# Bibliometric Study of the Articles Published in The Proceedings of The International Conference of Agricultural Librarians and Users' Community

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Abstract

*The present study is based on 958 references appended to 74 papers published in the proceedings of the International Conference of Agricultural Librarians and User Community (ICALUC)in the year 2023. This study highlights the authorship pattern, citation pattern of articles, subject-wise distribution, institution-wise distribution, gender-wise distribution and state-wise distribution in this proceeding. The study also found that on average, 958 references, 74 are papers. Major contribution is made by universities (61%), followed by colleges (30%) and other institutions (16%). Most of the contributors prefer to contribute their papers jointly (41`%), followed by single (34%) authors individually.*

Keywords
Bibliometric Analysis; International Conference; User community

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## INTRODUCTION

The term 'Bibliometric' was coined by Pritchard in 1969, and he defined it as 'bibliometric is the application of mathematical and statistical methods for measuring quantitative and qualitative changes in collections of books, journals, and other publications. By using quantitative analysis, it is possible to measure the scattering of articles to different journals and also make it possible to measure the growth and obsolescence of literature in different subjects
.
Bibliometrics is an emerging thrust area of research and has now become a well-established part of information research and a quantitative approach to the description of documents. The most used bibliometric methods, such as citation analysis, bibliographic coupling, co-word analysis and co-citation analysis, can be used to map the knowledge structure and the use of literature. Bibliometric techniques have evolved over time and are continuing to do so. The counting of papers with attribution by country, by institution and by author, the counting of citations, to measure the impact of published work on the scientific community etc.

There are a number of ways to measure the quantity and quality of research output of the country and the contributions of an individual. Citation analysis is one of the areas in bibliometrics that deals with the study of the relationship between citing and cited documents. Citation analysis studies the patterns of citation in documents, which is an objective method for gathering data about information needs. Hence, through the method of citation analysis, an attempt has been made in this study to prepare the authorship pattern and citation pattern of articles in the proceedings.

## PUNJAB AGRICULTURAL UNIVERSITY

Punjab Agricultural University (PAU) is an internationally acclaimed University which was established on October 17, 1962, based on the 'Land Grant' pattern of America. The University has made a remarkable contribution to agricultural development by paving the way for the Green Revolution in the country and making the nation food secure. PAU was adjudged as the "Best Agricultural Institute" in 1995 and conferred with the "Sardar Patel Outstanding ICAR Institution Award" for the year 2012-17. It was identified as "Institution of Excellence in Agriculture" in 2018. The University secured first

position among State Agricultural Universities and third position among Agricultural Universities and Institutes in the NIRF 2023 ranking.

**MOHINDERSSINGH RANDHAWA LIBRARY**

PAU Library was established in 1959 and is named as Mohinder Singh Randhawa Library in honor of the second Vice-Chancellor of PAU. It has a centrally air-conditioned, beautiful five-story building and is surrounded by lush green lawns, dotted with beautiful ornamental trees and a pollution-free environment. It is regarded as one of the best libraries of the region. This library has a seating capacity of around 950seats in its six Wi-Fi Reading Halls. It has a rich collection of over 4.2 lakhs documents and caters to about 6500 students, staff, faculty, researchers and extension specialists from its constituent colleges, Institutes of Agriculture, Regional Research Stations, Fruit Research Stations, Krishi Vigyan Kendras and Farm Advisory Services Centers established across the state of Punjab.

**ABOUT THE INTERNATIONAL CONFERENCE**

Punjab Agricultural University is celebrating its Diamond Jubilee year. This International Conference is being organised as a part of the diamond jubilee celebrations of PAU and as an annual feature of AALDI. The conference shall develop a vision for the agricultural librarianship, which will be helpful in achieving sustainable development goals. The conference will provide an international platform to Library and Information Science (LIS) professionals in the National Agricultural Research and Education System (NARES) to discuss and develop strategies to fulfil the informational needs of the agricultural fraternity in a better way. The conference will also provide opportunities to identify the strengths and gaps in the existing system and to suggest corrective measures for information delivery services. The conference will include invited lectures, product demonstrations and publishing of conference proceedings. A total of 74 papers have been accepted from various states like Punjab, Chhattisgarh, Karnataka, Andhra Pradesh, Kerala, Pondicherry and Tamil Nadu.

This volume covered broad areas that discuss and address the key issues in current topics concerning the Role of Agricultural Consortiums in Agricultural Information, Open Access Initiatives in Agriculture, Resource Sharing for Sustainable Development, Green Libraries and Natural Resources Management, Institutional Repositories for Agricultural Development, Augmented and Virtual Reality Applications in Agricultural Libraries, Emerging Technology Innovations in Agricultural Libraries, Best Practices, Redefining Libraries and librarianship in general and agricultural particularly with focus on future technologies including artificial intelligence that will impact the library an information Centre's with special reference to agricultural libraries. In this conference will share the globe and further enrich the knowledge and skills of agricultural librarian of India

**REVIEW OF LITERATURE**

Bibliometrics is the study of the quality of written communication, which helps in the measurement of published knowledge. Bibliometrics is the quantitative analysis of research publications. Bibliometric analysis is used in the study of scholarly communication. Vijay & Ragjavan have done citation analysis, a set of items (authors, documents, journals, etc.) for the journal "Journal of Food Science and Technology". Thanuskodi studied many bibliometric aspects of papers in the Journal of Library Philosophy and Practice from 2005 to 2009, and Kulkarni, Poshett, and Narwade carried out a bibliometric analysis of the journal Indian Journal of Pharmaceutical Education and Research, revealing that journals were the predominant citation source, followed by books. Analysis shows that the majority of the scientists preferred to publish research papers in multiple authorships, and there is a considerable time lag in the publication of articles from the date of receipt of the papers (Kulkarni, Poshett, & Narwade, 2009).. Tsay and shu conducted some statistical analysis on the citation patterns of the Journal of Documentation and found that journal articles were the most cited documents. Journals are the indicators of literature growth in any field of knowledge. They emerge as the main channel for transmitting knowledge.

Ally S, Sornam, etal., Studied the Bibliometric analysis of the 13th UGC Sponsored national conference proceedings organised by PG and Research DLIS, Bishop Heber College, Tirchy. The paper analysed a Bibliometric study of 53 articles which was published in the national conference proceedings. The study aimed to analyzed the topic-wise distribution of articles, category-wise distribution of contributions, authorship patterns and institutions-wise distribution of contributions. Out of

95contributors, 15 contributors had contributed more than one article each in the national conference proceedings. The 13th UGC sponsored national conference proceedings is very fruitful for the LIS Community

**SOURCE OF DATA**

Mohinder Singh Randhawa Library Punjab Agricultural University Ludhiana, (India) organized atwo days International Conference of Agricultural Librarians and Users Community ICALUC on 5-6 October, 2023 at Punjab Agricultural University, Ludhiana jointly organized by Association of Agricultural Librarians and Documentarists of India (AALDI)." The Library is a store house of knowledge and better than wealth" better management of all the recourses like Books Audio & Vides. Then CD-ROMs and the internet require specialised training and constantly updated skills for librarians and their staff.

**THE PROCEEDING CONSISTS OF THE FOLLOWING SUBJECTS.**

- Emerging Technologies in LIS
- Institutional Repositories for Agricultural Development and Metric Studies
- Library Consortia in Agricultural Information and Resource Sharing for Sustainable Development
- Open Access Initiatives in Agriculture & User Studies
- Redefining Libraries & Best Practices
- Green libraries and Sustainable Development

**OBJECTIVES OF THE STUDY**

The principal objective of the present study is to conduct a bibliometric study of the papers published in the International Conference of Agricultural Librarians and Users Community ICALUS) on 5-6 October 2023 at Punjab Agricultural University. the following objectives are:

- To find out the authorship pattern
- To calculate degree of collaboration among authors
- Contributions in various field of the subject.
- Institution-wise distribution of contributions
- Gender-wise distribution of contribution

**METHODOLOGY**

The data required for the study was collected from the proceedings of the International Conference of Agricultural Librarians and Users Community in libraries in 2023 at Ludhiana, Punjab. The reference appended to each paper are carefully scanned and tabulated. The analysis of the date collected is presented under different headings as per the objectives of the study. The date extracted from the proceedings is entered into MS Excel for analysis.

**ANALYSIS AND DISCUSSION**

The collected data have been analysed, and the results are presented in the tables below with a detailed discussion.

**Table 1:** Average number of citations per article

| | |
|---|---|
| Total References | 958 |
| Total Article | 74 |
| Average of citations per article | 12.9 |

**Table 2:** Section-wise contributed papers

| Sl.No | Sections | No of papers | Percentage |
|---|---|---|---|
| 1 | I | 14 | 19 |
| 2 | II | 14 | 19 |
| 3 | III | 11 | 15 |
| 4 | IV | 13 | 18 |
| 5 | V | 12 | 16 |
| 6 | VI | 10 | 13 |
| | TOTAL | 74 | 100 |

Table 2 describes the section-wise contributed papers. Among the 6 different sections, 14(19%) papers was published in Section I & II followed by, 13 (18%) papers was published in Section IV, 12 (16%) papers was published in section V, 11(15%) papers was published in section III and 10(13%) papers was published in section VI.

**Table3:** Authorship pattern

| Sl.No | Authorship | No of papers | Percentage |
|---|---|---|---|
| 1 | Single | 28 | 38 |
| 2 | Two | 31 | 42 |
| 3 | Three | 15 | 20 |
| | Total | 74 | **100** |

The authorship pattern was analyzed to determine the percentage of single and multiple authors (Table.3). The results that majority of papers are two authorship

pattern 31 (42%) Articles having single author pattern total papers followed by 28 (38%)and 15 (20%) more than two authors respectively. The shows the majority of authors have a tendency to conduct their research work in two authorship modes.

**Table 4:** Single Author Vs Multiple Authors' Contribution

| SL.No | Authorship | No of papers | Percentage |
|---|---|---|---|
| 1 | Single Author | 28 | 38 |
| 2 | Multiple Authors | 46 | 62 |
| | Total | 74 | 100 |

Analyses of data in Table 4 show that the majority of papers are multiple authors, 46(62%), followed by single authors, 28(38%).

**Table 5 :** Distribution of contributions among the various fields of the subject

| SL. No | Subject | No of papers | Percentage |
|---|---|---|---|
| 1 | Emerging Technologies in LIS | 14 | 19 |
| 2 | Institutional Repositories for Agricultural Development studies | 14 | 19 |
| 3 | Library Consortia | 11 | 15 |
| 4 | Open Access Initiatives | 13 | 18 |
| 5 | Redefining Libraries & Best Practices | 12 | 16 |
| 6 | Green libraries and Sustainable Development | 10 | 13 |
| | Total | 74 | 100 |

Table 5 reveals that major portions of the articles belong to Emerging Technologies and Institutional Repositories for Agricultural Development studies in LIS 14 (19%) articles & Emerging Technologies in LIS with 14(19%) articles received 364 citations (38%) and next rank is received by the subject Open Access Initiatives having 13 articles (18%) received 196 citations followed by Redefining Libraries & Best Practices 12 (16%) articles received 137 citations, Library Consortia concern 11 (15%)and received 113 citations and lost Green libraries and Sustainable Development 10 (13%) and received 148 citations.

**Table 6:** Institution-wise distribution of contribution

| SL. No | Types of Institutions | No of papers | Percentage |
|---|---|---|---|
| 1 | University | 81 | 61 |
| 2 | College | 30 | 23 |
| 3 | Other Institution | 22 | 16 |
| | Total | 134 | 100 |

Table 6 indicates that institutions' contribution in the proceedings, out of 81(61%), is contributed by universities, followed by colleges, which contributed 30 (23%). Next to this are 22 articles (16%) contributed by institutions and others

**Table 7:** Gender-wise distribution of contribution

| SL. No | Gender | No of papers | Percentage |
|---|---|---|---|
| 1 | Men | 94 | 68 |
| 2 | Women | 45 | 32 |
| | Total | 139 | 100 |

Table 7 depicts that the majority of male contributors are 94 (68%). Similarly, 45 (32%) female contributions occupy their position. The number of male contributors is more than the female contributors in this proceeding.

**Table 8:** Distribution of citations (Section-wise)

| Sl. No | Sections | No of papers | No of Citations | Percentage |
|---|---|---|---|---|
| 1 | I | 14 | 207 | 22 |
| 2 | II | 14 | 157 | 16 |
| 3 | III | 11 | 113 | 12 |
| 4 | IV | 13 | 196 | 21 |
| 5 | V | 12 | 137 | 14 |
| 6 | VI | 10 | 148 | 15 |
| | TOTAL | 74 | 958 | 100 |

Table 8 shows the Number of contributions with citations. It indicates that out of 74 contributions section I cites the 207 (22%) citations, , section IV cites the 196 (21%) citations, section II cites 157 (16%) citations followed by section IV cites the 148 (15%) citations, section V cites the 137 (14%) an last section III cites the least citations113 (12%) .

## FINDING AND CONCLUSION

The citation analysis of the Proceedings of the International Conference of Agricultural Librarians and Users Community ICALUC revealed that 958

citations are in 74 published articles. The important finding of the study supports the objectives laid down. On the whole, it can be highlighted from the present study that the average citations per article is 12.9. It is also found that the major source of information is online. Most of the contributors were found from. Most of the Contributors prefer to contribute their papers jointly. Most of the contributors are cited. Most of the contributions are on Knowledge management and various other aspects of different subjects of library science. Most of the contributors in this proceeding are from universities.

It has been observed that most of the articles are jointly authored. The authors have contributed articles on various Emerging Technologies in LIS& Institutional Repositories for Agricultural Development studies, followed by Open Access Initiatives, Redefining Libraries & Best Practices, Library Consortia and Green libraries and Sustainable Development. This clearly shows that agricultural librarians are at the forefront of using the latest literature dealing with the cutting-edge technologies and state–of–the–art tools and techniques in the field of library and information science.

**References**

1) Das,Tappas Kumar.(2013), "A biblionetric analysis of contributions in the journal Library Trends", Library and Philosophy (e-journal), paper 1014
2) Doraswamy, M & Janakiramaiah, M (2013). Information use pattern of library and information science professionals: A Bibliometric study of conference proceedings. International Journal of Digital Library Services, 3(1),33-44.
3) Kulkarni, A., Poshett, B., & Narwade, G. (2009). Indian Journal of Pharmaceutical Education and Research (1996-2006) – a bibliometric analysis. Annals of Library and Information Studies , 56 (4), 242-248.
4) Kunwar P Singh, Aarti Jain, and Parveen Babbar.(2011). DESIDOC Bulletin of Information Technology: A Bibliometric Study. SRELS Journal of Information Management, 48, 1,57-68.
5) Mahipal,D.S (2023) a Citations Analysis of Proceedings of AALDI Conferences (2012-2022) "International Conference of Agricultural Librarians and Users Community (ICALUC 2023) on Agricultural Libraries and Development Goals" organized by PAU, Ludhiana &AALDI DURING 5th-6th October 2023.pp155-161.ISBN978-93-58879-47-6
6) Manithiramoorthi, M. & Thamaraiselvi, M (2016). Bibliometric Analysis of National Conference Proceedings – A study, International Research: Journal of Library & Information Science, 6(1), 104-111.
7) Ravikumar,S & Chinnasamy, K (2018) "A Study and Analysis about National Conference Proceeding of Alagappa University-A Bibliometric Study" International Journal of Creative Research Thoughts, 6(1), pp 404-409.ISSN:2320-2882
8) Thanuskodi S.(2010). Bibliometric analysis of the Journal Library Philosophy and Practice from 2005-2009. Library Philosophy and Practice, pp1-6
9) Vijayakumar P, Indian Journal of Biochemistry and biophysics (2001-2010): ABibliometric Analysis . National Seminar on ELITE 2011 9-10 December, 672-678.
10) Vijay, K R & Raghavan,I. (2007). Journal of Food Science and Technology: A Bibliometric study, Annals of Library and Information Studies, 54, 4, 207-212.
11) www.webpages.uidaho.edu/~mbolin/thanuskodi-lpp.htm