

STATUS OF LIBRARY AUTOMATION IN GOVERNMENT DEGREE COLLEGES OF JAMMU DIVISION: A SURVEY

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ABSTRACT

This study examines the current status of library automation in the government degree colleges of the Jammu division, J&K state, India. Out of the total 49 college libraries surveyed, 46 of them responded. Data was collected through questionnaire, interview and verification of library records. Major objectives were to identify the government degree colleges in the area, to study the status of library automation, availability of library staff, to study document collection, library automation software as well as hardware, areas of library automation. The findings revealed that most of the colleges in Jammu division were established between 2005–2012, majority of professionals have less than five years' experience, only 34 colleges have permanent librarians, a quarter of the college libraries have a collection of more than 20,000, half of them are subscribing to e-resources, only 11% are fully automated, one third are using Koha software, majority of them have cataloguing module, 2/3rd of them are familiar with library automation software, majority of the librarians lack training in the use of library automation software, for half of them automation will save time, majority of the colleges have printer and desktop computer and inadequate professional staff is the major problem. Suggestions for improving the current situation provided.

Keywords: *Library Automation, Library Computerisation, Library Software, Computer Hardware, Open-Source Software, KOHA, Government Colleges, Academic Libraries, College Libraries, Government Libraries, Information Resources, Computer Applications, Jammu, Jammu and Kashmir.*

1. Introduction

Among the academic institutions, college libraries are playing a very important role in providing efficient library and information services, to the students and faculty. In the traditional settings, the library users need more time and effort in searching and locating documents or information, and they have to depend on the college library staff. Library staff also faced problems in

providing quick and effective services to their clientele. After the introduction of ICT, computers began to be used in college libraries in India. Library automation is the process of automating the traditional functions of libraries and their services. It helps in saving time of users as well as staff, handle large amount of data, handle the library house keeping activities with speed, ease, efficiently process, store and retrieve documents or

information. It is being applied in library housekeeping activities – such as acquisition, cataloguing, classification, circulation, serial control and information storage and retrieval activities. In Jammu & Kashmir state of India, the university libraries are fully automated and only very few college libraries are automated fully. In this regard, this study looks into the automation status of the government degree colleges of Jammu division. Even though there is a study in this aspect done earlier, but there is no current and up to date survey available and thus the need and importance of the study is required.

2. Review of Literature

There are a number of studies conducted on the status of library automation in special libraries, public libraries and academic libraries in India and abroad. Among the studies reported of academic libraries, there are several studies done in colleges in India as well as abroad. In this review, only the studies on automation of college libraries are included. These reviews are arranged in reverse chronological sequence from the latest studies backwards. Several studies from certain states in India are pretty old and has not been included here. The situation in foreign countries is entirely different from a developing country like India and thus the foreign studies are excluded in this review. However, a few such studies are included in the reference section.

Babuprasad (2022) conducted a study of the automation of Govt. first grade college libraries in Kolar district of Karnataka. A joint study by Nashipudi

and Muthuraj (2022) describes the current scenario of automation activities in Govt. first grade college libraries in Karnataka. Library automation of private engineering and management colleges in Indore city of Madhy Pradesh has been studied by Yadav and Rajput (2022). A solo study by Padmalatha (2022) on the status of automation in BMSCE library, Bangalore is seen in literature. Singh and Kumar (2022) studied the library automation aspects in the college libraries of Himachal Pradesh. This report by Singh (2022) presents the survey of the pre and post automation problems in college libraries in eastern Uttar Pradesh.

Chitra and Kumbar (2021) studied the use of library automation software in the first grade colleges affiliated to the University of Mysore. The case study done by Gangula et al. (2020) emphasises on library automation in the Anurag institutions, Ghatesar, Telengana.

It is to be mentioned that the second author of this paper (Sangita) along with Sunita Sharma did a survey of automation status of the government degree college libraries in Jammu district five years ago and the findings have varied results from the present study (Gupta and Sharma, 2018). This has been incorporated in the discussions.

3. Objectives

The main objectives are:

- i) To identify the government degree colleges in the Jammu region.
- ii) To study the present status of library automation of these college libraries.
- iii) To study the availability of library staff to carry out library automation.

- iv) To study the present infrastructure in the college libraries including its document collection.
- v) To know the hardware requirement and library automation software used by the college libraries under study.
- vi) To find out the barriers faced by the college libraries during automation.
- vii) To put forward suggestions for improvement.

4. Methodology

The present study is mainly quantitative as well as qualitative in nature. It is based on primary data as well as secondary data. Primary data was collected through questionnaire as well as through interview. Secondary data was collected from library records and other sources of information. There are a total of 150 colleges in Jammu division. Out of which 72 are government Degree colleges and the rest 68 are non-government colleges. Among the 82 government colleges, 10 are professional colleges and the rest 72 are government degree colleges which are affiliated to University of Jammu which can be seen in the official website (www.jammuuniversity.ac.in/sites/default/files). Lion's share of the colleges are

affiliated to University of Jammu and a few attached to Cluster University. Twenty three colleges established after 2019 were not considered in this study. This is because the infrastructure and libraries of those newly created colleges are not properly established so far. The authors personally visited the 49 college libraries (see appendix-1). In the study the sample size of the librarians is determined by the equal allocation method i.e. 49 libraries selected, one librarian only from each college. Questionnaires were administered to 49 college librarians/in charge personally. Responses received from 46 college libraries and the response rate is 94%.

5. Analysis of Data and Discussion

5.1. Experience of Librarians

Professional experience of the college librarian is essential to make the library flourish better, stronger and efficient. It is a factor for effective college library automation. Majority (74%) of the college librarians have experience of less than 5 years. Those having 5-10 years are six in number. Thus, it is seen that 89% of the librarians have experience below 10 years only. This shows that most of the librarians working in the government colleges in Jammu are freshers.

Table 1
Experience of College Librarians

Sl.No.	Range of Years	No. of Professionals	Percentage
1	Less than 5 years	34	74
2	5- 10 Years	06	13
3	10-15 years	03	07
4	More than 15 years	03	11
	Total	46	100

5.2. Strength of Library Staff

Out of the total 46 libraries, only 34 libraries have permanent librarians. Six colleges have contract librarians and another six colleges does not have any librarian at all. In those libraries where

there is no librarian, data collected from the lower staff. It is high time to appoint qualified permanent librarians in all the college libraries in the Jammu region for effective management.

Table 2

Strength of Library Staff in College Libraries

Sl. No.	Designation	No. of Staff
1	Librarian	34
2	Junior Librarian	09
3	Computer Assistant	01
4	Library Assistant	15
5	Library Attendant	38

5.3. Document Collection in College libraries

The analysis of document collection shows that around one fourth (26%) of the

college libraries have a collection of more than 20,000. Document range of 10,000-20,000 are found in 35% of the college libraries, and those college libraries having 1-10000 are 39%.

Table 3

Document Collection in the College Libraries

Sl. No.	Range of Documents	No. of Libraries	Percentage
1	1-10000	18	39
2	10000-20000	16	35
3	Above 20000	12	26
	Total	46	100

5.4. Availability of Electronic Resources

The analysis showed that 54% of the libraries are subscribing to electronic resources and the rest 46% does not have it. Electronic resources are very

much essential in the present electronic era and the authorities should look into the matter.

5.5. Status of Library Automation

The survey showed that very less number (only 11%) of the college libraries

are fully automated. Eighteen percentage are partially automated. Surprisingly about half (46%) of the college libraries are still not automated. Thus, out of the 46 libraries, only 23 libraries (29%) have the process of automation. None of the government degree college libraries were fully automated according to a study done by the second author in 2018 (Gupta and

Sharma, 2018), while 25% were partially automated. At that time only 8.33% of the libraries were in the initial stage of automation. This shows that there is an increase in awareness among the college authorities regarding library automation. Several studies reported from the south Indian states shows that the status of college library automation in those states are much better than the northern states.

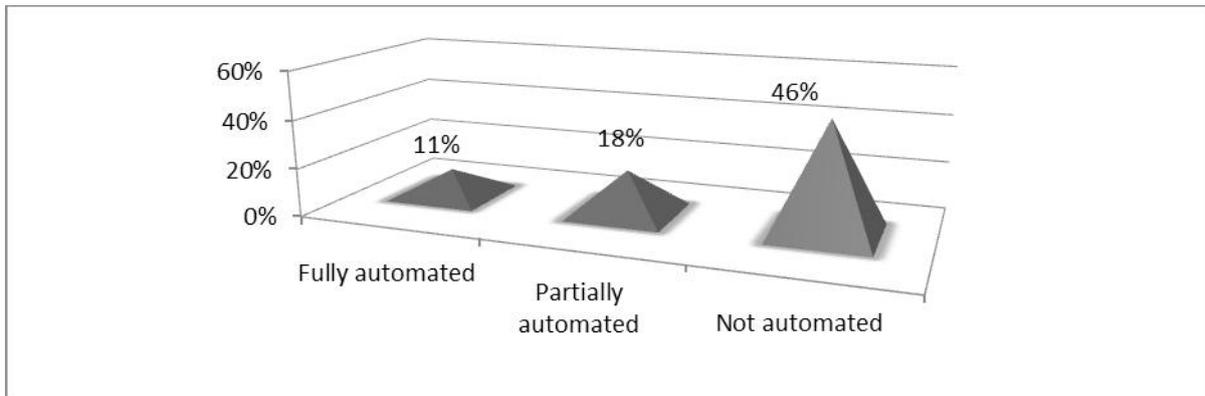


Fig.1. Status of Library Automation in Colleges of Jammu Region

5.6. Library Automation Software

It is seen that around one third (33%) of the college libraries in Jammu region are using Koha software. Eight libraries are using e-Granthalaya. Table 4 shows only a total of 23 libraries because the rest of the libraries (23) are not initiated

the process of automation. It is observed from the earlier study done by Sangita and Sharma that SOUL and Libsys software were used in those days and now none of the libraries are using above two softwares. Thus, it is a good sign that most of the libraries are switching over to open-source software.

Table 4

Library Automation Software Used in College Libraries

Sl. No.	Name of Software	No. of Libraries	Percentage
1	Koha	15	33
2	E-Granthalaya	08	17
3	SOUL	0	0
4	Libsys	0	0
	Total	23	50

5.7. Status of Functional Modules

Out of the 23 libraries, 91% of the libraries have cataloguing module, 60%

each have circulation and OPAC. Those libraries having serial control and acquisitions are less.

Table 5**Functionality of the Module in College Libraries**

Sl. No.	Modules	No. of Libraries	Percentage
1	Acquisitions	01	4
2	Cataloguing	21	91
3	Circulation	14	60
4	Serial Control	02	8
5	OPAC	14	60

*Multiple answers permitted

5.8. Familiarity with Library Automation Software

Knowledge of library automation software and experience of the librarians plays an important role in the effective implementation of college library automation. The analysis showed that 67% of the librarians are familiar with library automation software and rest 33% does not have knowledge of this software. Here arises an urgent need for giving

automation training to the rest of the professional staff.

5.9. Training in the Use of Library Automation Software

The analysis (table 6) indicates that majority (65%) of the college library staff does not have any training in using library automation software. Only 16 of them have training in using it. Thus, there arises an urgent necessity of giving training to them.

Table 6**Training in Using Library Automation Software**

Sl. No.	Training Status	No. of Respondents	Percentage
1	Have training	16	35
2	Do not have training	30	65
	Total	46	100

5.10. Opinion on the Impact of Software

Around half (54%) of the library professionals opined that library automation software installed in the

college library can save time of the users as well as library staff. It enhanced user satisfaction level, opined 30% of them. Around a quarter (26%) opined that it has increased circulation of documents in the library (See table 7).

Table 7

Opinion on the Impact of Library Automation Software

Sl. No.	Opinion	Respondents	Percentage
1	Save the time of the users as well as the staff	25	54
2	Enhanced user satisfaction level	14	30
3	Increase in circulation of documents	12	26

*Multiple answers permitted

5.11. Status of Hardware Equipment

It is found that 80% of the college libraries have printer. Desktop computer

is present in 78% of the libraries. Forty six percent have pen drive/hard disk for back up. Other items are given in table 8.

Table 8

Status of Hardware Equipment in College Libraries

Sl. No.	Hardware Equipment	No. of Respondents	Percentage
1	Printer (Ink-jet / Laser / Line	37	80
2	Desktop Computer	36	78
3	Pen Drive/Hard disc (for backup)	21	46
4	Online UPS	17	37
5	Barcode Printer/ Scanner	16	36
6	Separate Server Computer	13	28

*Multiple answers permitted

5.12. Problems Faced by Library Staff

Out of the 46 college libraries, 78% of them are facing inadequate staff to handle the automation work. Lack of management support was pointed out by around half of them (52%). Half of the libraries have space problem and 22% of the college librarians lack ICT knowledge and skills. Lack of funds is a problem faced by 18 libraries and a few of them (5) lacks knowledge about the benefits of

library automation. Thus, both in the previous study (Gupta and Sharma, 2018) and the present study, the problem of inadequate staff, lack of ICT knowledge and skills of library staff etc are still persisting and have not been rectified till now. Such problems are reported from other states of India as the literature shows (see the studies given in the reference).

Table 9**Problems Faced by Professional Staff in Library Automation**

Sl. No.	Problems	No. of Respondents	Percentage
1	Lack of adequate staff to handle the automation process	36	78
2	Lack of Management Support	24	52
3	Lack of space	23	50
4	Lack of ICT knowledge and skills of library staff	22	48
5	Lack of Funds	18	39
6	Lack of Knowledge of benefits of Library Automation	05	11

*Multiple answers allowed

6. Findings

Major findings of the study are:

- a) Most of the government degree colleges in the Jammu division were established between the years 2005-2012.
- b) Majority of the college librarians have professional experience of less than five years.
- c) Out of the 46 college libraries only 34 of them are having permanent librarians.
- d) Only a quarter of the college libraries have a document collection of more than 20,000.
- e) Only around half of the college libraries are subscribing to e-resources.
- f) Only 11% of the college libraries in Jammu division are fully automated.
- g) One third of the college libraries are using Koha software and one fifth are using e-Granthalaya software for automation of libraries.
- h) Majority of the college libraries have used cataloguing, circulation, and OPAC modules in their libraries. Acquisition and serial control modules are used by very few libraries for various housekeeping operations.
- i) Only 2/3rd of the librarians are familiar with library automation software.
- j) Majority of the college librarians in Jammu region does not have any training in using library automation software and lack of ICT knowledge.
- k) Around half of the librarians are of the opinion that library automation

software if installed can save the time of the user as well as staff.

- l) Majority of the libraries have printer as well as desktop computers, but lacking in other types of hardware items required for automation process.
- m) Inadequate staff is the major problem faced by majority of the college libraries in Jammu region.

7. Suggestions

- a) The college libraries in the Jammu region should be provided with good ICT infrastructure – like desktops with good configuration, online UPS for power backup, barcode printer, scanner and broad band internet connection.
- b) College librarians should be given intensive training in the use of library automation software and for that they should be sent on deputation basis.
- c) Vacant posts of librarians, assistant librarians and library assistants should be filled immediately and more such posts be created in college libraries.
- d) The non-automated degree college libraries should be automated at the earliest and those at present partially automated should be fully automated.

8. Conclusion

Automation of libraries is still in the formative stages in government colleges of Jammu region in the state of Jammu and Kashmir. Only 11% of the college libraries are fully automated which is a lower percentage, compared to other states, which shows that majority of the

college libraries are not automated fully. The authorities of those colleges which are non-automated should take immediate steps to start automation of their library services, and those partially automated should go for full automation. Majority of the college libraries are using circulation and cataloguing modules only for housekeeping activities. Other modules such as acquisition, serial control, OPAC and stock verification should be introduced. Those government colleges established after 2019 should take keen interest in developing their college libraries and implementing library automation at the earliest. An in-depth study covering the colleges in both Jammu and Kashmir should be conducted, which will give a clear idea of the whole state.

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Appendix-1**List of Government Degree Colleges in Jammu Division**

Sl.No.	Name of the Government College	District	Year of Establishment
1	GGM Science College, Jammu	Jammu	1907
2	Govt. Women College, Parade	Jammu	1944
3	MAM College, Jammu	Jammu	1954
4	Govt. Degree College, Bhaderwah	Doda	1955
5	Govt. Degree College, Poonch	Poonch	1955
6	SPMR College of Commerce, Jammu	Jammu	1955
7	Govt. Degree College (Boys), Udampur	Udhampur	1961
8	Govt. Degree College, Kathua	Kathua	1961
9	Govt. College for Women Gandhinagar, Jammu	Jammu	1969
10	Govt. Degree College, Rajouri	Rajouri	1981
11	Govt. college of Education, Jammu	Jammu	1986
12	Govt. Degree College, Kishtwar	Kishtwar	1986
13	Govt. Degree College for women, Udampur	Udhampur	1986
14	Govt. Degree College, Doda	Doda	1989
15	Govt College of Engineering & Technology	Jammu	1993
16	General Zorawar Singh Memorial Degree college, Reasi	Reasi	2003
17	Govt. Degree College Akhnoor	Jammu	2005
18	Govt. Degree College R.S.Pura	Jammu	2005
19	Govt. Degree College Bishnah	Jammu	2005
20	Govt. Degree College Paloura	Jammu	2005
21	Govt. Degree College, Mendhar	Poonch	2005
22	Govt. Degree College, Billawar	Kathua	2005
23	Govt. Degree College, Thanamandi	Rajouri	2005
24	Govt. Degree College, Ramban	Ramban	2005
25	Govt. Degree College, Samba	Samba	2005
26	Girdari Lal Dogra Memorial Degree College, Hiranagar	Kathua	2005

27	Govt. Degree College, Basohli	Kathua	2005
28	Govt. Degree College, Ramnagar	Udhampur	2005
29	Govt. Degree College for Women, Kathua	Kathua	2005
30	Govt. Degree College, Dharmari	Reasi	2008
31	Govt. Degree College, Budhal	Rajouri	2008
32	Govt. Degree College, Nowshera	Rajouri	2008
33	Govt. Degree College, Bani	Kathua	2008
34	Govt. Degree College, Chatroo	Kishtwar	2008
35	Govt. Degree College, Kilhotran	Doda	2008
36	Govt. Degree College, Banihal	Ramban	2008
37	Govt. Degree College, Surankot	Poonch	2011
38	Govt. Degree College, Sunderbani	Rajouri	2011
39	Govt. Degree College, Kalakote	Rajouri	2012
40	Govt. Degree College, Thathri	Doda	2012
41	Govt. Degree College, Mahanpur	Kathua	2012
42	Govt. Degree College, SarhBagga, Mahore	Reasi	2012
43	Govt. Degree College, Gool	Ramban	2012
44	Govt. Degree College, Jindrah	Jammu	2012
45	Govt. Degree College, Khour	Jammu	2012
46	Govt. Degree College, Marwah	Kishtwar	2013
47	Govt. Degree College, Majalta	Udhampur	2016
48	Govt. Degree College, Paddar	Kishtwar	2018
49	Govt. Degree College, Kastigarh	Ramban	2018