Indian Research Information Network System: A Comparative Study of Institutions and Scholars in India

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ABSTRACT: *A web-based Research Information Management System (RIMS) for the support of another project of INFLIBNET is VIDWAN. The* main objective of the article is to analyze *the status of the IRINS, its collections, use, and awareness. The main aim of the project is a graphical representation of research and metrics reflecting research impact can at both department and individual level. In this article, the author finds the 157 institutions with 25343 scholars from a different discipline, and more focus on 208 library and Information Science scholars from 25 states of India. This article focus on the status of the scholar discipline, their state, designation, and institutions wise contributions of publications as well as the citations of both Scopus and H indexes.*
KEYWORDS: IRINS, Citation, Research Information, Vidwan, Scholars, Ranking.

I. INTRODUCTION

A web-based research information network is called the "Indian Research Information Network System" initiated by the INFLIBNET Centre with the support of MHRD. The main aim of the portal is to find out the academic, R&D organizations, and faculty members, scientists to collect, curate, and showcase scholarly communication activities. It is a free Software-as-Service (SaS) that provides an opportunity to create a scholarly network to the academic and R&D organizations in India. The Academic Identity, Citation, Search, Analytics, Network, Social Media Metrics, and Links to Institutional Repositories are the significant features and functionalities in IRINS.

II. LITERATURE REVIEW

More than fifty articles collected for this study, few relevant articles reviewed, and the result shown below;

Jeyapragash, Muthuraj, & Kannan (2019) find out the main objectives of the article is to analyze the faculty members, department, and their scholarly publications with citations and its impact. It found that KL University, Guntur, has the highest 836 (17.22%) faculty member. The Indian Institute of Technology, Madras, has received 278374 (26.28%) most top citations from Scopus and 227686 (22.30%) citations from Cross Ref.

- VIDWAN Expert Database and National Researchers' Network (INFLIBNET, 2020).
- Web of Science (Clarivate, 2020).
- IRINS@IITI (IIT-Indore, 2020).
- IRINS Instances (IRINS, 2020).
- Research and Information System for Developing Countries (RIS) (RIS, 2020).
- Indian Research Information Network System (IRINS): An Overview *(*Sab, Kumar, & Biradar, 2019).
- *IRINS: Indian Research Information Network System (*Kannan, & Kimidi, 2019)
- IRINS: The Challenges in the research eco-system (Kannan, Sharkar, & Solanki, 2019).
- An analysis of the Indian Research Information Network System (IRINS) (Balasubramani, Anbalagan, & Palavesam, 2019).
- An analysis of the Indian Research Information Network System (IRINS) (Jeyapragash, Muthuraj, & Kannan, 2019).
- Indian Research Information Network System (INFLIBNET, 2018).
- Federated Research Profile Management for Researchers in India: Indian Research Information Network System (Kannan, Kimidi, & Arora, 2018).
- Indian Research Information Network System (IRINS) (INFLIBNET, 2018)
- Research Data in Current Research Information Systems (Schöpfela, Prosta, & Rebouillatb, 2017).

- VIZ–VIVO: Towards Visualizations-driven Linked Data Navigation (Javed, Payette, Blake, & Worrall, 2016).
- Semantic-based Researcher Profile Management System: Case Study on VIVO (Kannan, 2015)
- Vidwan: Expert Database and National Researcher Network (INFLIBNET, 2015).
- Current research information systems, open access repositories, and libraries: ANTAEUS (Nicholas, 2008)
- VIVO: Connecting People, Creating a Virtual Life Sciences Community (Medha, et al, 2007).
- Networking of Agricultural Information Systems and Services in India (Sreenivasulu, & Nandwana, 2001).

III. OBJECTIVES

The main objectives of the study as follows;
- To examine the various institutions, the number of scholars in India listed in IRINS
- To find out the total number of scholars who contributed their publications to society.
- To identify the discipline wise, state-wise, and designation wise status of the contributions.
- To focus on the Library and Information Science scholars support in the field of Research Network.
- To identify the profile of the scholar in a specific subject

IV. METHODOLOGY

The Information and Library Network (INFLIBNET) Centre undertaken a project was called IRINS. The main aim of the article is to find out the awareness of publication, the scholars' profile, and their citation status in different disciplines. Data collected from the IRINS website of few instances (IRINS, 2020). Based on the availability of different types of data collected, analyzed, and provide the status of Indian Research Information Network Systematically. As of March 2020, there are 25343 scholars, 579790 publications, and 7638034 citations from 157 institutions recorded in the IRINS project (IRINS, 2020).

V. DATA ANALYSIS AND FINDINGS

Expert Database and National Researcher Network (VIDWAN) is the initial project of INFLIBNET for IRINS. More than 49877 experts from 5792 institutions registered in this Vidwan database. Organizations like all the Universities, institutes of National importance, R & D Organisations, and Technical Institutions categorized in this database (INFLIBNET, 2020).

5.1 Sample Scholars Profile

Figure -1: The sample profile of scholars

Figure 1 shows the profile of a scholar. It will provide the details like Name of the Scholar, Designation, Vidwan Id, Subject specialization, Organisation Name, Sate, Total publications, number of SCOPUS citations, Number of Crossref citations, number of H indexes and view profile.

5.2 Topmost contributions

Table – 1: The topmost institutions contributed to IRINS

Sl.No.	Type of Institution	Total Institutions	Topmost Institutions	Total		
				Scholars	Resource	Citations
1	Central Funded Institutions	109	Indian Institute of Science, Bangalore	566	29918	529980
2	R & D Organisations	07	CSIR - National Aerospace Laboratories	408	2040	33441
3	State Universities	22	Panjab University, Chandigarh	920	12779	249140
4	Private Universities/ Institution	19	Visvesvaraya National Institute of Technology, Nagpur	217	3474	24155

Table 1 highlights that IRINS categorized there are four types of institutions/organizations. Out of 157 institutions, the centrally funded institutions like the Indian Institute of Science, Bangalore has 566 scholars with 29918 resources and 529980 citations. The table also highlights that out of 7 R & D institutions, the CSIR – NAL has 408 scholars, 2040 resources, and 33441citations. But the 22 state universities and 19 private universities are not more records in the IRINS database.

5.3 State-wise Contributions

Table 2 focuses on the state-wise contributions in the IRINS projects, as per the IRINS database, the Tamil Nadu contributed 4417 scholars, and Karnataka is the second place with 3199 contributors as on March 2020.

Table 2: State-wise Number of Scholars

Sl.No.	Name of the State	No. of Scholars	%
1	Tamil Nadu	4417	17.43
2	Karnataka	3199	12.62
3	Uttar Pradesh	2764	10.91
4	Delhi	1187	4.68
5	Odisha	1093	4.31
6	Maharashtra	1020	4.02
7	West Bengal	966	3.81
8	Chandigarh	949	3.74
9	Andhra Pradesh	830	3.28
10	Assam	809	3.19
11	Telangana	741	2.92
12	Madhya Pradesh	739	2.92
13	Jharkhand	669	2.64
14	Uttarakhand	605	2.39
15	Punjab	568	2.24
16	Rajasthan	563	2.22
17	Kerala	534	2.11
18	Himachal Pradesh	503	1.98
19	Gujarat	440	1.74
20	Pondicherry	387	1.53
21	Haryana	378	1.49
22	Jammu & Kashmir	360	1.42
23	Bihar	285	1.12
24	Chhattisgarh	258	1.02
25	Sikkim	230	0.91
26	Mizoram	210	0.83
27	Maharashtra	128	0.51
28	Tripura	123	0.49
29	Meghalaya	70	0.28
30	Nagaland	43	0.17
31	Goa	35	0.14
32	Andaman and Nicobar	6	0.02
33	Manipur	2	0.01
34	Orissa	1	0.00
35	Not included	231	0.91
	Total	**25343**	**100.00**

5.4 Type of Institution wise contributions

Table 3: Institution wise number of Scholars

Sl.No.	Type of Institutions	No. of Scholars	%
1	Universities	7134	28.15
2	Indian Institute of Technologies	4582	18.08
3	Others	4480	17.68
4	National Institute of Technologies	3722	14.69
5	Colleges	1462	5.77
6	CSIR Centres	466	1.84
7	School of Planning and Architecture	146	0.58
8	Not included	3351	13.22
	Total	**25343**	100.00

Table 3 highlights that as per the datasheet of IRINS the universities scholars are more than other organizations. Least only 146 of planning and architecture scholars are available, but, 3351 scholars have not mentioned the type of organization.

5.5 Designation wise contributions

Table 4 shows that the subject wise scholars available in the IRINS database. Of the 25343 scholars, Assistant professors (11866) are in the first place and only 2 pro-vice chancellors are ranked low.

Table – 4: Designation wise scholars statistics

Sl.No.	Designation	Scholars	%
1	Assistant Professor	11866	46.82
2	Professors	7224	28.50
3	Associate Professor	4744	18.72
4	Scientists	554	2.19
5	Retired Professors	305	1.20
6	Others	219	0.86
7	Directors	83	0.33
8	Visiting Professors	59	0.23
9	Librarians	45	0.18
10	Adjunct Faculty	41	0.16
11	Assistant Librarian	39	0.15
12	Vice-Chancellors	33	0.13
13	Deputy Librarians	29	0.11
14	Lecturers	28	0.11
15	Administrative	17	0.07
16	Scientific Officers	17	0.07
17	Research Scholars	14	0.06
18	Retired Directors	8	0.03
19	Guest Faculties	7	0.03
20	Principal	6	0.02
21	Deputy Directors	3	0.01
22	Pro Vice-Chancellors	2	0.01
	Total	**25343**	**100.00**

5.6 Scholars and Institutions support

Table 5: Range of scholars and institutions status

Sl.No.	Range	
	Scholars	No. of Institutions
1	800-1000	3
2	401-700	13
3	201-400	27
4	101-200	42
5	51-100	28
6	265-50	21
7	11-25	9
8	01-10	18
Total	**25343**	**157**

Table 5 shows that there are eight ranges of scholars with eight varieties of institutions. Out of 157 institutions, the top field is 800-1000 scholars from three institutions, the Banaras Hindu University (BHU) contributors are 980.

5.7 Library and Information Science

Out of 25343, only 208 scholars are available in the Library and Information Science discipline of this IRINS server.

5.7.1 Designation wise Scholars

Table 6: Designation wise Library Science Professionals

Sl.No.	Designation	Scholars	%
1	Assistant Professor	50	24.04
2	Librarian	41	19.71
3	Assistant Librarian	36	17.31
4	Professor	30	14.42
5	Deputy Librarian	29	13.94
6	Associate Professor	14	6.73
7	Librarian and Head	3	1.44
8	Library Information Officer	3	1.44
9	Retired Professor	1	0.48
10	Others (P.A)	1	0.48
	Total	208	100.00

Table 6 shows that the designation wise scholars available in the IRINS database in the field of Library and Information Science as of March 2020. This table also highlights that out of 208 scholars, 50 are from Assistant Professors designation.

5.7.2 State-wise scholars

Table 7 highlights that out of 25 states, 208 scholars the Tamil Nadu state scholars are more (48) comparative other states. But the Karnataka state is in second place with 28 scholars.

Table 7: State-wise Library and Information Science Scholars

Sl.No.	State	Scholars	%
1	Tamil Nadu	48	23.08
2	Karnataka	28	13.46
3	Uttar Pradesh	23	11.06
4	Gujarat	11	5.29
5	Assam	9	4.33
6	Delhi	8	3.85
7	Mizoram	8	3.85
8	Jammu & Kashmir	7	3.37
9	Maharashtra	7	3.37
10	West Bengal	7	3.37
11	Chandigarh	6	2.88
12	Punjab	6	2.88
13	Telangana	6	2.88
14	Rajasthan	5	2.40
15	Pondicherry	4	1.92
16	Chhattisgarh	3	1.44
17	Kerala	3	1.44
18	Madhya Pradesh	3	1.44
19	Odisha	3	1.44
20	Uttarakhand	3	1.44
21	Haryana	2	0.96
22	Andhra Pradesh	1	0.48
23	Bihar	1	0.48
24	Himachal Pradesh	1	0.48
25	Manipur	1	0.48
26	Tripura	1	0.48
27	Not included in Database	3	1.44
	Total	208	100.00

VI. CONCLUSION

The academic, R & D organizations, faculty members, and scientists to collect, curate, showcase the scholarly communication activities, provided an opportunity to create the scholarly IRINS network. The IRINS supports the institutions to showcase the academic communication activities and offer the chance to develop a scholarly system in the higher educational institution and faculty members. The IRIS showcases the faculty research contributions to the scholarly community, and it will provide the Faculty Profile with H-Index and department profile with H-Index. It helps faculty members showcase their research contributions and see the impact of their research easily.

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