GLOBAL RESEARCH TREND IN BUMDes (VILLAGE ENTERPRISE) DURING 2000 – 2023 IN SCOPUS DATABASE

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Abstract

The aim of this study was to analyse the bibliographic characteristics and content of articles on BUMDes (Village Enterprise) published in journals indexed by Scopus written by researchers from throughout the world. We conducted a bibliometric and content analysis of publication in the Scopus database. We only retrieved articles written in English. We conducted content analysis using the VOSviewer software and visualized the co-occurrence of keywords and bibliographic coupling of sources and countries. Following the study protocol, we found 1749 articles on BUMDes (Village Enterprise) over the past 24 years. The most productive journal that published these articles was IOP Conference Series Earth and Environmental Science (n=63). The post productive country were China (n=304), respectively. The keywords of research on BUMDes (Village Enterprise) formed 8 clusters (e.g China, Rural Area, and Township and Village Enterprise). From a global perspective, BUMDes (Village Enterprise) research in the past two decades has increased significantly.

Keywords: BUMDes, Village Enterprise, Scopus, VOSViewer.

INTRODUCTION

This article discusses the discourse BUMDes (Village Enterprise). The discourse understanding is inseparable from bibliometric analysis (Lee, 2020)(Mifrah, 2020)(Omoregbe et al., 2020)(Saravanan & Dominic, 2014), referring to the incorporation of various frameworks and methods to analyze citations from scientific publications. Such attempt leads to the development of different metrics to gain insight into the intellectual structure of a broad academic discipline and to evaluate the impact of a particular field of study (Akhavan et al., 2016)(Putera et al., 2020).

The various studies above show that the problem of BUMDes (Village Enterprise) can no longer be considered a simple problem. Althought some researchers have produced BUMDes (Village Enterprise) articles, we have not found research in bibliometric articles on BUMDes (Village Enterprise) utilized social network analysis. This aim of this article was to provide useful data for understanding global publication trends regarding BUMDes (Village Enterprise).

This study aimed to analyze the bibliographic characteristics and trends of articles on BUMDes (Village Enterprise) published in journals indexed in Scopus written by researchers from throughout the world and to conduct an analysis of keyword co-occurance using VOSviewer.

METHODS

This study did not involve human subjects; therefore, neither institutional review board approval nor informed consent was needed. This study was a descriptive and bibliometric analysis based on a literature database. The data in this study were retrieved from the Scopus database. To obtain the necessary data, this study used the keyword "BUMDes (Village Enterprise)" in the title, abstracts, and author's keywords. In this step, we found 1749 articles. In the next step, we downloaded the articles from the scopus database and analyzed the 1749 articles that had been sorted by relevance. In this study, the metadata and refined Scopus result values were retrieved in the Csv dataset format. However, before the bibliometric analysis, the consistency and reliability of the data were checked to address issues such as a lack of consistency in country names and keywords. The data were also standardized to ensure consistency regarding key words that sometimes appeared in singular or plural, abbrevieations, or other forms. The data obtained from the Scopus database were analyzed using VOSviewer software, and simple statistics were calculated using Microsoft Excel.

RESULTS

Based on a search with the keyword "BUMDes (Village Enterprise)", the result showed approximately 1749 documents. Most articles were listed under Social Sciences (n=762), Environmental Science (n=441), Business, Management and Accounting (n=328), Economics, Econometrics and Finance (n=269), and Agricultural and Biological Sciences (n=249). The full distribution of BUMDes (Village Enterprise) articles across subject areas is shownin Fig. 1.

Fig 1: Distribution of BUMDes (Village Enterprise) based on subject area.
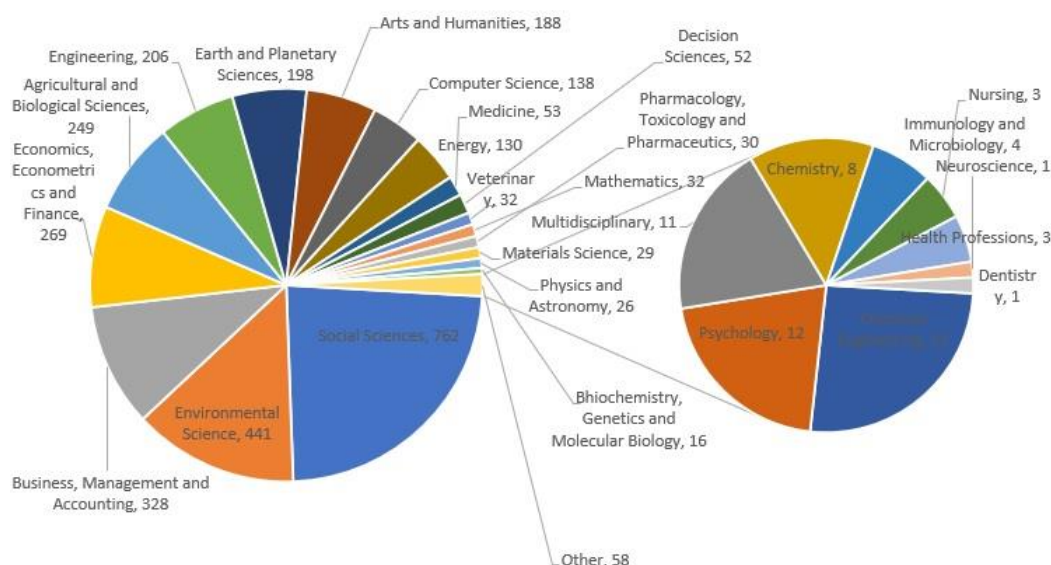
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The highest number of articles were published in IOP Conference Series Earth and Environmental Science, with 63 publications, followed by Sustainability Switzerland (n=33), Journal of Environmental Biology (n=19), Livestock Research For Rural Development (n=14), and E3s Web Of Conferences (n=14). The other most productive journals with the most publications are shown in Table 1.

In the period 2000 to 2023, China was the country with the most publications on BUMDes (Village Enterprise), with 304 articles, followed by the United States with 236 articles. Indonesia and India were the Asian countries ranked in the top 10 countries in terms of the most BUMDes (Village Enterprise) publications. These two Asian countries ranked three and fourth, respectively. The top 10 countries can be seen in Fig. 2.

Table 1: The most production journals based on the number of publications

| Rank	Journal	No. Of Publication
1st	IOP Conference Series Earth and Environmental Science	63
2nd	Sustainability Switzerland	33
3rd	Journal of Environmental Biology	19
4th	Livestock Research For Rural Development	14
5th	E3s Web Of Conferences	14
6th	Advanced Materials Research	14
7th	Journal Of Rural Studies	13
8th	Journal Of Physics Conference Series	13
9th	Land	12
10th	World Development	11

Source : Processed by Author

Fig 2: Top 10 countries with publication of BUMDes (Village Enterprise)
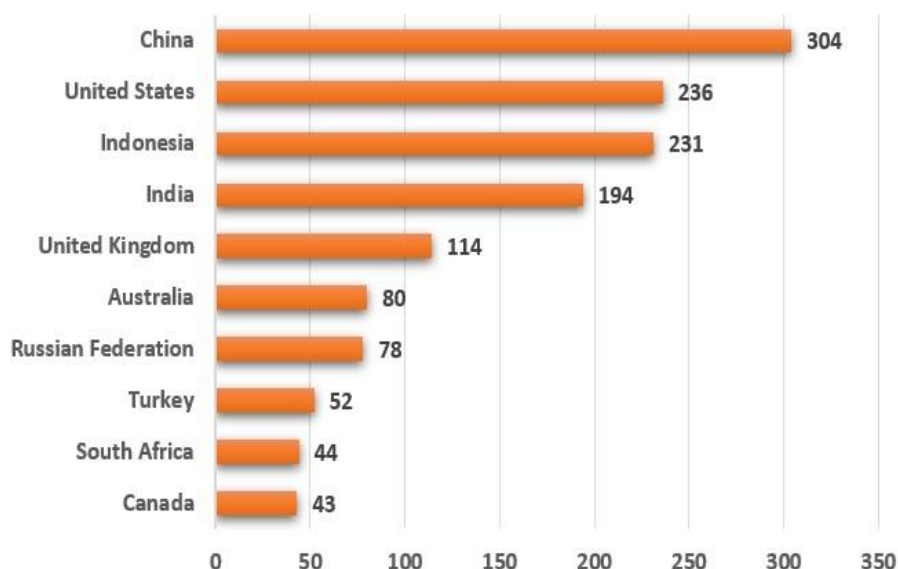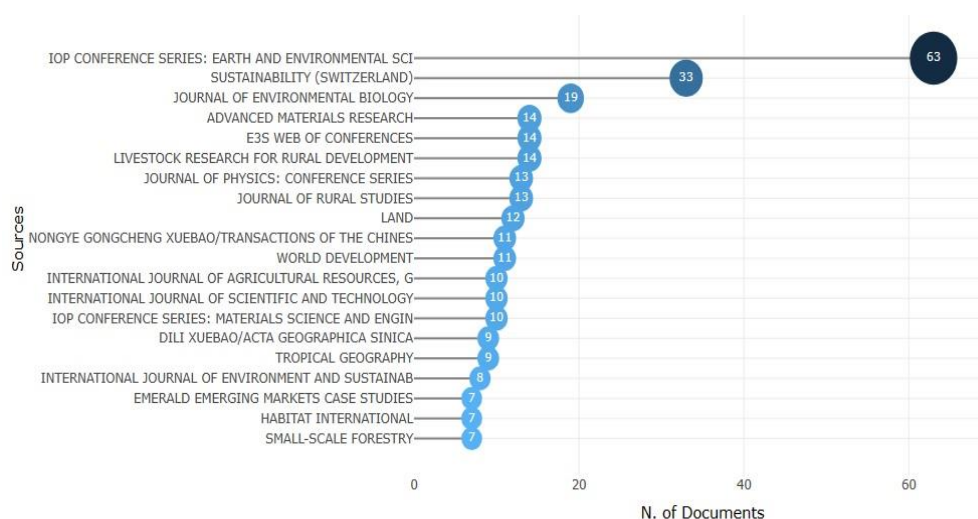

Source : Processed by Author

Figure 3. Lists the most relevant authors recorded by the Scopus database. The most relevant was Li X., with 14 Publication, followed Li Y (n=12), Wang J (n=11), Zhang L (n=11), and Wang X (n=10). Figure 4. Present the most relevant source (i.e journals). IOP Conference Series Earth and Environmental Science (n=63) was the most relevant source, followed by Sustainability Switzerland (n=33), Journal of Environmental Biology (n=19), Livestock Research for Rural Development (n=14), and E3s Web of Conferences (n=14).

Fig 3: The most relevant authors.
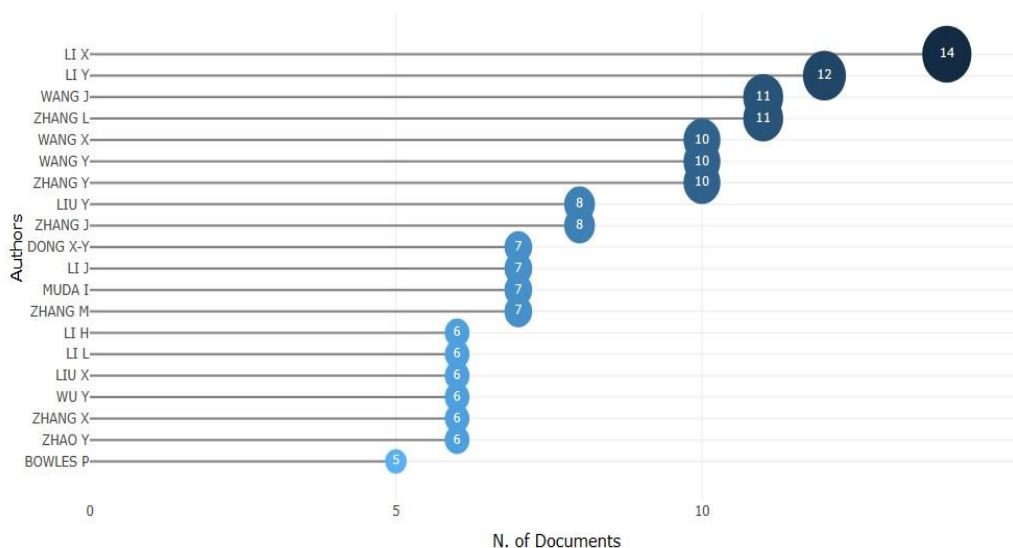
Source : Processed by Author

**Figure 4: The most relevant source.**

Source : Processed by Author

The three fields plot shown below is an illustration fo three elements, consisting of a list of journal names, country, and affiliation (Fig. 5). These three elements are plotted with gray linkages that show their relationship with each other, starting from the name of the journal, followed by country, and each author is then linked to affiliation of their publication. The size of each retangle in each list indicates the number of papers associated with that element.

The first element, on the left, is the journal. Twenty journals were indexed in the three fields in the three fields plot as having published papers on the topic of BUMDes (Village Enterprise), and the top journal that published the most papers on this topic was IOP Conference Series Earth and Environmental Science, which is depicted with a scarlet rectangle and connected to Indonesia and China.

Fig 5: Illustration of three elements, consisting of a list of journal names, Country, and Affiliation
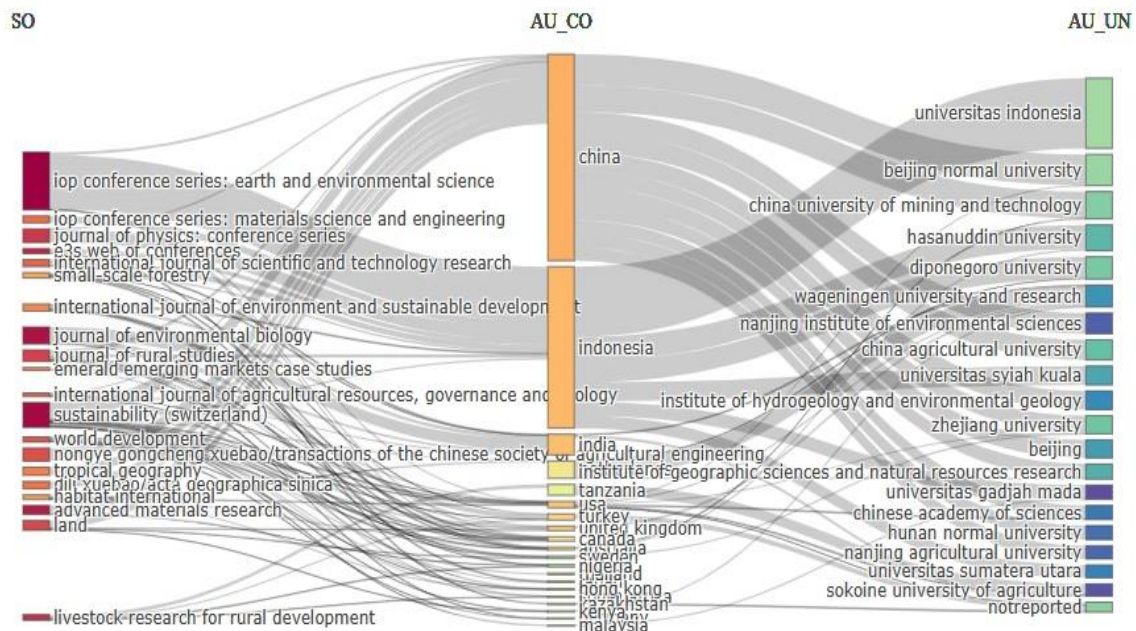
The second element in the middle contains Country. Country who published articles in journal that were recognized are associated with previous elements, such as China who is linked to Beijing Normal University and China University of Mining and Technology as Affiliation elements.

The third element contains Affiliation that appeared most frequently in the papers. Each topic is associated with authors who published extensively on that topic. Universitas Indonesia that appeared most frequently was "BUMDes (Village Enterprise)", as indicated by the size of the light green rectangle, which dominated the other rectangles.

A content analysis was performed of the 1749 publications sorted by relevance. Next, we performed a co-occurrence analysis with VOSviewer, using the "all keyword" analysis unit

and the "full counting" method. We limited the frequence of keyword occurrence to 5 times; out of 9122 keywords VOSviewer found 510 keywords that met the threshold. The results of this analysis are presented in Fig. 6.

China (466), Rural Area (238), and Township and Village Enterprise (144) were the top three keywords that appeared most frequently. Moreover, we found eight clusters in this analysis. Fig. 3 shows these keywords divided into 8 clusters (each with a different number of keywords), which are represented by colors.

The first cluster (red, 119 keywords) focused on Village, Rural Economy, Poverty, Social Enterprise, and Indonesia. The second cluster (green, 101 keywords) centered on Rural Areas, Sustainable Development, Agriculture, Local Government, and Industry. The third cluster (blue, 86 keywords) related to Article, Human, Economics, Biodiversity, and Ecology.

The fourth cluster (yellow, 74 keywords) related to China, Rural Development, Privatization, Urban Development, and Income Distribution. The five cluster (purple, 54 keywords) focused on India, Eurasia, Water Poluttion, Drinking Water, and Groundwater. The sixth cluster (light blue, 39 keywords) dealt with Community, Economic Activity, Coping Strategy, Enterprise and Farmers. The seventh cluster (orange, 27 keywords) focused on Social Aspect, Local Community, Mining Industry, Industrial Economics, and Corporate Social Responsibility. The eight cluster (brown, 10 keywords) focused on Heritage Tourism, Natural Resources, Rural Tourism, Cultural Heritage, and Tourist Destination.

Fig 6: Network visualization of BUMDes (Village Enterprise) articles published globally in the Scopus database.
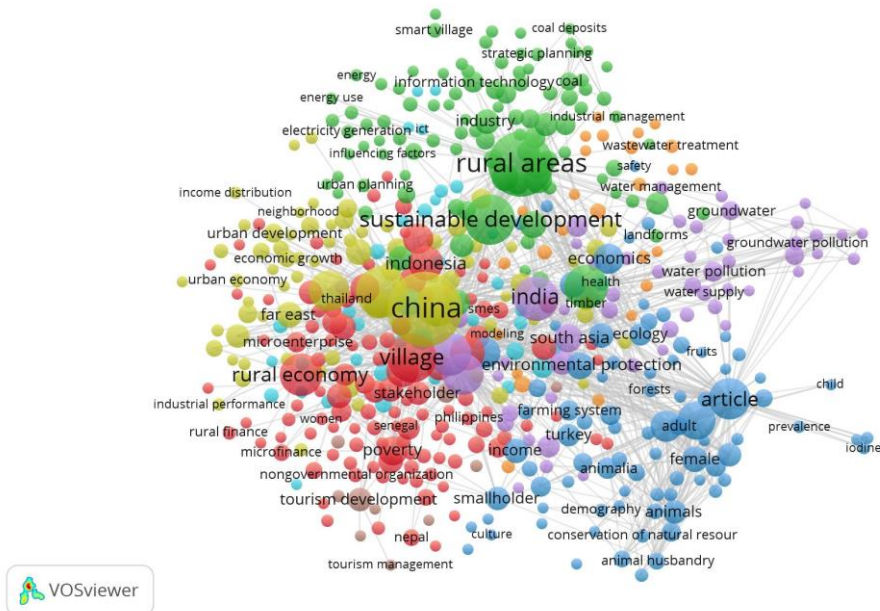
Source : Processed by Author

Fig 7: Overlay visualization of global BUMDes (Village Enterprise) articles.
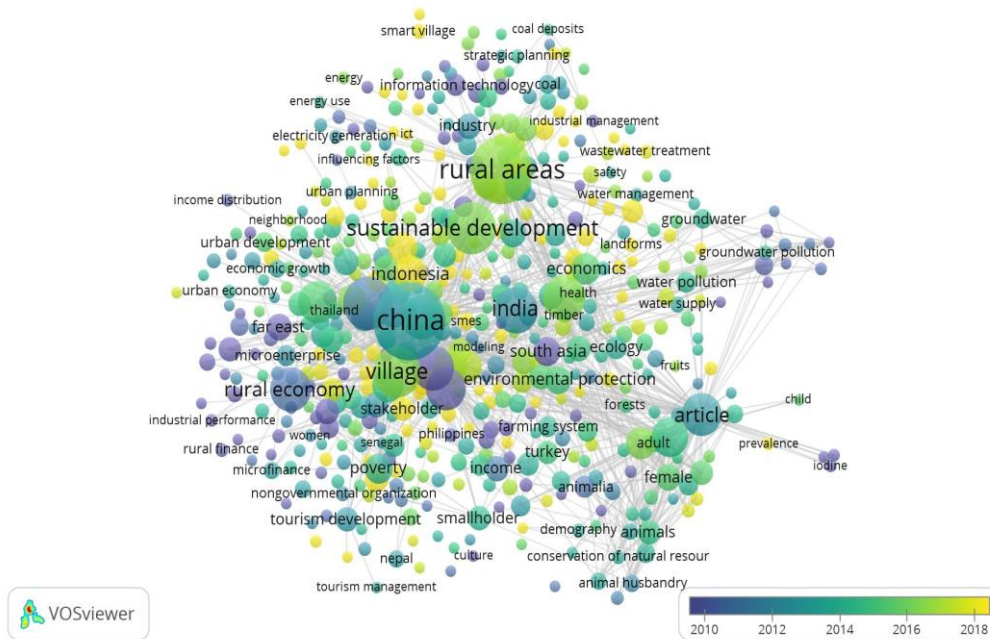
Source : Processed by Author

Fig. 7 shows an overlay visualization of the BUMDes (Village Enterprise) literature with the average number of publications from 2012 to 2014. There was a shift in topics; around 2014, the literature on BUMDes (Village Enterprise) contained extensive discussions of the terms "Tourism Development", "Poverty" and "Economic Growth", and then the last 3 years discussed "Social Enterprise", "Agricultural Robots", and "Empowerment".

DISCUSSION

Based on data from Scopus, the publication trends, journal performance, content analysis, and bibliographic coupling of countries and sources were analysed for research on BUMDes (Village Enterprise) issues throughout the world. The current study focused on articles published in BUMDes (Village Enterprise). This study aimed to provide information on the status of publications in these fields. A total of 1749 studies published were recorded in the scopus database. The data showed the rapidity of article publications and the responsiveness of researchers in analyzing on BUMDes (Village Enterprise) around the world. However, limited research from a global perspective on BUMDes (Village Enterprise) in the past 3 years has discussed "Social Enterprise", "Agricultural Robots", and "Empowerment". And its relationship with governance within the scope of social science. Based on Fig. 2, the most productive and influential country was the China, Indonesia and India is the country from Asia in the top 10. The current study has limitations, we only retrieved studies from Scopus and did not use other source such as Web of Science, Crossref, or PubMed Central. Finally, we

did not use other analyses in VOSviewer, such as co-citation or co-authorship. Thus, we hope that bibliometric research on this topic will expand in terms of the databases used, the subject areas, and the analyses conducted in order to provide a broader overview of the issue.

CONCLUSION

In the past two decades, global research on BUMDes (Village Enterprise) has increased significantly. The theme of research on BUMDes (Village Enterprise) related to policy implementation, and local government could be interesting for future discussions. There are also opportunities to foster discussion about BUMDes (Village Enterprise) in social science journals related to public administration.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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