



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

Pradeep Kumar Yadav ^{a++*} and N. K. Mishra ^{a#}

^a Department of Agricultural Extension, T. D. PG. College, Jaunpur-222002, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2024/v24i31257

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/112978>

Review Article

Received: 24/01/2024

Accepted: 14/02/2024

Published: 19/02/2024

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

⁺⁺Research Scholar;

[#]Professor;

^{*}Corresponding author: E-mail: pradeep400jnp@gmail.com;

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.

Keywords: 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 [1].

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 [2,3]. 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.

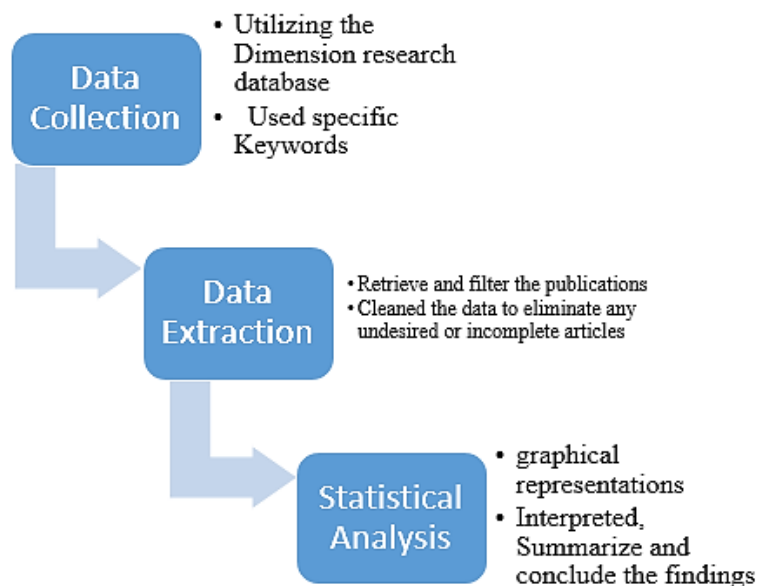


Fig. 1. Procedure to used bibliometric analysis

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.

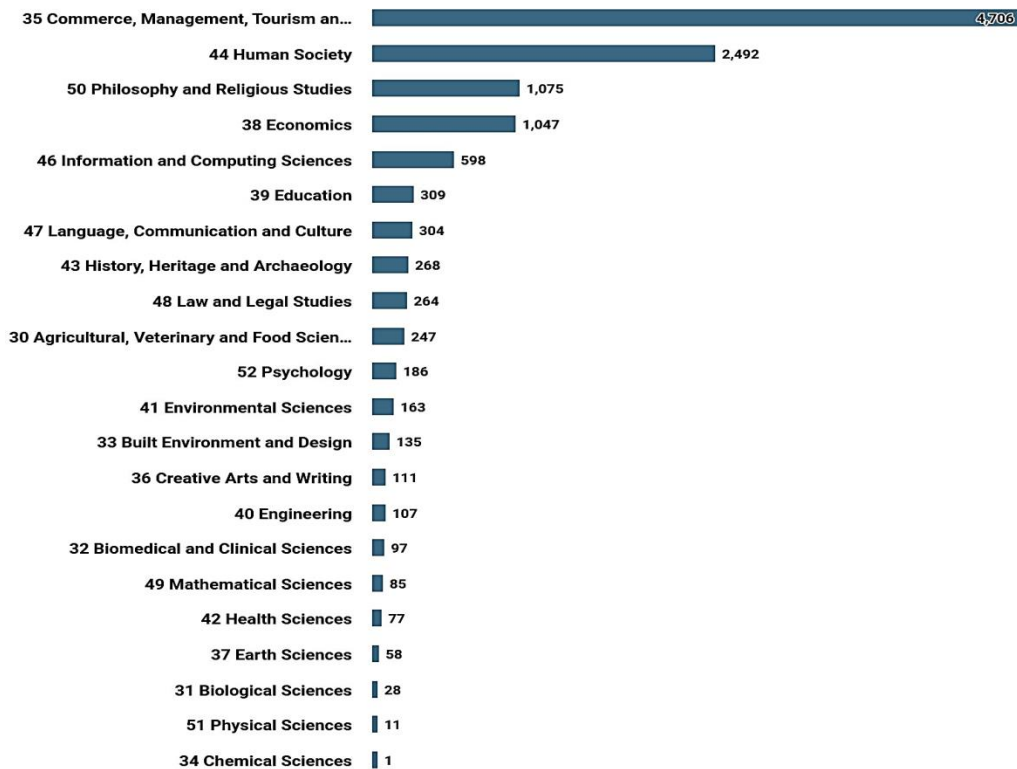
3. RESULTS AND DISCUSSION

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 4706. 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 [4,2].

The significance of entrepreneurial behavior in developing countries has become a pivotal concern, gaining prominence in recent keyword analyses. Fig. 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 (Fig. 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.



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 2024 or 2023 or 2022 or 2021 or 2020 or 2019 or 2018 or 2017 or 2016 or 2015 or 2014 or 2013 or 2012 or 2011 or 2010 or 2009 or 2008 or 2007 or 2006.

© 2024 Digital Science and Research Solutions Inc. All rights reserved. Non-commercial redistribution / external re-use of this work is

Fig. 2. Number of publications in each year research category

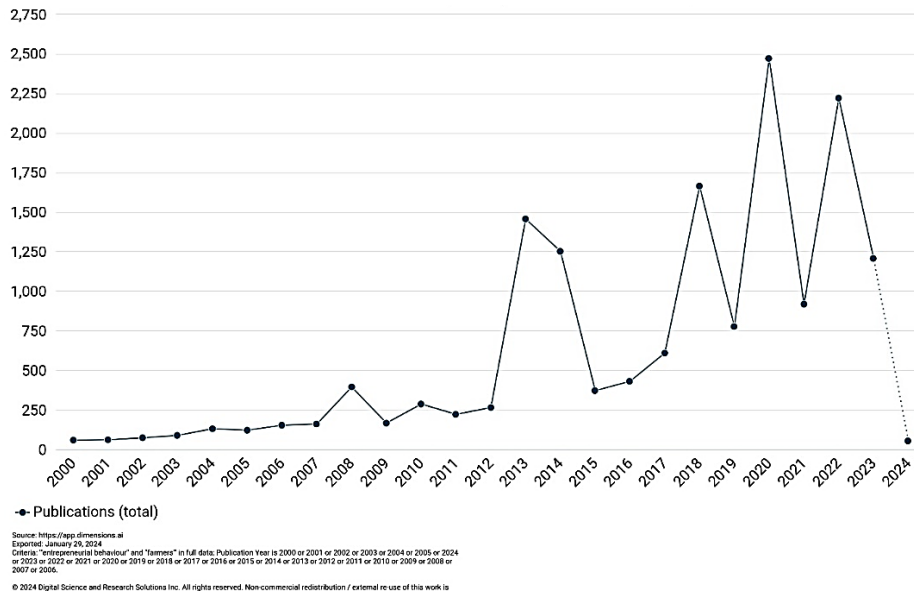


Fig. 3. Publications in each year

Table 1. List of authors and their citations

| Authors | Citations |
|-------------------------------|-----------|
| Hisrich, R. et al. | 252 |
| Ritter, C. et al. | 187 |
| Hofman, A. et al. | 295 |
| Morgado, Fabiane F. R. et al. | 374 |
| Taras, V. et al. | 744 |
| Farmer, Steven M. et al. | 250 |
| Newman, A. et al. | 234 |
| Renko, M. et al. | 324 |
| Welter, Friederike | 220 |
| Rauch, Andreas; et al. | 1114 |

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 [3].

3.3 Co-Authorship Analysis

The tabulated analysis of authors presented in Table 1 focused on the top 10 contributors, while Fig. 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 Fig. 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 [5].

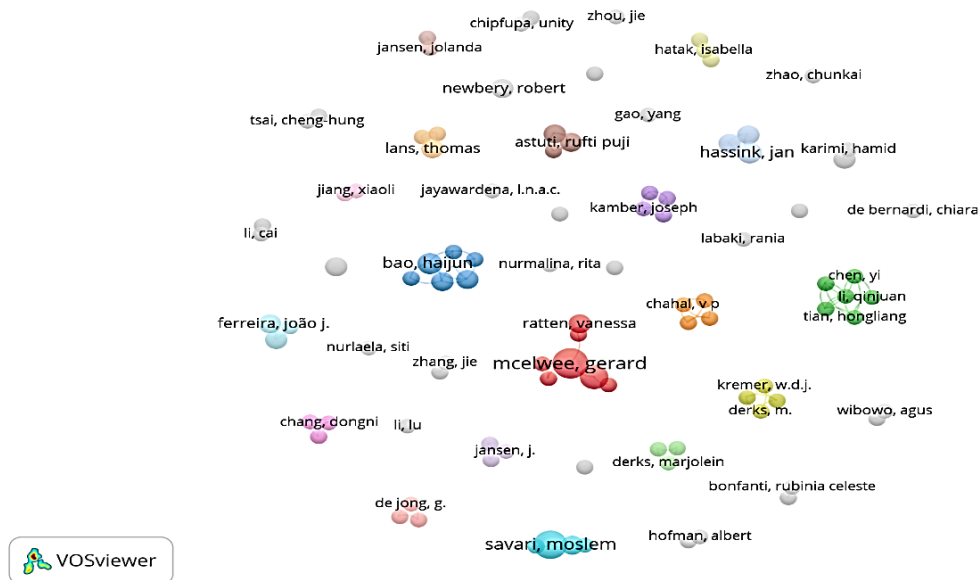


Fig. 4. visual representation of co-authorship

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.

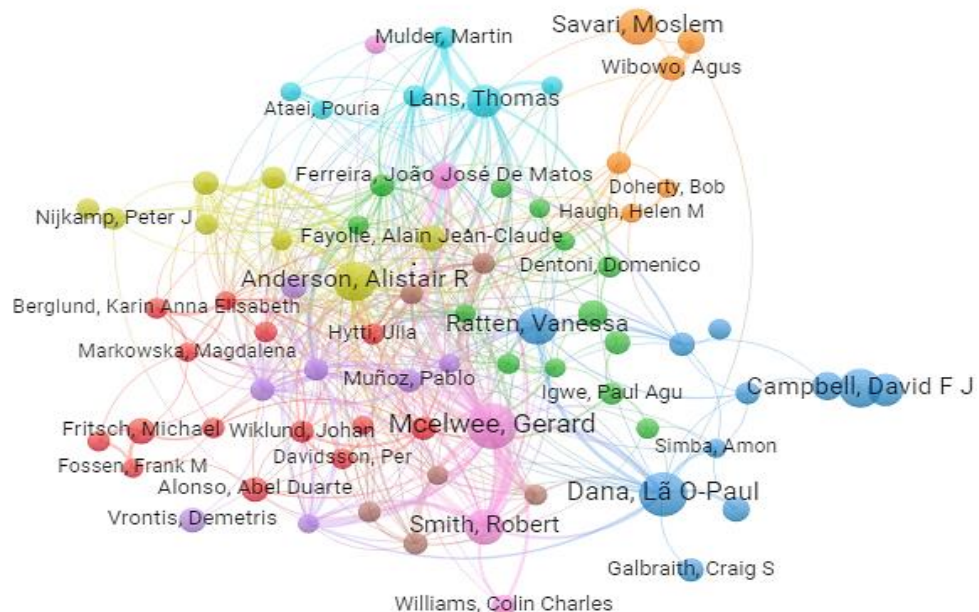


Fig. 5. Visual representations of the citation analysis of organizations

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 [6,7].

Fig. 5 visually represents the citation analysis of organizations, showcasing the intricate web of connections established through scholarly references [8]. 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 [9].

4. 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 Fig. 5, demonstrates the intricate web of connections among organizations through scholarly references [10,11]. 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 [12,13].

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Baas J, Schotten M, Plume A, Côté G, Karimi R. Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*. 2020;1: 377–386.
2. Hook DW, Porter SJ, Draux H, Herzog CT. Real-time bibliometrics: Dimensions as a resource for analyzing aspects of Covid-19. *Frontiers in Research Metrics and Analytics*. 2021;5:595299.
3. Lal P, Behera B, Yadav MR, Sharma E, Altaf MA, Dey A, Kumar R. A bibliometric analysis of groundwater access and its management: Making the invisible visible. *Water*. 2023;15:806.
4. Egghe L, Rousseau R. *Introduction to informetrics: Quantitative methods in library, documentation, and information science*. Amsterdam. The Netherlands: Elsevier; 1990.
5. Lal P, Tiwari RK, Behera B, Yadav MR, Sharma E, Altaf MA, Kumar R. Exploring potato seed research: a bibliometric approach towards sustainable food security. *Frontiers in Sustainable Food Systems*. 2023;7:1229272.
6. Martín-Martín A, Orduna-Malea E, Delgado López-Cózar E. Coverage of highly-cited documents in google scholar, web of science, and scopus: A multidisciplinary comparison. *Scientometrics*. 2018;116: 2175–2188.

7. Martín-Martín A, Thelwall M, Orduna-Malea E, Delgado López-Cózar E. Google scholar, microsoft academic, scopus, dimensions, web of science, and open citations' COCI: A multidisciplinary comparison of coverage via citations. *Scientometrics*.2021;126:871–906.
8. Sandison A. Documentation Note: Thinking about Citation Analysis. *Journal of Documentation*. 1989;45:59.
9. Roemer RC, Borchardt R. Meaningful metrics: A 21st century librarian's guide to bibliometrics, altmetrics, and research impact. Chicago, IL, USA: American library association; 2015.
10. Van Eck, NJ, Waltman L. Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*.2017;111:1053–1070.
11. Van Eck, NJ, Waltman L, Dekker R, van den Berg J. A comparison of two techniques for bibliometric mapping: Multidimensional scaling and VOS. *Journal of the American Society for Information Science and Technology*.2010;61:2405–2416.
12. Shaw WM. Statistical disorder and the analysis of a communication-graph. *Journal of the American Society for Information Science*.1983;34: 146–149.
13. Van Eck, NJ, Waltman L. Text mining and visualization using VOSviewer. *ISSI Newsletter*.2011;7:50–54.

© 2024Yadav and Mishra; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/112978>