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EMBRACING OUR SMART WORLD WHERE THE CONTINENTS CONNECT: ENHANCING THE GEOSPATIAL MATURITY OF SOCIETIES 6–11 May 2018, İstanbul

Bibliometric Analysis of Articles Presented Under Commission 7: A Case of the 25th Fig Congress in Malaysia in 2014

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INTRODUCTION

With technological developments, the world of science has become closer to each other, sharing of knowledge and experience has been accelerated and scientific communication activity has increased. The sharing of information resources on the web, participation in international projects and conferences and similar scientific activities have increased rapidly in recent years.



















INTRODUCTION

Articles or papers which are an important tool for sharing information inform and direct the reader about the related topic with the information and the references. In bibliometric research, which is a kind of scientific text analysis, certain features of documents or publications are analyzed and various findings related to scientific communication are obtained (Al and Costur, 2007).

















PURPOSE of the STUDY

There are two main purposes of our study:

- (1) To determine the level of participation of the activities organized by the FIG by the countries, institutions and experts.
- (2) To provide an idea to researchers about the scientific progress in terms of occupation.

















SCOPE of the **STUDY**

One of the institutions that make a great contribution to the global development of our profession is the International Federation of Surveyors (FIG). The future of our profession is directed with commissions created in the FIG. In the congresses organized by the FIG in various countries every 4 years, various academic studies are presented under the name of commissions.

In this study, a bibliometric analysis of acamedic works that presented under Commission 7 at the 25th FIG Congress in Malaysia in 2014 was performed in terms of authors, institutions, countries and topics.









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METHOD

Bibliometry is a quantitative analysis in the general sense and statistically analyzes published articles and referrals made in the magazines (De Nicola, 2009; Godin, 2006). Although books, theses, reports, patents are considered as elements of bibliometric analysis, scientific articles constitute the main element. The number of publications and authors, references to publications constitute the basic data of the bibliometric measure (Karasözen et al., 2009; Polat and Alkan, 2015).















METHOD

The following questions have been set for the analysis:

- How are the articles distributed according to the countries?
- How is the distribution of the authors according to the institutions?
- How is subject distribution of the articles?
- How is the distribution of the articles according to the number of authors?

With the answers given to the questions, it is evaluated the progress of scientific development from a professional point of view.

















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MATERIAL

- 25th Congress in Malaysia in 2014
- 398 studies presented at the congress according to the commissions

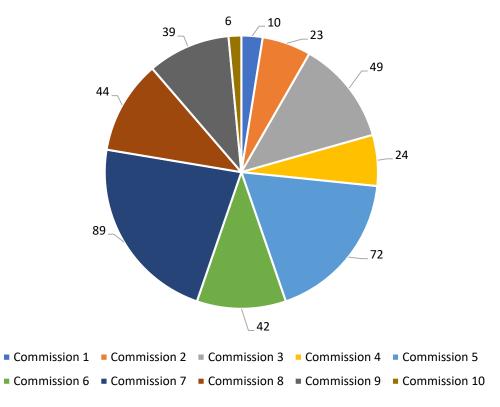


Figure 1 Number of articles according to commissions

















MATERIAL

• For the bibliometric analysis, at the 25th Congress in Malaysia in 2014, 89 papers presented in 14 technical sessions related to Commission 7 were examined.

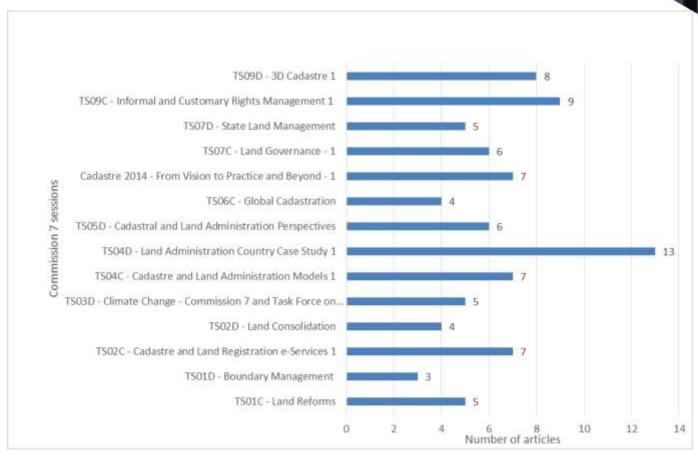


Figure 2 Number of articles according to Commission 7 sessions

















RESULTS

Author Analysis

• 92 authors have contributed 89 articles which presented related to Commission 7

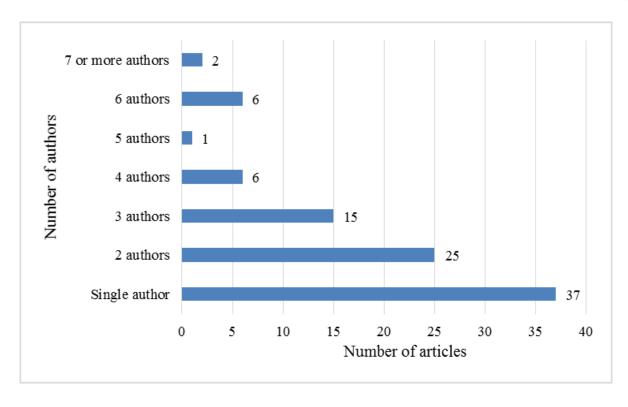


Figure 3 Number of articles by number of authors

















Author Analysis

• The top contributor author are shown in the graphic in figure 4. The most contributing authors are Daniel Steudler (4 articles) and Abbas Rajabifard (4 articles).

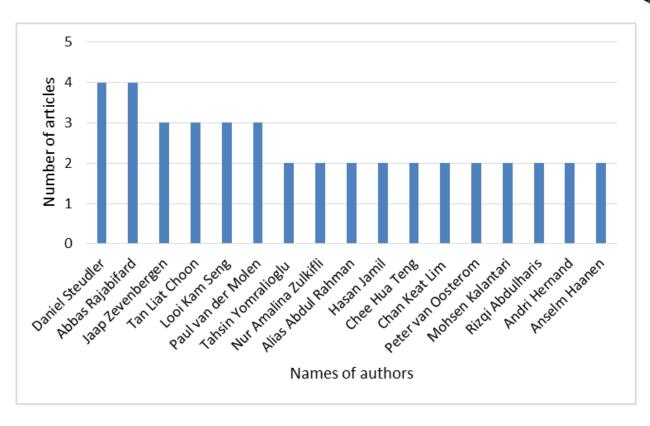


Figure 4 Most contribution authors









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RESULTS

Institutional Analysis

• Distribution of authors according to institutional information is given in the figure 5.

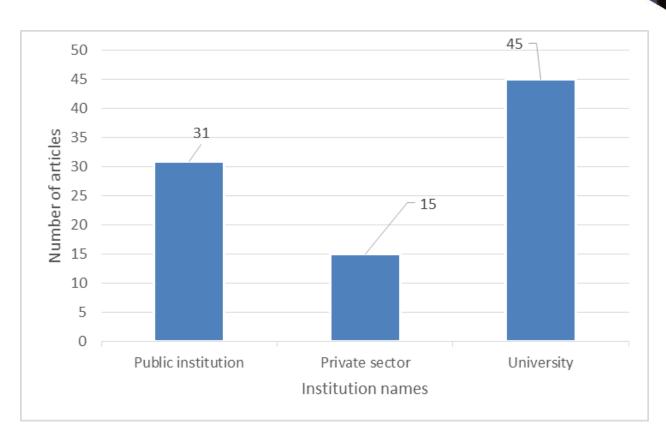


Figure 5 Distribution of authors according to institutions















RESULTS

Country Analysis

The authors' country information and the number of articles contributed by these countries are given in Table 1.

Table 1 Country names and article numbers

Country names	Number of article	Country names	Number of article
Netherlands	13	USA	2
Australia	10	Ethiopia	1
Malaysia	9	Fiji	1
United Kingdom	7	Kosovo	1
Switzerland	7	Belgium	1
Turkey	6	Thailand	1
Hungary	6	Canada	1
New Zealand	3	Kenya	1
Indonesia	3	Cambodia	1
Sweden	3	South Africa	1
Republic of Korea	2	Jamaica	1
Nigeria	2	Botswana	1
Denmark	2	Russia	1
France	2	Germany	1
Finland	2	Hong Kong	1
Philippines	2	Croatia	1
Japan	2	Poland	1
China	2	Ghana	1
Singapore	2		

















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RESULTS

Topic Analysis

Subject and keyword analysis of the 89 articles presented related to Commission 7 were analyzed. Articles are mainly covered by 3 topics. These are Land Administration, Cadastre and **Spatial Information Management**

Topics	Land Administration	Cadastre	Spatial Information Management
	Sustainable land administration	Cadastre 2034	Spatial Data Integration
	Land Registration	Multi-Purpose Cadastre	SI Infrastructure
	Land Acquisition	The Cadastral Template	Data Mining
	Right of Indigenous	Cadastre 2014	3D Spatial Databases
	Rural Areas	Cadastral Development	Parcel Based SI
	LADM	Marine Cadastre	Spatio-Temporal Data
	Land Governance	Cadastral System	
	Good Governance	Cadastral Information system	
	Urban Expansion	3D Digital Cadastral System	
	State Lands	3D Cadastre	
	Privatization of Land	Web-based Cadastral Survey	
	Land Rights	Development Plans	
S	Land Claim Settlements	Cadastral Survey Systems	
Key words	Land Tenure Information	Cadastral Processing	
W /	Rapid Urbanization	2D Cadastral Registration	
Χey	Social Tenure Domain Model	Cadastral Applications	
—	Pro-Poor Land	Cadastre Base Data Model	
	3D City Model	Real Estate Cadastre	
	Land Regularization	Cadastral Infrastructure	
	Urban planning	General Boundary Survey	
	Land Consolidation	Border Management	
	Urban Development	Public cadastral surveying	
	Agricultural Land	Private cadastral surveying	
	Land Surveyors		
	Real Property Owner		
	Land economy		
	urban renewal		
Platinum Sponsors	Land readjustmen		
	Informal settlements		
Trimble.	Leica esri Table 27	Topics and keywords related to	the articles











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RESULTS

Keywords Analysis



Figure 6 Key words cloud of the topic of the land administration



Figure 7 Key words cloud of the topic of the cadastre

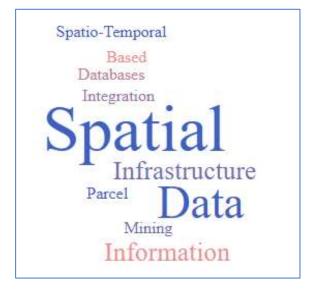


Figure 8 Key words cloud of the topic of the spatial information (SI) management

















- 1- A significant portion of the 89 articles presented in the Congress (37 articles) are prepared by a single author. The remaining articles are 2 or more authors. This shows that both individual participation and multiple participation. Multi-authored articles include mainly the projects topics.
- 2- The most contributing institution is the university with 45 articles. The number of articles contributed by public institutions are 31. The private sector contributed 15 articles. These data show that work carried out on the professional level is followed by all institutions. These institutions have contributed to various articles together. This is an example of cooperation between institutions.

















- 3- The congress was attended by authors from 37 different countries. When the distribution of the countries was examined, authors presented articles from the North America (3 countries), Europe (14 countries), Asia (12 countries), Africa (6 countries) and Australia (2 countries) continent. This shows that the FIG congress and its work are being followed from every part of the world.
- 4- The countries that presented the most articles in the congress on a country basis were Netherlands (13 articles), Australia (10 articles), Malaysia (9 articles), United Kingdom (7 articles) and Switzerland (7 articles). These countries have most of studies in terms of land management. These countries describe their own developed land management structures in other countries.















- 5- The 89 articles presented in the Congress seem to focus mainly on land administration, cadastre and spatial information management. The key words that are produced according to the topics show that the works refer to all the topics related to land administration. The studies included various standards (eg. LADM) and visions (eg. Cadastre 2014 and 2034 Visions) for land administration.
- 6- The study offers a variety of contributions to the researcher. The researchers who will work in the field of land administration can get ideas from this work about which subjects can be studied and design their work in this framework. In this context, for future researches the articles presented in other congresses can be included in the examination and the research can be repeated.















Thanks for attention...







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