# BIBLIOMETRIC ANAYSIS OF ANNALS OF LIBRARY AND INFORMATION STUDIES (2002-2006)

## Kamal Kumar Chaurasia<sup>1</sup>

#### ABSTRACT

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. Bibliometrics has grown out of the realization that literature is growing and changing out of a rate with which no librarian or information worker equipped with traditional bibliographic skills and methods could keep abreast. The present study shows that journals are most cited form of communication amongst the library and information scientists and the source journal is the most cited publication.

The bibliometric analysis of the journal "Annals of Library and Information Studies (2002-2006)" shows a trend of growth in contributions and average number of contributions is 21.4 per volume. Majority of the library and information scientists prefer to do collaborative research and contribute their papers jointly. Most of the contributions are on Bibliometrics (36.45%). IT & Digital technologies in Libraries have also got sufficient papers. The institutional and geographical distribution of contributions is calculated. Most of the contributions are with citations. Majority of the library and information scientists have cited journals in large number (50.15%) while books comes on second with 273 (19.96%) citations. 'Annals of Library & Information Studies' occupies the 1st rank & 'Scientometrics' occupies the 2nd rank in the ranked list of cited journals.

### Introduction

The term bibliometrics was first used by Alan Pritchard in 1969 to denote a new discipline where quantitative methods were employed to probe scientific communication process by measuring and analyzing various aspects of written documents. (PS Kwatarra, 2000) Bibliometrics is an emerging thrust area of research from different branches of human knowledge. Bibliometrics has now become a well established part of information research and a quantitative approach to the description of documents and examination of services is gaining ground both in research and practice.

Bibliometrics is a quantitative evaluation of publication patterns of all macro and micro communication along with their authorship by mathematical and statistical calculation. Bibliometrics can be applied to any subject area and to most of the problems concerned with

<sup>&</sup>lt;sup>1</sup> Librarian, Motilal Rastogi School of Mgmt., Lucknow-8 Email: Klib\_522@yahoo.com, Mo: 09839488276

written communication. In fact bibliometrics has grown out of the realization that literature is growing and changing out of a rate with which no librarian or information worker equipped with traditional bibliographic skills and methods could keep abreast.

### **Source Journal**

Annals of Library and information Studies is published by the NISCAIR (formerly known as INSDOC), which is an apex body for the promotion of library and information science profession in India. INSDOC has started it publication long back in 1952 and its 54<sup>th</sup> volume is in market. It covers various current and burning issues related with library and information profession such as professional development, public and special library development, classification and cataloguing, IT and its application in libraries, digital and virtual libraries, bibliometrics, articles on standardization and international cooperation among various library associations and institutions.

## **Objectives**

The main objectives of this study are:

- 1. To find out volume wise distribution & average number of contributions per volume
- 2. To find out the authorship pattern
- 3. To calculate the volume wise degree of collaboration
- 4. To find out the statistics of distribution of contributions in various fields of library and information science
- 5. To find out the institutional contributions in the journal
- 6. To determine the geographical distributions of contributions in the journal
- 7. To determine the extent of research contributions from the U. P. & Lucknow
- 8. To obtain the form of dispersion of references in Annals of Library and Information Studies
- 9. To prepare a ranked list of journals in library & information science

### Methodology

A total of 20 issues of the journal Annals of Library and Information Studies (2002 to 2006) have been taken for the study. The details regarding each published article such as title of the article, number of authors, their institutional affiliations and addresses, number of references with list, page number , number of tables and figures etc., were recorded and analyzed for making observations. Tables are filled by tally mark system counting one by

one reference and other data. The data has been calculated and represented in tables. The study does not take consideration how far a certain piece of information is useful or a particular citation relevant to the central theme of the citing documents. The emphasis is largely on quality forms and age of citations rather than on the subject content and the degree of its relevance to the citing documents. The citations were counted by the type of document and volume wise. Based on the analysis, a ranked list of cited journal is prepared.

# **Data Analysis & Interpretation**

# **1. DISTRIBUTION OF CONTRIBUTIONS**

| Year              | Vol. No. | No. of Issues | No. of Cont. | %     |
|-------------------|----------|---------------|--------------|-------|
| March 02 -Dec. 02 | 49       | 4             | 18           | 16.82 |
| March 03-Dec. 03  | 50       | 4             | 19           | 17.76 |
| March 04-Dec.04   | 51       | 4             | 21           | 19.62 |
| March 05-Dec.05   | 52       | 4             | 23           | 21.50 |
| March 06-Dec.06   | 53       | 4             | 26           | 24.30 |
| 5 Years           | 5 Vols.  | 20            | 107          | 100.0 |

TABLE-1: VOLUME WISE DISTRIBUTION OF CONTRIBUTIONS

### **GRAPH SHOWING VOLUME WISE CONTRIBUTIONS**

This graph shows that the numbers of contributions are increasing day by day in later volumes of the journal. Most significant part of this chart is that it is showing a continuous growth in the publication of contributions volume by volume.



# 2. AUTHORSHIP PATTERN



### TABLE 2: AUTHORSHIP PATTERN OF CONTRIBUTIONS

Table-2 shows that the contributions of double authors are more than those of single, triple or more than triple authors. The multiple authorship pattern has the most productive publications i.e. 73 (68.22%) papers while the single authorship pattern has 34 (31.78%) papers. The multiple authorship patterns are further analyzed to shed more light on the pattern of collaboration. Publication with two authors are 49 (45.79%) papers followed by three authorship pattern with 20 (18.69%) papers and, more than three authorship pattern have 4 (3.74%) papers. This shows a trend that more researchers and library professionals are coming together to execute the research projects and studies in library and information science field. The numbers of co-authors are relatively increasing in numbers for each of the five years.

| Vol. No. | 1 author | %     | 2 author | %     | 3 author | %     | >3 author | %     |
|----------|----------|-------|----------|-------|----------|-------|-----------|-------|
| 49       | 6        | 17.65 | 8        | 16.33 | 3        | 15.00 | 1         | 25.0  |
| 50       | 6        | 17.65 | 11       | 22.44 | 2        | 10.00 | -         | -     |
| 51       | 7        | 20.58 | 8        | 16.33 | 5        | 25.00 | 1         | 25.0  |
| 52       | 9        | 26.47 | 8        | 16.33 | 5        | 25.00 | 1         | 25.0  |
| 53       | 6        | 17.65 | 14       | 28.57 | 5        | 25.00 | 1         | 25.0  |
| Total    | 34       | 100.0 | 49       | 100.0 | 20       | 100.0 | 4         | 100.0 |

TABLE-3: AUTHORSHIP PATTERN OF CONTRIBUTIONS (VOLUMEWISE)

The above table shows the trends in authorship pattern, as multi authored papers are leading in frequency of occurrence in the journal "Annals of Library and Information Studies"

throughout the study and more interestingly this growth is continuous which indication about the future pattern in authorship. The difference in frequency can be analyses easily by plotting a graph based on above data.

The highest numbers of contributions in the category of single authorship are contributed in 2005 which are 9(26.47%) out of 34 single authored papers while in the category of multi authored papers the highest number of contributions are contributed in the year 2006 having 20 (27.40%) contributions out of 73 contributions.

|       | With Sing        | gle Author | With Mu          | Iti Authors |                     |  |
|-------|------------------|------------|------------------|-------------|---------------------|--|
| Year  | No. of<br>Papers | %          | No. of<br>Papers | %           | Total Contributions |  |
| 2002  | 6                | 17.65      | 12               | 16.44       | 18                  |  |
| 2003  | 6                | 17.65      | 13               | 17.80       | 19                  |  |
| 2004  | 7                | 20.58      | 14               | 19.18       | 21                  |  |
| 2005  | 9                | 26.47      | 14               | 19.18       | 23                  |  |
| 2006  | 6                | 17.65      | 20               | 27.40       | 26                  |  |
| Total | 34               | 100.0      | 73               | 100.0       | 107                 |  |

TABLE-4: SINGLE AUTHORED V/S MULTI AUTHORED PAPERS

### **GRAPH SHOWING SINGLE & MULTI AUTHORSHIP PATTERN**



The above graph shows that in every volume of the journal "Annals of Library and Information Studies", the numbers of multi authored papers are dominating to single authored papers. The overall multi authored papers are more than two times of single authored papers. It reveals that now the library and information science field is heavily influenced by the collaborative research.

#### **3. DEGREE OF COLLABORATION**

It is clear from the above analysis that the percentage of multi-authored papers is more than that of single authored papers. To determine the extent of collaboration in quantitative terms, the formula given by K. Subramanyam is used.

The formula is as follows-

C = Nm/Nm+Ns

Where,

C=Degree of Collaboration Nm=Number of Multi Authored Contributions Ns= Number of Single Authored Contributions In the present study the value of C is

=0.68 (C=73/73+34)

Thus the degree of collaboration in the journal "Annals of Library and Information Studies" is 0.68. This brings out clearly the prevalence of team research in library and information science field. The distribution of degree of collaboration over the yeas from 2002 to 2006 is presented in table-5

TABLE-5: YEARWISE DISTRIBUTION OF DEGREE OF COLLABORATION

| Year | Degree of Collaboration |
|------|-------------------------|
| 2002 | 0.67                    |
| 2003 | 0.68                    |
| 2004 | 0.67                    |
| 2005 | 0.60                    |
| 2006 | 0.76                    |

It is very interesting to record that the degree of collaboration in the journal "Annals of Library and Information Studies" over the period of study varied from 0.60 to 0.76. The degree of collaborative research is seems to be almost constant during 2002-2004. It has decreased only in 2005 but from 2005 onwards it is increasing sharply. It is a good sign for library and information science research that the collaborative research is expanding its dimensions in its all concerned knowledge domains as it is assumed that the collaborative research produces excellent contributions.



GRAPH SHOWING DEGREE OF COLLABORATION

This graph shows the distribution of degree of collaboration over 2002 to 2006 in the journal "Annals of Library and Information Studied". The degree of collaboration is highest in the year 2006 while it is lowest in the year 2005. The degree of collaboration is almost constant 2002 to 2004

## 4. SUBJECT WISE DISTRIBUTION

TABLE-6: DISTRIBUTION OF CONTRIBUTIONS IN VARIOUS FIELDS OF LIS

| Sr.<br>No. | Subject fields                         | No. of<br>contributions | %     |
|------------|--|-------------------------|-------|
| 1          | Bibliometrics                          | 39                      | 36.45 |
| 2          | IT & Digital Technologies in Libraries | 23                      | 20.56 |
| 3          | User Education & Studies               | 11                      | 10.28 |
| 4          | Knowledge & Info. Mgmt                 | 5                       | 4.67  |

| 5  | Lib & Info. Science Education        | 5   | 4.67   |
|----|--------------------------------------|-----|--------|
| 6  | Library Info Systems & Networks      | 5   | 4.67   |
| 7  | Library Management (TQM)             | 5   | 4.67   |
| 8  | Classification/ Cataloguing          | 4   | 3.74   |
| 9  | Librarianship (academic/pub/special) | 3   | 2.80   |
| 10 | Professional Development             | 3   | 2.80   |
| 11 | Miscellaneous                        | 4   | 3.74   |
|    | Total                                | 107 | 100.00 |

Table-7 shows that the various fields of subjects in library and information science, Bibliometric Studies including scientometrics, webometrics, citation studies, citation indexing is dominating over other subjects.

- Out of 107 contributions, highest numbers of contributions are from the field of Bibliometrics with 39(36.45%) contributions that include articles on bibliometric, scientometric studies, webometrics, study of dedication pages, citation analysis, citation profile of scientist and institutions and other related aspects.
- Next comes to IT & Digital Technologies in Libraries which includes 23(20.56%) contributions covering aspects IT and its application in lib. & info. centers, digital and virtual libraries, digitization, metadata and its standards, digital object identifiers, electronic resource sharing, information security in electronic environment etc.
- Out of 107 contributions, 11(10.28%) contributions are on user education and studies conducted frequently in library, which includes various aspects of user studies, user education techniques, user orientation programmes in electronic and web environment covering different domains of knowledge.
- Knowledge & Information Management has total 5(4.67%) contributions out of 107 contributions that include knowledge communication, approaches of knowledge management in higher education etc.
- Library Management (TQM) has total 5(4.67%) contributions out of 107 contributions that includes articles on cost benefit analysis, database management, auditing and control of digital library systems etc

 Library Information Systems & Networks has total 5(4.67%) contributions out of 107 contributions that mainly consists articles on library networking, resource sharing, subscription of e-journals etc.

# **5. INSTITUTION WISE DISTRIBUTION**

# TABLE-8: INSTITUTION WISE DISTRIBUTION OF CONTRIBUTIONS (Volume wise)

| Institution                         | V.<br>49 | %     | V.<br>50 | %     | V.<br>51 | %         | V.<br>52 | %     | V.<br>53 | %     |
|-------------------------------------|----------|-------|----------|-------|----------|-----------|----------|-------|----------|-------|
| Teachers/Library<br>Scholars        | 4        | 22.22 | 6        | 33.33 | 1        | 4.76      | 4        | 17.39 | 6        | 23.07 |
| University and<br>College Libraries | 7        | 38.89 | 1        | 5.26  | 7        | 33.3<br>4 | 5        | 21.74 | 7        | 26.92 |
| Institutions                        | -        | -     | 8        | 42.10 | 5        | 23.81     | 6        | 26.09 | 4        | 15.38 |
| Res. Institutions<br>/Labratories   | 3        | 16.66 | 3        | 15.79 | 4        | 19.05     | 4        | 17.39 | 7        | 26.92 |
| Documentation/<br>Info. Centers     | 2        | 11.11 | -        | -     | -        | -         | 3        | 13.04 | 2        | 7.69  |
| Individual<br>Professionals         | 1        | 5.56  | -        | -     | 2        | 9.52      | -        | -     | -        | -     |
| Government<br>Departments           | -        | -     | -        | -     | 1        | 4.76      | 1        | 4.35  | -        | -     |
| S/W Companies &<br>MNCs             | 1        | 5.56  | 1        | 5.26  | 1        | 4.76      | -        | -     | -        | -     |
| Total                               | 18       | 100.0 | 19       | 100.0 | 21       | 100.0     | 23       | 100.0 | 26       | 100.0 |

# TABLE-9: INSTITUTIONWISE DISTRIBUTION OF CONTRIBUTIONS

| 1 | University and College Libraries   | 27  | 25.23  |
|---|------------------------------------|-----|--------|
| 2 | Institutions                       | 23  | 21.50  |
| 3 | Research Institutions/ Labs        | 21  | 19.63  |
| 4 | Teaching Faculty/ Library Scholars | 21  | 19.63  |
| 5 | Documentation/ Info. Centers       | 7   | 6.54   |
| 6 | Individual Professionals           | 3   | 2.80   |
| 7 | S/W & MNCs                         | 3   | 2.80   |
| 8 | Government Departments             | 2   | 1.87   |
|   | Total                              | 107 | 100.00 |

Table-9 indicates institution wise distributions of contributions in the journal. Out of 107 contributions, the highest number, i.e. 27(25.23%) has been contributed by the staff of university and college libraries. Institutes (Management, Medical and Others) have contributed 23(21.50%) contributions while contributions from the library staff of research institutes/laboratories and teaching faculty/research schools of various library schools are equal i.e. 21 (19.63%) each. Documentation and Information Centres have contributed 7 (6.54%) articles. The articles produced by the Software Professional /Multi National Corporations and individual Professionals are 3 each.

# 6. GEOGRAPHICAL DISTRIBUTION

| Country | No. of       | %      |
|---------|--------------|--------|
| Name    | Contribution |        |
| India   | 103          | 96.26  |
| Nepal   | 3            | 2.80   |
| Nigeria | 1            | 0.94   |
| Total   | 107          | 100.00 |

# TABLE 10: GEOGRAPHICAL DISTRIBUTION (INTERNATIONAL)

Table-10 shows that international contributions in the journal are very rare and mere4 contributions are from abroad while the contributions from India constitutes 96.26% portion having 103 contributions out of 107. This shows that the coverage of the journal "Annals of Library and Information Studies" is not very broad and its scope is confined to the Indian continent only.

| Name of State/ Country | No. of Contributions | %      |  |
|------------------------|----------------------|--------|--|
| New Delhi              | 23                   | 21.50  |  |
| Maharashtra            | 16                   | 14.95  |  |
| Karnataka              | 13                   | 13.15  |  |
| West Bengal            | 9                    | 8.41   |  |
| Kerala                 | 8                    | 7.48   |  |
| Orissa                 | 6                    | 5.60   |  |
| Uttrakhand             | 5                    | 4.67   |  |
| Manipur                | 4                    | 3.74   |  |
| Tamilnadu              | 4                    | 3.74   |  |
| Haryana                | 3                    | 2.80   |  |
| Madhya Pradesh         | 3                    | 2.80   |  |
| Nepal                  | 3                    | 2.80   |  |
| Uttar Pradesh          | 3                    | 2.80   |  |
| Andhra Pradesh         | 2                    | 2.80   |  |
| Assam                  | 1                    | 0.94   |  |
| Gujrat                 | 1                    | 0.94   |  |
| Nigeria                | 1                    | 0.94   |  |
| Punjab                 | 1                    | 0.94   |  |
| Rajasthan              | 1                    | 0.94   |  |
| Total                  | 107                  | 100.00 |  |

## TABLE 11: GEOGRAPHICAL DISTRIBUTION OF CONTRIBUTIONS

## **GRAPH SHOWING DISTRIBUTION (TOP 7 STATES)**

Table-11 & the adjacent graph depict the geographical distribution of contributions in 5 volumes of the journal. Out of 107 contributions, the highest number i.e. 23 (21.5%) has been contributed by Delhi and only 4 foreign contributions are there. Maharashtra, Karnataka and West Bengal are on second, third and forth place having 16, 13 and 9 contributions respectively.



## TABLE-12: CONTRIBUTIONS FROM UTTAR PRADESH

| Sr.<br>No. | District | No. of<br>Contributions |
|------------|----------|-------------------------|
| 1          | Kanpur   | 1                       |
| 2          | Agra     | 1                       |
| 3          | Varanasi | 1                       |



# 7. CITATION STUDIES

## DISTRIBUTION OF CITATIONS (VOLUMEWISE)

## TABLE 13: DISTRIBUTION OF CITATIONS (VOLUME WISE)



The above figure shows that volume 53 has highest number of share (29%) in the total citation i.e., 1368 received during the study. While least citations has been recorded in volume number 51 with 11.4% citations. Total 1368 citations have been recorded in 107 contributions therefore the average number of citations per contribution is 12.78 which is good enough.

| Vol.  | No. of | No. of    | Average | Graph Showing Avg. Citations                   |
|-------|--------|-----------|---------|--|
| No.   | Cont.  | Citations |         | Avg Citation Per Contribution                  |
| 49    | 18     | 170       | 9.45    | 20   |
| 50    | 19     | 329       | 17.32   | 16<br>14<br>12 → 14.39 → 14.73                 |
| 51    | 21     | 156       | 7.43    | 10<br>8<br>9.45<br>7.43                        |
| 52    | 23     | 330       | 14.39   |  |
| 53    | 26     | 383       | 14.73   | 2<br>0<br>V 49<br>V 50<br>V 51<br>V 52<br>V 53 |
| Total | 107    | 1368      | 12.78   | V.75 V.50 V.51 V.52 V.55                       |

TABLE 14: AVERAGE CITATIONS PER ONTRIBUTION IN EACH VOLUME

# 8. BIBLIOGRAPHICAL DISTRIBUTION

| <b>TABLE 15:</b> | : TYPES OF | PUBLICATION | CITED |
|------------------|------------|-------------|-------|
|------------------|------------|-------------|-------|

| Types of Publication Cited | No. of<br>Citations | %     | Cumulative | %     |
|----------------------------|---------------------|-------|------------|-------|
| Journals                   | 686                 | 50.15 | 686        | 50.15 |
| Books                      | 273                 | 19.96 | 959        | 70.10 |
| Seminar/Conference Proc.   | 112                 | 8.18  | 1071       | 78.29 |
| Web Resources              | 86                  | 6.29  | 1157       | 84.58 |
| Government Documents       | 59                  | 4.31  | 1216       | 88.89 |
| Reference Sources          | 36                  | 2.63  | 1252       | 91.52 |

| Reports                | 36   | 2.63  | 1288 | 94.15 |
|------------------------|------|-------|------|-------|
| Courseware's/ Syllabus | 34   | 2.49  | 1322 | 96.64 |
| Thesis/Dissertation    | 20   | 1.46  | 1342 | 98.10 |
| News Papers            | 4    | 0.29  | 1346 | 98.39 |
| Miscellaneous          | 22   | 1.61  | 1368 | 100.0 |
| Total                  | 1368 | 100.0 |      |       |

Table-15 shows that journals occupy 50.15% citations which are in number 686 out of total 1368 citations. Books and Seminar Proceedings/Conferences have 273 (19.96%) and 112 (8.18%) citations respectively in their account. Government Documents have 59 citations in its account out of total 1368 citations. Reference Sources and Reports have equal number of citations, i.e. 36 (2.63%).

This graph shows that journal is leading in all the sources cited by the authors during the research article writing and other research preparations. Books are second highest cited items followed by the conferences/Seminar Proc. having 115 (8.18%) citations. Web Resources have total 86 (6.29%) citations.

It is evident that more than 50% of citations are cited from different journals that give a clear indication of good and much updated type of research papers published in the journal "Annals of Library and Information Studies".

### GRAPH SHOWING RANKING OF SOURCE MATERIAL



# TABLE 16: TYPES OF PUBLICATION CITED (VOLUME WISE)

| Types of                        | V.  | %     | V.  | %     | V.  | %     | ۷.  | %     | V.  | %     |
|---------------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| Publication<br>Cited            | 49  |       | 50  |       | 51  |       | 52  |       | 53  |       |
| Journals                        | 64  | 37.65 | 169 | 51.37 | 71  | 45.51 | 158 | 47.88 | 224 | 58.59 |
| Books                           | 44  | 25.88 | 54  | 16.41 | 30  | 19.23 | 99  | 30.00 | 46  | 12.01 |
| Seminar/Confere<br>nce Proceed. | 14  | 8.24  | 35  | 10.64 | 12  | 7.69  | 18  | 5.45  | 33  | 8.62  |
| Web Resources                   | 11  | 6.47  | 48  | 14.59 | 16  | 10.26 | 9   | 2.73  | 02  | 0.52  |
| Govt.<br>Documents              | 1   | 0.59  | 4   | 1.21  | 3   | 1.92  | 29  | 8.79  | 22  | 5.74  |
| Reference<br>Sources            | 8   | 4.70  | 6   | 1.82  | 9   | 5.77  | 1   | 0.30  | 12  | 3.13  |
| Reports                         | 4   | 2.35  | 4   | 1.21  | 11  | 7.06  | 5   | 1.52  | 12  | 3.13  |
| Courseware's/<br>Syllabus       | 18  | 10.59 | -   | -     | -   | -     | 1   | 0.30  | 15  | 3.92  |
| Thesis/<br>Dissertation         | 2   | 1.18  | 3   | .90   | 4   | 2.56  | 1   | 0.30  | 10  | 2.61  |
| News Papers                     | -   | -     | 1   | .30   | -   | -     | -   | -     | 3   | 0.78  |
| Miscellaneous                   | 4   | 2.35  | 5   | .15   | -   | -     | 9   | 2.73  | 4   | 1.05  |
| Total                           | 170 | 100.0 | 329 | 100.0 | 156 | 100.0 | 330 | 100.0 | 383 | 100.0 |

# 9. RANKED LIST OF CITED JOURNALS

## TABLE 17: RANKED LIST OF CITED JOURNALS

| Sr. No. | Rank | Name of Journal   | No. of<br>Citations | %     |
|---------|------|---|---------------------|-------|
| 1       | 1    | Annals of Library & Information Studies                                 | 80                  | 11.66 |
| · · ·   |      |   |                     | 11.00 |
| 2.      | 2    | Scientometrics  | 78                  | 11.37 |
| 3.      | 3    | Malaysian Journal of Library and<br>Information Science                 | 34                  | 4.96  |
| 4.      | 4    | SRELS Journal of Information<br>Management                              | 30                  | 4.37  |
| 5.      | 5    | IASLIC Bulletin   | 29                  | 4.23  |
| 6.      | 6    | Journal of Information Science  | 26                  | 3.79  |
| 7.      | 7    | Journal of Documentation  | 24                  | 3.50  |
| 8.      | 8    | Current Science   | 20                  | 2.92  |
| 9.      | 9    | ILA Bulletin  | 18                  | 2.62  |
| 10.     | 10   | Indian Journal of Library, Information & Society                        | 12                  | 1.75  |
| 11.     | 11   | Journal of the American Society for<br>Information Science & Technology | 11                  | 1.60  |
| 12.     | 12   | D Lib   | 10                  | 1.46  |
| 13.     | 13   | Herald of Library Science   | 9                   | 1.31  |
| 14.     | 14   | Kelpro Bulletin   | 8                   | 1.16  |
| 15.     | 14   | The International Journal of Scientometrics<br>& Informetrics           | 8                   | 1.16  |
| 16.     | 15   | College and Research Libraries  | 7                   | 1.02  |

| 17. | 15 | DESIDOC Bulletin of Info. Technology               | 7 | 1.02 |
|-----|----|--|---|------|
| 18. | 15 | Research Evaluation                                | 7 | 1.02 |
| 19. | 16 | Information Processing and Management              | 6 | 0.88 |
| 20. | 16 | Library Herald                                     | 6 | 0.88 |
| 21. | 16 | Nature   | 6 | 0.88 |
| 22. | 16 | Science  | 6 | 0.88 |
| 23. | 17 | International Forum on Information & Documentation | 5 | 0.73 |
| 24. | 17 | Journal of Scientific & Industrial Info.           | 5 | 0.73 |
| 25. | 17 | Lucknow Librarian                                  | 5 | 0.73 |
| 26. | 17 | Modern Review                                      | 5 | 0.73 |
| 27. | 18 | Annual Review of Information Science & Technology  | 4 | 0.58 |
| 28. | 18 | Information Technology and Libraries               | 4 | 0.58 |
| 29. | 18 | Library Trends                                     | 4 | 0.58 |
| 30. | 18 | Libri  | 4 | 0.58 |
| 31. | 18 | Science and Technology Libraries                   | 4 | 0.58 |
| 32. | 18 | Social Studies of Science                          | 4 | 0.58 |
| 33. | 18 | University News                                    | 4 | 0.58 |
| 34. | 19 | Ariadne  | 3 | 0.44 |
| 35. | 19 | Current Contents                                   | 3 | 0.44 |
| 36. | 19 | Czech Journal of Physics                           | 3 | 0.44 |
| 37. | 19 | Information Today                                  | 3 | 0.44 |

| 38. | 19 | International Library Review           | 3 | 0.44 |
|-----|----|--|---|------|
| 39. | 19 | Journal of Electronic Publishing       | 3 | 0.44 |
| 40. | 19 | Library Resources & Technical Services | 3 | 0.44 |
| 41. | 19 | MIS Quarterly                          | 3 | 0.44 |
| 42. | 20 | 25 Journal with Double citations       | 2 | 0.29 |
| 43. | 21 | 134 Journals with Single Citation      | 1 | 0.15 |

This graph shows that Annals of LIS is leading journal next to this comes Scientometrics having almost equal (78) citations .Malaysian Journal of LIS, SRELS, and IASLIC come on 3rd,  $4^{\text{th}}$  &  $6^{\text{th}}$  rank. The above graph clearly indicates proportion the of respective shares in citation pattern.





## **TABLE 18: TOP 10 INDIAN JOURNALS**

| Rank | Name of the Journal                     | No. of Citations |
|------|---|------------------|
| 1    | Annals of Library & Information Studies | 80               |
| 2    | SRELS Journal of Information Management | 30               |
| 3    | IASLIC Bulletin                         | 29               |
| 4    | Current Science                         | 20               |
| 5    | ILA Bulletin                            | 18               |

| 6  | Indian Journal of Library, Information & Society | 12 |
|----|--|----|
| 7  | Herald of Library Science                        | 9  |
| 8  | Kelpro Bulletin                                  | 8  |
| 9  | DESIDOC Bulletin of Information Technology       | 7  |
| 10 | Library Herald                                   | 6  |

The table-18 shows that *Annals of Library and Information Studies* is on top having 80 citations out of total 686 citations received by the all journals. It is far ahead of its competitor journal 'SRELS Journal of Information Management' which has total 30 citations. While IASLIC Bulletin and Current Science are on 3<sup>rd</sup> and 4<sup>th</sup> rank having 29 and 20 contributions respectively. ILA Bulletin and Indian Journal of Library, Information and Society are on 5<sup>th</sup> and 6<sup>th</sup> rank having 18 and 12 citations respectively.

| S. No. | Name of the Journal   | No. of Citations |
|--------|---|------------------|
| 1      | Scientometrics  | 78               |
| 2      | Malaysian Journal of Lib. & Info. Science                                 | 34               |
| 3      | Journal of Information Science  | 26               |
| 4      | Journal of Documentation  | 24               |
| 5      | Journal of the American Society for Information<br>Science and Technology | 11               |
| 6      | D Lib   | 10               |
| 7      | The International Journal of Scientometrics & Informetrics                | 8                |
| 8      | College and Research Libraries  | 7                |
| 8      | Research Evaluation   | 7                |
| 9      | Information Processing and Management                                     | 6                |

#### **TABLE 19: TOP 10 FOREIGN JOURNALS**

| 9  | Nature   | 6 |
|----|--|---|
| 9  | Science  | 6 |
| 10 | International Forum on Information and Documentation | 5 |

The table-19 shows that Scientometrics is the highest cited foreign journal in the field of library and information science while Malaysian Journal of Library and Information Science is on 2<sup>nd</sup> rank having 34 citations out of total 686 citations. Journal of Information Science, Journal of Documentation & Journal of the American Society for Information Science and Technology are on 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup> rank having 26, 24 & 11 citations respectively. D Lib & the International Journal of Scientometrics & Informatics are on 6<sup>th</sup> & 7<sup>th</sup> rank having 10 & 8 citations respectively.

#### **RESULTS AND FINDINGS**

The following results and conclusions can be drawn from the bibliometric analysis of the journal "Annals of Library and Information Studies (2002-2006)".

- This study shows a trend of growth in contributions published during 2002 to 2006 and average number of contributions per volume is 21.4
- Majority of the library and information scientists prefer to contribute their papers jointly.
- Most of the contributions are on Bibliometrics, Scientometrics and Webometrics (36.45%). IT & Digital technologies in Libraries has too good share in the papers published during 2002-2006.
- Most of the contributions in this journal are from the library staff of various university and college libraries.
- Most of the contributions in this journal are from India (96.26%). Only 4 contributions are from abroad.
- Delhi is the biggest domestic contributor to the articles published in this journal. Only 3 contributions are from Uttar Pradesh.
- Most of the contributions are with citations. Only one contribution is found with citation out of total 107 contributions.
- Majority of the library and information scientists have cited journals in large number (50.15%) while books comes on second with 273 (19.96%) citations.

- The journal citations are from 200 journals but most of the citations are from 41 journals.
- 'Annals of Library & Information Studies' occupies the 1st rank & 'Scientometrics' occupies the 2nd rank in the ranked list of cited journals.
- Top ten list of Indian journal includes Annals of Library and Information Studies, SRELS Journal of Info. Management, IASLIC Bulletin, Current Science, ILA Bulletin, Indian Journal of Library, Information & Society, Herald of library science, Kelpro bulletin, DESIDOC BIT & Library Herald
- Top ten list of foreign journal includes Scientometrics, Malaysian Journal of Library documentation, Journal of the American Society for Information

#### LIMITATIONS

This bibliometirc study is based data collected from volume 49- volume 53 of the journal "Annals of Library & Information Studies" therefore its results may vary on different times for the different journals. Here one same contribution is repeatedly published in two successive issues of volume number 49, in the year 2002 therefore its results may show some fluctuations in individual studies of its different aspects of library and information science and its concept like bibliometrics, scientometrics, citation studies etc.

The nature of journal is itself defines the boundaries of the aspects comes under its scope and coverage. Sometimes author's designation and affiliations changes which may cause a little deviation in actual results of institutional affiliations of contributions. The validity of the result depends upon the sample size and as this study is based on only 20 issues therefore it may not be fully representative in all the result but it gives a trend about what is happening in the publication arena of library and information science.

#### REFERENCE

- Chaurasia (K. K.). Bibliometric Analysis of ILA Bulletin (1998-2003). Dissertation Submitted to Lucknow University for the award of degree of Master of Library & Information Science, 2004
- 2. Kwattra (P S). Text Book of Information Science, New Delhi: APH Publishing Corp, 2000, P:41
- Ravichandra Rao, I. K. Quantitative Techniques for Library & Information Science, New Delhi: Willey Eastern, 1985 P:12-15
- Sengupta (I N). Bibliometrics and Identification of Core Periodicals. Herald of Library Science, 1990 P:226-234