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A LITERATURE REVIEW OF SETTLEMENT LAND TRENDS (PAST, PRESENT, AND FUTURE) BASED ON ENGLISH- LANGUAGE ARTICLES INDEXED IN THE WEB OF SCIENCE DATABASE FROM 2014 TO 2023

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Abstract: This review explores the past, current, and future trends of settlement lands by analyzing papers indexed in the Web of science database published in English between 2014 and 2023. Settlement lands, which involves systematically measuring, recording, and analyzing land use, land cover, and land-related resources, is crucial for managing land resources sustainably. This review synthesizes findings from a range of studies, highlighting significant advancements, challenges, and evolving methodologies in Settlement lands. The analysis identifies key trends in the use of remote sensing technologies, Geographic Information Systems (GIS), and spatial data analytics, which have enhanced settlement lands practices. It also examines the growing importance of environmental sustainability, land degradation monitoring, and policy implications. In addition, it is necessary to scientifically and rationally guide rural settlements to agglomerate appropriately to improve the utilization efficiency of land resources and public service resources.

Keywords: Digital Settlement Lands Mapping, Land Cover Mapping, Land Resource Management, Remote Sensing, Informal Settlement, Land Use Regression, Geographic Information Systems (GIS)

Introduction. Land is one of the most valuable and finite natural resources, supporting various socio-economic activities, including agriculture, urban development, and conservation. As the global population continues to grow, the demand for land intensifies, necessitating effective and sustainable management. Settlement lands have been used as a essential tool in this context, offering a systematic approach to living, awareness of environmental building, and manage rural and urban settlement. Over the past few decades, technological advancements and a growing understanding of environmental concerns have significantly influenced the evolution of land accounting practices. This paper reviews the past, current, and future trends in settlement lands, focusing on papers published in English between 2014 and 2023 that are indexed in the Web of science database. The objective is to provide a comprehensive overview of the key developments in this field, assess the methodologies employed, and identify potential gaps and opportunities for future research. By analyzing a wide range of studies, this review aims to contribute to the ongoing discourse on land resource management,

providing valuable insights for researchers, policymakers, and practitioners alike. The review also seeks to highlight how settlement lands intersect with broader global issues such as environmental sustainability, urbanization, and climate change adaptation.

Methods. A Global Library of Advanced Land Quantitative Methods for 2014-2023 in Web of science. We first searched for “Settlement Lands” as a keyword in the article title, abstract, and keywords section and found 231 published papers within the above-mentioned time period. During the skimming process, we found that most of the papers were not entirely devoted to settlement lands. Then, the following filters were used as a search strategy.) and (limit-to (language, "English")) and research disciplines were selected. Through this refinement, we finally captured the papers from 2014-2023 and converted them into CSV and RIS extensions. Map chart is used to analyze which country published more from 2014 to 2023 and it is demonstrated by map.

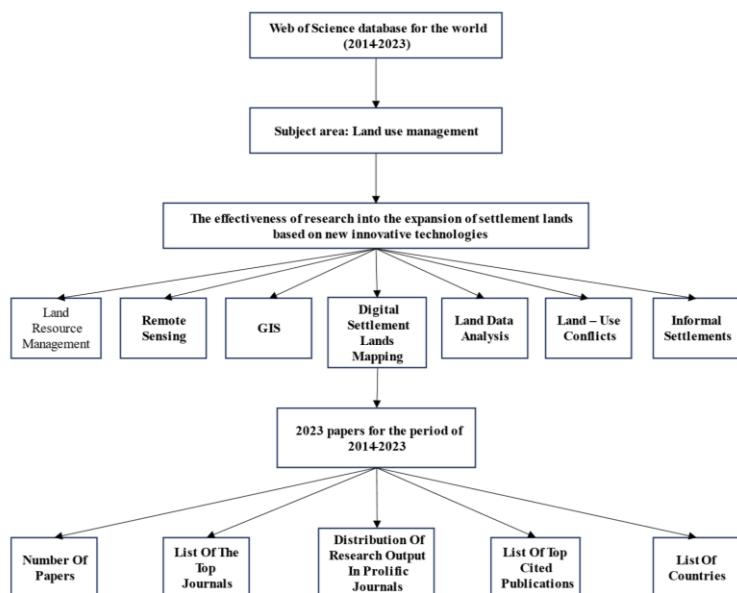


Figure 1. Flowchart of the methodology

The causes why we use the methods mentioned earlier are due to Web of science as a well-known database that collects authoritative literature from all over the world, especially in the case of land use management. English is a universal language, therefore, the literature in English is more standard and meaningful than literature in other languages.

Results and discussion.

3.1. Published papers on settlement lands

In order to understand the effectiveness of settlement lands in the land field, annual publication and citation trends were analyzed, as shown in Fig. 2. The publication on settlement lands research had come from 89 countries scattered all over the globe. The figure indicates that from 2014 to 2023, from 14 papers in 2014 to 27 papers in 2023, there

is a general upward trend with a significant increase in the 2019-2022 years. We deduced that researchers are paying high concentration on settlement lands in the land category.

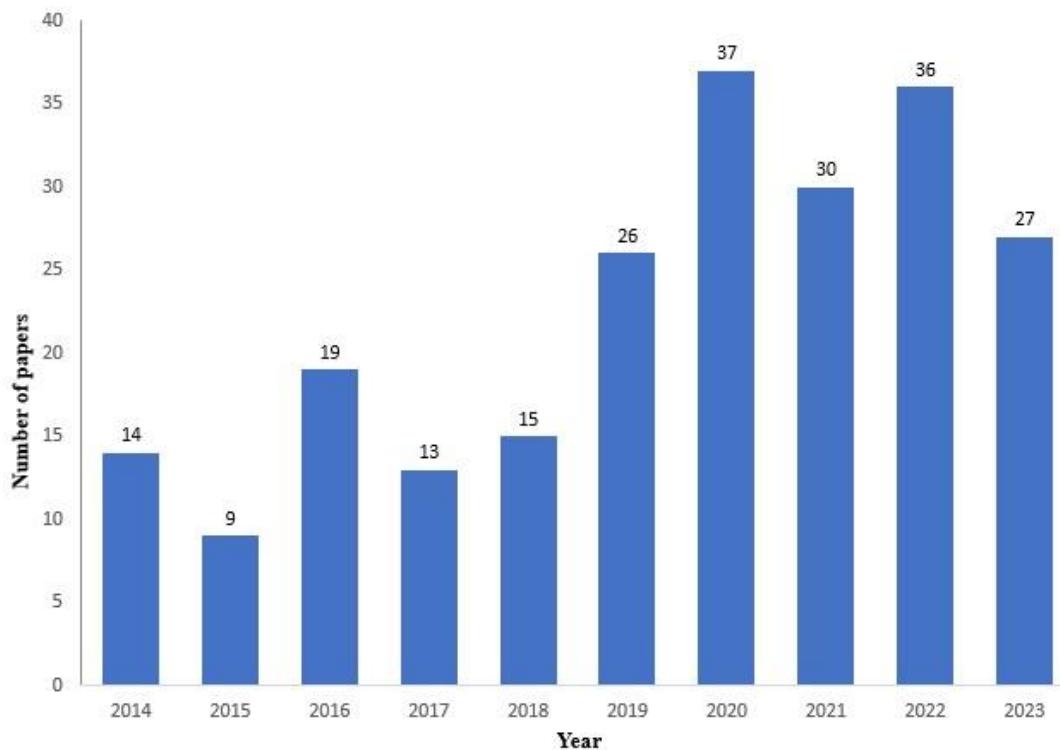


Figure 2. Number of papers on settlement lands by the year of publication in the world

3.2 Journals on Settlement lands

A wide variety of journals in different parts of the world are used by scholars to publish their research. Land is the most common journal among the well-known journals, and 26 papers were published by researchers. the second part of journals (Land Use Policy, Habitat International, Remote Sensing, and Sustainability) they were made up between 17 and 14 papers in the field. By contrast, researchers published less of their research in the last 10 journals, which consist of 3 to 7 papers.

Table 1. List of the top journals on settlement lands in the world

No	Web Of Science Source Title	Number of papers
1.	Land	26
2.	Land Use Policy	17
3.	Habitat International	16
4.	Remote Sensing	14
5.	Sustainability	14
6.	Remote Sensing Of Environment	7
7.	Urban Science	6
8.	Environment And Urbanization	5
9.	International Journal of Environmental Research and Public Health	5
10.	International Journal of Urban Sustainable Development	5

11.	Fresenius Environmental Bulletin	4
12.	Frontiers In Environmental Science	4
13.	Anthropocene	3
14.	Chinese Geographical Science	3
15.	International Journal of Urban and Regional Research	3

The second analyzing criteria is the name of publishing country and impact factor of the top 15 journals (Table 2). Most of the journals were published by Switzerland and United Kingdom and each country belong to six journals and three of them from Germany, China and United States. The average impact factor of the journals with the highest number of articles was 3.92. Among the 15 journals the Remote Sensing of Environment had the highest impact factor and Remote Sensing of Environment had the highest number of cite score in this field.

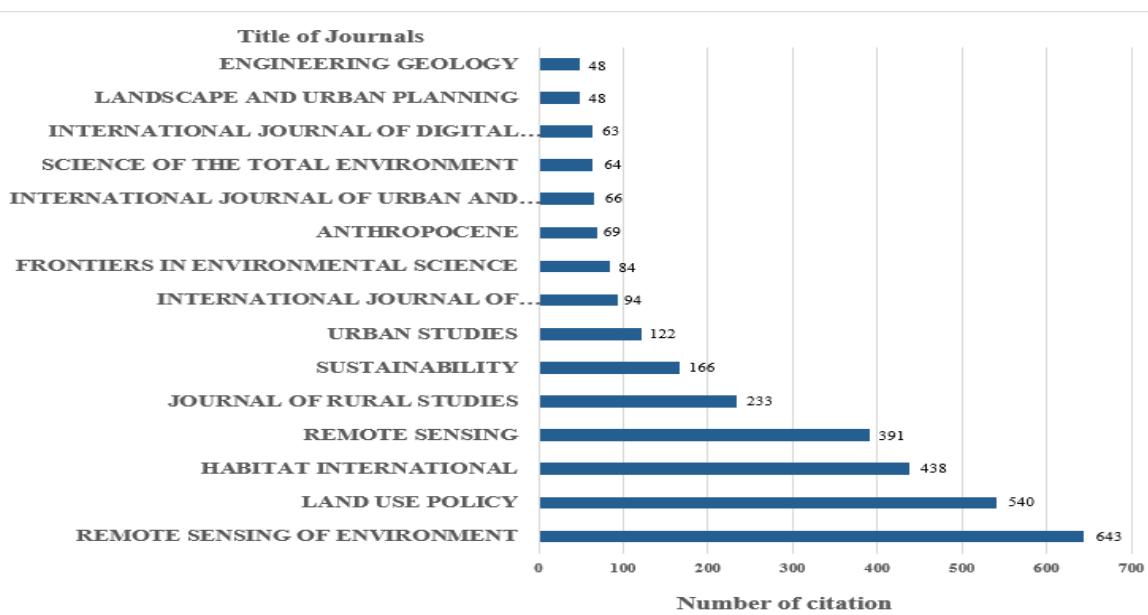
Table 2. Distribution of research output in prolific journals

No	Journal	Citescore	Publishing country	IF
1.	Land	4.9	Switzerland	3.2
2.	Land Use Policy	13.7	United Kingdom	6.0
3.	Habitat International	10.5	United Kingdom	6.5
4.	Remote Sensing	8.3	Switzerland	4.2
5.	Sustainability	6.8	Switzerland	3.3
6.	Remote Sensing Of Environment	25.1	United States	11.1
7.	Urban Science	4.3	Switzerland	2.1
8.	Environment And Urbanization	5.9	United Kingdom	2.0
9.	International Journal of Environmental Research and Public Health	7.3	Switzerland	4.614
10.	International Journal of Urban Sustainable Development	4	United Kingdom	2.5
11.	Fresenius Environmental Bulletin	0.7	Germany	0.6
12.	Frontiers In Environmental Science	4.5	Switzerland	3.3
13.	Anthropocene	6.3	United Kingdom	3.3
14.	Chinese Geographical Science	5.3	China	3.4
15.	International Journal of Urban and Regional Research	6.7	United Kingdom	2.7

3.3 Top cited journals on settlement lands

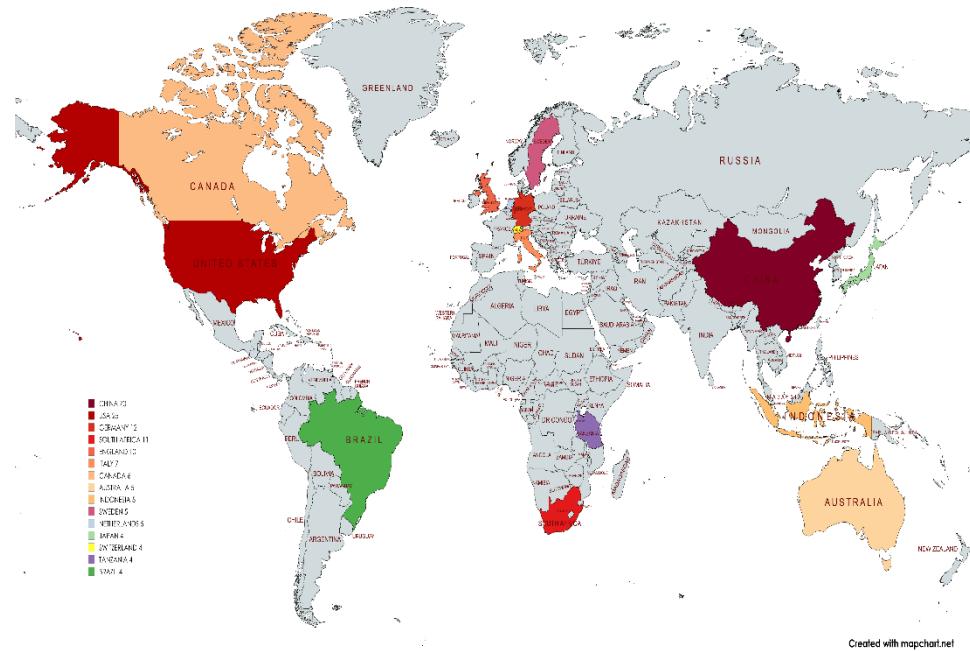
A minority of scientific journals publish the majority of scientific papers and receives the majority of citations (Ioannidis, 2006). In 3.2 subsection we analyzed top journals which published the greatest number of papers. However, despite of fever number of papers there are journals that gathered more citation from 2014 to 2023. Taking into consideration this factor we decided to investigate top-cited journals on settlement

lands. Firstly, we sorted source names alphabetically of excel extension file of 2010 documents. Then step by step total papers' citations are summarized by each journal. Interestingly, at the result we got updating list with potential journal names. Initial 15 journals selected and shown in Figure 5. Almost 70.5% (3005 citations) of total citations given to papers published in these 15 journals. As a result of the number of citations, the first ranked journal with 26 documents by publication rate emerged as the best journal (see Table 1, 2). Five journals: Journal Holocene, Planning Theory & Practice, Urban Studies, Cities, Pastoralism-Research Policy and Practice are leaved the Table 2. Instead of five journals Journal of Hydrology, Applied Geography, Chinese Geographical Science, Journal of Geology Geography and Geoecology, Fresenius Environmental Bulletin are ranked as a top cited journal on settlement lands.



3.4 Top countries on settlement lands

A region's internationalization can be measured by the number of countries participating in research activities on a particular topic. Total of more than 51 countries jointly worked on settlement lands issue in the world from 2014-2023. Figure 3 highlights geographical location of the top 15 countries participated in publishing of at least 4 and more publications. On the figure with huge difference China holds a dominant by 70 research documents representing 39.5% of overall publications, followed by The Use (25; 14.1%), Germany (12; 6.7%), South Africa and England are almost the same level (11; 6.2%). Researchers from these top five countries participated in publication of 66.5% of total papers.



Conclusions. The evolution of settlement lands from 2014 to 2023 reveals an increasing sophistication in methods, technologies, and applications. While earlier research focused on the establishment of foundational concepts and technologies, the current trends show an emphasis on sustainability, ecosystem services, and governance. Looking to the future, settlement lands is poised to play a key role in managing people growth such as build apartment, resource management, and sustainable development through more integrated, transparent, and innovative approaches.

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