

Exploring the Landscape of Entrepreneurial Behavior Among Farmers: A Bibliometric Analysis Using the Dimension Research Database

Abstract:

This bibliometric analysis utilizes the Dimension research database to explore publications on entrepreneurial behavior among farmers. Examining metadata such as publication titles, authors, keywords, and citation counts, the study identifies significant journals, trends, and authors in this domain. Initial findings reveal a growing interest in the entrepreneurial dimension of farming, with co-authorship and term co-occurrence studies highlighting thematic landscapes and collaborative patterns. Through a citation analysis, impactful papers are discerned, and journal evaluations provide insights into their individual contributions. The study, drawing on Dimension's extensive dataset, offers a concise yet comprehensive summary of the current state of research on farmers' entrepreneurial activity. Noteworthy concentrations of interest are observed in fields like Commerce, Management, Tourism, and Services. Top author and co-authorship analyses showcase influential contributors and multidisciplinary collaboration. The visual representation of a comprehensive citation analysis illustrates intricate connections among organizations. This research delivers valuable insights for scholars, policymakers, and practitioners, contributing to a nuanced understanding of the evolving discourse on entrepreneurial behavior among farmers and its implications for agricultural sustainability and development.

Key words: *bibliometric analysis, co-occurrence, dimension, sustainable development etc.*

1. Introduction:

Understanding the entrepreneurial behavior of farmers is essential for sustainable development and economic progress, as the agricultural sector is critical to global economies. In order to thoroughly map the research landscape and uncover important trends in this interdisciplinary topic, this study performs a detailed bibliometric analysis of publications focused on entrepreneurial activity among farmers.

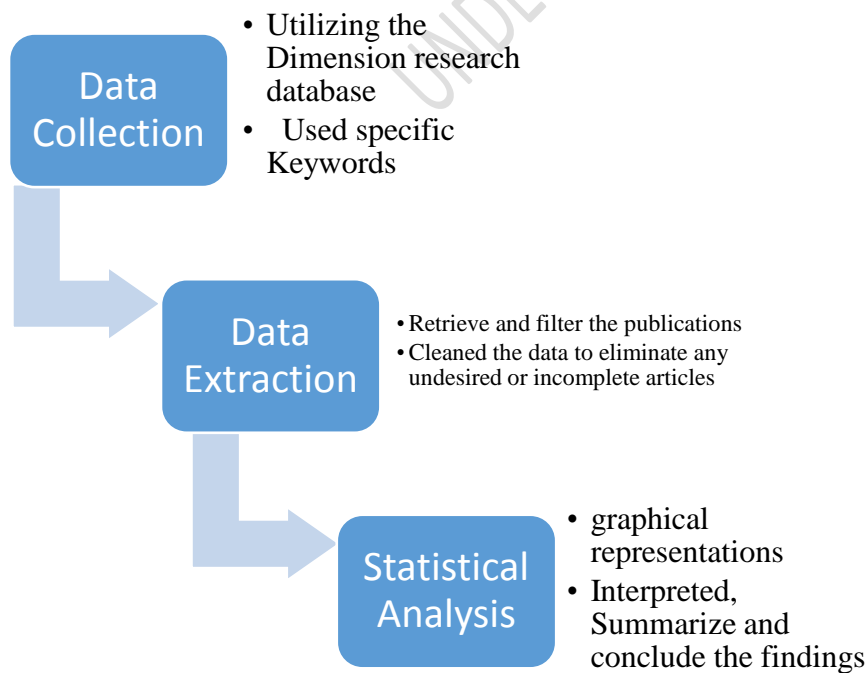
Farmers that exhibit entrepreneurial behavior in agriculture use creative approaches, take calculated risks, and make calculated decisions to increase yield and financial returns. An abundance of academic material has surfaced as the significance of entrepreneurship in the farming community becomes more widely acknowledged. By utilizing the sophisticated features

of the Dimension research database, this bibliometric analysis provides a quantitative and qualitative assessment of the present status of research by thoroughly evaluating publications, authors, and journals. This study adds to a better understanding of the changing conversation on entrepreneurial behavior among farmers and its implications for agricultural sustainability and development by looking at collaborative networks, theme patterns, and citation repercussions.

2. Methodology:

The research methodology adopts a systematic approach, utilizing the Dimension research database for a thorough bibliometric analysis of publications related to entrepreneurial behavior among farmers. For our investigation, we followed the procedures in **Fig- 1**, and the time frame for the study was 2000–2024. A targeted and comprehensive data collection process employs keywords such as "entrepreneurial behaviour," and "farmers," within a specified timeframe to capture recent developments. Extracted metadata, including publication details and citation counts, will facilitate co-authorship network analysis, citation analysis. These techniques aim to identify influential authors, collaborative networks, thematic clusters, impactful publications, and reputable journals in the field.

Fig-1. Procedure to used bibliometric analysis.



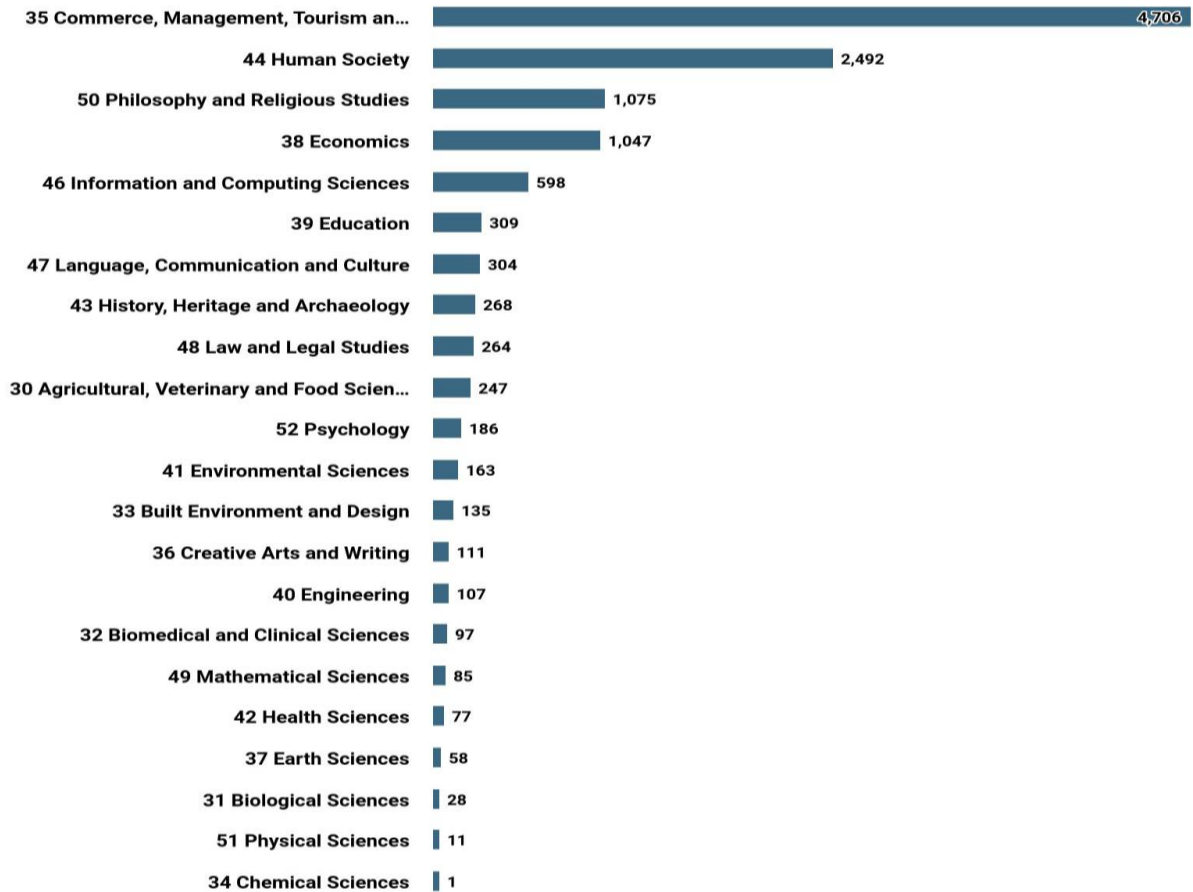
In order to track the development of research themes, the technique includes a time trend analysis and a quality assessment procedure that guarantees the inclusion of credible, peer-reviewed articles. To summarize findings, the study uses graphical representations and descriptive statistics, among other statistical analytic techniques. This comprehensive strategy ensures a thorough understanding of the current state of research on farmers' entrepreneurial activity, providing valuable insights to scholars, decision-makers and practitioners in the agricultural industry.

3. Results and Discussion:

3.1. Number of Publications

After a thorough examination of fifteen thousand six hundred documents, only the data relevant to the study's focus were considered. **Fig. 2** illustrates the total number of articles that satisfied each criterion within the broad subject area of study. According to the investigation findings, the field of Commerce, Management, Tourism, and Services emerged with the highest number of publications related to entrepreneurial behavior and farmers, totaling 4705. Following closely was the field of Human Society with 2492 publications, and Philosophy and Religious Studies with 1075. These results indicate a substantial concentration of research on the topic within the fields mentioned.

Fig 2 :Number of publications in each year research category



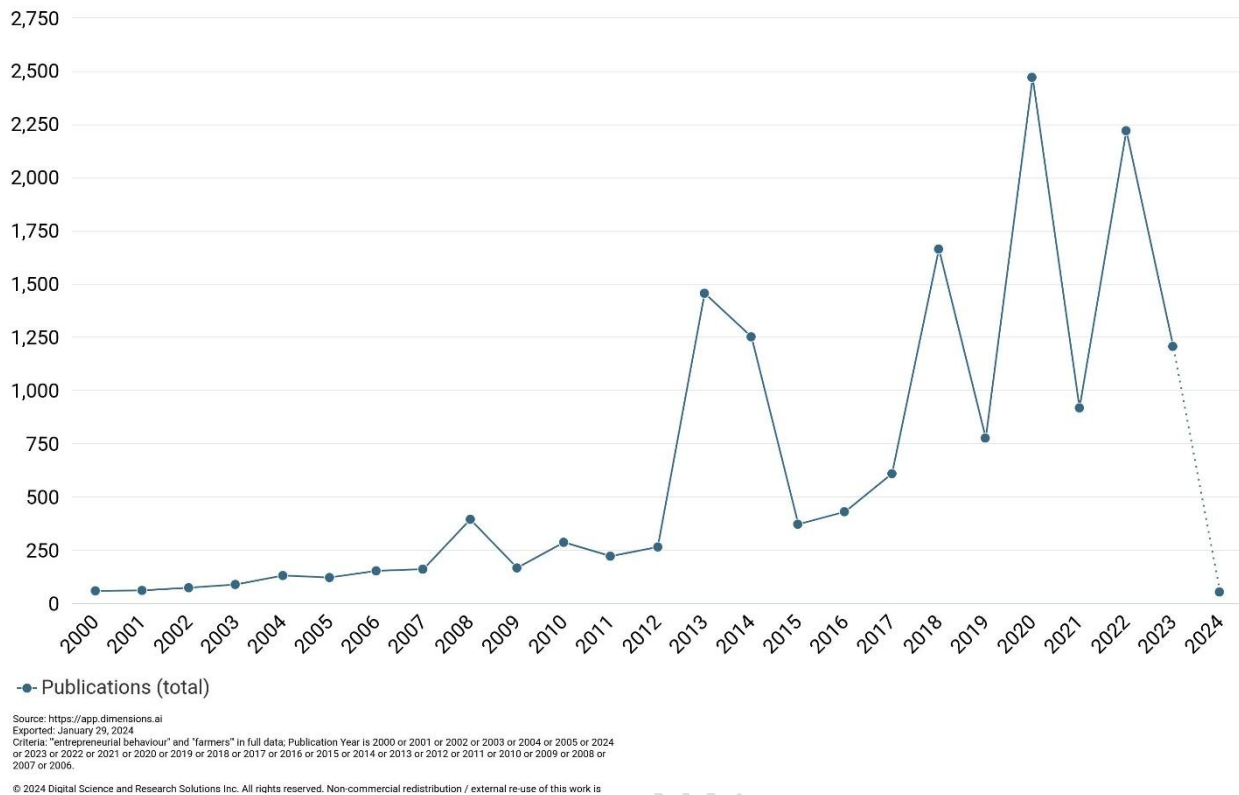
Source: <https://app.dimensions.ai>
 Exported: January 29, 2024

Criteria: "entrepreneurial behaviour" and "farmers" in full data; Publication Year is 2000 or 2001 or 2002 or 2003 or 2004 or 2005 or 2006 or 2007 or 2008 or 2009 or 2010 or 2011 or 2012 or 2013 or 2014 or 2015 or 2016 or 2017 or 2018 or 2019 or 2020 or 2021 or 2022 or 2023 or 2024

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The significance of entrepreneurial behavior in developing countries has become a pivotal concern, gaining prominence in recent keyword analyses. Figure 4 illustrates the total number of publications over the study period. The data reveals a consistent upward trend from 2000 to 2024, with a slight fluctuation observed between 2018 and 2023. Notably, the majority of publications, amounting to 2471, occurred in the year 2020, followed closely by 2220 publications in 2022 (**Figure 3**). This indicates a peak in scholarly interest and research output in these particular years, suggesting a heightened focus on the subject during that period.

Fig 3 :Publications in each year



3.2: Top Author Analysis:

In evaluating the impact of authors based on their citation counts per document, **Table-1** highlights notable contributors to the field. The findings showcase a diverse range of prolific authors and their respective citation counts. Rauch, A., *et al.*, stands out with a remarkable 1114 citations, indicating substantial influence in the research landscape. Following closely are authors like Taras, V., *et al.*, Morgado, Fabiane F. R., *et al.* and Renko, M., *et al.*, with noteworthy citation counts of 744, 374, and 324, respectively. These figures underscore the significant contributions and recognition of these authors within the scholarly community. The table further reveals a mix of seasoned researchers and emerging voices, such as Hisrich, R., Farmer, Steven M., and Welter, Friederike, each making valuable contributions with varying citation impacts. This analysis offers insights into the diverse and impactful authorship landscape in the study's domain.

Table1 :List of authors and their citations

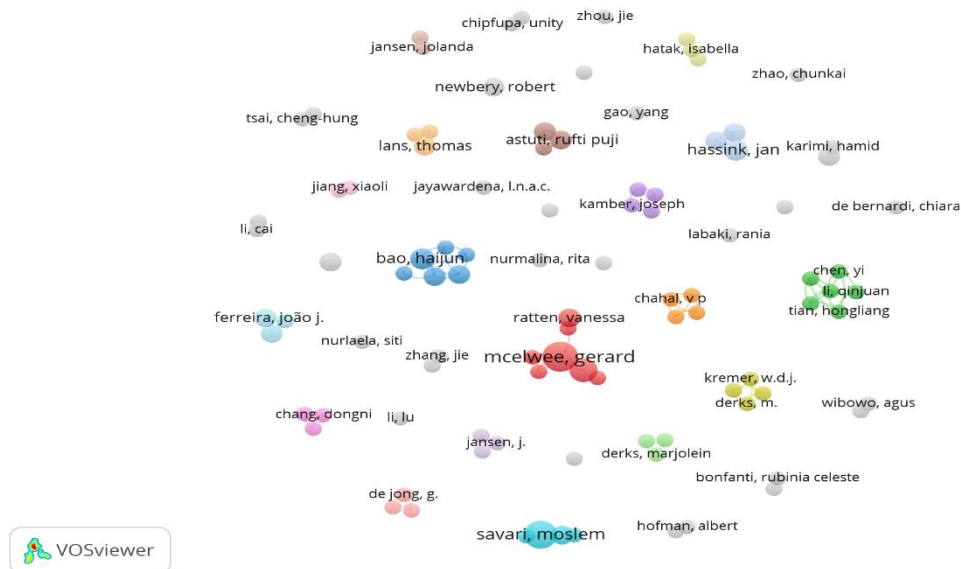
Authors	Citations
Hisrich, R. <i>et al.</i>	252
Ritter, C. <i>et al.</i>	187

Hofman, A. <i>et al.</i>	295
Morgado, Fabiane F. R. <i>et al.</i>	374
Taras, V. <i>et al.</i>	744
Farmer, Steven M. <i>et al.</i>	250
Newman, A. <i>et al.</i>	234
Renko, M. <i>et al.</i>	324
Welter, Friederike	220
Rauch, Andreas; <i>et al.</i>	1114

3.3.Co-authorship analysis:

The tabulated analysis of authors presented in Table-1 focused on the top 10 contributors, while Figure 4 provides a visual representation of this analysis. To delve deeper into the relationships among authors, a co-authorship analysis was conducted using VoS software, visualized in Figure 5. The methodology involved assessing the strength of connections between authors and identifying significant collaborations. Given the multifaceted nature of entrepreneurship development and its involvement of various stakeholders, a collaborative, multidisciplinary approach has become imperative. Researchers now engage in collective efforts, addressing the complexity of the subject.

Fig 4 : visual representation of co-authorship



The co-authorship analysis employed VoS viewer with specific criteria: a minimum of one document per author and a maximum of twenty-five authors per document. Articles not meeting these criteria were excluded. The output window of VoS viewer displayed the results, revealing that out of 98 authors meeting the criteria, only 7 exhibited significant relationships.

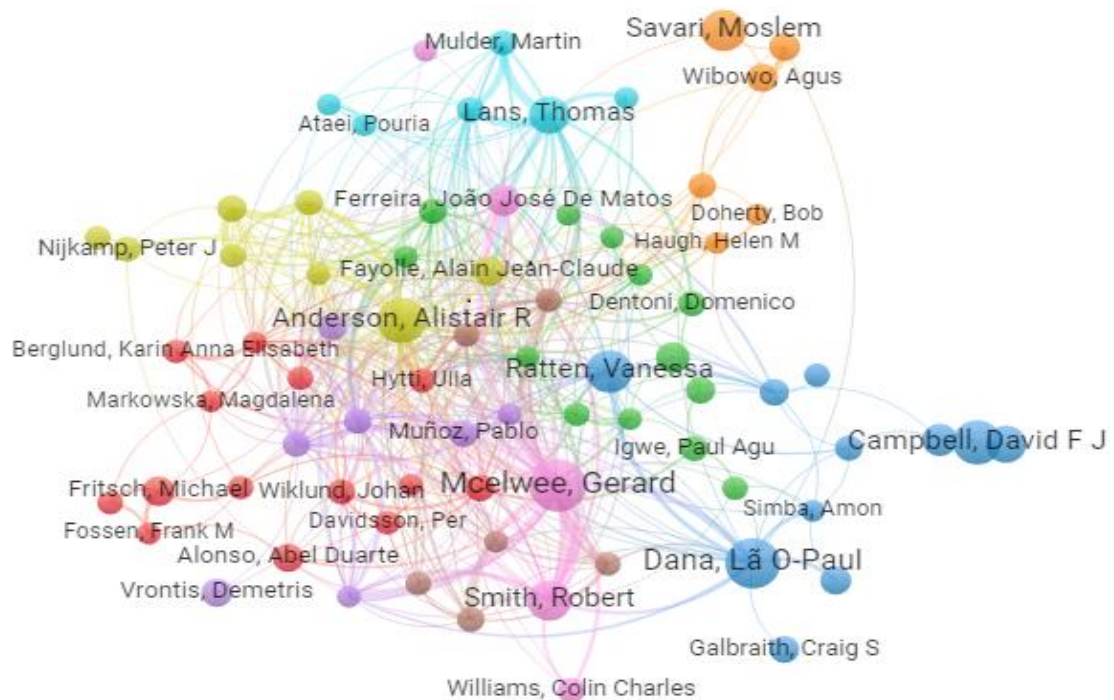
This suggests a network of collaboration within the research community, emphasizing the interconnectedness of scholars tackling entrepreneurship development issues. The co-authorship analysis thus sheds light on the collaborative dynamics and shared expertise in addressing the multifaceted challenges of entrepreneurship development.

3.4. Citation Analysis:

The data obtained was leveraged for a comprehensive citation analysis, a widely employed bibliometric strategy that examines and utilizes citations within one paper to establish connections with other researchers. Sandison emphasized the significance of citations, noting that they go beyond mere bibliographic data, serving as a representation of an author's decision to establish connections between their work and that of others. Shaw further highlighted that citations create a relational link among authors, indicating the extent of their indirect interaction through the literature.

Figure 5 visually represents the citation analysis of organizations, showcasing the intricate web of connections established through scholarly references. This visual map provides insights into the collaborative and influential networks formed within the academic landscape. By examining the citation patterns, researchers can discern the depth of engagement and impact that organizations have on each other's work, contributing to a more nuanced understanding of the scholarly discourse in the field.

Fig 5 : Visual representations of the citation analysis of organizations



Conclusion:

In conclusion, this bibliometric analysis, conducted on publications related to entrepreneurial behavior among farmers, provides valuable insights into the evolving landscape of research in this interdisciplinary field. Utilizing the extensive Dimension research database, the study delved into the metadata, including publication titles, authors, keywords, and citation counts, to uncover trends and significant contributors.

The findings reveal a growing interest in the entrepreneurial aspects of farming, with a concentration of research in fields such as Commerce, Management, Tourism, and Services. The upward trajectory in the number of publications from 2000 to 2024 signifies the increasing prominence of entrepreneurial behavior among farmers, with a notable peak in 2020 and 2022. Top author analysis identified influential contributors like Rauch, Andreas, Taras, V., and Morgado, Fabiane F. R., showcasing their substantial impact on the research landscape. The co-authorship analysis illustrated a collaborative network among researchers, emphasizing the multidisciplinary approach essential for addressing the complex challenges of entrepreneurship development in the agricultural sector. The citation analysis, visualized in Figure 5, demonstrates the intricate web of connections among organizations through scholarly references. This visual map enhances our understanding of collaborative networks and influential interactions within the academic landscape. In essence, this comprehensive study contributes to a nuanced understanding of the changing discourse on entrepreneurial behavior among farmers. Scholars, policymakers, and practitioners in the agricultural industry can leverage these insights for informed decision-making and sustainable development in this critical sector.

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