



EVOLUTION AND STATEMENT OF THE RURAL STUDIES IN LATIN AMERICA. A CURRENT BIBLIOGRAPHICAL REVIEW

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ABSTRACT. The structure and evolutionary dynamic of the rural world of Latin America has always been a privileged topic in research and scientific reflection, not only at the level of the continent, but also at the international level. Scientific production has always reflected the problems of this vast rural world, but always under the influence of the social, political, and economic conditions of each historical moment. In this paper, we analyze the current scientific production on the rural world with a historical perspective, to understand the evolution of scientific thought and production. We appeal to a very simple bibliometric method based on the analysis of the most prestigious journals about the rural reality of the continent. The analysis allows us to observe a clear trend towards new topics, linked to the problems of the rural world, such as the new relationship between the countryside and the city, environmental problems, the emergence of new ways of producing, among others.

Evolución y estado de los estudios rurales en América Latina. Una revisión bibliográfica actual

RESUMEN. La estructura y dinámica evolutiva del mundo rural de América Latina ha sido siempre un tema privilegiado en la investigación y la reflexión científica, no solo a nivel del continente, sino también a nivel internacional. La producción científica siempre ha reflejado los problemas de este vasto mundo rural, pero siempre bajo la influencia de las condiciones sociales, políticas y económicas de cada momento histórico. En este trabajo, se analiza la producción científica actual sobre el mundo rural con una perspectiva histórica, para entender la evolución del pensamiento científico y la producción. Se utiliza un método bibliométrico sencillo basado en el análisis de las revistas más prestigiosas sobre la realidad rural del continente. El análisis permite observar una clara tendencia hacia nuevos temas, vinculados a los problemas del mundo rural, como la nueva relación entre el campo y la ciudad, los problemas ambientales, la aparición de nuevas formas de producción, entre otros.

Keywords. Latin America, rural studies, bibliometric analysis.

Palabras clave: América Latina, estudios rurales, análisis bibliométrico.

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1. Introduction

Until the mid-20th century, the Latin American rural world was characterized by the preeminence of a dichotomous agricultural and rural development model, with the presence of numerous small farmers (peasants) and large estates. In the mid-century (1940s and 1950s), the national States implemented new development policies, focused mainly on import substitution processes, which required large amounts of capital for their sustainability and development (Moncayo Jiménez, 2001). In this context, the agricultural sector is seen as the main sector capable of providing low-cost food for the growing masses of urban population, and exportable products capable of providing the foreign exchange needed to sustain this import substitution process. During this period, many initiatives were implemented to promote production, including production protection, price control, market regulation, agrarian reform and colonization programs, and the creation of infrastructure and equipment.

This first stage of strong intervention in agricultural policies was followed in the 1960s by policies of strong support for technological change, thus creating research and technology transfer agencies with large resources and technical capabilities throughout the region (Chonchol, 1994), which allowed the development of innovations and substantial growth in agricultural production throughout the region (Riffo, 2013). By the late 1960s and early 1970s, and thanks to the technological development process achieved in the previous decade, the green revolution process was consolidated, which involved the adoption of new varieties and cultural practices, but also the creation and development of large irrigation and drainage infrastructure projects (Muzlera and Salomon, 2022). Throughout this historical period, scientific production around the rural world was clearly focused on supporting the process of agrarian modernization, and on increasing the production and productivity of the agricultural sector (Arenas *et al.*, 2004).

At the end of the 1970s and mainly in the 1980s and 1990s, policies to support the agricultural and rural sector were gradually dismantled and the countries (with time differences among them) adopted structural adjustment policies that included market deregulation, trade liberalization, privatization, sanitary improvements, development of agro-export logistics, technological development and bureaucratic and administrative decentralization (Sili, 1995). Clearly, the emphasis of policies related to the rural world was on increasing production and productivity, which promoted the development of agribusiness, the consolidation of production chains and exports, all in the hands of the productive business sectors linked to the export agroindustry. The agricultural sector performed well overall and there was a growing adoption of technologies that made it possible to maintain a growth path despite the poor or regular macroeconomic conditions of the countries. Scientific and technological production during this period was focused on supporting modernization processes, but numerous scientific papers also emerged that analyzed the impact of adjustment processes, especially social disparity, land issues and migration (Teubal, 2001).

At the beginning of the new century, several governments emerged in Latin America that, under the paradigm of neo-development, advanced with new policies and practices that attempted to reverse the structural problems of the rural world, focusing their support on family agriculture and food security (Tzeiman, 2013). This did not prevent policies and practices to support the most dynamic sectors of export agriculture; on the contrary, in this period, unsustainable production practices intensified, especially deforestation, pollution due to unsustainable mining practices and loss of biodiversity. The scientific production of this historical moment was closely linked to issues such as family agriculture, land tenure, and public policies to support rural development, among others.

Currently, the Latin American rural world is going through new paths of greater complexity and diversity in which four major elements are combined, which we will analyze below.

A first relevant fact in the region is the persistence of a deep crisis and re-composition of family farming (a sector made up of small family farmers engaged in agriculture, livestock, fishing, artisanal activities, and tourism) (Craviotti, 2014) (World Bank, 2007) (Salcedo and Guzman, 2014). Family

farming in Latin America manifests structural problems derived from: a) the scarce amount of land owned by these farmers -according to FAO, in Latin America these producers have, on average, 13 ha- (Soto Baquero y Gómez, 2014), and b) the low technological level and marketing difficulties, which does not allow them to increase their production and productivity or, therefore, to be competitive in terms of market in the production of traditional agricultural goods, compared to larger and more capitalized sectors. These production conditions are in addition to other problems inherent to the territories where family farming is concentrated, such as structural deficits in infrastructure and equipment (World Bank, 2007); this considerably reduces the quality of life and production possibilities (lack or deterioration of roads, lack of electricity, low levels of education, problems of access to health care, lack of water, and others). Clearly, this affects even more the areas far from cities and areas with very low population densities.

A second element that characterizes the rural situation in Latin America is the strong entrepreneurial dynamism in the agricultural and agroindustrial sector, as a result of the new international scenario in terms of prices and demand for primary goods. This growth dynamic has been analyzed by numerous authors (Gras and Hernández, 2021; Villagómez Velázquez *et al.*, 2011; Guibert and Sili, 2011) and institutions and organizations (IICA-CEPAL-FAO, 2010); in general terms, they all point to the same factors as drivers of this new dynamism. Thus, technological changes in agriculture (new varieties, machinery, practices and inputs), management and marketing processes, the emergence of new actors more closely linked to the world of services and finance (contractors, services, agricultural trusts, among others) (Guibert, *et al.*, 2011) and an international context increasingly demanding of raw materials (Quenan and Velut, 2014) have constituted a highly attractive environment for the growth of productivity and production that is clearly visualized in recent decades and that allowed the consolidation of a remarkable agricultural boom (Villagómez Velázquez *et al.*, 2011). Although the main productive transformations in the rural world are related to the agricultural sector, it is not possible to ignore the strong impact of mining and oil exploitation, and as some authors point out, it has generated a reprimarization of Latin American economies (Teubal and Palmisano, 2015). The new investments made since the 1990s have had a significant impact on all countries in the region.

The third characteristic factor of the Latin American rural world is the growing presence of new environmental and territorial conflicts (CEPAL, 2016; Teubal and Palmisano, 2015). The growth of the agricultural sector was not only the result of an improvement in productivity per hectare, but was also, and above all, the result of an accelerated advance on new lands, many of them tropical and subtropical forests that were deforested, or desert areas on which new irrigation systems were installed. The advance over new lands, evident in Brazil, Paraguay, Argentina, and Bolivia, among others, and the capture of new water sources (cases of Chile, Peru, Ecuador, Colombia, among others) have generated, on the other hand, numerous conflicts with family farmers - evicted or without availability of water use (Graziano da Silva *et al.*, 2010). This also generates conflicts with the non-agricultural population, which suffers from the advance of new productive ventures that do not always respect local environmental conditions and values (contamination by agrochemicals and mining by-products, deforestation, and loss of biodiversity, among others).

A final dynamic of the Latin American rural world is the persistence of rural exodus but also the growing process of demographic and social rebirth under construction. The process of rural exodus has been evident in the region from the mid-20th century onwards (Dirven *et al.*, 2011). However, the depopulation process would be in its final stage and would now enter a new period of stabilization of the rural population and in many cases of demographic renaissance due to migration from cities to the countryside and towns. This situation can be observed especially in small towns, in areas of high landscape value, in coastal areas, and in the vicinity of important communication routes. This does not mean that there are no areas that still suffer from rural exodus processes, especially areas of dispersed population, but rather that the dynamics and rate of depopulation has changed substantially, and many areas are beginning to experience new dynamics of repopulation, which to a large extent is not directly related to agricultural activities, but rather to other forms of employment and occupation. Several factors are

generating this change. First, the loss of quality of life in cities due to congestion, the lack or deterioration of infrastructure and equipment, and the resurgence of violence and marginalization (World Bank, 2008 and 2009). Hundreds of cases exemplify this process whereby artisans, professionals, workers, new entrepreneurs, retirees seek a new way of life and new ways of connecting with nature. This "return" to rural areas (countryside, villages, or small towns) is complemented by the strong development of secondary residences or tourism in rural areas, also with the objective of seeking open spaces, in contact with nature and associated with rural values. A second factor contributing to this process of construction of a new rurality is the generation of new and multiple activities in rural areas, with the creation of new commercial activities, production services, hotels, restaurants, personal services, and others. This responds to the demands generated by the expansion of primary activities, the growing importance of agriculture and, above all, the growing rural domestic consumption; that is, the consumption of the rural population, both the original population and the population that migrates to these areas.

These four elements are undoubtedly reconfiguring the rural territories of the region, generating new dynamics, and making viable the emergence of innovative processes and the construction of new models and approaches to development in the territories.

In general terms, we can observe that all processes of political and economic change in each historical moment were always accompanied by a significant base of ideas, concepts, and knowledge, which are mostly visualized or reflected in the international scientific literature (Kay, 2007). Considering this dynamic, the hypothesis we propose is that the current emerging issues related to rural issues are no longer the same as those raised before the 1980s or 1990s; there has been a clear evolution towards new issues. From the well-known problems of the gap between peasant and business agriculture, rural poverty, infrastructure problems, agrarian reform, among others, there has been a gradual shift to other issues, among which environmental problems, the new rural-urban relationship, the dynamics of the actors, among others, are gaining much more strength, thus accompanying the processes of change in the rural world. The change in reflection on rural issues reflects the political and social changes in the different countries, but we also consider that scientific production plays a very important role because it can open the doors to a more powerful reflection in the region on the need for a transition to new models of rural development, in a regional context marked by persistent economic crises, with strong volatility and political changes, and with increasingly critical environmental scenarios.

In summary, and in terms of work objectives, we are interested in analyzing the major emerging themes of analysis and reflection on the rural world in Latin America since the 1990s, and especially at the present time (2018-2023). It is interesting to note the persistence of some key issues identified almost three decades ago, but especially the emergence of new issues, which reflect new concerns about the rural world in the region, and which could open the door to a more intense reflection on the need to build new paradigms of more sustainable and inclusive rural development, capable of overcoming the historical structural problems of the Latin American rural world. For this purpose, a very simple bibliometric analysis is used, based on the analysis of publications in numerous international journals, and especially six specialized journals on rural issues, three from Latin America and three in English.

The first part of this paper presents the materials and methods used for the analysis, describing the database of scientific articles constructed specifically for this work. Secondly, we present the basic bibliometric data by country, journals, and topics. Thirdly, we emphasize the evolutionary analysis of the different topics and the current situation, describing in detail the research topics.

2. Materials and Methods

It is presented a quantitative, retrospective, and descriptive study of the scientific production on the rural environment in Latin America, which according to Buitrago-Pulido (2019), will allow the selection and organization of the documents. Only original articles were considered in the bibliometric analysis.

To begin the study, the database was elaborated. It started with research in Google Scholar and Google *Académico*, utilizing keywords like rural, territory, development, agricultural, and their synonyms. The time lapse was from year 2018 to 2023 (until January 2023), and the region of study was Latin America.

For more accurate results, a research equation was utilized for each Web search engine, Google Scholar and Google *Académico*, one in English and other in Spanish, respectively. The equations were:

- Google Scholar: (rural) AND (territory OR territorial) AND (development) AND (agrarian OR agricultural).
- Google *Académico*: (*rural*) AND (*territorio* OR *territorial*) AND (*desarrollo*) AND (*agrario* OR *agraria*).

Once both databases were integrated, due to the experience of the researchers, the database was complemented with all the papers published by the most prestigious journals directly linked to rural topics in Latin America in said time lapse like: “Mundo Agrario”, “Revista de Economía y Sociología Rural”, “Cuadernos de Desarrollo Rural”, “Journal of Rural Studies”, “Journal of Agrarian Changes”, and “Rural Sociology”.

The primary database contained a sample of 559 articles about agricultural and rural issues in Latin America, during the period 2018-2023. The database contained the following data:

- Authors: name of the authors
- Title of article: complete name of the article
- Year: year of publication
- Journal: journal of publication
- Country of reference: Indicates the country where the paper was published.

Then, new variables were created to enhance the data analysis. The first dichotomous variable was the geographic origin of the paper, being able to be LAC (papers published by journals originating from Latin American countries) and NO LAC (papers published by journals originating from no Latin American countries). The second variable generated was the subject matter on which the paper focused. No previous classification was used for this purpose, but rather these categories were created inductively from the key words and the subject areas of the same publications. These categories were as follow:

1. Actors, networks, and institutions: It is about papers that stress the dynamic of actors, network construction and functioning of the institutions.
2. Agribusiness: Papers focused on agribusiness.
3. Agricultural technology: Papers on general technology in agricultural production systems.
4. Agroecology: Papers focused on agroecology.
5. Bioeconomy: Papers related to bioeconomy.
6. Commercialization: Papers focused on commercialization issues.
7. Competitiveness and efficiency: Papers focused on sectoral competitiveness issues and the search for productive efficiency.
8. Conflicts: Papers focused on analyzing conflicts between actors and sectors, especially over the control of resources.

9. Cooperativism: Papers focused on cooperativism in general.
10. Credit and financing: Papers focused on access to finance and credit issues.
11. Economy: General papers on economic topics not included in other categories.
12. Environment: Papers on environmental issues in general.
13. Extension and innovation: Papers focused on innovation, extension, and development promotion.
14. Family agriculture: These are papers that emphasize in the dynamics and organization of family farming.
15. Food safety: Papers on food safety issues in general.
16. Gender: Papers on gender issues.
17. Identity and representations: Papers emphasizing identity and representations about rural and development.
18. Infrastructure: Papers on different types of infrastructure problems and their relation to rural development.
19. Land: Paper on land issues in the region.
20. Policies: Papers focused on public policies in support of rural development, the fight against poverty and hunger.
21. Production systems: Papers describing and analyzing production systems and value chains in rural areas.
22. Society: Papers on social issues in rural areas.
23. Territory: Papers on territorial problems and intervention models with a territorial approach.
24. Tourism: Papers on tourism in the rural areas.

The collected data was edited, tabulated, and processed to generate tables and figures that help to visualize the findings. This process was elaborated through the Microsoft Excel program.

The analysis part focuses on the main topics by locations, groups, and main journals, through the calculation of the frequencies and percentages of the indicated variables, to provide an overview of what is being studied in Latin America about agricultural and rural issues. Additionally, it was considered appropriate to include a comparative analysis on topics by year/period (1992, 2007, 2018-January 2023), to see the evolution of the study on the subject. It should be noted that the publications analyzed in the years 1992 and 2007 only correspond to the 6 main journals analyzed: “Mundo Agrario”, “Revista de Economía y Sociología Rural”, “Cuadernos de Desarrollo Rural”, “Journal of Rural Studies”, “Journal of Agrarian Changes, and Rural Sociology”. In this way, these two years contain less publications than the 2018-january 2023 period, which, although it may imply a slight bias in the information, it does not prevent the construction of a global view of the mayor research topics over the year.

Moreover, an index was sought to measure the dispersion of the results; for example, how dispersed are the publications in the journals by country, or in the countries by journals. For this purpose, the coefficient of variation is an appropriate indicator, which consists of the ratio between the standard deviation and the mean. The equation below represents the coefficient of variation.

$$CV_i = \frac{S_i}{\bar{x}_i} \quad i=1, \dots, n \text{ countries or journals}$$

Where CV denotes the coefficient of variation of i , s is the standard deviation of i in the sample and \bar{x} is the mean of i in the sample. When the result of the coefficient approaches 0, the dispersion is greater (less concentration), and as the resulting number moves away from 0, it indicates less dispersion (greater concentration). Note that saying that something has greater dispersion is equal to saying that it has less concentration, or vice versa; i.e., there is an inverse relationship between dispersion and concentration.

The logic is that, for example, when measuring publications in journals by country, those countries that publish in several journals have a greater dispersion (less concentration). While those countries that publish in one or a few journals have less dispersion (greater concentration).

3. Results

3.1. Scientific production around the rural world in Latin America. Journals and countries

The number of papers that could be evaluated for the period 2018-2023 is 559 articles, which represents a very significant number of scientific works for the region and denotes the importance given to the agricultural and rural topic.

These are very unevenly distributed by country (Fig. 1). Five main groups of countries can be identified.

- **Brazil** is a separate case because it has the largest absolute number of publications, with a total of 258, that is, 46.2% of the database.
- **Group 1**, composed of Argentina, Mexico and Colombia with a total of 173 publications, 30.9%.
- **Group 2**, composed of Ecuador, Chile, Peru and Uruguay, with 54 publications or 9.7%.
- **Group 3**, composed of Bolivia, Costa Rica, Cuba, Guatemala, Honduras, Nicaragua, Paraguay, Puerto Rico, Puerto Rico and Venezuela, totaled 23 publications, only 4.1%.
- **Group 4** Latin America. Are the publications in general for the entire region, or for several countries in the region, these are 51 publications, or 9.1% of the total.

The volume of publications per country shows two elements. First, the number of articles depends on the size of the national economics and the importance of the rural sector in general. Secondly, it also depends on the scientific and technological apparatus of each country; country that are very advanced from this point of view, such as Brazil, for example contrast with countries with a less developed scientific apparatus, such as Paraguay, for example.

The coefficient of variation shows high concentration for the following countries: Paraguay, Puerto Rico, Haiti, Honduras, and Jamaica (Table 1). This means that those countries usually publish in just one or a few journals about rural topics. This also could mean just one publication of those countries in the sample. On the other hand, the coefficient shows greater dispersion for Latin America (in general), Colombia, and Mexico. This result means that those countries usually publish in several journals, i.e., publications in more than 10 journals.

While studying the publications in the countries by journal, the coefficient of variation shows the highest concentration for “Revista de Economía e Sociología Rural”, a journal from Brazil, and greater dispersion for “Journal of Rural Studies” and “Journal of Agrarian Change”, with publications about rural topics in more than 10 Latin America countries (Table 2).

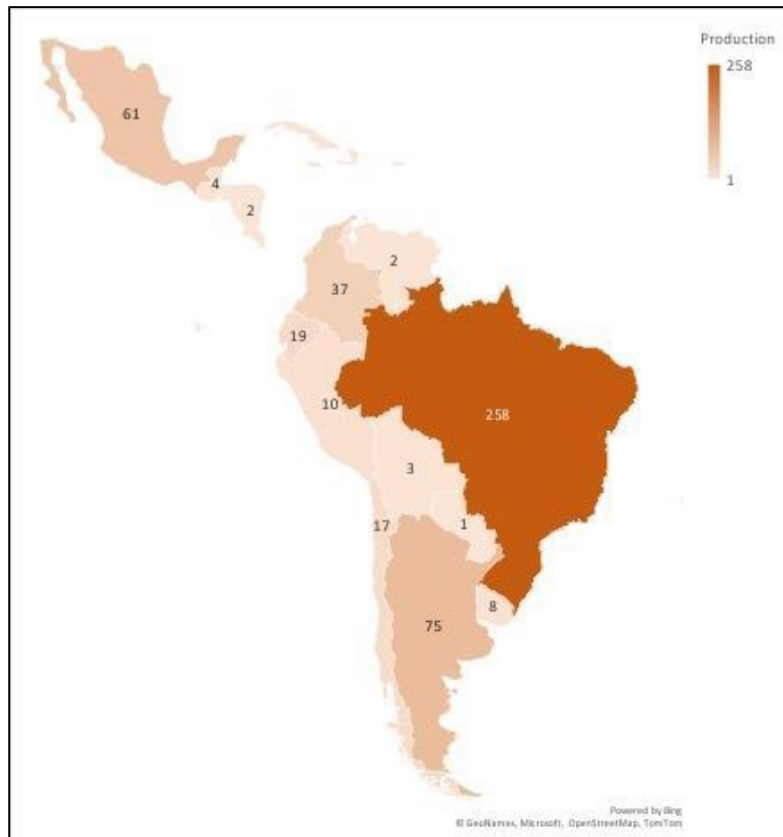


Figure 1. Distribution of selected scientific articles by country.

Table 1. Coefficient of variation of publications in the journals, by country.

Country	CV
Paraguay	8.66
Puerto Rico	8.66
Haiti	8.66
Honduras	8.66
Jamaica	8.66
Brazil	7.49
Argentina	6.51
Nicaragua	6.08
Venezuela	6.08
Guatemala	5.24
Uruguay	5.24
Cuba	4.93
Costa Rica	4.93
Bolivia	4.93
Ecuador	3.95
Perú	3.56
Chile	3.37
Mexico	3.15
Colombia	3.11
Latin America	2.15

Table 2. Coefficient of variation of publications in the countries, by journal.

Journal	CV
Revista de economía e sociología rural	4.00
Mundo Agrario	2.84
Cuadernos de Desarrollo Rural	2.19
Rural Sociology	2.05
Journal of Rural Studies	1.18
Journal of Agrarian Change	1.13

Another notable difference in the journals is their level of concentration on articles from their own countries of origin. The journal “Economía y Sociología Rural” is heavily referenced to articles on its country origin, publishing 86% of its articles on specific cases in Brazil, especially papers about economy (18%), family agriculture (8,8%), environment (7,7%) and agricultural technology (7%).

In the case of the journal “Mundo Agrario”, 63% of its articles are published on its country of origin, Argentina, mainly on social issues (15.9%), family farming (10.2%) and, in third place, conflict issues (9.1%) and land (9.1%). The Colombian journal “Cuadernos de Desarrollo Rural” is much more balanced in terms of the countries about which it publishes, the main topics being rural tourism (17%), followed by the environment (14.9%) and economics (12.8%). English-language journals publish articles on numerous countries, with no special emphasis on any one topic. The “Journal of Rural Studies” gives priority to articles on the environment (14.3%), secondly to production systems and social issues (12.9%) and thirdly to actors, networks and institutions (8.6%). The “Journal of Agrarian Change” gives priority to policy issues (17.9%), family farming, production systems and land (10.3%).

It should also be noted that there are thematic differences between the journals that publish only in English and the Latin American journals that publish in Spanish, Portuguese and English. As the data show, the journals published in Latin America have approximately 50% of their articles focused on economics, society, environment, family farming, extension and production technologies, while in the journals published in English, approximately 50% are focused on environment, society, production systems, policies and territory, which means that the focus of attention between journals published in Latin America and those published in Europe and the USA is significantly different.

There are also major differences in the topics according to the countries (Fig. 2). In the case of Brazil, the main concerns are focused on the economy (17.8%), family farming (8.9%) and agricultural technology (7%) (which is consistent with the country's agro-export efforts on the one hand, and the support of family farming and rural territories on the other). In the case of Argentina, the main topics are much more centered on agrarian conflicts (12%), social issues (16%) and family farming (10.7%), which is the result of a very particular historical moment in which two very dichotomous production models are facing each other: the agro-export model based mainly on soybean production, with strong environmental impacts, and the family farming model, which is being displaced. Although this dichotomy is a reality throughout the region, in Argentina it is more acute due to the prevalence of strong political conflicts between different sectors.

In the case of Colombia, the main topics are the environment 21.6%, extension and innovation 13.5%, and production systems and territory 8.1%. In Mexico, the most outstanding topics are production systems, 16.4%, society 14.8%, and environment and tourism 11.5%. Publications in Colombia and Mexico show a greater concern for innovation and change. The countries in group 2 (Ecuador, Chile, Peru and Uruguay) are also increasingly focused on environmental issues, as are the countries in group 3 (Bolivia, Costa Rica, Cuba, Guatemala, Honduras, Nicaragua, Paraguay, Peru, Puerto Rico and Venezuela). However, if we consider the publications produced for the region as a whole, three key themes emerge: agroecology, the environment and gender issues; in these cases, these publications tend to be cross-cutting and provide a general reflection on these issues for the entire region.

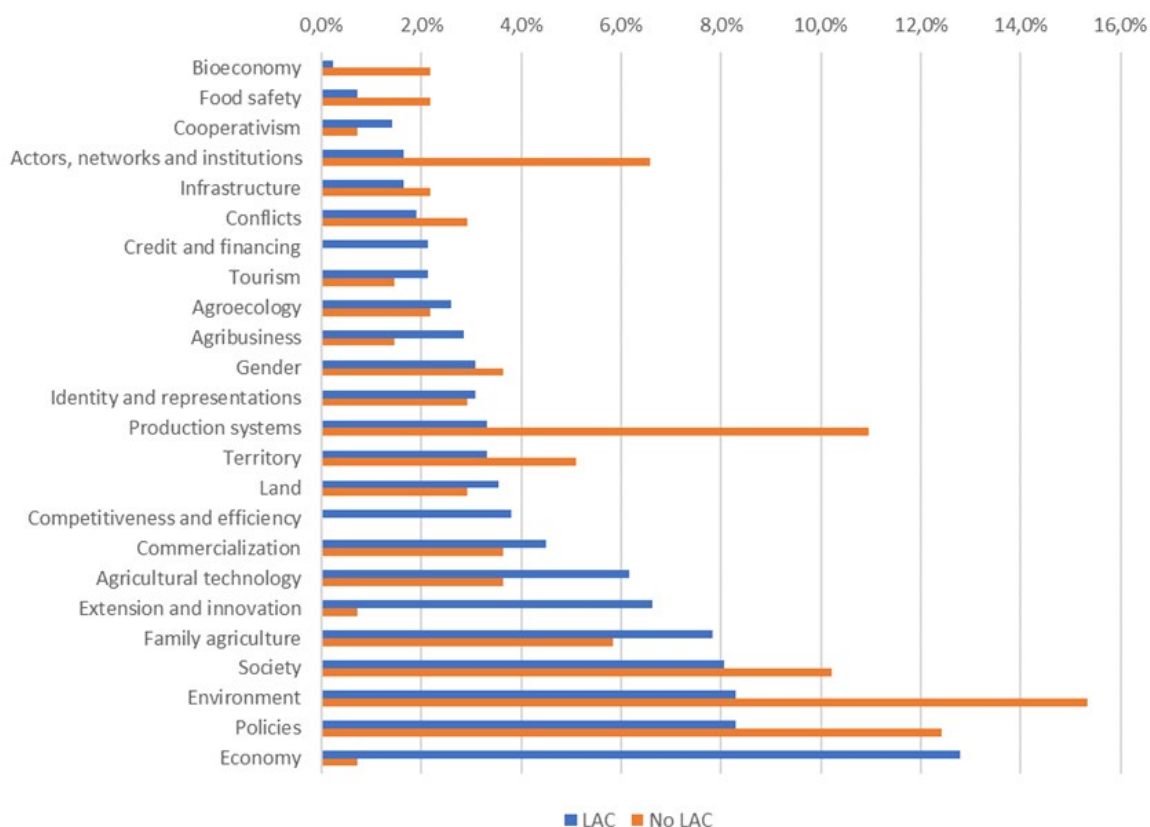


Figure 2. Main research topics in LAC and NON-LAC journals.

3.2. Key issues for the analysis of the rural reality in Latin America

In 1992, scientific publications were concentrated on economic development issues, with 31% of scientific articles, followed by production systems issues with a little more than 10%, and then production technology, agribusiness, cooperativism and social issues with 7% each. Issues related to tourism, land, food security, identity, gender, agroecology, among others, were not present in scientific production in the 1992 survey (Fig. 3). These thematic concerns were consistent with the political and economic reality of the countries that were during a process of structural adjustment and economic liberalization.

By 2007, the topics had changed significantly (Fig. 4). This is a period marked by neo-development policies in the region, with dual policies of support for exports on one hand (as an instrument for generating foreign exchange) and for maintaining family agriculture on the other. At this time, the most frequent topics were economic and productive issues, trade issues and issues compatible with the need for agro-export development, but there were also social and land issues and the policies needed to support family farming and rural territories, which had been neglected during the 1990s.

Indeed, the scientific production observed for 2007 is associated with the profound changes that took place in the 2000s, with the emergence of new policies and greater State intervention in agricultural and rural development, aimed at resolving the problems of family agriculture, problems of land concentration or land tenure and other social problems resulting from the deterioration of vast socio-productive sectors following the structural adjustment process of the 1990s. In this sense, the scientific production of this historical moment is consistent with the political and economic reality of the countries of the region.

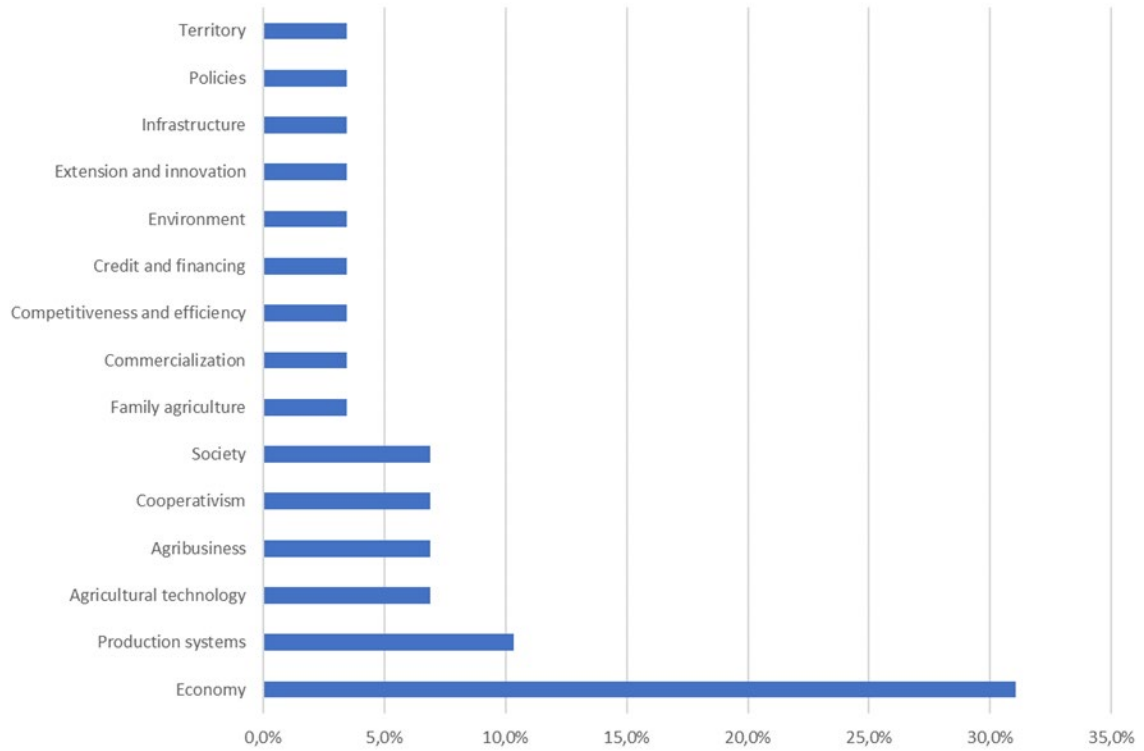


Figure 3. Distribution of scientific articles by subject matter in 1992.

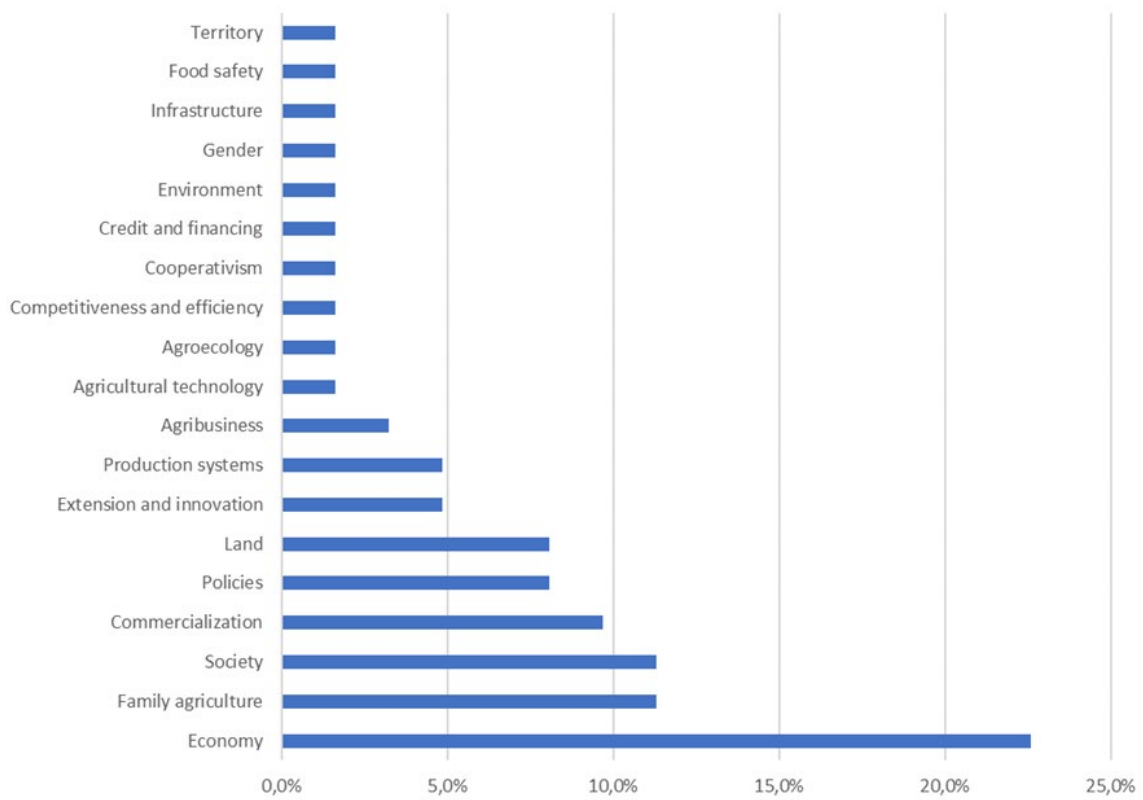


Figure 4. Distribution of scientific articles by subject matter in 2007.

As shown in Figure 5, the scientific production published in the period 2018-2023 is very different from that of the years previously analyzed. The inertia of several research topics typical of the 1990s and 2000s is maintained, i.e. the concern for productive and agroexport development on the one hand and the sustainability of family farming on the other, but the environmental topic emerges as the most studied and published topic. Environmental, economic and social issues, family farming, policies and agricultural technology account for nearly 50% of the scientific articles.

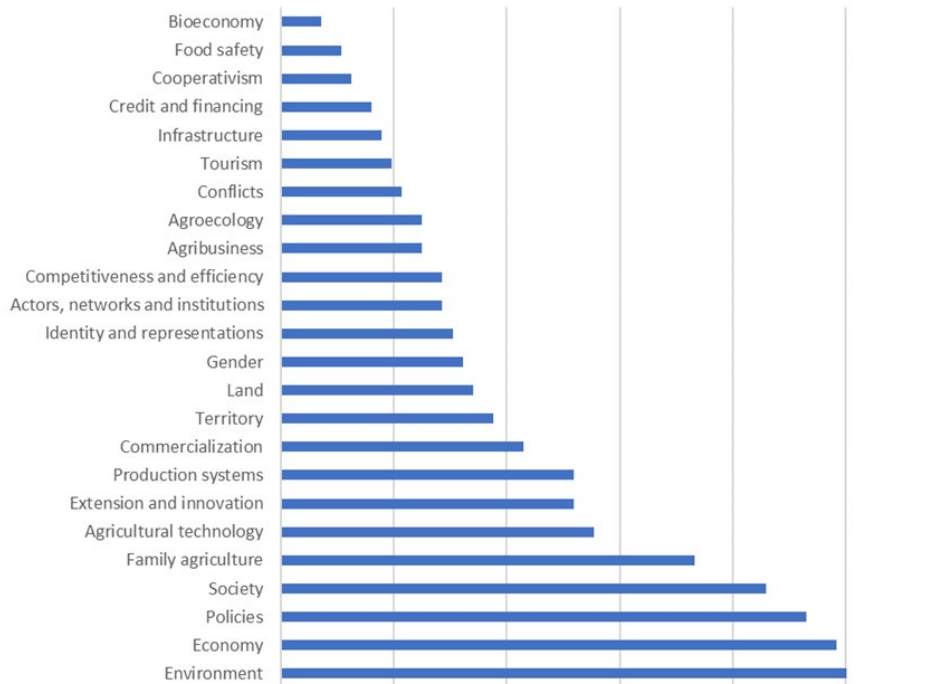


Figure 5. Distribution of scientific articles by subject matter during the period 2018-2023.

In short, from a concern focused on increasing production and productivity in the 1990s, we moved on to a period of concern for production issues and the sustainability of family farming in the 2000s, before finally moving on to a greater concern for environmental issues and the search for new alternatives to the more traditional production models, which is also reflected in the discussion of policies.

However, what stands out is the evolutionary process of the publications, which marks certain trends and behaviors, reflecting the changing times, political and economic conditions in the region.

Beyond the weight and importance of the different themes of analysis, different dynamics can be observed over time (Table 3). As Figure 6 shows, two main trends can be observed. On the one hand, the topics that tend to grow in terms of the number of publications. Within this large group, there are many topics that have grown significantly in the last decade, such as environmental issues, technology, policies, territory, agroecology, identity and many others. Meanwhile, there are issues that have varied greatly over time, but have a slight tendency to grow, such as those linked to production systems, extension and innovation, sectoral competitiveness, credit, financing and trade. However, there are other topics that have always been part of the scientific agenda but are decreasing in importance. The first set of issues have declined significantly, such as agribusiness economics and cooperativism. The second set of issues are those that have been very important at other times in history but have now declined considerably in importance, such as social issues, family farming, land issues and food security.

The variation in published topics reflects the region's problems and economic, political and institutional conditions.

Table 3. Evolution of the topics of the publications over time.

Topics	1992	2007	Currently	Trend
Environment	3.4%	1.6%	10.0%	strong growth
Economy	31.0%	22.6%	9.8%	strong decrease
Policies	3.4%	8.1%	9.3%	strong growth
Society	6.9%	11.3%	8.6%	decreasing trend
Family agriculture	3.4%	11.3%	7.3%	decreasing trend
Agricultural technology	6.9%	1.6%	5.5%	strong growth
Extension and innovation	3.4%	4.8%	5.2%	growing trend
Production systems	10.3%	4.8%	5.2%	growing trend
Commercialization	3.4%	9.7%	4.3%	strong decrease
Territory	3.4%	1.6%	3.8%	strong growth
Land	0.0%	8.1%	3.4%	strong decrease
Gender	0.0%	1.6%	3.2%	strong growth
Identity and representations	0.0%	0.0%	3.0%	strong growth
Competitiveness and efficiency	3.4%	1.6%	2.9%	growing trend
Actors, networks and institutions	0.0%	0.0%	2.9%	strong growth
Agribusiness	6.9%	3.2%	2.5%	growing trend
Agroecology	0.0%	1.6%	2.5%	strong growth
Conflicts	0.0%	0.0%	2.1%	strong growth
Tourism	0.0%	0.0%	2.0%	strong growth
Infrastructure	3.4%	1.6%	1.8%	growing trend
Credit and financing	3.4%	1.6%	1.6%	decreasing trend
Cooperativism	6.9%	1.6%	1.3%	strong decrease
Food safety	0.0%	1.6%	1.1%	decreasing trend
Bioeconomy	0.0%	0.0%	0.7%	growing trend

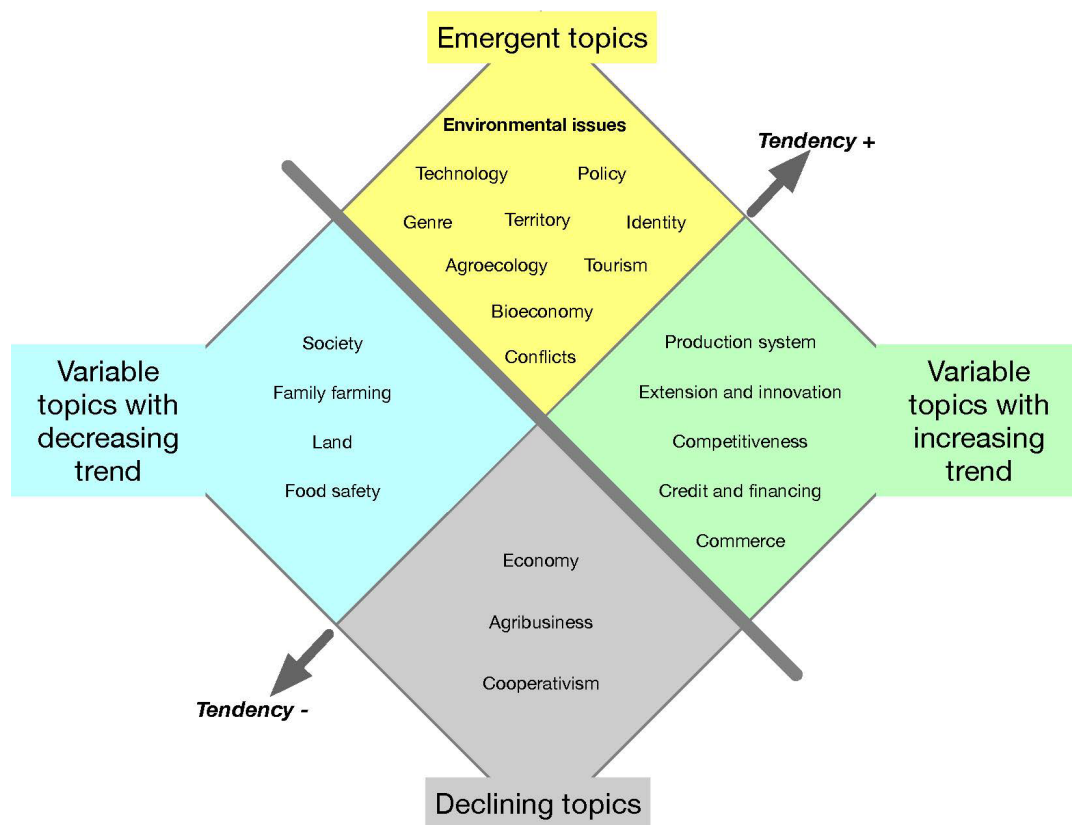


Figure 6. Dynamics of the topics published in scientific journals over time.

3.3. Emergent topics

These are themes that have been consolidated over time, especially given their importance in this historical context.

Environmental issues. The number of publications on environmental issues has grown significantly in recent years. Of the total number of articles surveyed, 33% correspond to environmental policy and governance issues, followed by diagnoses of environmental problems (28%). This is followed by environmental management issues (17%), climate change (11%) and articles related to the economic valuation of natural resources and environmental services in general (9%). Thus, the environmental issue in general has been rediscovered in recent years as a key factor in rural development, which is also a product of greater environmental awareness and the transformation generated by climate change in the region's rural territories. We consider that the growing interest in environmental issues is significant and points to a greater concern for building new scenarios of transition and greater sustainability.

Policy publications. Another emerging theme in studies on the rural world in the region is the dynamics of policies, although with notable changes depending on the historical moment. Rural policy issues emerged very strongly in the 2000s, with publications focusing on evaluating social policies aimed at family farming, assessing their impacts and their suitability as tools for change, especially transfer policies, financing for family farming, public procurement, among others (Bandeira Greño *et al.*, 2003; IICA-ECLAC-FAO, 2010). Currently, publications on policies have multiplied, with articles focusing on the review of development policies accounting for 34% of the total, followed by articles on production policies in general (32%), followed by 17% of articles on food policies and rural and territorial development policies. Once again, the importance of articles focused on evaluating the performance of policies can be seen, especially in countries with greater density and public programs oriented towards rural development, such as Brazil.

Agricultural technology. Another subject that is growing in importance in terms of publications are articles related to agricultural technology in general. Although it is not a topic of great importance in general, it was important in the 1990s, then declined in the 2000s, a period in which the technological issue was not as important as poverty and policy issues. Of the total number of articles surveyed (34), most correspond to works on management technologies (36%) and technical diagnoses (33%). The rest of the articles focus on analyses of types of productive activities and varieties (15%) and articles focused on the analysis of technological change (15%).

Territorial issues Already in the 2000s, concern for territorial issues (territorial organization and planning, land use, rural-urban relations) began to emerge as an issue of interest in the region (Perico and Ribero, 2002). The visualization of the problems of the rural world as systemic phenomena that went beyond mere production issues, and the emergence of the concept of rural territorial development by RIMISP, IICA, FAO and other national organizations was an incentive for the generation of studies and publications on the subject (Guzmán *et al.*, 2006). At the present time, publications on territorial issues, although only 23 cases were published, are notably higher than in previous periods, reflecting the emergence of new discussions and problems in the region, such as rural territorial development (45% of the articles), territorial diagnoses (25%), the valorization of heritage resources and rural pluriactivity (20%) and the problems of rural-urban relations, decentralization processes and especially the issue of land use planning (10%), which are increasingly key issues in the development of rural territories (Sili, 2022).

Genre. Another emerging issue in recent years is the question of gender and the role of women in the rural world. Although the number of articles is lower (19 articles), the number of articles has increased with respect to the periods analyzed above, which is consistent with current discussions. The most important topic linked to the gender issue refers to the working conditions of women in the rural world in general and around different productive activities.

Identity and representations. Also, as with gender issues, there was an increase in the number of articles focused on issues of identity and representations by the rural population. Although there are few articles (17), they are focused on analyzing the representations of the population on rurality, life in rural areas, the relationship with nature and, in some cases, on technological change and production systems. In a certain way, there is a reevaluation of the meaning of rural life, which is "rediscovered" in its unique aspects and symbolic attributes. They are associated with the authenticity of customs, with identity references that link them with the traditional, with the autochthonous, with the deep values of national identity. They are also valued in their environmental conditions and lifestyles, in contrast to urban spaces.

Actors, networks and institutions. The number of articles on actors, networks and institutions has also increased with respect to previous periods, most of them dealing with collective action, social movements and institutional arrangements. Most of these articles refer to family farming organizations and networks.

Agroecology. Agroecology, although it has very few articles, is clearly an emerging topic, which shows the concern in the region for the construction of new models of production and rural development, such as the logic of circular economy and agroecology (Betancourt Morales and Zartha Sossa, 2020; Altieri and Nicholls, 2012; Muñoz *et al.*, 2021). Most of these articles focus on promoting and substantiating, with empirical evidence from the field, the importance of agroecology as an alternative production model.

Tourism. There are very few articles focused on tourism, although this topic has grown considerably with respect to other years. Most of these articles focus on Mexico. The growth of this topic highlights the importance of this activity in the rural world of Latin America, an activity that has been responsible for the revitalization of many marginalized rural territories (Sarasa, 2014).

Bioeconomy. The bioeconomy, like tourism, is beginning to appear in the literature on the rural world in Latin America as a set of innovative productive activities capable of dynamizing production chains and territories. (Sasson and Malpica, 2018). Most of these articles are published in English-language journals, often by authors from countries outside the region.

Conflict over the control of resources. Finally, within this category of emerging issues, there are publications on conflicts over the control and management of natural resources (Palmisano, 2015; Manzanal and Villareal, 2010). Indeed, the expansion of the production of primary goods has a spatial correlate, since growth was not only the result of an improvement in productivity per hectare, but also, and above all, the result of an accelerated advance on new lands, many of them tropical and subtropical forests that were deforested, or desert areas on which new irrigation systems were installed (Slipak, 2015; Gligo *et al.*, 2020). The advance on new lands, evident in Brazil, Paraguay, Argentina and Bolivia, among others, and the capture of new water sources (cases of Chile, Peru, Ecuador, Colombia, among others) have generated, on the other hand, numerous conflicts with family farmers - evicted from their lands or without availability of water use. These conflicts over the appropriation and use of natural resources have given rise to articles, preferably focused on the case of Argentina and Brazil. In many cases these conflict processes are analyzed through articles under the policy theme.

3.4. Variable topics with increasing trend

There is another set of publication topics that has had a variable behavior over time, but which show a growing trend in recent years.

Production system. The literature on agricultural production systems in general has been very important in the period of the 1990s, a time when there was a strong orientation in policies towards improving production and increasing economic competitiveness (Gazzano *et al.*, 2019). The importance of these articles decreased notably and remains stable at present. The most relevant topics on those that

describe and analyze different production systems, especially of agricultural origin, using different approaches, many of them linked to the analysis of value chains, analyzing the types of products, scales of production and the actors linked to these products or production chains.

Extension and innovation. Directly linked to production systems, there is many publications focused on extension systems and the emergence of innovation processes. These are growing topics, and in recent years more oriented to innovation issues for adaptation to climate change and new environmental conditions. Within this set of articles an expanded concept of innovation is put forward, understood in a broad sense that includes not only the generation of new products, processes, services or forms of management, but also the search for creative solutions to problems faced by communities, strategies to increase efficiency and for the construction of new development processes (Pyburn and Woodhill, 2014; Horlings and Marsden, 2014; Sili and Martin, 2022).

Competitiveness efficiency. The articles related to competitiveness and efficiency of production system were important during the 1990s, then they declined and reappeared as important topics now days. These are orientated to measure the level of competitiveness of the products or production activities and the efficiency in the use of resources. Most of these articles are focused on the case of Brazil.

Credit and financing. Similarly, articles related to credit and financing have decreased over the years, being scarce at present (11) and very focused on the case of Brazil.

Commerce. The articles related to trade have decreased with respect to previous years (31 articles), which follows the trend observed with the other articles related to competitiveness, credit and agribusiness. These articles are heavily concentrated on three topics: export markets, markets for family farming products, and national marketing chains through supermarkets or other instruments. Within these articles, there is a clear reference to new forms of consumption and changes in consumer preferences, which stimulate the production of new, more natural products that are closer to the traditions and values of the territories.

3.5. Variable topics with decreasing trend

There is a large set of analysis topics that are highly variable over time but have a declining historical trend. These are the ones that were in vogue during the period of the 2000s and that were directly linked to the social problems of the rural world.

Social issues. The social issues and problems of the rural world in Latin America continue to be a key topic on the scientific agenda, but their importance is declining. The main topics of interest are the organization and transformation of rural societies (22%), followed by the analysis of workers and their dynamics (15%), the analysis of social capital (14%), the problem of education in rural areas (12%), the situation of indigenous communities (11%), the problem of rural youth (6%), rural poverty (6%) and finally issues related to migration (2%). This last topic of migration is not considered a topic of great importance as it has been in other historical moments, as well as the topic of poverty, a topic that was treated with much greater emphasis in other historical moments.

Studies on family farming. It is evident that the problems of this vast social sector continue to be a permanent topic of analysis in the region, which has generated numerous research and publications in recent decades (Grisa and Sabourin, 2019; Obschatko *et al.*, 2007; Salcedo and Guzman, 2014). However, and seen through the number of scientific publications observed over time, this topic does not occupy the same place of importance. It was a topic that received little work in 1992 (3.4% of publications), which is consistent with the level of concern at that time, focused on issues of development and competitiveness; it then occupied a privileged place in 2007 (11.3% of publications), i.e. in the midst of a period of momentum, with numerous policies to support the family farming sector, and then declined again in percentage terms in the current period, with 7.3% of the publications

surveyed. At present, the topics most frequently dealt with are the characterization of family farming (33%), the development of the family farming sector (23%), aspects of technology and production in family farming (19%), strategies for persistence and sustainability (14%) and finally topics related to marketing (9%).

Land. The subject of land, a key issue in rural development in Latin America, has been studied extensively between the 1950s and 1980s, when different agrarian reform measures were implemented. Then, and in the context of reforms and structural adjustment, its importance declined to become relevant again in the years 2000, at which time many policies aimed at strengthening family farming and solving the historical land tenure problems in the region emerge (Soto Baquero y Gómez, 2014). However, the importance of this topic has diminished at present, with only 3.4% of articles published.

Food safety. The issue of food security is a minority topic in publications on the rural and agricultural world, accounting for only 1.1% of publications, less than in the 2000s, when the topics of family farming, poverty and food security were more widely addressed. This topic is much more developed by cooperation agencies, in the form of reports (IICA, 2020).

3.6. Declining topics

There is another set of issues that have become less important over the years.

Economic issues. Latin America has a strong dependence on primary production; the region contributes 45% of global food exports, much more than any other region in the world (Barrantes *et al.*, 2013). The agricultural sector grows at an average of 2.8% per year, supported by the expansion of exports and by the dynamics of domestic demand (Rodríguez *et al.*, 2017). It is not surprising then that scientific production around growth and productive development linked to the agricultural sector continues to be one of the main topics of scientific publications (about 10%). However, the most salient fact is that this topic has been decreasing in recent years in relative terms compared to other emerging issues. Latin America has reached very important levels of production and development in the agricultural sector; the problem does not seem to be there, but in the impacts that this productive growth has had in social, environmental, and territorial terms in general, which is reflected in the growing importance of other topics of analysis. The topics addressed are, in first place, economic diagnoses of activities or chains (25%), studies linked to consumption and demand for products derived from the agricultural sector (22%), studies linked to economic policies (15%), studies on the transformation of productive structures (12%), studies on productive strategies linked to the agricultural sector (10%), studies linked to finance (4%), employment (4%) and finally, studies on insurance (3%).

Agribusiness. Only 18 articles related to agribusiness have been surveyed, most of them focused on Brazil and Argentina, the two countries most closely linked to this topic. The key topics are the organization and dynamics of the agribusiness sector and its relationship with markets and resources. However, the importance of this topic has declined at present, compared to the 1990s.

Cooperativism. The topics related to cooperativism have also decreased throughout the period analyzed, being currently a minority topic.

4. Conclusions

Clearly, this study has limitations that could be resolved in new studies. Thus, there are numerous bibliometric indicators such as authors' age, sex, productivity indexes of the authors themselves, multi-authorship indexes, journal impact factor, self-citation indexes, descriptors, isolation indexes, the national impact factor, among others, which have not been used in this work and which would allow a more detailed analysis of the publications and their trends (González de Dios *et al.*, 1997). Another limitation of this work is the method and technique used to link each article to a topic, this has

been a work done by the authors based on titles and keywords, which may have generated biases since an article was linked to only one topic, when in some cases an article could be linked to two or more topics.

However, this work was not intended to be bibliometrically exhaustive, but rather to understand the major trends in terms of analysis and reflection on rural studies in Latin America, relating these changes to the political and economic transformation of the region. With this in mind, there are several elements that can be highlighted.

Scientific production on the rural and agricultural world in the Americas is very important. Only three Latin American journals specialized in rural issues publish approximately 60 articles per year, to which must be added the articles of numerous other journals published in Latin America, plus all the international journals, especially English-language ones, that publish articles on the subject and on the region. This shows the importance of rural issues in general, which is consistent with the economic and political reality of the continent, a continent that, although it is rapidly urbanizing, has a strongly rural economic and social base.

Scientific production on the rural world has evolved significantly in the last thirty years, from topics more focused on production and productivity in the 1990s, we have moved in the 2000s to social issues, family agriculture and policies, in response to the impact of production models that do not respect the environment and rural societies, to advance in recent years to topics where the environment, new activities and productive modalities (tourism, bioeconomy, agroecology) and policy issues appear more strongly. This thematic evolution shows that there is a change in the way rural issues are viewed, from a productive and agricultural perspective to a much broader rural perspective, interested in the dynamics of the territories, in the multiple resources of the rural world and in thinking of the rural thing as living and dynamic territories where people can build their life projects.

The approaches of the journals differ from one another and are conditioned by the reality of their own countries and their networks of authors. In the case of Latin America, the journals are very focused on their own countries, and therefore more closely linked to the political and economic agendas of the countries; in the case of English-language publications, they maintain greater autonomy in their editorial policies and a more balanced distribution of the countries on which they publish their articles.

The changes in the topics published suggest that research and reflection are increasingly oriented towards new models and paradigms of development. However, and perhaps the greatest shortfall in terms of the publications surveyed, is that there are no clear publications focused on the analysis and reflection of new paradigms or emerging rural development models. Thus, only two publications out of a total of 559 explicitly mention in their titles the issue of transition to new sustainable models, and only 5 articles explicitly mention the term sustainability. In this sense, although it can be affirmed that there are conceptual advances in scientific publications on the rural world in Latin America in relation to previous decades, accompanying the changes occurring in the rural world, research and reflection on the rural world in Latin America is still tied to the old problems inherited from the modernization periods of the mid and late twentieth century.

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References

- Altieri, M., Nicholls, 2012. Agroecología: única esperanza para la soberanía alimentaria y la resiliencia socioecológica. *Agroecología* 7(2), 65–83.
- Arenas, M., Dovalina, de Arenas, J. L., 2004. La investigación agrícola en América Latina y el Caribe desde la perspectiva bibliométrica. *Anales de Documentación* 7, 29–38.
- Bandeira Greño, P., Atance Muñiz, I., Sumpsi Viñas, J. M., 2003. Las políticas de desarrollo rural en América Latina: requerimientos de un nuevo enfoque. *Cuadernos de Desarrollo Rural* 51, 115–136.
- Barrantes, R., Berdegué, J., de Janvry, A., Díaz-Bonilla, E., Elizondo, D., Gordillo, G., Ibáñez, A.M., Junguito, R., Hertford, R., Moscardi, E., Piñeiro, M. (Coordinador), Pomareda, C., Valdés, A., Villasuso, J.M., Yúnez-Naude, A., 2013. *Agricultura y Desarrollo en América Latina: Gobernanza y Políticas Públicas*. Teseo, 218 pag., Buenos Aires
- Betancourt Morales, C. M., Zartha Sossa, J. W., 2020. Circular economy in Latin America: A systematic literature review. *Business Strategy and the Environment* 29(6), 2479–2497. <https://doi.org/10.1002/bse.2515>
- Buitrago-Pulido, R.D., 2019. Análisis bibliométrico sobre la producción científica en distribución en planta en la red Redalyc durante el periodo 2007-2017. *Scientia Et Technica* 24(3): 446-450. <https://www.redalyc.org/journal/849/84961239011/html/>
- CEPAL (Comisión Económica para América Latina), 2016. *The social inequality matrix in Latin America*. First meeting of the Presiding Officers of the Regional Conference on Social Development. CEPAL, Santo Domingo. https://repositorio.cepal.org/bitstream/handle/11362/40710/S1600945_en.pdf?sequence=1&isAllowed=y
- Chonchol, J., 1994. *Sistemas agrarios en América Latina. De la etapa prehispánica a la modernización conservadora*. Fondo de Cultura Económica, Santiago de Chile.
- Craviotti, C. (Ed.), 2014. *Agricultura familiar en Latinoamérica. Continuidades, transformaciones, controversias*. Ciccus Ediciones, Buenos Aires.
- Dirven, M., Echeverri, R., Sabalain, C., Rodríguez, A., Candia Baeza, D., Peña, C., Faiguenbaum, S., 2011. Hacia una nueva definición de “rural” con fines estadísticos en América Latina. *CEPAL, Colección Documentos de Proyectos*, 107.
- Gazzano, I., Achkar, M., Díaz, I., 2019. Agricultural Transformations in the Southern Cone of Latin America: Agricultural Intensification and Decrease of the Aboveground Net Primary Production, Uruguay’s Case. *Sustainability* 11(24). <https://doi.org/10.3390/su11247011>
- Gligo, N., Alonso, G., Barkin, D., Brailovsky, A., Brzovic, F., Carrizosa, J., Durán, H., Fernández, P., Gallopín, G., Leal, J., Marino de Botero, M., Morales, C., Ortiz Monasterio, F., Panario, D., Pengue, W., Rodríguez Becerra, M., Rofman, A., Saa, R., Sejenovich, H., Sunkel, O., Villamil Villamil, J., 2020. *La tragedia ambiental de América Latina y el Caribe*. Libros de la CEPAL 161. Santiago de Chile.
- González de Dios, J., Moya, M., Mateos Hernández, M. A., 1997. Indicadores bibliométricos: Características y limitaciones en el análisis de la actividad científica. *Anales Españoles de Pediatría* 47(3), 235–244.
- Gras, C., Hernández, V., 2021. *La Argentina Rural. De la agricultura familiar a los agronegocios*. Editorial Biblos, Buenos Aires.
- Graziano da Silva, J., Gómez, S., Castañeda, R., 2010. Boom Agrícola y Persistencia de la Pobreza Rural en América Latina. *Revista Austral de Ciencias Sociales* 18, 5-20. <https://doi.org/10.4206/rev.austral.cienc.soc.2010.n18-01>
- Grisa, C., Sabourin, E., 2019. *Agricultura Familiar: de los conceptos a las políticas públicas en América Latina y el Caribe 2030*. Alimentación, agricultura y desarrollo rural en América Latina y el Caribe 15. FAO, 19 pág. Santiago de Chile.
- Guibert, M., Sili, M., 2011. L’Argentine: expansion agricole et dévitalisation rurale. En M. Guibert, Y. Jean (Eds.), *Dynamiques des espaces ruraux dans le monde*, pp. 315–337. Armand Colin, Paris.
- Guibert, M., Sili, M., Arbeletche, P., Piñeiro, D., Grosso, S., 2011. Les nouvelles formes d’agriculture entrepreneuriale en Argentine et en Uruguay. *Économies et Sociétés* 10(33), 1808–1825.

- Guzmán, M., Martínez, E., Pérez Yruela, M., Moscoso Sánchez, D., 2006. *Nuevos Enfoques del Desarrollo Rural en América Latina. Reflexiones a partir de la aplicación y la evaluación del proyecto EXPIDER en Ecuador y Bolivia*. Instituto de Estudios Sociales Avanzados de Andalucía (IESA-CSIC). Documento de Trabajo 1006, 1-23.
- Horlings, L., Marsden, T., 2014. Exploring the “New Rural Paradigm” in Europe: Eco-economic strategies as a counterforce to the global competitiveness agenda. *European Urban and Regional Studies* 21(1), 4–20. <https://doi.org/10.1177/0969776412441934>
- IICA-CEPAL-FAO, 2010. *Perspectivas de la agricultura y del desarrollo rural en las Américas: una mirada hacia América Latina y el Caribe*. Santiago de Chile. <https://repositorio.iica.int/handle/11324/6038>
- IICA, 2020. *Desarrollo rural en las Américas: 2019-2020*.
- Kay, C., 2007. Algunas reflexiones sobre los estudios rurales en América Latina. *Íconos - Revista de Ciencias Sociales* 29, 31-50. <https://doi.org/10.17141/iconos.29.2007.230>
- Manzanal, M., Villareal, F., 2010. *El desarrollo y sus lógicas en disputa en territorios del norte argentino*. CICCUS, Buenos Aires.
- Moncayo Jiménez, E., 2001. *Evolución de los paradigmas y modelos interpretativos del desarrollo territorial*. CEPAL, Santiago de Chile.
- Muñoz, E. F. P., Niederle, P. A., de Gennaro, B. C., Roselli, L., 2021. Agri-food markets towards agroecology: Tensions and compromises faced by small-scale farmers in Brazil and Chile. *Sustainability* 13(6), 1–20. <https://doi.org/10.3390/su13063096>
- Muzlera, J., Salomon, A., 2022. *Diccionario del agro iberoamericano*. TeseoPress, Buenos Aires.
- Obschatko, E. S., Foti, M. P., Román, M. E., 2007. *Los Pequeños Productores en la República Argentina. Importancia en la producción agropecuaria y en el empleo en base al Censo Nacional Agropecuario 2002*. Secretaría Agricultura, Ganadería, Pesca y Alimentos. Dirección de Desarrollo Agropecuario: Instituto Interamericano de Cooperación para la Agricultura – Argentina. Buenos Aires
- Palmisano, T., 2015. Paradojas y resignificaciones del “cuidado del suelo” en el agronegocio argentino. La construcción de una consigna para el cambio tecnológico. *Argumentos. Revista de Crítica Social* 17, 1.
- Perico, R. E., Ribero, M. P., 2002. *Nueva ruralidad. Visión del territorio en América Latina y el Caribe*. Instituto Interamericano de Cooperación para la Agricultura, San José de Costa Rica.
- Pyburn, R., Woodhill, J., 2014. *Dynamics of rural innovation. A primer for emerging professionals*. LM Publishers, Arnhem, The Netherlands.
- Quenan, C., Velut, S., 2014. *Les enjeux du développement en Amérique Latine*. Agence Française de Développement, Paris
- Riffo, L., 2013. *50 años del ILPES: evolución de los marcos conceptuales sobre desarrollo territorial*. CEPAL, Santiago de Chile.
- Rodríguez, A. G., Mondaini, A. O., Hitschfeld, M. A., 2017. *Bioeconomía en América Latina y el Caribe: contexto global y regional y perspectivas*. CEPAL, Santiago de Chile.
- Salcedo, S., Guzmán, L., 2014. *Agricultura familiar en América Latina y el Caribe: Recomendaciones de Política*. FAO.
- Sarasa, J. L. A., 2014. El turismo en los procesos de desarrollo rural. *Papeles de Geografía*, 60, 17–36.
- Sasson, A., Malpica, C., 2018. Bioeconomy in Latin America. *New Biotechnology* 40, 40–45. <https://doi.org/10.1016/j.nbt.2017.07.007>
- Sili, M., 1995. The macroeconomic policy of structural adjustment and their territorial impact in Argentina in the 90s. *Yearbook - Conference of Latin Americanist Geographers* 21.
- Sili, M., 2022. Planificación y gestión territorial en América Latina: entre la persistencia de las problemáticas territoriales y los nuevos desafíos de futuro. *Ikara. Revista de Geografías Iberoamericanas* 1, 1–15. <https://doi.org/10.18239/ikara.3037>

- Sili, M., Martín, C., 2022. *Innovación y recursos bioculturales en el mundo rural. Lecciones para un desarrollo sostenible*. Editorial Biblos Sociedad, Buenos Aires.
- Slipak, A., 2015. Argentina y el debate sobre el modelo productivo: la encrucijada de la reprimarización y las nuevas formas de dependencia. En M. Svampa (Ed.). *El desarrollo en disputa. Actores, conflictos y modelos de desarrollo en la Argentina contemporánea* (pp. 39–66). Universidad Nacional de General Sarmiento, Los Polvorines.
- Soto Baquero, F., Gómez, S. (Eds.), 2014. *Reflexiones sobre la concentración y extranjerización de la tierra en América Latina y el Caribe*. FAO, Roma. <http://www.fao.org/3/a-i3075s.pdf>
- Teubal, M., 2001. Globalización y nueva ruralidad en América Latina. En N. Giarracca (Ed.), *¿Una nueva ruralidad en América Latina?* Clacso, pp. 45–65, Buenos Aires.
- Teubal, M., Palmisano, T., 2015. ¿Hacia la reprimarización de la economía? En torno del modelo extractivo en la posconvertibilidad. *Realidad Económica* 296, 55–75.
- Tzeiman, A., 2013. *Estado y desarrollo en América Latina: dilemas y debates de las ciencias sociales latinoamericanas en el posneoliberalismo (2006-2012)*. Documentos de trabajo / Informes. <http://biblioteca.clacso.edu.ar/clacso/becas/20131016123041/Tzeimaninformeoctubre2013trabajofinal.pdf>
- Villagómez Velázquez, Y., Guibert, M., Neuburger, M. (Eds.), 2011. *Territorios y Actores Rurales Latinoamericanos. Nuevas Prácticas y Nuevos Modelos de Gestión*. El Colegio de Michoacán Universidad de Toulouse II Pontificia Universidad Javeriana. Michoacán.
- World Bank, 2007. *Agricultura para el desarrollo*. Boletín del Banco Mundial.