beans, beef, chicken and the third largest of corn, and the fourth of pork [7].

Brazil is in the fourth position of the world’s largest exporter of agricultural products, behind only the United States, China and the European Union. And this growth contributed significantly to the macroeconomic stability of Brazil [16].

However, in 2020, with the emergence of COVID-19, it agitated the structures of several economic sectors, including agribusiness. This situation caused several sectors to suspend their activities, generating negative economic impacts resulting from the new coronavirus crisis, related to social isolation, thus reducing production and increasing consumption.

The effect of isolation immediately affected the flow of inputs and Brazilian agricultural production, causing logistical problems and loss of production [17].

However, agribusiness, despite the production demand, the interruptions in the agri-food markets, which affected the production and availability of food, still managed to maintain the active capacity of generating wealth and income, maintaining not only its productive sector, but also, sustaining the national economy, plagued by economic devastation [18].

Thus, even amid the scenario of the crisis caused by COVID-19, Brazilian agribusiness has presented satisfactory results, which show mitigation of the impact suffered by the national economy, which should be the reason for the recovery [19].

The Brazilian agribusiness once again proved to be a strong sector, presenting good results amid a period of economic downturn, numerous challenges caused by COVID-19. Despite the numerous impacts experienced by agribusiness, the sector stood out, with positive results.
1.2 Agribusiness in the San Francisco Valley

The São Francisco Valley Submedio (SMSF) is located between the west of the state of Pernambuco and the north of the State of Bahia, with a semiarid tropical climate, and area of more than 360 thousand irrigable hectares [20].

The same has been noted for the production of fruit for export. The irrigated area of the Valley was 360,000 hectares in 2013. The region is considered the third largest fruit producer in the world, producing 43.8 million tons per year [20].

The world consumption of fresh fruit is of the order of 42 million tons per year, moving US$ 28 billion annually. Brazil participation, on the other hand, is in the order of US$ 642.7 million (2.3%). Of this total, the São Francisco Submedio participates with 39.1%, mainly exporting grapes and mango, being responsible for a total of US$ 251.5 million. 80% of the grapes and 65% of the mango exported by the São Francisco Submedio go to the European Union, 15% of the grape and 30% of the mango go to the United States and the remaining 5% of mango and grape go to Canada, countries in Asia, South America and the Middle East [20].

Thus, the São Francisco Submedio, a region that includes some cities of these two States, is known as the most prosperous region of the northeastern interior, which is totally in the semiarid zone of the Brazilian Northeast.

Agribusiness is one of the most important sources of wealth in Brazil. The importance of Brazilian agribusiness places the country among the most competitive nations in the world in the production of agro-industrial commodities, with enormous potential for horizontal and vertical expansion of supply. It is the result of a combination of factors, among them, mainly investments in technology and research, which led to exponential increase in productivity [21].

1.3 Women in the Labour Market

According to the International Labour Organization (ILO), although the presence of women in the labor market has increased significantly, they were to a greater extent in "part-time work, informality, sporadic employment and self-employment" [22].

Data from the National Household Sample Survey (PNAD) reveal that between 2002 and 2015, the Rate of Female Participation in the Work Force (TPFT), grew approximately 3 percentage points, reaching 40% in 2015. Female presence has been increasing over the years [9].

Even with this growth, a part of women still have to go through difficulties that many men do not find, such as the balance between domestic activities versus out-of-home employment and wage difference. Even with greater challenges, most of these women struggle daily to maintain or even create their space in companies. Also according to the ILO, "Women earn 17% less per hour than men and, despite the increase in female participation in the labor market, are still far from equity" [23].

In 1950, only 13.6% of women were economically active. In the same period, the index of men reached 80.8%. Sixty years later, data from 2010 showed that female participation more than tripled to 49.9%. Among men, on the other hand, the figure dropped to 67.1% [24].

In view of this, we can see the female struggle against the setbacks in her achievements and, above all, for the right to be able to go out on the street, to walk on public transport without being harassed, be beaten or raped and so that no right won with so much struggle and resistance is withdrawn. Today, more than half a century after the "First Feminist Wave", the movement has amplified and divided into several others. His subject no longer boils down to the white woman, middle class, who fights for civil rights: it is also the black, the mother, the periphery, the young, lesbian, trans [25].

Thus, while significant wage inequalities between men and women in the same capacity remain, it is undeniable that feminist criticism of inequalities in the labour market played an important role in the intense occupational diversification, experienced by women in the last three decades [26]. The integration of women occurs almost exclusively by their own effort, due to the rapid change of mentality through which our society passes [27].

Also, it is important to highlight that the women’s movement in Brazil is one of the most respected in the world, standing out for the decisive contributions in the process of democratization of the state producing, including, important innovations in the field of public policies [26].

Therefore, the struggle of women is of extreme importance to decrease the gender inequalities that remain in our society and ensure the creation and implementation of public policies in favor of women and progress in terms of gender equality in the labor market.

1.4 Women participation in agribusiness

The participation of women in agribusiness is still a theme little explored in the academic field, as well as little perceived by the economic and political agents of the country, although women have increasingly played a decisive role in increasing the sector’s competitiveness.

Women have always worked in the field, but in recent decades have managed to conquer more space and assume leadership positions in Brazilian agribusiness [28].

www.ijaers.com
Historically, the work done by women was seen as invisible to society and often, in addition to the work intended for the family and the home, they "helped" their husbands with the activities in the field. Women have gained a lot of space in the labor market, but gender equality is still far from being achieved.

Agribusiness historically has a greater involvement of men despite the fact that there has always been the participation of women in this area. However, women in agribusiness have sought their space, seek to professionalize themselves, have a holistic view of the field and seek recognition of their work, which was formerly invisible to society.

Men are assigned primarily to activities linked to the productive sphere, while women to the reproductive sphere, and at the same time there is a greater appreciation of male work and they perform the activities of higher added value [29].

A survey commissioned by the Brazilian Agribusiness Association (ABAG), entitled "All Women in Agribusiness", outlined the profile of these producers and the important role they have played for the agricultural harvest in Brazil, dividing into place of operation and type of work developed, as shown below [30]:

| PLACE WHERE THEY OPERATE          | Percentage |
|-----------------------------------|------------|
| MINIFÜNDOIS                       | 49,5%      |
| SMALL PROPERTIES                  | 26,1%      |
| AVERAGE PROPERTIES                | 13,5%      |
| LARGE ESTATES                     | 10,9%      |

| TYPE OF WORK CARRIED OUT           | Percentage |
|-----------------------------------|------------|
| INSIDE THE FARM                    | 73%        |
| COOPERATIVES                       | 3,7%       |
| AGRICULTURAL INPUTS                | 3,4%       |
| FUNCTIONS RELATED TO THE SUPPLY OF SERVICES AND PRODUCTS, TRADE, GOVERNMENT AND OTHER ACTIVITIES RELATED TO AGROBUSINESS | 9,3%       |

Source: ABAG, 2017

The number of women running rural properties in Brazil reached almost 1 million. 947,000 women responsible for managing rural property were identified, out of a total of 5.07 million. The majority are in the Northeast (57%), followed by the Southeast (14%), North (12%), South (11%) and Midwest, which concentrates only 6% of the universe of women leaders [24].

According to the survey, together they manage about 30 million hectares, which corresponds to only 8.5% of the total area occupied by rural establishments in the country.

From 1991 to 1998, only 1% of rural properties had a woman in charge of decision-making. Currently, this percentage reaches 10%. In addition, the salaries received by women are unequal to those received by men [31]. Women receive about 78.3% of what is paid to men [32].

The number of women working in agribusiness between 2004 and 2015 grew by 8.3%. According to the study Women in Agribusiness, the biggest impetus for this to happen was due to the actions of women over 30, married and with a higher level of qualification [9].

There is evidence that this behavior may be partly related to the historical factors that have marked the agricultural organization differently in the various states, and the Northeast region stands out for presenting a rather unfavorable scenario to women’s participation in agribusiness [33].

Important improvements have occurred in the participation and profile of women in agribusiness in recent years, such as the increasing level of education of female workers, the higher degree of formalization of employment and the good level of job satisfaction [33].

However, despite the positive developments cited, other aspects still need attention, such as the hierarchical level of positions usually occupied by women in agribusiness, as well as the gender pay gap and numerous other points to be adequate.

The profile of those who work in the agricultural segment has been evolving over the years. Nowadays, men and women perform similar activities in agriculture and livestock.

History shows that the achievement of the recognition of women’s work has been arduous but rewarding [34].
Women are working in the different activities that make up agribusiness, and are increasingly present as successors, collaborators and entrepreneurs. They have sought more and more professionalization, since the academic training, in the areas of veterinary, agronomy, administration, zootechnics, which are mostly composed of men, until the specialization, in masters, doctorates or vocational courses.

1.5 Female Leadership in Agribusiness

Traditionally the role of leadership has been attributed to men and, despite the emergence of new social behaviors such as gender equality, the representation of men and women in leadership positions presents another reality. The role of leader is still tied to the male sex, which generates inequality regarding the position of power and prestige [35].

The female leadership has suffered a decline in the last 5 years and, in contrast, has increased the number of men hired in Brazilian industries. With this data, a gap is opened to be studied and analyzed to try to understand what the path taken by women for the development of their career and the legitimization of their leadership. In agribusiness, 23% of Brazilian families have female leadership. Regarding agribusiness management, in Brazil 27% of leadership positions are held by women [24].

19% of working women are self-employed. Of the professionals who work up to 30 hours, women are already the majority, being 28.2% women and 14.1% men. In relation to salary, still men, on average, receive higher salary, getting R $ 2,300.00 for them and R $ 1,700.00 for them [24].

Inequality in senior positions between men and women. They represent 62.2% and they represent 37.8%, but the difference is smaller when it comes to younger women, and in the population between 16 and 29 years, women in managerial positions represent 43%, and between 30 and 49 years represent 39.5% [24].

II. METHODOLOGY

Considering that the objective of this study is to know the "State of the Art" of the production of knowledge related to the theme "Female Participation in Agribusiness" based on bibliometric indicators, different actions were necessary for the design of the research.

First, the bibliometric review makes it possible to collect, select and critically analyze studies, for example, academic articles from studies available in a database can be considered as the source of a bibliometric study.

Bibliometry is the application of quantitative and qualitative methods. Study of quantitative aspects of scientific production, dissemination and use of available information. It creates mathematical patterns and models for measuring scientific production [36].

Bibliometric research investigates the productivity of individuals present in the scientific and technological environment, through the categorical evaluation of bibliographic and reference sources, the relations and patterns of organization, as well as critical points, trends and counterpoints [37] [38].

The research used two databases of bibliographic production, the Web of Science (WoS), and the Scientific Electronic Library Online (SciELO). The first is a multidisciplinary foundation developed by Thomson Scientific - Institute for Science Information (ISI). The choice of WoS for data collection was based on its tradition and scope, besides being internationally used for macro analysis of scientific production. We also consider the fact that it includes the names of all the authors of the published works and information about the institutions and the country of origin of the authors, allowing analysis of collaboration patterns, the second research base, has more than 20 years of regular operation, in open access with peer-reviewed scientific journals, and to cover 15 Ibero-American countries, in addition to South Africa.

This research is characterized as empirical-analytic, with an approach at the descriptive and exploratory level, since it seeks to identify aspects not yet explored with regard to the aforementioned theme. The facts will be observed, recorded, classified and analyzed.

Qualitative and quantitative research methods were chosen. Qualitative because it adopted the collection of data from the analysis of the content exposed in the journals that contained the articles read, and an analysis of content was made through the research in the texts. It is quantitative because statistical techniques will be applied to analyze scientific production.

The work was carried out in four stages, the first phase, in order to provide support for the accomplishment of the work, a bibliographic survey process was carried out in several sources (books, articles and scientific journals, theses, dissertations, among others) and the constitution of the theoretical foundation that will permeate the stages of research. The second stage consisted of the collection of scientific articles dealing with women’s participation in agribusiness published in the last 10 years, from 2010 to 2020 in the databases chosen for the work, based on specific keywords for the research.

The third phase, with a quantitative focus, was used descriptive statistics for the creation of indicators and organization of data essential for the understanding of variables. Based on this, the quantitative analysis was
made divided by areas of knowledge, and soon after these areas were grouped, thus generating new indicators for analysis, it was also carried out by research base, where the WoS and SciELO numbers are shown.

The following terms were used to meet the objectives of the research: I - ((AGRIBUSINESS) AND (FEMALE)) II - ((SAN FRANCISCO VALLEY) AND (AGRIBUSINESS)) III - ((AGRICULTURE) AND (FEMALE)), collecting the data in the two databases mentioned, WoS and SciELO. After the collection, the data were tabulated and analyzed, thus generating an answer to the initial question of the article.

In the fourth and final phase, the analysis and discussion of the data obtained in the bibliographic survey was carried out, observing the relations between the themes addressed in the research problem and the comparative aspects between the results obtained between the two databases chosen.

III. RESULTS AND DISCUSSIONS

In total, 175 searches related to the theme of the Woman and Agribusiness, each 165 newspapers on the basis of WoS and 7 on the basis of SciELO, as shown in figure 2.

It is possible to see the increase in the number of publications over the years, and the theme being inserted in the context of agribusiness publications.

| Table 2: Number of Records Obtained in the Searched Databases |
|---------------------------------------------------------------|
| **Web of Science (WoS)** | **SciELO** |
| 2020 | 29 | 2020 |
| 2019 | 30 | 2019 |
| 2018 | 30 | 2018 | 1 |
| 2017 | 18 | 2017 | 1 |
| 2016 | 22 | 2016 | 2 |
| 2015 | 16 | 2015 | 1 |
| 2014 | 7 | 2014 | 1 |
| 2013 | 1 | 2013 | - |
| 2012 | 6 | 2012 | 1 |
| 2011 | 4 | 2011 | - |
| 2010 | 2 | 2010 | - |

Source: Elaboration of Own Data from the Database (WoS and SciELO)

Analyzing these articles, we notice a small amount of the articles found in Brazil, while the others were published in international journals, in countries such as the United States, China and some European countries, as can be seen in figure 3.

In 2020, twenty-nine articles were found on the WoS platform, and analyzing some of the articles with the topics researched and published in Brazil, The main points of each one were highlighted in Table 3.

This review of the literature makes it evident that the female participation in agribusiness, even though it is still little explored and often underestimated, is of paramount social and economic importance. In addition to growing over the years, as shown by studies, the female labor force has grown in the sector.

Source: Elaboration of Own Data From the Web of Science and SciELO Database

In 2020, twenty-nine articles were found on the WoS platform, and analyzing some of the articles with the topics researched and published in Brazil, The main points of each one were highlighted in Table 3.
Table 3: Some Articles Found in The Year 2020

| COUNTRY | ARTICLE | MAIN POINTS |
|---------|---------|-------------|
| Brazil (BR) | BUTURI, D., GARCIA, M.. Women’s Labor Market in Paranaense Agribusiness. Agricultural Policy Magazine. | It analyzes the profile of women who work in agribusiness in Paraná, focusing on the socioeconomic aspects of women workers. It uses as the main database Pnad and, in a complementary way, CNAE 2.0 and information from CEPEA and Rais. |
| Brazil (BR) | AF Marques, FC Pierre - Women in Agribusiness - IX JORNACITEC. | Insertion and the main challenges of women in agribusiness. |
| Brazil (BR) | VERONEZZI, Fernando; SERRA, Elpídio. Participation and Female Protagonism in the Family Agriculture Training Programs in São Paulo State. Geo UERJ. | Female Protagonism and the Mastery of Commodities Production. |
| Brazil (BR) | CALADO, Camila; SILVA, Valéria. Agriculture, Gender and Social Reproduction: Lifestyles of Rural Women in Contexts of Agribusiness Expansion. ECO-Post Magazine, v. 23, n. 2, p. 79-107. | It analyzes the impacts of agribusiness on the ways of life of women in rural areas of Vale do Brejo Prata/Sebastião Leal/PI. |
| Brazil (BR) | SILVA, Brenda Ribeiro da; REDIN, Ezequiel. A woman’s place is where she wants it: The challenges of Women in the Agribusiness Labor Market. Study & Debate Magazine. | Analises a atuação das mulheres que ocupam cargos no âmbito comercial em organizações dos agronegócios. |
| Brazil (BR) | SANTOS, Sérgio Silva dos. Rural Women Empowered by The Use of Digital Technology. 2020. | Women, Cooperativism and Digital Transformation. |
| Brazil (BR) | BATISTA-CRISTIANE, CRISTIANE; BENCKE-FERNANDO, Fernando Fantoni; PADILHA, Luccas Santin. Legitimization of Leadership and Mobilized Capitals: History of Life of Female Leaders of a Large Agro-industry. | It analyzes Women’s Leadership, Mobilized Capitals, Legitimation and Life History. |
| Brazil (BR) | BRITO, Carina de Moraes Pereira; DO NASCIMENTO, Priscila Brasilheiro Silva. Agroecology and Empowerment of Women From a Rural Community in the Semi-arid Region of Bahia. Journal of Public Policy and Educational Management (POLIGES), v. 1, no. 1, p. 140-166. | Agroecological experiences developed within a solidary productive group have contributed to the advancement in the search for female empowerment in a rural community of the Bahian semi-árid. |
| Brazil (BR) | GUBERT, Flavia Piccinin Paz et al. Women’s Empowerment in Family Farming. | Gender, Women’s Empowerment, Family Agriculture and Sustainable Development. |
| Brazil (BR) | RODRIGUES, Helder Epifane. Female Entrepreneurship in Rural Pará: Study With Family Farmers in Municipalities of Baixo Tocantins. 2020. Doctoral Thesis. UFRA/Campus Belém. | Gender equality and women’s empowerment. |

Source: Elaboration of Own Data From the Web of Science Database (WoS)

As for the areas of elaboration of the articles, the predominance in the field of agricultural sciences is seen. But applied social sciences also has its role in the contribution of the production of articles focused on this theme. Thus, the difficulties and unequal treatment between men and women persist, with the need for public policies to solve problems such as functional machismo, low wages and double working hours which are linked to the lack of appreciation of them by the market, even though women are qualified.
IV. CONCLUSION

This study aimed to perform an analysis of the panorama of publications on women’s participation in agribusiness through a bibliometric study. Survey done with farmers in 17 countries by Corteva Agriscience (is the new name of the agricultural division of Dowdupont), reveals a slow progress of women in agribusiness, a segment where financial disparity, lack of recognition and poor access to training are the main obstacles. In Brazil, almost 80% of respondents say that there is gender discrimination in agribusiness and almost 50% report earning less than men - a worse perception than in other countries, whose average is 40%. Despite this, 63% of Brazilian women said that there is currently less discrimination than 10 years ago and 44% believe that the country will take one to three decades to achieve equity [39].

Therefore, it can be inferred that the participation of women is essential, in all cultures, to keep afloat the world production of food and that its action is growing in the various segments of the agro-industrial sector, from farming to business management. In this sense, it is understood that companies in the agro-industrial sector, attentive to this reality, should insert and promote actions and strategies aimed at women in the sector.

When conducting the research, it is noticeable the growth in searches among researchers from all over Brazil, in which we have articles published in several universities in the country.

The assessment made by this study mirrors the still embryonic participation of research in the theme addressed, within SciELO in the period 2010 - 2020, the platform represented only 5.71% of the total of the works obtained in the two databases analyzed from the filters applied and detailed in the methodology of this work, having, the Web of Science, answered by 94.28 of the total of these works (175).

It can be seen that the increasing evolution of female participation in the labor market, as well as, the importance of female insertion in all sectors of the economy are facts proven, both by the indexes pointed out by government agencies, as for the numerous studies developed by researchers on gender issues.

However, there are many challenges and difficulties faced by women in the conquest of a space in the labor market, mainly in relation to cultural issues of the role assumed by women, mother and "housewife", allied to formal work, paid and whose vacancies are predominantly occupied by men.

The objectives outlined at the beginning of this investigation to know the "State of the Art" of the production of knowledge related to the theme "Female Participation in Agribusiness", based on the academic production of articles published in the research bases were met in their entirety, given the intended exploratory and descriptive character.

However, once the objectives of this study are achieved, it is suggested the continuity of this research agenda, as it is a matter of relevance in the present day, it is necessary to obtain more instruction on this subject, seeking to deepen new aspects to broaden the understanding of the specificity of female leadership in this sector.

It is possible to infer that the presence of women in agribusiness is a trend and the gains in terms of competitiveness and productivity tend to increase with the greater participation and engagement of women in different agricultural activities, both in production and management. Finally, even though the true contribution of women to agricultural economic production is still sometimes underestimated, the considerable progress achieved in relation to the insertion of women in agribusiness and gender mainstreaming in agricultural statistics is visible and growing.

Like any scientific work, it is also not without limitations. Like any scientific work, it is also not without limitations. The main one refers to the scarcity of publications focused on the subject and a theoretical contribution that founds it.

However, this is a limitation of methodological nature and not a practical limitation, since the actions aimed at the insertion of women in agribusiness really exist. Thus, it can be said that the limitation of this work is part of the process of construction of knowledge on the subject.

Finally, it is necessary to promote alternatives for the participation and empowerment of these women, based on technical assistance, public policy-making and projects that assist in the demystification of women’s work, valuing and recognizing the role of women in the development of agribusiness in the region.

REFERENCES

[1] COELHO, F. U. Prefácio. In: Manual do Direito do Agronegócio. São Paulo: Saraiva, 2013.
[2] GIOVANNI, G. D.; NOGUEIRA, M. A. Dicionário de Políticas Públicas. 2ª. ed. São Paulo: Unesp, 2015.
[3] COSTA, M. Agronegócio: O Motor da Economia Brasileira e o Dinamismo da Economia Paranaense. Disponível em: <www.agronline.com.br/artigos/artigo.php?id=331>. Acesso em: 05 de outubro de 2021.
[27] CRUZ, A. R. de S. O Direito à Diferença. Belo Horizonte: Ed. Arraes, 2009.

[28] ARAÚJO, Naiara. Farming. Mulheres Lutam para Liderar e Conquistar Reconhecimento no Agronegócio. Disponível em: <https://sfagro.uol.com.br/mulheres-agronegocio/>. 2018. Acesso em: 06 de setembro de 2021.

[29] DI SABBATO, A. et al. (Org.). Estatísticas Rurais e a Economia Feminista: Um Olhar Sobre o Trabalho das Mulheres. Brasília: MDA, 2009. p. 31-120.

[30] ABAG. Todas as Mulheres do Agronegócio 2017. Disponível em: <www.abag.com.br/media/files/sumario-pesquisa-mulheres-do-agro-2017-compressed.pdf>. Acesso em: 16 setembro de 2021.

[31] VINHAS, José Ney. Cresce Número de Mulheres que Desempenham Funções na Agropecuária. Compre Rural. Disponível em: <www.comprerural.com/mulheres-em-alta-cresce-o-numero-de-mulheres-que-desempenham-funcoes-na-agropecuaria/>. Acesso em: 19 de outubro de 2021.

[32] Centro de Estudos em Agronegócios da Fundação Getúlio Vargas. Mulheres Recebem Cerca de 78,3% do que é Pago aos Homens. 2017. Disponível em: <https://gvagro.fgv.br/>. Acesso em: 19 de outubro de 2021.

[33] CEPEA - Centro de Estudos Avançados em Economia Aplicada. Mulheres no Agronegócio. Edição Especial, v. 2, Piracicaba, janeiro de 2019.

[34] FERREIRA, Williams Pinto Marques et al. In: ARZABE Cristina. Mulheres dos Cafés no Brasil. Brasília: Embrapa, 2017. p. 20-34.

[35] DE SOUZA ALFERINO, Esther. O Homem Neopentecostal na Sociedade Contemporânea Busca por Sucesso e Prestígio. Serviço Social em Debate, v. 1, n. 2, 2020.

[36] TAGUE-SUTCKIFFE, J. An Introduction to Informetrics. Information Processing & Management, v. 28, n. 1, p.1-3, 1992.

[37] SPINAK, E. Dicionário Enciclopédico de Bibliometria, Cienciometria e Infometria. Caracas: UNESCO, 1996.

[38] VASCONCELOS, Y. L. Estudos Bibliométricos: Procedimentos Metodológicos e Contribuições. UNOPAR Científica. Revista de Ciências Jurídicas e Empresariais, v.15, n.2, p. 211-220, 2014.

[39] Desafios das Mulheres à Frente do Agronegócio. Globo Rural, 3 dez. 2018. Disponível em: <https://revistagloborural.globo.com/Publicidade/Corteva/noticia/2018/12/desafios-dasmulheres-frente-do-agronegocio.html>. Acesso em: 10 de novembro de 2021.