

Library Automation and Digitisation of ICSSR-Funded Research Institutions in India – A Study

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ABSTRACT

ICSSR was established in 1969 to address problems in the social sciences and to promote social science research in India. Since its inception, it has been functioning with the objectives of sponsoring research programmes, projects, encouraging research activities such as conferences, capacity-building programmes, fellowships for scholars and social scientists, and providing grants to promote social science research. It also supports Grants to 24 research institutions to encourage scholars to engage in active research in the social sciences. These institutions conduct research in various sectors related to social science and its allied subjects.

Libraries play an important role in social science research. Right from the formulation of the research problem in all the stages of research, including literature review, preparation of the research instrument, data analysis and interpretation, preparing the research report, referencing and bibliography, the researcher heavily relies on the library resources. Social science researchers often consult the existing literature to support or refute their research findings. A well-equipped library, therefore, is an inevitable tool for the researcher. With the advances in technology, libraries started digitizing their collections. Digitization increases access to the resources at a greater speed and fosters communication among social scientists. It helps the libraries to overcome the problems of storage space and helps in long term preservation of library materials. Present study examines the current status of libraries of ICSSR-funded research institutes with respect of their book collection, library personnel, budget allocation. Collecting data from the Librarians of these institutions, this paper attempts to study the automation and digitization activities among all 24 research libraries with special focus on computer infrastructure, purpose and status of digitisation. The study concludes that the automation and digitisation processes are observed to be slow; and more efforts and staff training are needed to function in a fully digitized environment.

KEYWORDS: ICSSR Institutions, Digitisation, Automation, Social Science Libraries.

INTRODUCTION

National Development relies on research in various sectors, including science and technology, as well as the social sciences and humanities. Social science research helps to resolve the challenges and issues faced by society from time to time and supports informed policy-making.

Libraries play an important role in social science research. Right from the formulation of the research problem, literature review, preparation of the research instrument, data analysis and interpretation, preparing the research report, referencing and bibliography, the researcher heavily relies on the library resources. Social science researchers often consult the existing literature to support or refute their research findings. A well-equipped library, therefore, is an inevitable tool for the researcher.

With the advances in technology, libraries started digitising their collections. Digitization increases access to resources at a greater speed and fosters communication among social scientists. It helps the libraries to overcome the problem of storage space and helps in long-term preservation of library materials. Social Scientists extensively depend on Library and Information Centres to fulfill their information requirements. However, very few studies have focused on the information needs of social scientists and how library automation and digitisation contribute to the furtherance of social science research.

In India, ICSSR plays a vital role and is responsible for promoting, granting and encouraging research activities in social sciences and allied subjects.

After independence, ICSSR was established on August 1st, 1969 with the overall objective of promoting research, conducting surveys, disbursing grants, awarding fellowships, organizing training programs and seminars at National and International levels. To promote and encourage social science research, ICSSR initiated funding to state-level research institutions, providing full or partial funding and grants to institutions. Funds are also allocated to the development of Libraries and for the purchase of books, e-resources in different disciplines of social sciences. Primarily, ICSSR provides the grant-in-Aid to 24 Research institutions to encourage social research. Each of these institutions has a library to support its academic and research activities. These ICSSR-funded research institute libraries have a good collection of resources to support interdisciplinary research in social sciences. Present study attempts to find out the current status of the Library & Information Centres of the 24 ICSSR-funded research institutions concerning the collection of books and other documents, budget for procurement, computer infrastructure and status of automation and digitization, and services provided to support faculty, research scholars and other library users.

OBJECTIVES

The primary objective of the study is to examine the status of digital library automation and digitisation among the 24 ICSSR-funded research institutions. The specific objectives of the study are to-

1. Present an overview of the 24 ICSSR-funded research institution libraries.
2. Examine the present status of 24 ICSSR-funded research institute libraries with respect to library collections, personnel, library budget allocation and services offered
3. Assess the status of Library Automation efforts of the institutions
4. Identify the digitization initiatives and activities.

REVIEW OF LITERATURE

Research study of any kind is always embedded in the existing literature. A review of the literature indicates the progress made on the selected topic, methodologies used for the research, and identifies the gaps in areas where further research needs to be carried out. Some previously done research studies on the present topic are reviewed and presented in descending chronological order in this section.

Kumari & Choudhary (2024)¹ studied social science research scholars' awareness of ICSSR services, programmes and services based on 218 research social scientists at Mahatma Gandhi Central University, Bihar. It reveals that scholars are well aware of various programmes and services offered through ICSSR.

Krishnappa and Kemparaju (2019)² studied the awareness and use of library resources and facilities by the social science researchers, faculty members and research staff at ISEC Institute, Bangalore. Study reveals respondents are knowledgeable about the resources and services. It concludes that there is a need for user orientation for better and increased use of resources.

Ghosh, P.S. (2010)³ discussed the background history and formation of ICSSR as a Social Science Research regulatory organization in India. This paper briefly analyses the roles, responsibilities, functions, scope and activities of ICSSR for the promotion of social science research through 27 selected institutions that receive funding from ICSSR. Study finds that ICSSR supports research by conducting methodology courses, providing grants and funding to the institutions for social science research.

A review paper by Mahesh & Mittal (2008)⁴ attempted to assess the growth, development and current status of digital library initiatives in India and found that very few studies focused on copyrights, digital rights management, security and digital library policies. Study concluded that some science and technological libraries show better progress in digitization compared to social science libraries, including ICSSR libraries, where progress has been very slow.

Jain (2003)⁵ conducted a study on 22 ICSSR research institutes and three regional libraries. They examined the availability of books and other documents, the budget, computer infrastructure, including hardware and software, for facilitating access to library resources and services to social scientists. The study results reveal that ICSSR libraries started introducing digital systems, slowly replacing the traditional library services for easy access and retrieval of documents and better conservation and preservation of material.

MATERIALS AND METHODS

The present study examines the status of library automation and digitisation in 24 ICSSR research-funded institutions supported by ICSSR through grant-in-aid across India. There are 29 research institutes acknowledged by ICSSR, and funding in grants is given to 24 research institutes involved in research activities in social science disciplines. A structured questionnaire is distributed to 24 research institutional libraries. Responses were analysed and presented in the form of tables and figures for clear interpretation and understanding.

DATA ANALYSIS AND INTERPRETATION

The 24 ICSSR-funded research institutions have libraries attached to them. The primary role of these libraries is to serve and facilitate the information needs of their parent institutions' researchers, faculty, and project staff.

1. Overview of ICSSR-funded research institution Libraries

The 24 ICSSR Research-funded institutions are categorised into six regions, namely -the East, West, North, South, North-East and North-West Regions. There are (Table I)3 research institutions in the east, 7 in the south and 8 in the North and 4 in the west and one each in the North West and North East regions.

In terms of the total number of registered users, CESS Hyderabad has the largest number (300), followed by ISEC Bangalore with 154 and IEG Delhi with 150 users. CSD Hyderabad has the lowest number of users with 20 members. In 7 institutions (29.17%), the membership is above 100 while in the remaining 17 institutions (70.83%), number of registered users range between 20 to 98,(Table-1).

In terms of Average number of users visiting the library per day, CRRID, Chandigarh and IPE Hyderabad reported the highest visitors i.e., 100 and 90, respectively. NCDS Bhubaneswar and GIDR Ahmadabad reported the least visitors per day, that is, 1 and 3 respectively. Eleven (45.83%) out of 24 institutions reported less than 10 visitors per day. With respect to the average number of transactions in a day, five institutions have transactions between 31-50; six institutions have transactions between 11-30 and in 13 institutions, transactions are less than or equal to 10 books per day (Table-1).

2 Status of ICSSR-funded research Institute Libraries

Library Personnel

Table 2 shows that a total of 92 (26.08%) staff members are in the libraries of all 24 institutions. Out of 92, 13.04% positions are in the cadre of Librarian; 2.17% positions are in the cadre of Deputy Librarian; 15.22% positions are in the cadre of Assistant Librarians; 23.91% are in the cadre of Semi-Professionals, and the remaining 45.66% are non-professional staff. Most of them (79.65%) are in permanent positions, while only29.35% are in temporary positions. Out of the 24 institutions, only 8 (33.33%) have permanent librarians. Only 2 (8.33%) institutions out of 24 have Deputy Librarian positions. In only 13(54.17%) institutions, there are Assistant Librarians. There are a total of 14 Assistant Librarians in 13 institutions.

The total strength of personnel in all 24 research institutions is only 92. NKCCDS, ISID and IEG have a maximum of 8 staff members working in the libraries. CSS has 7 members, and CDS and CWDS have 7 staff members each working in their libraries. In all other institutions, the staff members are very less, ranging between 1 to 5.

Table No.1 – Background Information of ICSSR-funded research institutelibraries

S.No	Institute Name	Region	No of Registered Users	Average Visitors per day	Average Library Transactions per day
1	CDS	South	125	25	50
2	ISEC	South	154	10	20
3	MIDS	South	68	5	30
4	CMDR	South	51	12	25

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5	IPE	South	109	90	50
6	CESS	South	300	25	25
7	CSD	South	20	6	5
8	NKCCDS	East	32	1	2
9	CSSS	East	142	3	5
10	ANISS	East	47	15	5
11	OKDISCD	North- East	25	10	50
12	GIDS	North	48	13	10
13	MPISSR	North	59	15	50
14	ISID	North	66	6	7
15	IEG	North	150	15	10
16	CSDS	North	49	10	15
17	CWDS	North	27	5	5
18	CPR	North	122	5	5
19	IDS	North	23	5	5
20	CRRID	North- West	98	100	40
21	CSS	West	47	4	5
22	SPIESR	West	27	20	25
23	GIDR	West	22	3	3
24	IIE	West	23	6	6
	Total		1834	409	453

Note: CDS = Centre for Development Studies, Trivandrum; ISEC=Institute for Social and Economic Change, Bengaluru;MIDS=Madras Institute of Development Studies, Chennai; CMDR=Centre for Multi-Disciplinary Development Research, Dharwad; IPE=Institute of Public Enterprise, Hyderabad;CESS=Centre for Economic and Social Studies, Hyderabad; CSD=Council for Social Development, Hyderabad;NKCCDS=NKC Centre for Development Studies, Bhubaneswar; CSSS=Centre for Studies in Social Sciences, Kolkata; OKDISCD=O.K.D. Institute of Social Change and Development, Guwahati; ANSISS=A.N. Sinha Institute of Social Studies, Patna;GIDS=Giri Institute of Development Studies, Lucknow; MPISSR=Madhya Pradesh Institute of Social Science Research, Ujjain; ISID=Institute for Studies in Industrial Development, New Delhi; IEG=Institute of Economic Growth, Delhi;CSDS=Centre for the Study of Developing Societies, Delhi; CWDS=Centre for Women’s Development Studies, New Delhi; CPR=Centre for Policy Research, New Delhi; IDS=Institute of Development Studies, Jaipur; CRRID=Centre for Research in Rural and Industrial Development, Chandigarh;CSS=Centre for Social Studies, Surat; SPIESR=Sardar Patel Institute of Economic and Social Research, Ahmedabad; GIDR=Gujarat Institute of Development Research, Ahmedabad; IIE=Indian Institute of Education, Pune.

Table No.2 – Library Personnel working in 24 ICSSR-funded Research Institutions

S. NO	Institute Name	Librarian		DL		AL		Prof./ Semi Prof.		Non Professionals		Library Permanent Staff	Library Staff on Contract	Total Strength
		P	C	P	C	P	C	P	C	P	C			
1	CDS	1		1		3					1	5	1	6

2	ISEC					1		2		1		4		4
3	MIDS	1						3				4		4
4	CMDR			1				1		1	1	3	1	4
5	IPE					1		2		2		5		5
6	CESS	1				1				3		5		5
7	CSD									1		1		1
8	NKCCDS	@	1							2	4	2	6	8
9	CSSS	1								1	5	2	5	7
10	OKDISCD	@								1		1	1	2
11	ANISS						1		1	1	1	1	3	4
12	GIDS										2	0	2	2
13	MPISSR	1						1				2		2
14	ISID					1		5		2		8	0	8
15	IEG	1				1		2		2	2	6	2	8
16	CSDS									2		2		2
17	CWDS					1		4		1		6		6
18	CPR					1		1				2		2
19	IDS	1									1	1	1	2
20	CRRID					1					1	1	1	2
21	CSS					1				1		2	0	2
22	SPIESR		1								1		2	2
23	GIDR					1					1	1	1	2
24	IIE	1									1	1	1	2
	TOTAL	8	4	2		13	1	21	1	21	21	65	27	92

Note: @Prof. In charge

Institute	Books	Journals	Reference Books	Technical reports	Bound volumes	Govt Reports	Maps	Palm Leaf manuscripts	Conference Proceedings	Project reports	Rare Books	Theses & dissertations	Total
CDS Trivendrum	125000	75	1000		21000		15	10000				500	157590
ISEC Bangluru	33780	280			7603	29924	150					300	72037
MIDS Chennai	37607	113	650		7821	9738						239	56168

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CMDR Dharwad	111203	58	7380		1423	3285	6	420	3208			7 4	126637
IPE Hyderabad	46200	123			5113	4715				7000		106	63257
CESS Hyderabad	50000	102											50102
CSD Hyderabad	14587	30	100		70					150		15	14952
NCCDS BBS	20597	75			30 years					250		86	21008
CSSS KOLkata	36000				yes	yes						273	36273
OKDISCD Guwahati	17000	7000	1000		3925	200			100	100		25	29350
ANISS Patna	66799	52	100									30	66981
GIDS Lucknow	47521	105	8002	2010	9600	1102	15			210	110	105	68780
MPISSR Ujjain	17858	200	2500	0	5500	0	0	0	0	50	0	200	26308
ISID Delhi	24600	140	1615	56	3698	4000	15		200	49	34	91	34498
IEG Delhi	147000	4500			4500							200	156200
CSDS Delhi	37000	8000	1500		8000	2000				500	3700 0	1000	95000
CWDS Delhi	16000	570			1131				2000			100	19801
CPR Delhi	10950	450											11400
IDS Jaipur	24000	112			6800					yes			30912
CRRID Chandigarh	29020	100	5000		1600	1000	50		500	500		101	37871
CSS Surat	33588	80				210			150	120			34148
SPIESR Ahmedabad	25000	120	8000	2000	10000	2000	5		500	500		100	48225
GIDR Ahmedabad	22657	47			3695								26399
IIE Pune	30727	20	1371		670	1328			89		79	167	34451
Total	10246 94	22352	38218	4066	10214 9	59502	25 6	10420	6747	942 9	372 23	371 2	131834 8

Library Collections

Table No.3 shows that there are 10,24,694 books in 24 ICSSR-funded institution libraries. Books (77.73%) form a major part of the collection, followed by Bound Volumes of Journals (7.75%). Government Reports (4.51%), and Reference Books (2.90%) are present but to a lesser extent. Other collections, such as technical reports, Maps, Palm leaf manuscripts, conference proceedings, project reports, Theses, and dissertations, together form 7.19% of the total collections and are therefore very insignificant.

It is also observed that CDS (15,7590), Trivandrum Library, followed by IEG, Delhi (15,6200), and CMDR, Dharwad (126637) possess the largest library collections. These three institutions have collections of over one lakh. Another 7 Libraries, namely – ISEC Bangalore(72037), MIDS Chennai (56168), IPE (63257) & CESS, Hyderabad (50102), ANISS Patna (66981), GIDS Lucknow (68780), and CDS Delhi (95000) have collections above 50,000 but less than one lakh. All the remaining 14 libraries have collections less than 50,000.

Library Budget of ICSSR-funded research institution libraries

Table-4: Annual Budget of ICSSR-funded Research Libraries

Budget for Library in Lacks	No of Institutions	Percentage
0-10	7	41.18
11 to 20	3	17.65
21 to 30	2	11.76
31 to 40	1	5.88
41 to 50	2	11.76
above 50	2	11.76
Not provided data	7	41.18

The Library Budget for the ICSSR funded Research institutions of CSSS Kolkata, ANISS Patna, OKDISCD Guwahati, CSDS Delhi, CPR Delhi, CSS Surat, SPIESR Ahmadabad is not available.

Librarians were asked for the library budget for the year 2020-21 for knowing the total allocation/ expenditure for the library in respect of purchasing books, e resources, IT support and infrastructure. the total amount for the year 2020-21 is taking into consideration among 24 ICSSR funded research institutions and represented in the Table No. 4 reveals that only 2 libraries have above 50 lacks, two libraries (11.76%) of the libraries are have budget between 41 to 50 lacks and 21 to 30 lacks. One library has budget in between 31 to 40 lacks. Three libraries (17.65%) have budget between 11 to 20 lacks and the majority of the libraries are seven (41.18%) have below 10 lacks budget for libraries. This shows that there is a variation of budget among the ICSSR funded research libraries and hence it's required to need for additional budget allocation for developing and strengthen the libraries with respect of resources and services among 24 ICSSR social science funded research institutions.

Library Services

Survey reveals that Acquisition, Circulation, Reference Service, OPAC services, and Article download services are offered by all 24 institutions. Internet / Wifi connectivity is present in 23 out of 24 institutions. The services like

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Reprography/ Printing Services are offered by 21 libraries (87.50%) followed by CAS/SDI by 20 Libraries (83.33%).

Services such as interlibrary loan/ Resource Sharing, and Newspaper Clippings were provided by 19 (79.17%) Libraries. Documentation services are offered by 18 (75%) libraries. Institutional Repository is present in 16 (66.67%) Libraries, and Bibliographical services are offered by 14 (58.33%) Libraries. RSS Feeds / Alert Services are facilitated by 13 (54.17%) libraries, and Audio Visual services are offered by 10 (41.67%) libraries.

Services such as Plagiarism Checking are offered by 9 (37.50%) libraries; application of Web 2.0 tools by 8 (33.33%) libraries.

Table No. 5: Services Offered by ICSSR-funded research Institution Libraries

Services Offered	Yes	%
Acquisition	24	100.00
Circulation of Books & Journals	24	100.00
Inter library loan/ Resource sharing	19	79.17
Reference / Referral services	24	100.00
OPAC Services	24	100.00
Reprography/ Printing Services	21	87.50
Selective Dissemination of Information (SDI)	20	83.33
Current Contents	17	70.83
Abstracting/ Indexing services	12	50.00
Article Download	24	100.00
News paper Clippings	19	79.17
Online searching	23	95.83
Plagiarism Checking	9	37.50
IT Support Services	Yes	%
E-mail	24	100.00
Wifi / Internet connectivity	23	95.83
Web 2.0 tools	8	33.33
RSS Feeds / Alert Services	13	54.17
Remote access	17	70.83
Institutional Repository	16	66.67
Audio Video Services	10	41.67

Status of Library Automation

Software

The survey inquired about the software available in the ICSSR-funded research institutions. Results are presented in

Table 6. Computer Software available in ICSSR-funded Institution Libraries

Computer Infrastructure	Yes	Percentage
Operating Systems		
✓ Only Windows	18	75
✓ Only Mac	0	0
✓ Both Windows & Mac	6	25
Digital Library Software	13	54
Library Automation Software (ILMS)	24	100
✓ Subscribed software	12	50
✓ Free or Open sources software	12	50

From Table 6, it is evident that all 24 libraries have the Windows Operating System. However, six (25%) libraries are using Mac in addition to the Windows Operating System. Just over half the libraries (54.17%) have Digital Library software. All libraries have Library automation software. Out of the 24 libraries that have Library Automation Software, 12 (50%) have subscription-based software, while the other 12 (50%) libraries use Open

Source Software for library automation.

Hardware

Table No.7: Computer Hardware availability in all 24 Libraries

ICT Infrastructure	Yes (%)
Web server	12 (50.0)
Internet / Wi-Fi network	22 (91.67)
Bandwidth dedicated	14 (58.33)
Database server	14 (58.33)
LAN connection	24 (100)
PCS/ Laptops	24 (100)
Scanners	18 (75.0)
Printers	24 (100)
Barcode system	14 (58.33)

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Table No.7 indicates that all the libraries have LAN connections; PCs, Printers, and Laptops. Internet / Wifi connectivity is available in 22(91.67%) libraries. Scanners are available in 18 (75%) libraries. Dedicated Bandwidth, Database server and Barcode system is available in 14 (58.33%) libraries. 50% libraries have a Web server.

Status of Library Automation

The status of Automation of different housekeeping operations is presented in Table 9.

Table No.8: Status of Library Automation in ICSSR-funded research institution Libraries

Library Operations	Fully Automated	Partially Automated	An Initial Stage	Not started	Total responded
Acquisition	9 (37.5)	8 (33.33)	3 (12.5)	4 (16.67)	24
Cataloguing	20 (83.34)	2 (8.33)	0	2 (8.33)	22
Circulation	16 (66.66)	4 (16.67)	1 (4.17)	3 (12.5)	24
serial control	7 (29.17)	5 (20.83)	6 (25.0)	6 (25.0)	24
Budget	3 (12.5)	3 (12.5)	2 (8.34)	16 (66.66)	24
Administration	6 (25.0)	4 (16.67)	4 (16.67)	10 (41.66)	24
Article Indexing	4 (16.67)	6 (25.0)	5 (20.83)	9 (37.5)	24
OPAC services	17 (70.83)	2 (8.33)	5 (20.84)	0	24

Analysis from Table 8 reveals that the acquisition function is fully automated in 9 (37.5%) libraries, while it is partially automated in 8 (33.33%) libraries. In another 3 (12.5%) libraries, it is in the initial stages of automation. Automation of the acquisition module has not yet commenced in 4 (16.67%) libraries.

The cataloging function is fully automated in 20 (83.34%) libraries, while it is partially automated in 2 (8.33%) libraries. Automation of the cataloging module has not yet commenced in 2 (8.33%) libraries. The circulation function is fully automated in 16 (66.66%) libraries, while it is partially automated in 4 (16.67%) libraries. It is in its initial stages in only one (4.17%) library and automation has not yet commenced in 3 (12.5%) libraries.

The 'Serial Control' function is fully automated in 7 (29.17%) libraries, while it is partially automated in 5 (20.83%) libraries. Six libraries (25%) have reported the automation of this module in its initial stages, while another six libraries have not yet commenced. The 'Budget Planning & Control' function is fully automated in 3 (12.5%)

libraries, partially automated in 3 (12.5%) libraries, it is in initial stages in 2 (8.34%) libraries. Automation of the ‘Budget Planning & Control’ module has not yet commenced in 16 (66.66%) libraries.

The ‘System Administration’ function is fully automated in 6 (25%) libraries, partially automated in 4 (16.67%) libraries, is in its initial stages in 4 (16.67%) libraries. Automation of the ‘System Administration’ module has not yet commenced in 10 (41.66%) libraries. The ‘Article Indexing’ function is fully automated in 4 (16.67%) libraries, partially automated in 6 (25%) libraries, is in its initial stages in 5 (20.83%) libraries, and not yet commenced in 9 (37.5%) libraries. The ‘OPAC Services’ function is fully automated in 17 (70.83%) libraries, while it is partially automated in 2 (8.33%) libraries. Automation of the ‘OPAC Services’ module is in its initial stages in 5 (20.84%) libraries.

It is observed that ISEC, Bangalore, MPISSR, Ujjain library and CDS, Trivandram libraries are fully automated. SPIESR, Ahmedabad, IPE, Hyderabad and ANISS, Patna libraries are observed to be partially automated. In the remaining libraries, the automation is partial or in the initial stages.

Table No. 9: Library Automation Software Used by ICSSR-funded Research Institutions

Library Automation Software	Total	%
CDS/ISIS	1	4.17
E Granthalaya	2	8.33
Koha	8	33.33
Libraria	1	4.17
Libsys	7	29.17
NETLIB	1	4.17
New Genlib	1	4.17
SOUL	3	12.50
Total	24	100

Further, librarians are asked to mention the name of the software used for library automation. Table No. 9 reveals that One-third of the libraries (8) use Koha open-source software (33.33%). ‘Libsys’ is used by 7 (29.17%) libraries and SOUL software by 3 (12.50%) libraries. Only one library (4.17%) is using the CDS/ISIS software. E-Grandhalaya, the software developed by NIC, Government of India, is used by 2 libraries. Other software such as – Libraria (Subscription-based); NetLib (Subscription-based) and NewGenLib (Open Source) are in use by the remaining libraries.

There is no uniformity in the use of Library Automation Software by the 24 ICSSR-funded research institutions. Hence, ICSSR can take the initiative to bring uniformity in the use of software by all the libraries in order to affect efficiency in library services and facilitate further networking.

Digitization

Survey finds that out of the 24 ICSSR-funded research institute libraries, 13 (54.17%) libraries have started digitization of library materials, and there is no digitization among the remaining 11 (45.83%) libraries.

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Purpose of Digitization

The respondents are asked to rate the purpose of digitizing the library material on a five-point scale. The weighted mean is calculated, and rank is assigned. Academic credibility, Preservation, and improving access, thereby increasing usage, are ranked as the first three important purposes for digitization. Showcasing faculty research output for wider visibility and resource sharing are ranked as the next preferred purposes (Table 10).

Table No. 10: Purpose of Digitizing the Library Materials.

Purpose of Digitizing Library Materials	5	4	3	2	1	Total score	Weighted Average	Rank
Showcasing Faculty research output for wider visibility	4 (20)	4 (16)	2 (6)	1 (2)	0 (0)	44	4.00	4
To increase the access and usage	5 (25)	4 (16)	0 (0)	1 (2)	0 (0)	43	4.30	3
Academic credibility	7 (35)	2 (8)	0 (0)	1 (2)	0 (0)	45	4.50	1
Reduce damage	4 (20)	1 (4)	3 (9)	1 (2)	2 (2)	37	3.36	7
Preservation	7 (35)	2 (8)	1 (3)	1 (2)	0 (0)	48	4.36	2
For resource sharing	4 (20)	4 (16)	0 (0)	2 (4)	1 (1)	41	3.73	5
Save space	3 (15)	3 (12)	3 (9)	1 (2)	1 (1)	39	3.55	6

Type of Materials Digitized

Librarians were asked to indicate the type of library materials digitized. Analysis is presented in Table 11. From Table 11, it can be inferred that Working Papers, Annual Reports, Rare Books, and Newspaper clippings are digitized to the maximum extent that are in demand by social scientists. Few libraries have digitized Reports-Literature (46.15%), Serials (38.46%), and Manuscripts (30.77%). Less than 25% libraries have digitized Photographs (23.07%), Preprints (15.38%).

Table 11: Type of Library Materials Digitized

Library Material	Yes	%	Rank
Rare books	9	69.23	2
Photographs	3	23.07	7
Manuscripts (Books)	4	30.77	6
Serials/ journals	5	38.46	5
Report literature	6	46.15	4
Newspapers clippings	8	61.54	3
Working papers	13	100	1

Annual Reports	13	100	1
Pre Prints	2	15.38	8
Other	5	38.46	5

Access

Librarians are asked about the method of access provided to the digitized material. Analysis is presented in Table 12. It is evident that twelve out of 13 respondent libraries are making them available through University LAN (92.3%), and 10 out of 13 (76.92%) of respondents are keeping the digitized material in their Institutional Repositories. Another 9 (69.23%) are making them accessible to the users from within the library. The number of libraries that are giving access to digitized documents through library websites 8, 61.64%) is relatively less.

Table 12: Providing access to digitized library material for use

<i>Library Material</i>	<i>Yes</i>	<i>%</i>
Through the Institutional repository	10	76.92
Accessible within the library	9	69.23
Made accessible through LAN within the institution	12	92.30
Through a website	8	61.64
N=13		

Digitization Policy

Librarians were asked whether they have any digitization policy for archiving or preserving scholarly publication content. Out of the 13 libraries that have digitized their collections, 9 (69.23%) have developed a digitization policy.

E-Resources

Table No.13: E-Resources Collection in ICSSR-funded Institutions

S. No	Name of the Database	No. of Institutions (%)		
		Subscribed by individual Institutions	Supplied by ICSSR	Total
1	EconLit with full text	1 (5.88)	16 (94.12)	17
2	Soc-Index with Full Text	0	5 (100.00)	5
3	Political Science Complete	0	8 (100.00)	8
4	Library, Information Science & Technology Abstracts, LISTA	0	5 (100.00)	5
5	Education Sources	0	4 (100.00)	4
6	India Stat (Data net India)	3 (21.43)	11 (78.57)	14
7	JSTOR (ITHAKA)	5 (22.72)	17 (77.28)	22

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8	Prowess IQ (Centre for Monitoring Indian Economy, CMIE)	1 (8.33)	11 (91.67)	12
9	J-Gate (Informatics)	0	4 (100.00)	4
10	Psyc Articles	0	4 (100.00)	4
11	Other (pl. specify)	29 (100.00)	0	29

Responses are obtained from the librarians regarding the subscription of e-databases. Analysis of the databases subscribed by the individual institutions and the resources provided through NASSDOC (ICSSR) is presented in Table 13. Out of the total 24 ICSSR-funded institutions, the database JSTOR is available in 22 (91.67%) institutions, EconLit in 17 institutions (70.83%), IndiaStat in 14 (63,63%), ProwessIQ in 12 (50%) libraries. In most cases, these databases are supplied by ICSSR. Few libraries where ICSSR does not provide access to databases, they are subscribing to the resources individually, as these are indispensable databases for social scientists. Hence, ICSSR should ensure that these databases are made available in all the institutional libraries.

DISCUSSION

Very few studies have been conducted on social science information systems in India, especially on ICSSR-funded research institution libraries. In 2015, Jain P K⁶ published a study on ICSSR-maintained research libraries in India, examining library services, budgets, automation, and digitization efforts of 22 research institute libraries. Their study reported that almost all libraries used CDS/ISIS, with LIBSYS software used only in three institutions. The present study shows that 7 out of 24 institutions use LIBSYS, 8 use KOHA, and only 2 still use CDS/ISIS. Software like E-Grandhalaya and SOUL is used to a lesser extent. This shift can be attributed to the emergence of several free and open-source software and the increasing popularity of KOHA as an alternative to subscription-based software. There is also a clear change in internet availability. In 2015, only 12 of 22 had internet access, whereas the current study indicates that internet is available in 22 of 24 research institutions.

ICSSR started providing access to e-resources to the social scientists through its member libraries. Authorized members can access these resources through the NASSDOC e-Library Portal⁷. Another important facility provided to social scientists is the ICSSR Data Service. It is a Repository of NSS and ASI datasets generated by MoSPI. Krishnappa and Kemparaju (2019)⁸ studied the awareness and use of Library resources and services among social scientists. They found that social scientists are increasingly making use of e-resources compared to textbooks and print journals. Due to the decrease in cost and increase in access, libraries are acquiring e-resources, resulting in a reduction of print subscriptions. In this changing scenario, libraries must train their staff in new technologies in order to provide efficient services to social scientists.

FINDINGS& CONCLUSION

Several observations emanate from Library Automation and Digitization initiatives of ICSSR-funded research institutions. The important findings are summarized below.

1. A total of 92 (26.08%) staff members are working in all 24 research libraries. Out of this majority (87.5%) are non-professionals. Professional Staff are very less. Only 8 libraries have full-time Librarians, while 4

other institutes are run by In-Charge librarians. Only 2 institutions have Deputy Librarian Positions, and 13 Assistant Librarians are working in 11 institutions. There are 21 semi-professionals in 24 research institutions.

2. Qualified Professional staff will contribute to the success of the institution and help to build the image of the institution. Therefore, there is a dire need to recruit qualified professional library staff in ICSSR-funded research institutions.
3. It is observed that Books (77.73%) form a major part of the collection, followed by Bound Volumes of Journals (7.75%). Government Reports (4.51%), and Reference Books (2.90%).
4. While the majority of the institutions are offering essential library services, only a few libraries have plagiarism-checking software. In view of the growing concern towards plagiarism, ICSSR should take steps to supply Plagiarism Check software to all 24 research institutions.
5. With respect to the status of Library Automation, ISEC, Bangalore, MPISSR, Ujjain library, and CDS, Trivandrum libraries are fully automated. SPISER, Ahmadabad, IPE, Hyderabad, and ANISS, Patna libraries are observed to be partially automated. In the remaining libraries, the automation is partial or in the initial stages.
6. It's found that One-third of the libraries (8) use Koha open-source software (33.33%), followed by 'Libsys' in 7 (29.17%) libraries. Hence, it is observed that there is no uniformity in the use of ILMS.
7. Thirteen libraries out of 24 are in the process of digitization. Only 10 libraries have developed institutional repositories.
8. Only Nine Libraries have a digitization or preservation policy in place. Library materials like Working Papers, Annual Reports, Rare Books, and Newspaper clippings are made available through LAN and Institutional repositories.
9. Academic credibility, Preservation, and improving access, thereby increasing usage, are ranked as the first three important purposes for digitization.

There is no uniformity in providing access to databases by ICSSR to 24 institution libraries. ICSSR should ensure access to the databases in all the 24 institution libraries to promote research in social sciences in the country.

With the advances in technology, Libraries have undergone a sea change in terms of their resources and services. On the other hand, the information needs of the social scientists are also changing. They require increased access to the databases and expect need-based and timely information services to carry out their research. The Automation and Digitization initiatives in the ICSSR-funded research institutions have taken off, but the progress appears to be slow. This may be due to the lack of a trained workforce in the library. ICSSR should initiate appropriate measures to equip the libraries with sufficient resources and direct NASSDOC to impart training programmes to the library staff. ICSSR should encourage for completion of automation and digitization activities in the research institutions.

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