University Libraries in North India: Current Status and Information Technology Use Trends

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ABSTRACT

The paper describes a study of 12 university libraries of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab and UT Chandigarh with special reference to ICT applications. The response to the questionnaire and information available on university websites, show that 8 of the 12 libraries have distinct names. Chaudhry Charan Singh Haryana Agricultural University has 99 branch libraries of different levels; Panjab University, Chandigarh more than 60; and University of Kashmir (UK) has 60 branch libraries. All the libraries have web presence, either through university website (8 no.) or direct (4). All the libraries have their own buildings of 3 to 8 floors with a seating capacity ranging from 200 to 1300. Universities have either campus wide Wi-Fi connectivity (6 libraries) or have partially completed the project (5 libraries). There are 100 computers each for users with internet connectivity in Kurukshetra University, Kurukshetra and UK. Library membership varies between 887 in Sher-e-Kashmir University of Agricultural Science & Technology (AS&T) and 15,738 in Punjabi University, Patiala (PbiU). Total 92 persons are working in PbiU library and still has 63 % vacant positions at Assistant Librarian and above while smallest staff strength is in AS&T (10 persons). Largest collection of 6.5 lac books is in UK library which also has small number of audio and braille books. All the libraries are providing readers' guidance within library; OPAC search; reading room for personal books; online search by library staff and users themselves; photocopy service; book reservation and renewal services. The paper concludes that university libraries have acquired ICT infrastructure and digital resources, and are offering ICT-based services despite a general administrative apathy towards alarming condition of vacant positions.

Keywords: University libraries, physical infrastructure, ICT use, university library collection, university library services

1. INTRODUCTION

The post-independence period has seen a remarkable expansion in Indian higher education system. "The number of Universities has increased 34 times from 20 in 1950 to 677 in 2014. The sector boasts of 45 Central Universities of which 40 are under the purview of Ministry of Human Resource Development, 318 State Universities, 185 State Private universities, 129 Deemed to be Universities, 51 Institutions of National Importance (established under Acts of Parliament) under MHRD (IITs-16, NITs-30 and IISERs-5) and four Institutions (established under various State legislations)"1. This expansion has taken place following the norms of a number of regulatory bodies in their respective fields, such as University Grants Commission (UGC), All India Council for Technical Education (AICTE), National Council for Teacher Education (NCTE), The Bar Council of India (BCI), Medical Council of India (MCI), and so on. Although, it is debatable whether the norms were as strictly observed while granting permission to open new institutions as is done in

accreditation of courses in USA particularly in the light of the comments from some industry stalwarts that majority of the products of Indian educational institutions are not employable.

One may take a position on either side of the argument, but despite all odds, Indian higher education system has done remarkable job. The products of our colleges and universities have put India in the forefront of knowledge economy.

2. LITERATURE REVIEW

Indian university libraries have been the subject of a large number of investigations by Indian LIS professionals. More than three decades ago, Goyal & Anand² found that out of 32 university libraries, all were providing ILL service; 21 reprographic; 10 documentation list/bibliographies; 7 each newspaper clipping and indexing and abstracting service; and 6 libraries were providing translation services. More than a decade later in 1997, Prodhani & Gautam³ studied the status of university libraries in North East India. They found that NEHU had the highest

number of 86 staff members followed by Assam Agriculture University with 82 and Gauhati University with 71. Gauhati University had the largest collection of more than 1.87 lac books, followed by Dibrugarh University with 1.4 Lac and NEHU with 1.35 Lac. Venkata Ramana & Rao⁴ in 2003 found that out of 14 central university libraries, all had telephone; 12 had Xerox and e-mail facility; 7 had internet and fax; and 2 libraries had their website also. About 86 % libraries used CDS/ISIS while 57 % used LibSys software for library automation. Among central universities, NEHU was the first to start computerisation in 1986. Among computerised library services, 50 % libraries were providing accessions list, followed by internet search (43 %); reference and CD/ROM (35 %); CAS, ILL and online search (28 % each). Vasishta5 investigated six deemed universities of engineering in North India. She found that NIT, Kurukshetra had highest number of 1,59,752 books; Thapar Institute of Engineering and Technology (TIET) had highest 3,843 e-journals; and NIT, Hamirpur had maximum 1,814 audio-visual documents. NIT, Srinagar had highest number of 21 staff members, followed by Punjab Engineering College with 15 members. All the NITs were using LibSys software while TIET was using SOUL.

Vijayakumar⁶ found that out of five university libraries of Kerala only two had university librarian. Kerala University library had maximum 48 persons in the library followed by Calicut University library with 27 persons. Quite a large number of library positions were lying vacant. Cochin University library had 35.71 % vacant positions, while Kerala University library had 30.47 % vacancies. Valmiki & Ramakrishnegowda⁷ studied ICT infrastructure in six university libraries of Karnataka. They found that Gulbarga University library had maximum 140 desktops and 5 servers. Two universities were using LibSys while all the libraries had campus wide LAN. 5 libraries had internet connection through Ernet and BSNL with maximum bandwidth of 2 mbps.

Adithya Kumari & Talwar8 studied the reference collection in university libraries in Karnataka. They found that Mangalore University library had maximum 2890 reference titles, followed by Mysore University library with 2694 titles and Karnataka University library with 1860 titles. When data was analysed for number of users per title, it was revealed that Mangalore University library again had the best ratio of 0.44 users per title. Bhatt9 described the document delivery service using JCCC at Banasthali University. During August 2008 to July 2011 the Document Delivery Centre of the University received 1704 requests and fulfilled 74.94 % requests. However, there was an increasing trend in fulfillment of requests from 66.74 % in the first year to 83.98 % during the third year. In a recent study of three

selected university libraries of Haryana, Mehar Singh & Arora¹⁰ found that Bhagat Phool Singh Mahila Vishwavidyalaya (BPSMV) had the largest collection of 69139 books, while Deenbandhu Chhotu Ram University of Science & Technology (DCRUST) had 3475 standards. DCRUST library had largest covered area of 4552 sq. mtr.; O.P. Jindal Global University (OPJGU) library had 14 persons in their staff and 47 computers. OPJGU library was member of INDEST, CSIR Consortium and DELNET while DCRUST was member of UGC-INFONET and INDEST.

Thus, the university libraries in India have wide variations in all respects, be it infrastructure, collection, staff or services. The same variation is expected in this region of the country.

3. OBJECTIVES

The study intends to present an overview of the state of university libraries in the North Indian states of Haryana, Himachal Pradesh, Punjab and UT Chandigarh. Aspects like IT infrastructure, staff, membership, budget, collection, and IT services have been included in the study.

4. METHODOLOGY

It was planned to include only those universities that came into existence before 21st century and have played a leading role in education and research in the region. So, the study was conducted through a

Table 1. Names of responding university libraries

S. No.	Name of the university libraries	Abbrev.
1.	A.C. Joshi Library, Panjab University, Chandigarh	PUC
2.	Guru Jambheshwar University of Science & Technology, Hisar	GJU
3.	Nehru Library, Chaudhary Charan Singh Haryana Agricultural University, Hisar	HAU
4.	Jawaharlal Nehru Library, Kurukshetra University, Kurukshetra	KUK
5.	CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur	HPKV
6.	Himachal Pradesh University, Shimla	HPU
7.	Sher-e-Kashmir University of Agricultural Science & Technology	AS&T
8.	Allama Iqbal Library, University of Kashmir	UK
9.	Dhanvantri Library, University of Jammu	UJ
10.	Mohinder Singh Randhawa Library, Punjab Agricultural University	PAU
11.	Bhai Kahn Singh Nabha Library, Punjabi University, Patiala	PbiU
12.	Bhai Gurdas Library, Guru Nanak Dev University, Amritsar	GNDU

questionnaire sent by e-mail to 16 libraries. Finally, 12 libraries responded. The responding university libraries are shown in Table 1. The response of some of the libraries was not very clear, so it was cross checked wherever possible from the university/ library website.

5. ANALYSIS

5.1 Status of University Libraries

Table 2 shows that the oldest university in the region, Panjab University was established in 1882 while the newest university Sher-e-Kashmir University of Agricultural Science & Technology Was established in 1999. Almost 8 of the 12 responding libraries had a distinct name. These libraries and their names are shown in Table 1. All the university libraries have their own buildings. However, except HAU, KUK and AS&T the libraries were sharing the building with or accommodating other departments/ branches. All the university library buildings have three to eight floors and seating capacity of 200 to 1300. Interestingly, floor area varies to a great extent. It is 5187 sq.m. in GJU while 13,935 sq.m. in GNDU. In certain cases information regarding

area is not readily available with the library.

5.2 IT Services

The impact of internet is clearly visible in the university libraries. The university libraries generally have links through their university websites. Table 3 shows that only four university libraries - PUC, HAU, UK and GNDU, have direct web access. None of the responding libraries has a blog while except University of Jammu all the libraries can be accessed via e-mail. Only Punjab University, Chandigarh has facebook presence. The university libraries in the region have quite variations with respect to branches as Haryana Agricultural University has 99 different type of branch libraries while Guru Jambheshwer University of Science and Technology does not have any branch.

All the state university libraries are members of INFLIBNET and UGC-Infonet Digital Library Consortium. In addition to this, PUC, UK, UJ and PbiU libraries are members of DELNET, while PbiU is also a member of INDEST. All the agricultural university libraries are member of Consortium for e-Resources in Agriculture (CeRA). AgriCat, a subset of WorldCat, is a union catalogue of agricultural

Chd Haryana HP J&K **Punjab PUC** HAU **HPKV** HPU UK PAU PbiU **GJU KUK** AS&T UJ **GNDU** Year of Estt. 6 1995 1970 1956 1978 1970 1999 1948-1969 1962 1962 1969 1969 Υ Υ Υ Ν Υ Υ Υ Υ Υ Distinct name Ν Ν Ν 00 3 6 1 No. of branch 60+ 99 60 33+6 15 15 libraries **Physical Infrastructure** Own building Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Υ Exclusive Υ Ν Υ Ν Ν Υ Ν Ν Ν Ν building No. of floors 5 4 3 4 8 3 5 5 4 5-3 5 Floor area (in 5187 9077 9916 4093 6800 8670 13,935 Sq. Mtrs.) Seating 600 400 650+ 1300 200 450+ 200 600 760 500 500 capacity 80 100

Table 2. General information about university libraries

Table	3. IT	services
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	Chd		H	P		J&K	Punjab					
	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU
Website	Υ	U	Υ	U	U	U	U	Υ	U	U	U	Υ
Blog	N	N	-	N	-	N	N	N	N	N	N	N
E-mail	Υ	Υ	Υ	Υ	Y	Υ	Y	Υ	N	Υ	Υ	Υ
Facebook	Υ	N	-	N	-	N	N	N	N	N	N	N
Network member- ship	UGC- Infonet DELNET	UGC- Infonet	CeRA	UGC- Infonet	CeRA	UGC- Infonet	CeRA	UGC- Infonet DELNET	UGC- Infonet DELNET	CeRA	UGC- Infonet DELNET INDEST	UGC- Infonet

Table 4. ICT infrastructure

Infrastructure	Chd	F	laryana		Н)		J&K			Punjab	
	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU
Wi-Fi	Y	Y	N	Υ	Р	Р	Р	Υ	Y	Р	Y	Р
Library LAN	Y	-	Υ	Υ	Y	Υ	N	Υ	-	Y	Υ	Υ
Server	2	0+3	7	3	2+2	1	1+2	2+1	1	3+3	1+1	
Computers with internet for staff	30	15	24	25	10	-	5	40	22	12	10	15
Computers with internet for users	25	52	27	100	15	-	50	100	15	33	20	25+4
Computers without internet for staff	00	7	00	00	10	20	2	3	22	00	34	6
Computers without internet for users	00	00	00	00	00	00	4	00	-	00	7	00
Printers	17	12	32	5	8	8	7	20	10	10	10	4
Scanners-simple	2	4	2	5	3	8	2	10	2	2	2	4
Scanners- barcode	2	2	6	1	00	2	2	4	00	2	6	8
Scanners- RFID tags	4	-	-	-	00	-	1	8	4	00	4	
PDA	2		-	-		-		-	1			
Software package	SLIM- 21	LibSys	LibSys	LibSys	LibSys	SOUL	SOUL	Virtua	LibSys	LibSys	LibSys	CLIPS

libraries developed in collaboration with OCLC under eGranth. So, not only these 2 but all the agricultural university libraries are participating in it.

5.3 ICT Infrastructure

The ICT infrastructure is gradually increasing in all the university libraries. Table 4 shows that six of the universities have entire campus Wi-Fi, while 5 universities have completed the work partially. Nine libraries have computers connected over LAN. KU has the highest number of 40 computers with Internet accessibility for staff while both UK and KUK have 100 internet accessible computers each, for users. Eight university libraries have computers for staff without internet access and two university libraries have computers mainly for OPAC search for users. University libraries are quite liberal in the provision of printers as the range of printers varies from 4 in GNDU to 32 in HAU and most of the libraries extend printing facility to users also. Except HPKV and UJ all the libraries have barcode scanners.

Five university libraries, viz, PUC, AS&T, UK, UJ and PbiU have adopted RFID systems, but only PUC and UJ have PDA for utilising RFID potential. Most of the libraries have installed CCTV cameras. All the libraries have photocopy machines, some even have multiple machines. Seven libraries have been using LibSys software while two have SOUL.

Some libraries have multiple library software packages for different collections. To facilitate bibliographical information exchange among agricultural university libraries, steps are being initiated for adoption of KOHA. No doubt, there is a great increase in ICT infrastructure in university libraries in the present century. In 2003, 14 central university libraries had only 169 personal computers and highest 53 systems were in the University of Delhi with two libraries having no system at all and another two libraries had only one system each4. The libraries were still in the process of development of bibliographic database of their books and other documents. By 2003, the bibliographic records of only 11.4 % books were prepared in the most resourceful central university libraries. Comparing it with present situation, today almost all libraries have completed preparation of bibliographic database of their collection. Some of the libraries have even gone beyond barcode based circulation to RFID systems. These developments in ICT infrastructure and its use are quite encouraging.

5.4 Library Budget

Table 5 clearly shows that there is no relationship between budget allocation for staff salary and library resources. Except AS&T all other libraries have more budget for staff salary than for resources. However, the ratio of budget for salary and resources

Table 5. Library budget (2014-15)

Budget	Chd	ŀ	laryana		НР			J&K			Punjab	
Head (in lacs)	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU
Staff	476.541	100.00	277.3190	-	121.46537	135.00	70.00	-	-	307.50	628.407	628.46
Books, etc.	20.00	45.00	129.0461	8.00	20.00	30.00	B+J	13.00	22.75	All Coll: 83.982	12.80	16.80
Journals, etc.	100.00	14.00	125.00	20.00	2.00	20.00	60.00	17.00	25.70		45.00	83.00
IT Infra- structure	1.043	4.50	16.0351	-	2.00		30.00	7.00	0.40		1.50	0.75
Others	e-res 130.00	15.90		-	e-res 26.00	Binding: 5.00		25.00	2. 27 + 0.60 (Binding)		11.64	
Salary/ re- sources	1.9	1.26	1.03	-	2.43	2.45	0.78	-	-	3.66	4.33	6.25

Table 6. Library membership

Membership	Chd	I	Haryana		Н)		J&K		Punjab			
	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU	
Faculty	512+ 728	218	199	930	190		122	400	390	271	805	849	
Researchers	2205	409	102	900	198		80	500	770	180	889	1,121	
Students	8438	3290	174+280	10,500	482		622	6,000	6,700	1730	12,657	8,463	
Staff	581	402	253	1,100	97		58	600	140	68	1,322	803	
Others	259	-	20	25	-		5	-	20	41	65	84	
Total	12,723	4,319	1,028	13,455	967	11,825	887	7,500	8,020	2,290	15,738	11,320	

varies to a great extent. In AS&T the budget for staff salary is less than that of resources (ratio 0.78) whereas in GNDU budget for staff salary is more than six times of the budget for resources. In KUK, UK and UJ, the budget for staff salary is not specified, but definitely it would be similar to GNDU and PbiU. This budgetary allocation scenario indicates that allocation for information sources is very small particularly when one can see that staff positions are not sufficient.

5.5 Library Membership

Table 6 shows that agricultural university libraries have relatively smaller membership than the general universities. Except the universities of J&K, all other state universities have a membership of more than 10,000, with PbiU having largest membership of 15,738; followed by KUK with 13,455 and PUC with 12,723 members. Among agricultural universities, PAU has largest number of 2,290 members while AS&T has smallest number of 887 members. The universities have generally increased the number of courses and student strength in each course is also increased. This trend is particularly visible in general universities where sometimes simultaneously two batches of the same course are started.

5.6 Library Staff

The position of library staff (Table 7) is not very satisfactory. Only 4 of the 12 university libraries have Librarian's position filled with a professional person. Only PUC and UK have professional staff at every level of professional ladder. The condition of KUK and HPKV libraries is perhaps the worst where there is no Librarian, no Deputy Librarian and not even an Assistant Librarian. Five of the responding libraries have more than half of the professional positions of Assistant Librarian and above vacant. Overall, the total staff strength varies from 10 in AS&T to 92 in PbiU library. This trend of administrative apathy is now a common phenomenon. In fact, the position has worsened over the years. The condition of KUK and HPKV shows a total neglect of library by the university administration.

5.7 Library Collection

Books and journals are the main source of information in university libraries. The general university libraries like UK (6.5 Lac), PUC (5.77 Lac) and UJ (5 Lac) have five Lac or more books in their collection. The PAU (2.48 Lac) has the largest book collection among agricultural universities (Table 8).

The response about journals and e-journals varies mainly because some libraries included bound volumes of journals while others only currently subscribed print journals.

Among e-journals some libraries mentioned only journals subscribed by them independent of consortium membership while others included those journals also. The general universities are members

of UGC-Infonet which is subscribing more than 7,500 e-journals and 10 bibliographic databases¹¹. All the agricultural university libraries are receiving more than 2,900 peer reviewed e-journals through CeRA¹². The PUC is subscribing maximum 15 bibliographic databases, while KUK and GNDU have 11 databases each in their subscription list. The PAU (37,426) has the largest collection of Theses

Table 7. Library staff

Staff	Chd Haryana			a	Н	Р		J&K			Punja	b
	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU
Librarian	1	00	00	00	00	00	00	1	00	00	1	1
Dy. Iibrarian	3	02	NA	00	00	1	NA	1	00	1	00	00
Asst. Librarian	12	2	5	00	00	3	2	5	11	4	6	10
Inf. Scientist		00	NA	NA	NA	00	NA	1	1	1	1	1
PA	4	NA	13	00	1	3	3	5	15	6	34	10
SPA	6	2	15	16	9	5	1	10	2	6	-	17
Others	31	12+ 13 on con- tract	31	27	6	17	4	40	40	-	50	10
Total staff	57	31	64	43	16	29	10	63	69	18	92	49
Vacant po- sitions*(%)	08 (47 %)	02 (33 %)	04 (44 %)	18 (100 %)	04 (100 %)	08 (67 %)	01 (33 %)	11 (61%)	09 (45%)		12 (63 %)	06 (35 %)

Table 8. Library collection (print and e-resources)

Collec-	Chd	Ha	aryana		HP		J	&K			Punjab	
tion	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU
Books	5,77,369	92,714	2,35, 165	3,82,480	54,456	2,19, 874	15,600+ 8,200	6,50, 000	5,00, 000	2,48, 843	5,25, 000	-
E-books	-	-	-	-			608	500	-	51	225	-
Journals	1,31,921	81	1,01, 022	246	29,505	180		80	200	1,03, 894	356	191
E-jour- nals	7,500+	7,129+ 474	-	7,500+	-	-	2,900+	3,000	-	27	10,000	7,500
I/A data- bases	15	2	5	10+1	7	-	4	4	-	3	6	11
Theses & dis- serta- tions	8,300	406 (401 Digital)	11, 632	Included in books	4,366 E-200	Υ	584	6,000	7757	37,426	7,000	10, 803
News- papers, etc.	-	20+ 58	14+11	37	24	Y	Y	30	15+ 15	13	21	52
A/V Ma- terials	-	17	20	1,034			2-Books	500	110	0	0	
Manu- scripts	1,493		0	15,328			0	400*	0	0	850	2572*
CDs, etc.			B-2403 T-1253					Audio-93		3,564		
Others	39,910							Braille-0				

& Dissertations; followed by another agricultural university library HAU (11,632). The KUK library has the largest collection of 15,328 manuscripts. Other university libraries with manuscript collection are GNDU (2572), PUC (1,493), PbiU (850) and UK (400). The UK has a small collection of digital audio books (93) and Braille books (50).

5.8 Library Services

All the libraries endeavour to provide maximum possible services to their users. In the present study, all the libraries are providing certain services such as readers' guidance within library; OPAC search; reading room for personal books; online search

by library staff and users themselves; photocopy service; book reservation and renewal services. Referral service, user orientation programmes and links to open access resources are being provided by 11 of the 12 libraries (Table 9). Ten libraries are having WebOPAC and providing search results by e-mail, arranging documents through ILL service; and organising book exhibitions. 9 libraries are using barcode-based circulation systems, while 5 libraries have gone for RFID systems. HPKV library is also offering its online services to off-campus users. It is interesting to see the impact of ICT on library services as 12 of the 21 services are directly linked to use of technology and 4 of these services are provided by all the university libraries. Thus, as the

Table 9. Library services (Traditional and IT-enabled)

Services	Chd	Harya	na		HP		J &	ιK		Punja	ab		Total
	PUC	GJU	HAU	KUK	HPKV	HPU	AS&T	UK	UJ	PAU	PbiU	GNDU	-
Traditional Services													
Readers' guidance	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
Readers' guidance- online	N	N	N	-	Y	N	Y	Υ	Υ	Y	Υ	Υ	07
Book exhibitions	Y, Oc- cas.	Y	Υ	Y, Oc- cas.	N	N	Y, Oc- cas.	Υ	Υ	Y	Υ	Υ	10
ILL	Υ	Y	Υ	Υ	Υ	-	Y	Υ	Ν	Υ	Υ	Υ	10
Translation	N	N	N	-	N	-	N	Ν	Ν	N	Ν	N	00
Reading room- per- sonal books	Y	Y	Υ	Υ	Y	Υ	Y	Υ	Υ	Y	Υ	Υ	12
Referral service	Υ	Υ	Υ	Υ	Υ	-	Y	Υ	Υ	Υ	Υ	Υ	11
Book reservation	Υ	Y	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
Book renewal	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	12
IT-enabled Services													
OPAC	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ	Υ	12
WebOPAC	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Ν	Υ	Υ	Υ	10
Online search users	Υ	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	12
Online search- library	Y	Y	Υ	Υ	Y	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
Search results by e-mail	Y	Y	Υ	Υ	Y	N	Y, rarely	N	Υ	Y	Υ	Υ	10
Search results by mobile/phone	N	Y	N	Υ	Υ	Υ	Y, rarely	N	Υ	Y	Υ	N	80
Photocopy service	Υ	Y	Υ	Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ	Υ	12
Barcode based circulation	N	Y	Υ	Partial	Y	N	Partial	Υ	N	Υ	Υ	Υ	9 Partial
RFID based circulation	Y	N	N	N	N	N	Partial	Υ	Υ	N	Υ	N	5 Partial
SMS alert	Υ	N	N	N	Υ	Ν	N	Ν	Υ	N	N	N	03
User orientation programme	Y	Y	Υ	Υ	Y	N	Y	Υ	Υ	Y	Υ	Y (4-5 times/ year)	11
Links to open access resources	Y	Y	Υ	Υ	Y	-	Υ	Υ	Υ	Υ	Υ	Υ	11

ICT infrastructure is increasing in university libraries, and user services has also increased.

6. PROBLEMS AND FUTURE PLANS

Every organisation has problems of different nature. Some express them while others prefer to keep silent. Only 3 libraries AS&T, UJ and PAU mentioned the problems they were facing. All the 3 libraries have the main problem of insufficient staff. Inadequate budget, staff training, lack of planning, are the other problems faced by the university libraries of this region. The shortage of staff and insufficient budget, are the twin problems ailing Indian university libraries for decades.

Four libraries revealed their plans. The PAU and HPKV are planning to introduce RFID system in future, while AS&T is planning for SMS alert and introducing its Blog. The PUC library intends to introduce smart card facility for users; subscription to new e-resources; integration of all departmental libraries with SLIM-21; and installing more drop boxes at various points.

7. CONCLUSIONS

The present study was restricted to only state universities of the states of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab and UT Chandigarh. But some trends are quite visible. The libraries are facing administrative apathy as 8 out of 12 libraries are without a professional librarian as head. Almost half of the libraries have more than 50 % vacant positions of Assistant Librarian and above. In two universities, there is no professional in these positions. This is very alarming condition and needs to be addressed immediately. The university libraries have moved ahead of automation and they are now recording their web presence through WebOPAC, Blog, Facebook, etc. They are acquiring digital resources and offering online/ICT-based services to users.

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