



Universidad
del Valle



Cuadernos de
Administración

Journal of Management

Print ISSN: 0120-4645 / E-ISSN: 2256-5078 / Short name: cuad.adm.

Pages: 14-27 / Vol: 36 / Issue: 68 / Sep. - Dec. 2020

Faculty of Administration Sciences / Universidad del Valle / Cali - Colombia

Territorial Governance: A Bibliometric Analysis

Gobernanza Territorial: Un Análisis Bibliométrico

¹ **Edwin Arango Espinal**

Full-Time Professor, Regionalization, Universidad del Valle, Caicedonia, Colombia

e-mail: edwin.arango@correounivalle.edu.co

² **Raquel Ceballos Molano**

Full-Time Professor, Faculty of Administration Sciences, Universidad del Valle, Cali, Colombia

e-mail: raquel.ceballos@correounivalle.edu.co

³ **Lida Valentina Patiño Giraldo**

Research Professional, Vice-Presidency for Research, Universidad del Valle, Cali, Colombia

e-mail: lida.patino@correounivalle.edu.co

Article of Scientific and Technological Research

Submitted: 14/05/2020

Reviewed: 29/06/2020

Accepted: 10/08/2020

Thematic lines: Public Policies

JEL classification: R19, R50, R58, R59

DOI: <https://doi.org/10.25100/cdea.v36i68.9702>

Abstract

Territorial governance has been given different definitions across the academic spectrum; however, it is considered a unit of analysis, an essential subject of study for regional economic development strategies. Not in vain has it become a field of interest for social scientists in the last few years. The purpose of this research is to analyze the body of literature developed around territorial governance, identifying its growth over time, the countries more academically interested in it, the most relevant authors, fundamental characteristics of territorial governance as described per cluster, recurring terms, and future research lines. To meet this study's objective, we applied a bibliometric analysis to the literature, for which 276 documents retrieved from *the Web of Science* were examined. The results suggest that the field of territorial governance has grown during the last six years, and Brazil, a Latin American country, is among the five regions with the highest production on the subject. It is observed that the topics of most significant interest have revolved around how territorial governance is related to the development of the territory and territorial policy. Future research should be aimed at integrating water resources management and land use planning in order to promote a sustainable territorial future, i.e., territorial sustainability.

Keywords: Bibliometric analysis, Territorial governance, Territorial administration, Regional planning.

¹ Public Accountant, Universidad del Valle, Colombia, Master's Degree in Administrative Law, Universidad Libre Seccional Cali, Colombia, Researcher, at the Derecho, Sociedad y Estado (Law, Society and State) Group, Category B Colciencias, group in Marketing, Category A Colciencias, Universidad del Valle, Cali, Colombia.

² Law and Social Sciences Professional, Universidad Libre Seccional Cali, Colombia, Doctor in General Law, Universidad Carlos III, Spain, Researcher at the Derecho, Sociedad y Estado (Law, Society and State) Group, Category B Colciencias, Universidad del Valle, Colombia.

³ Business Administrator, Faculty of Administration Sciences, Universidad del Valle, Cali, Colombia.

Resumen

La gobernanza territorial ha tomado diferentes definiciones en el espectro académico, sin embargo, se considera como unidad de análisis, un elemento importante de estudio para la estrategia del desarrollo económico regional, no en vano, se ha configurado como un campo de interés para los científicos sociales en los últimos años. El propósito de esta investigación es analizar el cuerpo de literatura desarrollada alrededor de la gobernanza territorial, identificando la tendencia de crecimiento en el tiempo, países con mayor interés académico, autores más relevantes, características fundamentales de la gobernanza territorial descritas en clúster, coocurrencia de términos y finalmente, líneas futuras de investigación. Para cumplir el objetivo de este estudio se emplea un análisis bibliométrico de la literatura, para ello, se examinaron 276 documentos extraídos de *Web of Science*. Los resultados sugieren que el campo de la gobernanza territorial viene creciendo en los últimos seis años, y Brasil, país Latinoamericano, se ubica dentro de las cinco regiones con mayor producción. Se observa que los tópicos de mayor interés han girado en cómo la gobernanza territorial se relaciona con el desarrollo del territorio, y la política territorial. La investigación futura debe estar dirigida a la integración entre la gestión de los recursos hídricos y la planificación del uso del suelo, con el fin de propiciar un futuro territorial sostenible, la sostenibilidad territorial.

Palabras clave: Análisis bibliométrico, Gobernanza territorial, Administración territorial, Planificación regional.

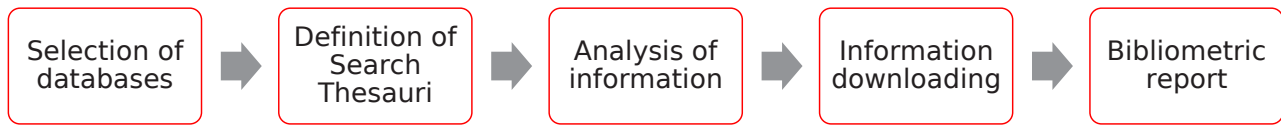
1. Introduction

Governance is a term that has been used in different contexts, which is why it has been given a variety of meanings and has become more relevant in recent years. Its origin dates back to institutional and regulation economics, whose objective was to facilitate public authorities' regulatory and intervention processes and enable decision-making by other social agents or stakeholders (Dasi, 2008). Subsequently, the concept transitioned from economic science to political science and administration, fostering more inclusive management, which has led the concept to acquire several meanings.

Governance is the process whereby citizens collectively solve their problems and respond to society's needs, employing government as the instrument to carry out their task (Rosas-Ferrusca, Calderón-Maya, and Campos-Alanís, 2012). According to Ferrão (2013), governance corresponds to "the association

of public, semi-public or private entities that cooperate on a volunteer base through horizontal relations and associations" (p. 259). Socio-economic changes, such as the forsaking of agricultural activities, progressive urbanization, and economic restructuring, have led to a multiplicity of territory levels (global or supranational, national, regional, local), which triggers coordination problems and entails new stakeholders (Ferreiro and Sousa, 2018). However, for authors such as Blanco and Gomá (2002), the difficulties in governing have arisen on four main accounts: (i) decreased certainty of knowledge, (ii) decreased authority, (iii) increased externalization of decisions, and (iv) increased heterogeneity in citizens' preferences. Therefore, there is a greater plurality of stakeholders and socially interested parties at the time of governing in order to process and solve problems relevant to society. In this way, it is possible to determine that regardless of what causes government complexity, different theorists have identified new stakeholders' participation in governing as the main consequence. It should be noted that this is one of the greatest concerning governance-related issues among researchers, which is why it has been considered pertinent for the different studies to focus on what is commonly known as territorial governance, a concept that dates back to the early 1990s.

Conceptually, territorial governance is a "set of existing or potential relationships and interactions between enterprises and institutions in a territory that determines their collective model for functioning and economic development" (Neto, 2007, p. 11). The territorial governance structure that is coherent for economic development consists of public policies geared to territorial needs and a multilevel governance system responsible for managing the cooperation of different stakeholders and participatory mechanisms (Delamaza and Thayer, 2016). On the other hand, Dasi (2008) defines territorial governance as the "practice of organizing the multiple relations that characterize the interactions between the various stakeholders present in the territory" (p. 15). Interested parties or stakeholders (public, private or mixed-nature) operating the different echelons or territorial levels achieve association from an institutional

Figure 1. Methodological research process

Source: Rodríguez et al. (2020).

fabric, which, in other words, consists of public policies aimed at territorial development. That is why governance sets standards of behavior to be adopted by the stakeholders within the processes and structures of public affairs (Enderlein, Wälti, and Zürn, 2010).

While varied research has been developed on territorial governance in the fields of economic, social, and administrative sciences at the national and international levels, there are few studies wherein a useful literature review is carried out that determines the state of the art of the subject. Therefore, the research aims to determine the scientific activity on territorial governance through a bibliometric analysis.

2. Research methodology

A bibliometric analysis on the subject of “Territorial Governance,” as a state-of-the-art tool in this, is fundamental. According to Rodríguez, Alcaide, and Cobo (2018), a bibliometric analysis is defined as one of the most common and accepted methods for literature review, as it is valued as a tool to determine scientific evolution and productivity, as well as for measuring the quality of the research in a given field. Similarly, for authors such as Gao, Huang, and Wang (2018), bibliometrics consists of a quantitative analysis based on statistics and uses literature to evaluate a thematic field’s development. The bibliometric analysis consists of two techniques: bibliometric performance indicators and scientific mapping. The first technique determines the productivity of authors, journals, and countries in the field of study. Simultaneously, scientific mapping allows the generation of bibliometric networks for bibliographic coupling and co-occurrence of terms. Both techniques make it possible to understand how documents, authors, and keywords

relate to each other and identify areas and trends for future research (Terán, Marín, Casado, and Capobianco, 2019).

The multidisciplinary Web of Science (WOS) database is the source of information used for this study, which contains 12,000 internationally recognized influential academic journals for the academic community (Huang, Zhou, Lv, and Chen, 2019). A total of 276 papers were identified dated up to January 2020 using search thesauri such as “Territorial Governance,” “Territorial Management,” “Territorial Planning,” and “Regional Planning.” No additional restrictions were applied to the search because we wanted to attain as many documents available on the subject as available. In this way, the following search equation was determined: ALL FIELDS: (“Territorial Governance”) OR ALL FIELDS: (“Territorial Management”) AND ALL FIELDS: (“Territorial Planning” OR “Regional Planning”).

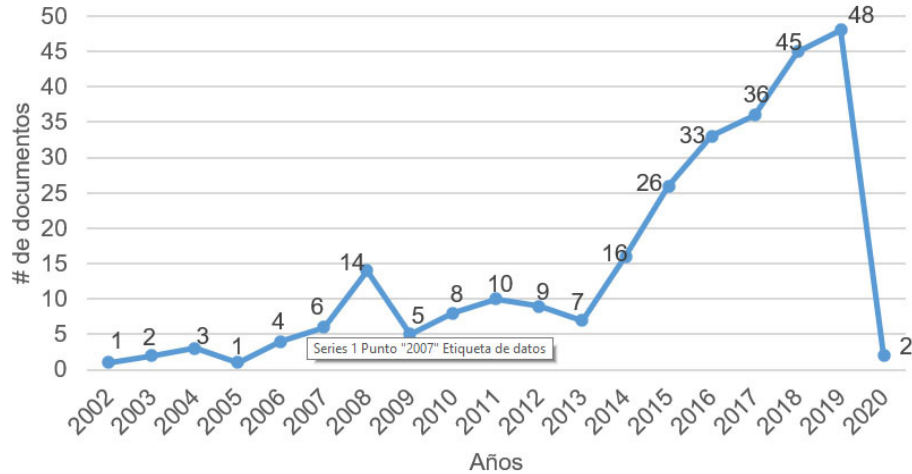
Figure 1 shows the methodological process proposed by Rodríguez, Osorio, and Peláez (2020), used for this analysis.

Finally, the following aspects were analyzed using the information obtained from the database: the (i) evolution of scientific production over time, (ii) scientific productivity by country/journal/author and impact, (iii) papers with the highest number of citations and (iv) analysis of bibliographic coupling bibliometrics networks and co-occurrence of terms.

3. Results and analysis

3.1. Evolution of scientific production

Graph 1 shows the scientific evolution of territorial governance, showing that the first article was published in 2002 under

Graph 1. Evolution of scientific production on Territorial Governance

Source: Web of Science, 2020.

Table 1. Scientific production by country on Territorial Governance

Country	Articles	Country	Articles	Country	Articles
France	50	Sweden	5	Serbia	2
Spain	43	Wales	5	Algeria	1
Italy	28	Chile	4	Austria	1
England	23	Argentina	3	Cameroon	1
Brazil	21	Australia	3	Ecuador	1
Portugal	16	Finland	3	Iceland	1
USA	16	India	3	Indonesia	1
Netherlands	14	Ireland	3	Latvia	1
Poland	10	Northern Ireland	3	New Zealand	1
Canada	8	Russia	3	Norway	1
Colombia	8	Slovakia	3	Pakistan	1
Germany	7	Belgium	2	Peru	1
Switzerland	7	Denmark	2	Romania	1
Hungary	6	Estonia	2	Slovenia	1
Czech Republic	5	Greece	2	South Korea	1
Mexico	5	Scotland	2	Tunisia	1

Source: Web of Science, 2020.

the title “Maintaining a distinctive public administration: The Isle of Man civil service since 1962”, which presents the case of study of the United Kingdom and the British Isles and their territorial governance transforming account of the Belfast Agreement, which established new intergovernmental structures (Carmichael, 2002). Similarly, it has been identified that the annual production of literature was minimal in the early stages of the research (2002-2006). Subsequently, substantial growth in scientific production

occurred in the last six years, as 74% of papers have been published in that period (2014-2020), indicating academics’ interest in focusing their research on the subject.

3.2. Scientific production by country

The first five countries on the list represent over 59% of all publications relating to Territorial Governance, as shown in Table 1. It is important to note that both developed (France, Spain, England, USA,

etc.) and developing countries (Brazil, Colombia, Mexico, Chile, etc.) have shown a great interest in the issue. It should be noted that there are 8 Latin American countries with publications, mainly Brazil, ranking 5th among the most productive countries, with 21 papers. Similarly, Latin America must develop research in this field because these countries have the most significant difficulties in incorporating and allowing social actors' participation; there is a limited capacity to resolve conflicts, which generates governance-related problems and increases uncertainty (Delamaza and Thayer, 2016).

3.3 Journals with the highest scientific production

Table 2 shows the 13 journals with the highest number of publications, containing about 30% of all papers. The Bulletin of the Association of Spanish Geographers is the highest-yielding journal. It encompasses papers from social and experimental sciences, which present studies relating to territorial processes. Currently, its JCR classification is Q2. On the other hand, the journal European Planning Studies is the second highest-yielding journal, which contains research related to spatial development processes and policies in Europe, and its JCR classification is Q3.

Among the 13 most productive journals, four are in the Q2-JCR category, 3 in the Q3-JCR classification, 2 in the Q4-JCR, and one is rated Q1-JCR. Also, three journals are unclassified. It can be inferred that a large share of the journals is mid-impact within the selected sample.

3.4. Scientific production by authors

The 13 authors with the highest number of documents on territorial governance research encompass approximately 16% of scientific production on the matter (Table 3). It should be noted that the author with the highest number of papers is Furmankiewicz with five publications, followed by Torre (sharing the same number of papers- 5), and Chia with four papers. Finally, it is essential to mention that many authors have a single publication on the subject.

Table 2. Journals with the highest scientific production on Territorial Governance

Journal	Articles	JCR
Bulletin of the Association of Spanish Geographers	15	Q2
European Planning Studies	14	Q3
Developpement Durable Territoires	6	N/A
Disp	6	Q4
Regional Studies	6	Q2
Revue d'economie Regionale et Urbaine	6	N/A
Sustainability	6	Q2
Eure - Latin American Journal of Regional Urban Studies	5	Q4
Land Use Policy	5	Q1
Cahiers Agricultures	4	Q3
International Review of Administrative Sciences	4	Q2
Ter es Tarsadalom	4	N/A
Tijdschrift Voor Economische en Sociale Geografie	4	Q3

Source: Web of Science, 2020.

Table 3. Authors with the highest scientific production on Territorial Governance

No.	Authors	Articles
1	Furmankiewicz M	5
2	Torre A	5
3	Chia E	4
4	Castanho RA	3
5	Cotella G	3
6	Evans A	3
7	Hersperger AM	3
8	Macken-Walsh A	3
9	Medeiros E	3
10	Oliveira E	3
11	Rey-Valette H	3
12	Rivolin UJ	3
13	Sandford M	3

Source: Web of Science, 2020.

Below are the most studied topics by the three authors with the highest production in the field:

3.4.1. Furmankiewicz: Rural development and Poland. The five research projects this author undertook focused on Poland and mainly on rural development in this region. The importance of generating different

initiatives, such as the European Union's LEADER program, has been identified to support different rural development projects being implemented in Poland; however, it was evident that Poland's rural governance is irregular. Therefore, it became clear that the country's rural governance is irregular and requires the support of territorial policies and cross-sectoral partnerships to improve the different rural areas (Furmankiewicz, Janc, and Macken-Walsh, 2016).

3.4.2. Torre: Land use conflicts and Latin America. This author has developed two-way studies. On the one hand, research was conducted on the land-use conflict in the Greater Paris Region, which is linked to a collective effort to prevent and manage urbanization's negative impacts (Torre and Darly, 2013; Darly and Torre, 2013). On the other hand, this author has conducted studies on territorial governance focused on two Latin American countries: Brazil and Chile. The research focused on Brazil was carried out within the framework of the "Territories of Citizenship" program, whose main challenge was that great distances hindered interaction between stakeholders, so it was sought to implement specific measures that promote and strengthen communication (Polge and Torre, 2017). Concerning Chile's case, the country's context and socio-political projects, territorialization mechanisms, and territorial intervention tools are examined (Gallardo, Lukas, Stamm, and Torre, 2019).

3.4.3. Chia: Ecological intensification. The research carried out by the author is focused on different topics; however, the study developed on ecological intensification is the most impacting since this is a new concept in the field of agriculture, which proposes a double challenge for agricultural systems: maintaining enough production to

meet populations' needs and respecting the environment (Aubin *et al.* (2017).

3.5. Most cited papers

Table 4 presents the papers with the highest number of citations on the subject of territorial governance. The paper titled Soil erosion risk scenarios in the Mediterranean environment using RUSLE and GIS: An application model for Calabria (southern Italy) has 125 citations. This paper addresses Calabria's case (southern Italy) as it is a high-erosion region, where the RUSLE model has been implemented to evaluate average soil loss per year. That model also allows comparing territory erosion through scenarios maps that make it is possible to identify high-risk areas, and, in turn, offer territorial planning authorities the implementation of prevention and control measures to reduce environmental damage and the costs involved (Newfoundland, Antronico, Coscarelli, and Iaquina, 2009). On the other hand, The polycentric state: New spaces of empowerment and engagement? is the second most cited paper (78 citations), which states that the government of the new Labour, a historical period of the British Labour Party (led by Tony Blair and Gordon Brown), has radically reformed the territorial governance structure of the United Kingdom by diverting its image as the most centralized (hierarchical) state of the European Union, to build the foundations of a polycentric state, where there are multiple centers of democracy (Morgan, 2007). Lastly, the third most cited paper on territorial governance is called A theory of institutional change: illustrated by Dutch city-provinces and Dutch land policy, with 74 citations, wherein it is evident that spatial planning processes influence institutional change.

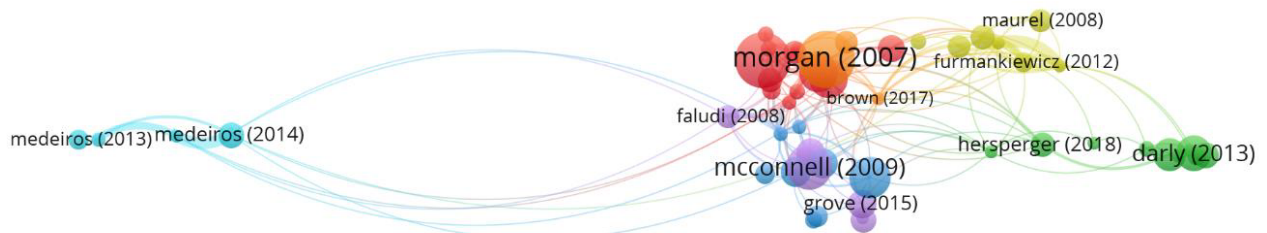
Table 4. Most cited papers

Article	Authors	Year	Citations
Soil erosion risk scenarios in the Mediterranean environment using RUSLE and GIS: An application model for Calabria (southern Italy)	Terranova, O.; Antronico, L.; Coscarelli, R.; Iaquina, P.	2009	125
The polycentric state: New spaces of empowerment and engagement?	Morgan, K	2007	78
A theory of institutional change: illustrated by Dutch city-provinces and Dutch land policy	Buitelaar, E; Lagendijk, A; Jacobs, W	2007	74
De facto, displaced, tacit: The sovereign articulations of the Tibetan Government-in-Exile	McConnell, F	2009	55

Territorial governance for sustainable development: state of affairs and agenda	Dasi, J	2008	49
European Integration and Spatial Rescaling in the Baltic Region: Soft Spaces, Soft Planning and Soft Security	Stead, D	2014	42
The Rise of Territorial Governance in European Policy	Stead, D	2014	42
Conflicts over farmland use and the dynamics of agri-urban localities in the Greater Paris Region: An empirical analysis based on daily regional press and field interviews	Darly, S; Torre, A	2013	39
Comprehensive consideration of conflicts in the land-use planning process: a conceptual contribution	Hersperger, A.; Ioja, C; Steiner, F; Tudor, C	2015	35
The search for territorial fixes in subnational governance: City-regions and the disputed emergence of post-political consensus in Manchester, England	Deas, L	2014	34
Territorial governance in the making. Approaches, methodologies, practices	Davoudi, S.; Evans, N.; Governa, F.; Santangelo, M.	2008	30
Territories in action, territories for action: The territorial dimension of Italian local development policies	Governa, F; Salone, C	2004	29
Integration and Control: The Governing of Urban Marginality in Western Europe	Uitermark, J	2014	28

Source: Web of Science, 2020.

Figure 2. Bibliographic coupling network by document



Source: Authors' own elaboration based on Web of Science records, 2020.

3.6. Bibliometric networks

The data retrieved from the Web of Science were processed in the VOSViewer software in order to generate bibliometric networks for bibliographic coupling and co-occurrence of terms. VosViewer is a widely used software for elaborating bibliometric analysis, as it allows to graphically represent and visualize large easy-to-interpret maps (Van Eck and Waltman, 2010).

3.6.1. Bibliographic coupling network by paper. Figure 2 represents the coupling bibliometric network by articles. Bibliometric mapping identified seven groups or clusters, with a total of 53 articles, each corresponding to a different color. The red group groups the largest number of papers (12), which address two great-importance issues for

territorial governance: spatial planning and institutional change.

On the other hand, the distance between two elements in a bibliometric network indicates the relationship force; that is, the elements closest to each other are more closely related than distant papers (Waltman and Van Eck, 2019). That is why the light blue cluster accounts for research topics or areas not close to the other clusters.

Below, Table 5 shows in a clear and detailed way the different groupings or clusters generated by the bibliographic coupling network.

Likewise, a brief description of each cluster was developed to identify topics in common and potential research areas:

Table 5. Clusters of the bibliographic coupling bibliometric network by document

53 items (7 clusters)			
Cluster 1 (12 items)		Cluster 2 (11 items)	
Adams (2014)	Rivolin (2010)	Darly (2013)	Oueslati (2011)
Buitelaar (2007)	Salet (2006)	Di palma (2016)	Ramon Molina (2016)
Cotella (2011)	Santina (2010)	Fularn (2012)	Rey-Valette (2016)
F)inka (2015)	Stead (2012)	Hersperger (2015)	Tritsch (2015)
Muldoon-smith (2015)	Stead (2014 ^a)	Hersperger (2018)	Voets (2006)
Raagmaa (2014)	Stead (2016)	Magsi (2014)	
Cluster 3 (8 items)		Cluster 4 (7 items)	
Dasi (2008)	Hauswirth (2003)	Cheshire (2015)	Furmankiewicz (2014)
Davoudi (2008)	Romero (2011)	Dallara (2012)	Furmankiewicz (2016)
Fernandez - tabales (2017)	Tubilewicz (2015)	Esparcia (2015)	Maurel (2008)
Governa (2004)	Zanon (2010)	Furmankiewicz (2012)	
Cluster 5 (7 items)		Cluster 6 (4 items)	
Faludi (2008)	Mcconnell (2009)	Medeiros (2013)	Medeiros (2017)
Grove (2015)	Mukerji (2011)	Medeiros (2014a)	Medeiros (2014b)
Gustafsson (2017)	Uitermark (2014)		
Larson (2012)			
Cluster 7 (4 items)			
Brown (2017)	Deas (2014)		
Carmichael (2003)	Morgan (2007)		

Source: Authors' own elaboration based on Web of Science records, 2020.

Cluster 1: European Spatial Planning and Institutional Change. This cluster consists of different studies aimed at spatial planning (ESP) in different European countries, such as Estonia, Latvia, Lithuania, Holland, and Italy. For authors such as Adams, Cotella, and Nunes (2013), changes in institutional structures have been aimed at linking countries with new market-based realities, such as cuts in state resources, dissolution of territorial governance structures, among others. Therefore, institutional change is regarded as an object of spatial planning (Buitelaar, Lagendijk, and Jacobs, 2007); in turn, ESP is held as a learning machine. Thus, the way is given to new stakeholder or communities of territorial knowledge, such as the epistemic communities that include politicians, professionals, academics, and researchers, who seek to support policy development and build a European scientific community around the field of territorial development (Cotella and Rivoli, 2011).

Cluster 2: Conflicts in Land Use. Conflicts over the use of agricultural land is the central topic addressed by the authors of this cluster. The expansion of urban areas has disturbed

agricultural landscapes, causing friction and conflicts between agricultural activities and industrial activities and the different economic and social groups (residents, farmers, etc.), this way changing social dynamics in rural areas (Darly and Torre, 2013). Hersperger, Loja, Steiner, and Tudor (2015) ascertain that land-use conflicts focus on who must retain control over the land, who has the right to participate in its management, and on the social and environmental impacts brought about by its new use, and spatial planning is used as the tool for negotiating such conflicts and enabling community communication and participation. Finally, a study conducted by Di Palma, Amato, Nolè, Martellozzo, and Murgante (2016) has provided local and professional authorities with the necessary tools to implement monitoring schemes on land use, which encourage sustainable territorial governance.

Cluster 3: Sustainable Territorial Development. Sustainable territorial development is one of the favorite fields for applying the new forms of territorial governance, with this subject being the most researched by this cluster's authors.

According to Dasi (2008), sustainable development consists of a new sound management model that seeks to exploit resources efficiently, which came about from the triggering of different problems (such as climate change, accelerated urbanization, loss of heritage values, etc.). On the other hand, it has been sustained that sustainable development needs to ensure equal opportunities for people and preserve the environment, culture, and values of a territory (Zanon, 2010).

Cluster 4: LEADER program. The studies addressed by this cluster's authors' main topic of research is the Community initiative Liaison Entre Actions de Développement de l'Économie Rurale (LEADER). According to Esparcia, Escribano, and Serrano (2015), the LEADER pilot program was aimed at the economic development of rural areas and improving governance and democratization in local societies. Similarly, the LEADER program's territorial development consisted of a bottom-up model, which intended to initiate development from the subjects and their cultures (Maurel, 2008). Therefore, in order to stimulate the participation and social inclusion of other stakeholders, it became relevant to provide benefits, financial incentives, and teaching tools; however, the private sector's and local inhabitants' participation in the program was limited (Furmankiewicz, 2011).

Cluster 5: European Integration. In this cluster, the authors conducted research aimed at European integration at the political, economic, social, and cultural levels. On the one hand, Faludi (2008) ascertains that "the European Union should not be seen as a developing state or a federation under formation, but as a learning machine promoting European integration" (p. 1470). Similarly, in the research developed by Uitermark (2014), integration is conceived as an instrument for social, territory, and different stakeholders control within the framework of governance.

Cluster 6: Cohesion Policy. The four investigations that make up this cluster are directly related to an issue of relevance to the European Union (EU), and it is Cohesion Policy, which was incorporated in 1989. As per Medeiros (2013), the European

integration process has been supported by its Cohesion Policy, which is considered the EU's central investment policy, in order to support economic growth, sustainable development, and the improvement of the people's quality of life. Years later, the same theoretician determined the main positive impacts of such a Cohesion Policy in most areas of territorial development in Europe (Medeiros, 2014 a, b, 2017), which will be outlined below:

Socio-economic impacts: Social policies and vocational training support through employment and training policies were introduced. There was economic support for small and medium-sized enterprises (SMEs) at the economic level, and employment generation was encouraged.

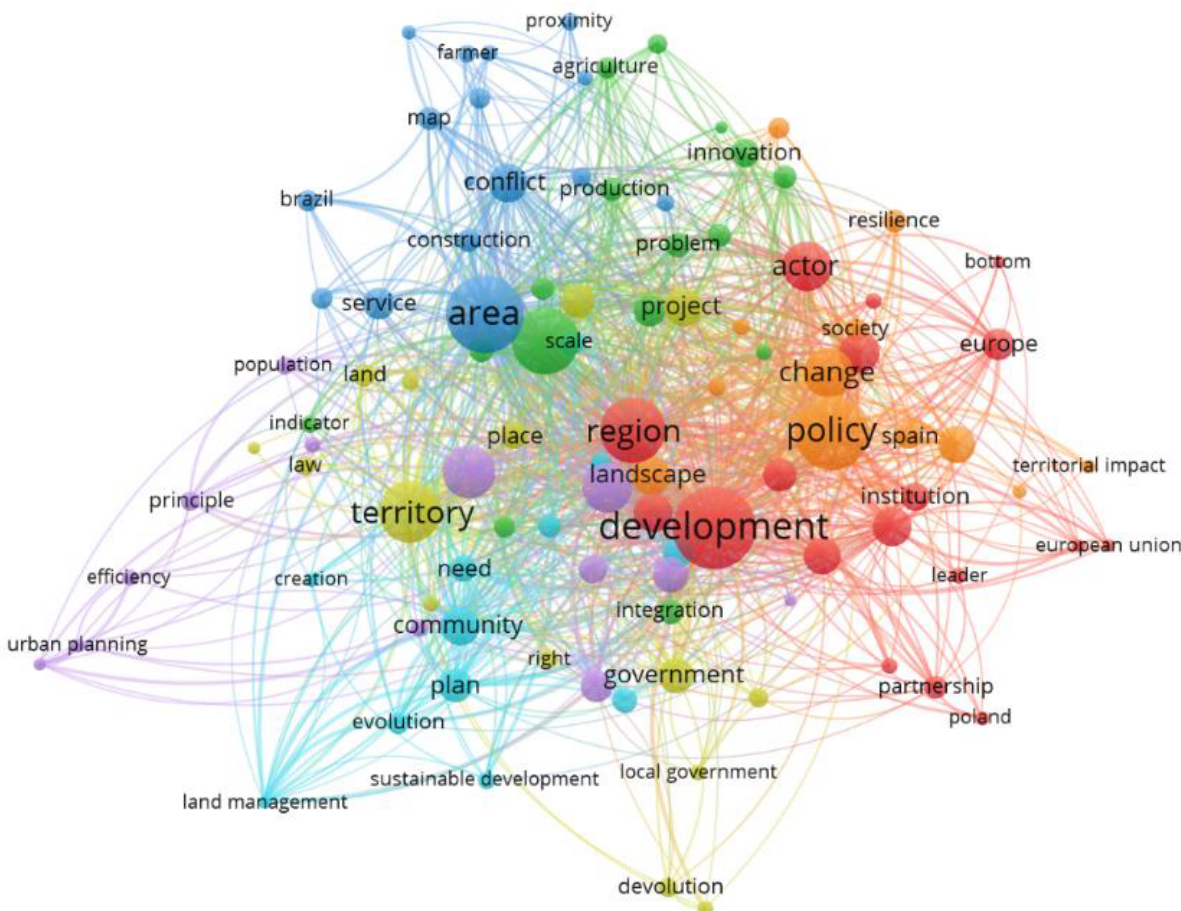
Environmental impacts: improvement in environment-related infrastructures (drinking water supply, waste treatment, recycling, etc.)

Impacts on territorial governance: development of mechanisms and instruments to ensure a more rational and inclusive regional policy.

Cluster 7: Urban-rural Interface. Finally, this cluster's theorists have been responsible for studying the urban-rural interface in a hybrid way, thus providing more effective governance and allowing spatial integration. According to Brown and Shucksmith (2017), the urban-rural interface should not be considered as an interdependent space that separates urban and rural life, but as an area that encourages interaction between people and urban and rural communities.

3.6.2. Bibliometric network of co-occurrence of terms. On the other hand, an analysis of the terms in the publications can provide information on the main research topics or territorial governance trends. Figure 3 shows the bibliometric network of co-occurrence of terms, with the information from the 7 clusters or groupings, each corresponding to a different color. The red cluster is the broadest, and it groups terms relating to governance in the European territory, such as partnership, cooperation, fund, European Union, Europe, Poland, and Hungary. On the other hand, the orange cluster is the smallest and consists of recent

Figure 3. Bibliometric network of co-occurrence of terms



Source: Authors' own elaboration based on Web of Science records, 2020.

terms in the subject of territorial governance, such as resilience and sustainability.

The size of the bibliometric network's circles makes it possible to determine that the terms with the highest degree of occurrence in the field are development, area, policy, region, system, territory, state, level, actor, change, cooperation, and project. Also, Table 6 shows the number of occurrences of each term.

The term development is the most recurring with 164 appearances. It refers to a process of development that applies to different aspects in the field of territorial governance, such as urban, rural, sustainable, tourism, territorial and local, and participatory development, among others.

Table 6. Most recurring terms

N°	Term	Occurrence
1	Desarrollo/ Development	164
2	Área / Area	145
3	Política / Policy	138
4	Región / Region	129
5	Sistema / System	117
6	Territorio / Territory	110
7	Estado / State	90
8	Nivel / Level - Actor / Actor	77
9	Cambio / Change	74
10	Cooperación / Cooperation - Proyecto / Project	60

Source: Authors' own elaboration based on Web of Science records, 2020.

On the other hand, “area” is the second most-recurring word (145 appearances) and is responsible for delimiting the place where a particular study is carried out, with the different metropolitan areas of Europe those that agglomerate much research on territorial governance.

The concept of policy is ever-present in the studies because development plans entail territorial policies. Also, territorial governance has been interpreted as an increasingly significant element in achieving the objectives at the territories’ political level (Stead, 2013).

4. Conclusions

This study explored the existing publications in the Web of Science database on territorial governance, providing an overview of the main aspects that characterize this research field.

The topic of “Territorial Governance” has grown in the last six years, with 2019 being the year with the highest scientific production, indicating that interest on the part of the academic community to develop research on this topic is recent.

On the other hand, the three countries with the highest scientific production in the field are European (France, Spain, and Italy) and have a high economic development. Nevertheless, Brazil is among the Latin American countries that have published the most papers on the subject (21); theorists from other Latin American countries must pay greater attention to this type of research. Colombia, a politically centralized and administratively decentralized country, thus becoming the best study scenario for understanding territorial governance, providing opportunities for analysis in social territories with an agricultural identity, this time addressing problems in the correlation of the different stakeholders, or actants as Latour, 2008 put it.

Concerning the bibliographic coupling analysis, seven relevant topics or areas of research on territorial governance were identified: (i) European Spatial Planning and Institutional Change, (ii) Conflicts in Land-Use, (iii) Sustainable Territorial

Development, (iv) the LEADER program, (v) European Integration, (vi) Cohesion Policy, and (vii) Urban-Rural Interface, which serve as thematic axes and conceptual guidance in the field.

Lastly, the analysis of most recurring terms showed that development and policy are two crucial central research axes for the subject of territorial governance because this practice/process encourages regional development at different levels (economic, social, political, etc.), promoting the articulation of different territorial actors. It also allows identifying those terms that are new to the field, such as sustainability and resilience. The first term is the one that has most recently prompted studies or research in this field concerning local agrifood systems that, for social reasons, have created territorial identities based on agricultural symbols such as coffee, rice, avocado, among others, broadening the complex economic developments spectrum in small environments.

5. Limitations and future lines of research

Among the limitations of this study is the source of information used because the papers’ search took place only in the Web of Science (WOS) database. There might be a range of information left unanalyzed.

Concerning future studies, we propose research that promotes integration between water resources management and land use planning, with a view to fostering a sustainable and safe territorial future for different nations, as well as improving the resilience of river-adjacent territories, as these are considered sensitive strategic areas in need of control and preservation (Voghera, 2020). On the other hand, Auzins (2019) proposes introducing a new approach, i.e., value-based planning (VLP), to improve land-use management in European countries by meeting the following objectives: (i) more solidary and collaborative improved territorial governance, (ii) guaranteed implementation of spatial planning, and (iii) balanced planning interests. Concerning the above, it is proposed for future studies to apply this new approach in contexts other than the European. It is also proposed for

stakeholders to be sufficiently involved when discussing methodological solutions on territorial matters.

Finally, the issue of territorial sustainability is new and requires more attention from theorists. Therefore, we propose research focusing on determining those influential factors and processes that must be observed to achieve territorial sustainability (Castanho, 2019). Even more so in the restoration of social activities following preventive isolation due to the recent COVID-19 pandemic.

6. Conflict of interest

The authors declare no conflict of interest.

7. Source of Financing

This work has not been financed by any entity whatsoever.

8. References

- Adams, N., Cotella, G., & Nunes, R. (2013). The Engagement of Territorial Knowledge Communities with European Spatial Planning and the Territorial Cohesion Debate: A Baltic Perspective. *European Planning Studies*, 22(4), 712-734. <https://doi.org/10.1080/09654313.2013.772735>
- Aubin, J., Callier, M., Rey-Valette, H., Mathé, S., Wilfart, A., Legendre, M., ... Fontaine, P. (2017). Implementing ecological intensification in fish farming: definition and principles from contrasting experiences. *Reviews in Aquaculture*, 11(1), 149-167. <https://doi.org/10.1111/raq.12231>
- Auzins, A. (2019). Capitalising on the European Research Outcome for Improved Spatial Planning Practices and Territorial Governance. *Land*, 8(11), 163. <https://doi.org/10.3390/land8110163>
- Blanco, I., y Gomá, R. (2002). Proximidad y participación marco conceptual y presentación de experiencias (pp. 21-42) In I. Blanco, R. Gomá (Eds.), *Gobiernos locales y redes participativas*. Barcelona, España: Ariel.
- Brown, D., & Shucksmith, M. (2017). Reconsidering Territorial Governance to Account for Enhanced Rural-Urban Interdependence in America. *ANNALS, AAPSS*, 672(1), 282-301. <https://doi.org/10.1177/0002716217706495>
- Buitelaar, E., Lagendijk, A., & Jacobs, W. (2007). A Theory of Institutional Change: Illustrated by Dutch City-Provinces and Dutch Land Policy. *Environment and Planning A*, 39(4), 891-908. <https://doi.org/10.1068/a38191>
- Carmichael, P. (2002). Maintaining a distinctive public administration: The Isle of Man civil service since 1962. *Public Administration*, 80(2), 257-282. <https://doi.org/10.1111/1467-9299.00303>
- Castanho, R. (2019). Identifying Processes of Smart Planning, Governance and Management in European Border Cities. Learning from City-to-City Cooperation (C2C). *Sustainability*, 11(19), 1-15. <https://doi.org/10.3390/su11195476>
- Cotella, G., & Rivolin, U. J. (2011). Europeanization of Spatial Planning through Discourse and Practice in Italy. *disP - The Planning Review*, 47(186), 42-53. <https://doi.org/10.1080/02513625.2011.10557143>
- Delamaza, G., y Thayer, L. (2016). Percepciones políticas y prácticas de participación como instrumento para la gobernanza de los territorios. *EURE*, 42(127), 137-158. <http://dx.doi.org/10.4067/S0250-71612016000300006>
- Darly, S., & Torre, A. (2013). Conflicts over farmland uses and the dynamics of "agri-urban" localities in the Greater Paris Region: An empirical analysis based on daily regional press and field interviews. *Land Use Policy*, 33, 90-99. <https://doi.org/10.1016/j.landusepol.2012.12.014>
- Dasi, J. (2008). Gobernanza territorial para el desarrollo sostenible: estado de la cuestión y agenda. *Boletín de la Asociación de Geógrafos Españoles*, 46, 11-32. Recuperado de <http://age.ieg.csic.es/boletin/46/02-GOBERNANZA.pdf>
- Di Palma, F., Amato, F., Nolè, G., Martellozzo, F., & Murgante, B. (2016). A SMAP Supervised Classification of Landsat Images for Urban Sprawl Evaluation. *ISPRS International Journal of Geo-Information*, 5(7), 109. <https://doi.org/10.3390/ijgi5070109>
- Enderlein, H., Wälti, S., & Zürn, M. (Eds.) (2010). *Handbook on Multi-Level Governance* (pp. 370-382). Cheltenham, United Kingdom: Edward Elgar.
- Esparcia, J., Escribano, J., & Serrano, J. J. (2015). From development to power relations and territorial governance: Increasing the leadership role of LEADER Local Action Groups in Spain. *Journal of Rural Studies*, 42, 29-42. <https://doi.org/10.1016/j.jrurstud.2015.09.005>
- Faludi, A. (2008). The learning machine: European integration in the planning mirror. *Environment*

- and Planning A: *Economy and Space*, 40, 1470-1484. <https://doi.org/10.1068/a39225>
- Ferrão, J. (2013). Governança, governo e ordenamento do território em contextos metropolitanos (pp. 255-281). In A. Ferreira, J. Rua, G. J. Marafon, A. C. P. da Silva (Eds.), *Metropolização do espaço: Gestão territorial e relações urbano-rurais*. Rio de Janeiro, Brazil: Editora Consequência.
- Ferreiro, M. de F., & Sousa, C. (2018). Governance, institutions and innovation in rural territories: The case of Coruche innovation network. *Regional Science Policy & Practice*, 11(2), 1-16. <https://doi.org/10.1111/rsp3.12147>
- Furmankiewicz, M. (2011). Leader+ territorial governance in Poland: successes and failures as a rational choice effect. *Tijdschrift Voor Economische En Sociale Geografie*, 103(3), 261-275. <https://doi.org/10.1111/j.1467-9663.2011.00680.x>
- Furmankiewicz, M., Janc, K., & Macken-Walsh, Á. (2016). The impact of EU governance and rural development policy on the development of the third sector in rural Poland: A nation-wide analysis. *Journal of Rural Studies*, 43, 225-234. <https://doi.org/10.1016/j.jrurstud.2015.12.011>
- Gallardo, B., Lukas, M., Stamm, C., & Torre, A. (2019). Neoliberalism and territorial governance: proposals and reflections based on the case of Chile. *Revista de Geografía Norte Grande*, 73, 161-183. <http://dx.doi.org/10.4067/S0718-34022019000200161>
- Gao, H., Huang, F.-Y., & Wang, Z.-P. (2018). Research Trends of Macrophage Polarization. *Chinese Medical Journal*, 131(24), 2968-2975. <https://doi.org/10.4103/0366-6999.247215>
- Hersperger, A. M., Loja, C. L., Steiner, F., & Tudor, C. A. (2015). Comprehensive consideration of conflicts in the land-use planning process: a conceptual contribution. *Carpathian journal of earth and environmental sciences*, 10(4), 5-13. <https://www.dora.lib4ri.ch/wsl/islandora/object/wsl:5423>
- Huang, L., Zhou, M., Lv, J., & Chen, K. (2019). Trends in global research in forest carbon sequestration: A bibliometric analysis. *Journal of Cleaner Production*, 252. <https://doi.org/10.1016/j.jclepro.2019.119908>
- Latour, B. (2008). *Reensamblar lo social: una introducción a la teoría del actor red*. Buenos Aires, Argentina: Editorial Manantial
- Maurel, M. (2008). Local Development Stakeholders and the European Model: Learning the LEADER Approach in the New Member States. *Sociologický časopis*, 44(3), 511-529. <https://doi.org/10.13060/00380288.2008.44.3.04>
- Medeiros, E. (2013). Euro-Meso-Macro: The New Regions in Iberian and European Space. *Regional Studies*, 47(8), 1249-1266. <https://doi.org/10.1080/00343404.2011.602336>
- Medeiros, E. (2014a). Assessing territorial impacts of the EU cohesion policy at the regional level: the case of Algarve. *Impact Assessment and Project Appraisal*, 32(3), 198-212. <https://doi.org/10.1080/14615517.2014.915134>
- Medeiros, E. (2014b). Assessing Territorial Impacts of the EU Cohesion Policy: The Portuguese Case. *European Planning Studies*, 22(9), 1960-1988. <https://doi.org/10.1080/14615517.2014.915134>
- Medeiros, E. (2017). European Union Cohesion Policy and Spain: a territorial impact assessment. *Regional Studies*, 51, 1259-1269. <https://doi.org/10.1080/00343404.2016.1187719>
- Morgan, K. (2007). The Polycentric State: New Spaces of Empowerment and Engagement? *Regional Studies*, 41(9), 1237-1251. <https://doi.org/10.1080/00343400701543363>
- Neto, P. (2007). Strategic Planning of Territorial Image and Attractability (pp. 233-256) In Matias Á., Nijkamp P., Neto P. (Eds.). *Advances in Modern Tourism Research. Physica-Verlag HD*. Évora, Portugal: Springer Link. https://doi.org/10.1007/978-3-7908-1718-8_12
- Polge, E., & Torre, A. (2017). Territorial governance and proximity dynamics. The case of two public policy arrangements in the Brazilian Amazon. *Papers in Regional Science*, 97(4), 909-929, 1-21. <https://doi.org/10.1111/pirs.12308>
- Rodríguez-Bolivar, M. P., Alcaide-Munoz, L., & Cobo, M. J. (2018). Analyzing the scientific evolution and impact of e-Participation research in JCR journals using science mapping. *International Journal of Information Management*, 40, 111-119. <https://doi.org/10.1016/j.ijinfomgt.2017.12.011>
- Rodríguez, A., Osorio, C., y Peláez, J. (2020). Dos décadas de investigación en Electronic Word of Mouth: un análisis bibliométrico. *Pensamiento y Gestión*, 48, 265-282. Recuperado de <http://rcientificas.uninorte.edu.co/index.php/pensamiento/article/viewFile/12510/214421444902>
- Rosas-Ferrusca, F. J., Calderón-Maya, J. R., y Campos-Alanís, H. (2012). Elementos conceptuales para el análisis de la gobernanza territorial. *Quivera: Revista de Estudios Territoriales*, 14(2), 113-136. Recuperado de <https://quivera.uaemex.mx/article/view/9628>

- Stead, D. (2013). The Rise of Territorial Governance in European Policy. *European Planning Studies*, 22(7), 1368-1383. <https://doi.org/10.1080/09654313.2013.786684>
- Terán-Yépez, E., Marín-Carrillo, G. M., Casado-Belmonte, M. del P., & Capobianco-Uriarte, M. de las M. (2019). Sustainable entrepreneurship: Review of its evolution and new trends. *Journal of Cleaner Production*, 252. <https://doi.org/10.1016/j.jclepro.2019.119742>
- Terranova, O., Antronico, L., Coscarelli, R., & Iaquina, P. (2009). Soil erosion risk scenarios in the Mediterranean environment using RUSLE and GIS: An application model for Calabria (southern Italy). *Geomorphology*, 112(3-4), 228-245. <https://doi.org/10.1016/j.geomorph.2009.06.009>
- Torre, A., & Darly, S. (2013). Land use and soils disposal: From competition to territorial governance (examples from land use conflicts in the greater Paris region). *Renewable Agriculture and Food Systems*, 29(3), 206-217. <https://doi.org/10.1017/s1742170513000379>
- Uitermark, J. (2014). Integration and Control: The Governing of Urban Marginality in Western Europe. *International Journal of Urban and Regional Research*, 38(4), 1418-1436. <https://doi.org/10.1111/1468-2427.12069>
- Van Eck, N., & Waltman, L., (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Voghera, A. (2020). The River agreement in Italy. Resilient planning for the co-evolution of communities and landscapes. *Land Use Policy*, 91. <https://doi.org/10.1016/j.landusepol.2019.104377>
- Waltman, L., & Van Eck, N. J. (2019). Field Normalization of Scientometric Indicators (pp. 281-300). In W. Glänzel, F. Moed, U. Schmoch, M. Thelwall (Eds.), *Springer Handbook of Science and Technology Indicators*. Cham, Switzerland: Springer Handbooks. https://doi.org/10.1007/978-3-030-02511-3_11
- Zanon, B. (2010). Planning Small Regions in a Larger Europe: Spatial Planning as a Learning Process for Sustainable Local Development. *European Planning Studies*, 18(12), 2049-2072. <https://doi.org/10.1080/09654313.2010.515822>

How to cite this paper?

Arango Espinal, E., Ceballos Molano, R., & Patiño Giraldo, L. V. (2020). Territorial Governance: A Bibliometric Analysis. *Cuadernos de Administración*, 36(68), 14-27. <https://doi.org/10.25100/cdea.v36i68.9702>

Cuadernos de Administración journal by Universidad del Valle is under licence Creative Commons Reconocimiento-NoComercial-SinObrasDerivadas 4.0. Based in <http://cuadernosdeadministracion.univalle.edu.co/>