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**A comparative study of infrastructure and resources at Punjab state
University Libraries**

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Abstract:

The Paper Focuses On The Infrastructure And Resources At Punjab State University Libraries. The Libraries Have Transformed From Museums To Digital Libraries. The Invention Of Ink, Paper, Printing Technology And Information And Information Communication Technologies (ICT) Are The Major Technological Milestones In The History Of Library Transformation. Library Building Is Modern Looking, Spacious, Equipped With Comfortable Furniture, Proper Lightening.

Key Word: Library Resources, E- Books, E-Journal, E-News Paper, E- Thesis Etc.

Introduction:

The Library Being The Heart Of Any Educational Arena Is A Physical Place Where Collection Of Information Resources In Various Formats (Books, Journals, Videos, CD-Roms Etc.) Is Organized In A Specific Manner To Meet The Needs Of A Specific User Or Group Of Users. It Is A Service Organization with both Tangible and Intangible Assets. The Tangible Assets Constitute Physical Documents And The Human Resources. Over The Time Due To Intervention Of Various Technologies. The Libraries Have Transformed From Museums To Digital Libraries. The Invention Of Ink, Paper, Printing Technology And Information And Information Communication Technologies (ICT) Are The Major Technological Milestones In The History Of Library Transformation. The Most Talked About Subject Among Librarians Today Is The Need For Application Of IT In Libraries To Meet Myriad Information Requirements Of The Present Changing Society.

Objectives of the Study:

- To Find Out The Status Of Available Infrastructure In State University Libraries Of Punjab.
- To Know The Extent Of Resources With Respect To The Use Of IT In State Libraries.

Literature Review:

Shokeen And Kaushik (2013) Found That In The Libraries Of Punjab, The Digital Access Mechanism Was Only To 0.13 Percent Of The Total Collections. Some Individual University Libraries Automation Activities Reported In The Literature Reveal A Similar Picture.

Chhatwal And Mahajan (2014) Wrote An Article Entitled Availability Of ICT Infrastructure Facilities To Access E-Resources Among The University Libraries Of Punjab And Chandigarh. The Objectives Of The Study Was To Identify Hardware Facilities; Software Facilities; The Status Of The Campus LAN And The Availability Of Internet Facilities In The Selected University Libraries Of Punjab And Chandigarh. They Found That The Infrastructural Facilities Shown That Some Of The Participating Libraries Lack Computer Hardware, Antivirus Software, Digital Library Software, Research Data Analysis Software, Extended Campus LAN And Internet Facilities With Necessary Bandwidth.

Methodology:

Questionnaire For Data Collection Purposes, For Collection Of Relevant Data Observation And Interview Technique Was Used. Two Different Questionnaires Were Designed To Collect The Data. In The First Questionnaire, The Information About The Current Status Of University Libraries Was Collected. The Faculty And Researchers In Various Departments Of Four Universities Of Punjab Viz. Punjab Agricultural University, Ludhiana; Punjab Technical University, Jalandhar ; Punjab University, Chandigarh; Punjabi University, Patiala Came Under The Scope Of The Study.

Findings:

Table -1
Showing Library Space of the State University (in Sq. metres)

Name of the University	Library Space (sq. meters)
Panjab University, Chandigarh	9479.55
Punjab Agricultural University (PAU), Ludhiana	8672.86
Punjabi University, Patiala	8861.74
I.K. Gujral Punjab Technical University (PTU), Kapurthala	3391.00

Fig. 1 Showing Library Space of the State University (in Sq. meters)

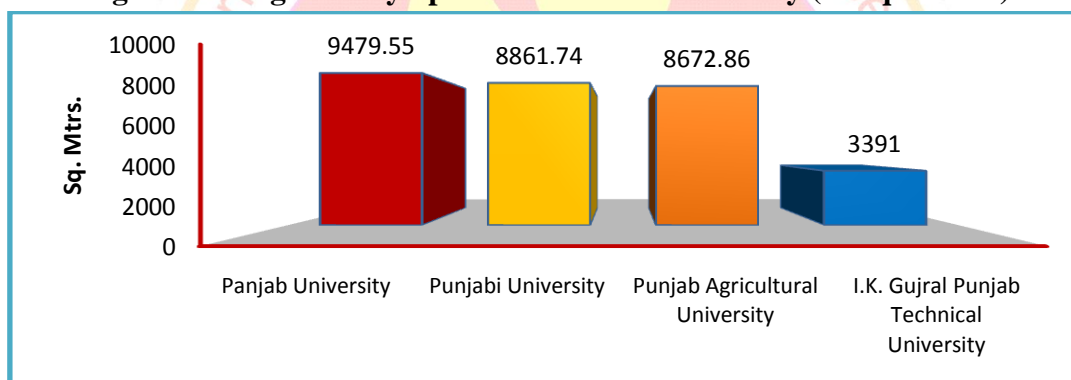


Table 1 & Fig.1 shows that the Panjab University, Chandigarh has the largest library space of 9479.55 sq. meters, followed by Punjabi University, Patiala with the space of 8861.74 sq. meters, then comes the Punjab Agricultural University (PAU), Ludhiana with the library space of 8672.86 sq. meters whereas the I.K. Gujral Punjab Technical University (PTU), Kapurthala is equipped with the least library space of 3391 sq. meter.

Table -2

Showing Adequate to stack collection, Standard Library Furniture, Air condition, Security and Disaster Mitigation Measure taken and Satisfaction from present physical facilities among Punjab State Universities.

Name of the University	Adequate to stack collection	Standard Library Furniture available	Air condition in Library	Security and Disaster Mitigation Measure taken	Satisfied with Present Physical Facilities
Panjab University, Chandigarh	✓	✓	✓	✓	✓
Punjab Agricultural University, Ludhiana	✓	✓	✓	✓	✓

Punjabi University, Patiala	✓	✓	✓	✓	✓
I.K.G. P T U (PTU), Kapurthala	✓	✓	✓	✓	✓

Table 2 shows that the librarians of all the four universities i.e. Punjab namely Panjab University, Chandigarh; Punjabi University, Patiala; Punjab Agricultural University (PAU), Ludhiana and I.K. Gujral Punjab Technical University (PTU), Kapurthala are equipped with

- Adequate stack collection.
- Has air condition facility.
- takes Security and Disaster Mitigation Measure
- Has satisfaction with their present physical facilities provided at library.

Table -3
Showing Seating Capacity among the Universities of Punjab state

Name of the University	Seating Capacity
Panjab University, Chandigarh	650
Punjabi University, Patiala	760
Punjab Agricultural University, Ludhiana	600
I.K.G. PTU Kapurthala	500

Fig.2 Showing Seating Capacity among the Universities of Punjab state.

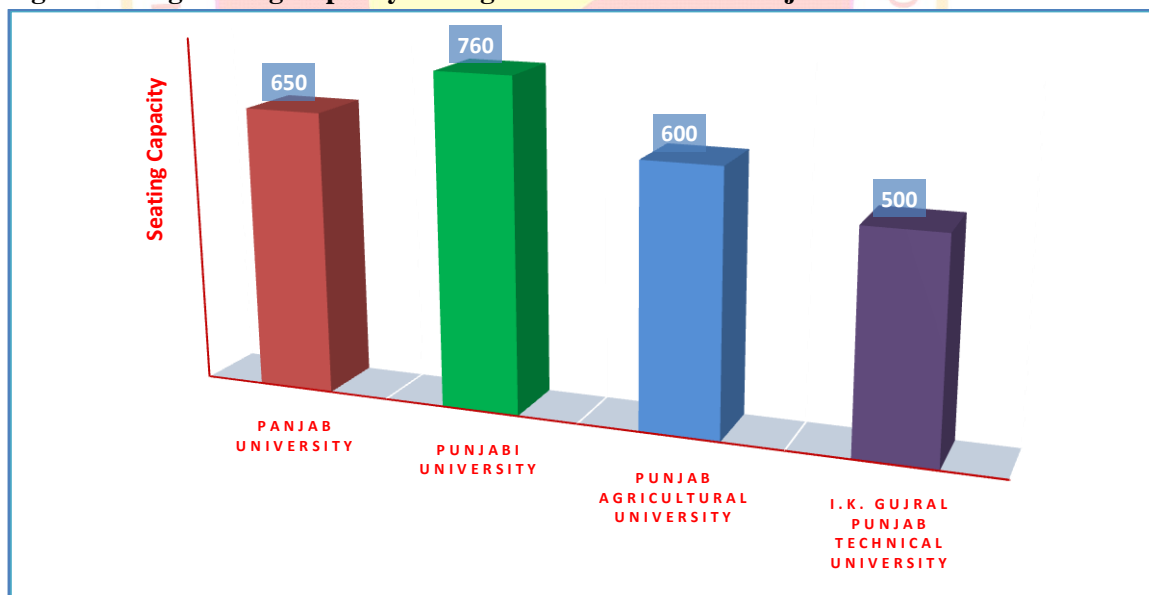


Table 3 & Fig.2 shows that Punjabi University, Patiala has the highest seating capacity of 760 persons, followed by Panjab University, Chandigarh with the seating capacity of 650, then comes the Punjab Agricultural University (PAU), Ludhiana with the seating capacity of 600 seats whereas the I.K. Gujral Punjab Technical University (PTU), Kapurthala is has the seating capacity of 500.

Table -4**Showing the Size of print collection among the Universities of Punjab State**

Name of the University	Books	Periodicals	Other materials
Panjab University, Chandigarh	7,50,000	646	Manuscripts- 1492
Punjabi University, Patiala	5,06,410	628	Brail Section(1983), Punjabi language & Literature.- 41548
Punjab Agricultural University, Ludhiana	2,50,031	200	E-Books & Thesis - 4101
IKG Punjab Technical University, Kapurthala	16,000	55	Non Book Material- 1450

Table 4 shows the collection of printed Books in Panjab University has 7,50,000 book and which is more than Punjabi University (3,06,410) followed by Punjab Agriculture University (2,50,031) and Punjab Technical University(16,00).

The collection of Periodicals in Panjab University has 646 periodicals and which is more than Punjabi University (628), Punjab Agriculture University (200) and Punjab Technical University (55).

The collection of Other Material Punjab University has 1492 manuscripts, Punjab Agriculture University has 4101 E-books and Thesis in Library, where as Punjabi University has Brail section (1983) and 41548 literatures in Punjabi language and Punjab Technical University has 1450 non book material in their library.

The above data indicates that the Panjab University, Chandigarh is the most enriched library in terms of books and periodicals whereas the Punjab Agricultural University (PAU), Ludhiana is more enriched in terms of e-books and theses which in turn reveals that the Punjab Agricultural University (PAU), Ludhiana is more IT friendly as compared to other three universities.

Table -5**Sowing the Average Annual Intake of the Library in print-resources of the Universities of Punjab State**

Name of the University	Books	Periodicals	Bound Volume	Indexing & Abstracting Journals	Reference Sources	Non-Books Material
Panjab University, Chandigarh	10,000	575	70,000	1225	45,056	5612+
Punjabi University, Patiala	10,000	562	5,123	563	12,100	5000+
Punjab Agricultural University, Ludhiana	2000	200	1,04,287	-	37,806	4120+
IKG Punjab Technical University, Kapurthala	1,000	165	1,521	41	1,358	1,450

Fig. 3
 showing the Average Annual Intake of the Library in print-resources of the
 Universities of Punjab State

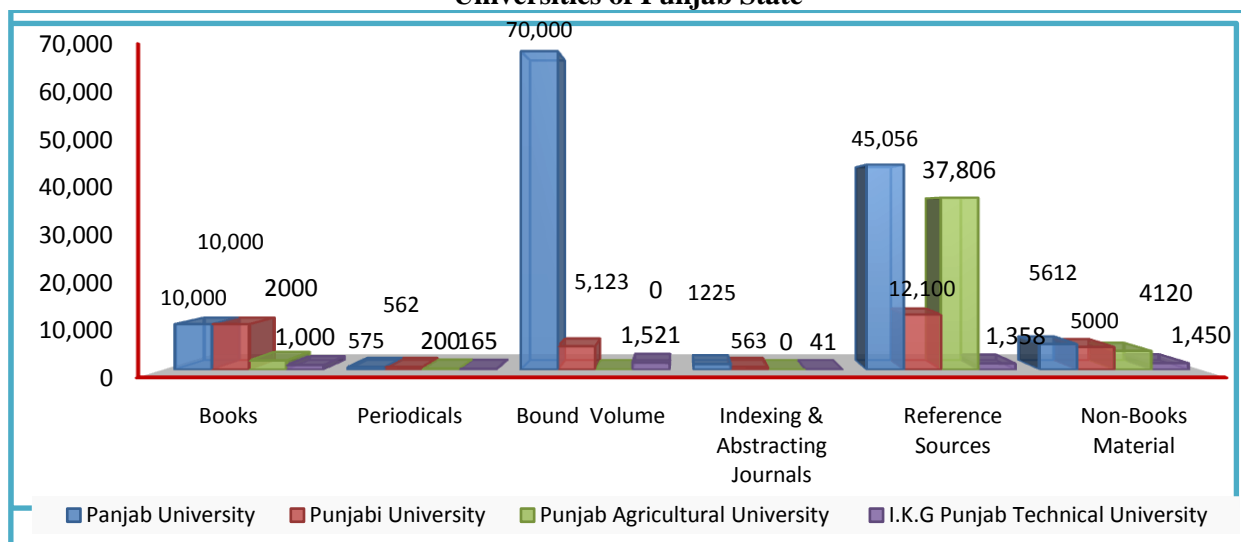


Table 5 & Fig 3 describe that Average annual books print for Panjab University (10,000), Punjab University (10,000) followed by Punjab Agriculture University (2,000) and Punjab Technical University (1,000).

Periodicals: Average annual periodicals print for Panjab University (575), Punjabi University (562) followed by Punjab Agriculture University (200) and Punjab Technical University (165).

Bound Volume: Average annual bound volumes were found for Punjab University (70,000), Punjabi University (5,123), Punjab Agriculture University (1, 04,287) and Punjab Technical University (1,521).

Indexing & Abstracting Journals: Average annual Indexing & Abstracting Journals were found for Punjab University (1,225), Punjabi University (563), Punjab Agriculture University (*) and Punjab Technical University (41).

Reference sources: Average annual references sources were found for Punjab University (45.056), Punjabi University (12,100), Punjab Agriculture University (37,806) and Punjab Technical University (1,358).

Non-Books Material: Average annual Non-Books material were found for Panjab University (More than 4,120), Punjabi University (More than 5,000), Punjab Agriculture University (More than 5,612) and Punjab Technical University (1,450).

The above data indicates that the book intake of both Panjab University, Chandigarh and Punjabi University, Patiala are same. However it is very less in Punjab Agricultural University (PAU), Ludhiana and I.K. Gujral Punjab Technical University (PTU), Kapurthala.

The intake of periodicals in Panjab University, Chandigarh is highest followed by Punjabi University, Patiala with least in I.K. Gujral Punjab Technical University (PTU), Kapurthala. However Punjab Agricultural University (PAU), Ludhiana has highest bound volumes. On the other hand Punjab Agricultural University (PAU), Ludhiana has no indexing & abstracting journals. Panjab University, Chandigarh has highest number of reference sources and non-book material. This clearly indicates that the Panjab University, Chandigarh is the best out of four universities in average annual intake of the library in print-resources.

Table No.6
Annual Intake of the Library in e-resources

Name of the University	Books	Periodicals	Journals	Database	Reference Sources	Back files of e- resources
Panjab University	890	600	7500	10	5211	65756
Punjabi University	215	150	8000	6	2533	24670
Punjab Agricultural University	74	96	3740	14	2310	14171
IKG Punjab Technical University	150	247	6000	3	1500	2000

Fig. 4: Annual Intake of the Library in e-resources

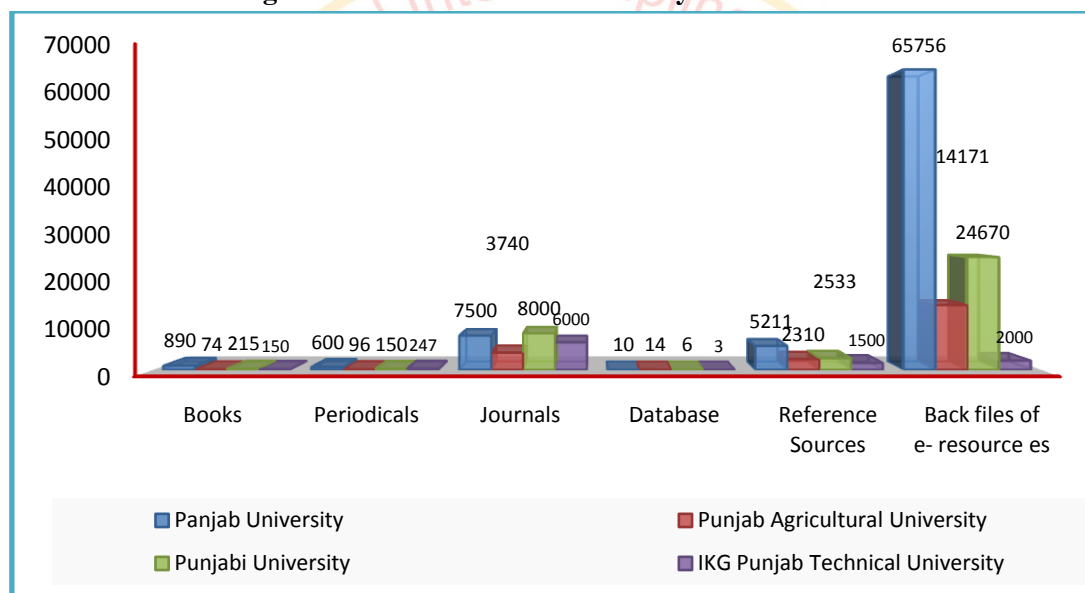


Table 6 & Fig 4 shows that Average annual intake of the library in e-resource of books were found for Panjab University (890), Punjabi University (215) followed by Punjab Agriculture University (74) and IKG Punjab Technical University (150).

The Periodicals: Average annual intake of the library in e-resource for periodicals were found for Panjab University (600), Punjabi University (150) followed by Punjab Agriculture University (96) and IKG Panjab Technical University (247).

Journals: Average annual intake of the library in e-resource for journals found for Punjabi University (8,000), Panjab University (7,500), and IKG Punjab Technical University (6,000). Punjab Agriculture University (3,740).

Data base: Maximum data base were found for Punjab Agriculture University (14), Panjab University (10), Punjabi University (6) and very minimum data base found for Punjab Technical University (3).

Reference Sources: Maximum references sources were found for Panjab University (5,211), Punjabi University (2,533), Agriculture university (2,310), IKG Punjab Technical University (1,500).

Back files of E-resources: Maximum Back files of E- resources were found for Panjab University (65,756), Punjabi University (24,670), Agriculture university (14,171), IKG Punjab Technical University (2,000).

The above discussion clearly indicates that the Panjab University, Chandigarh is the best in Average Annual Intake of the Library in e-resources except journals where Punjabi University, Patiala excels.

Table -7
Bibliographical database and whether Web Update available in various Universities of Punjab state.

Name of the University	library has Bibliographical database			Whether Web Update available		
	Yes	No	Planned	Yes	No	Planned
Panjab University	✓	-	-	✓	-	-
PunjabAgriculture University	✓	-	-	✓	-	-
Punjabi University	✓	-	-	✓	-	-
IKG PunjabTechnical University	✓	-	-	✓	-	-

Table 7. ICT solution in various universities of Punjab state is:

- Library has Bibliographical database:** Each university in their library has Bibliographical database.
- Web Update available:** All universities has update web in their Library. Punjab Technical University has update web on LAN and where as Punjabi University, Punjab University on World Wide Web.
- Library has Digital Collection and from its own resource:** Each university in their library has digital collection and all connection is on LAN and World Wide Web as mention in above Table.

Table -8
Distribution of Information Resources among university

Name of the University	Access to E-resources	E-books	E-journals	E-thesis	Any Other
Panjab University	YES	YES	YES	YES	YES
Punjab AgriculturUniversity	YES	YES	YES	YES	YES
Punjabi University	YES	YES	YES	YES	YES
IKGPunjabTechnical University	YES	YES	YES	YES	YES

Table 8 shows Access to E-resources: All universities has easy access to E-resources in their library. Types of E- resources: E-Books, E-Journals, E-Thesis the main E-resource at all universities library.

Table- 9
Mode of availability Subscribed by state universities of Punjab

Mode of availability Subscribed by University	Punjab Agriculture	Punjabi University	Panjab University	IKG Punjab Technical University
Business Source Elite	1	-	-	-
CAB Abstracts	1	-	-	-
Commodities Database	1	-	-	-
Consortium for e-Resources in Agriculture	1	-	-	-
FSTA (Food Science & Technology Abstracts),	1	-	-	-
Indiastat	1	-	1	-
Krishikosh	1	-	-	-
Krishiprabha	1	-	-	-
PAU Theses	1	-	-	-
INFLIBNET	-	1	-	1
SciFinder Scholar	-	1	-	-
MathScinet,	-	1	-	-
Royal Society of Chemistry web of Science etc	-	1	-	-
Science Direct	-	-	1	-
Scopus	-	-	1	-
West Law,	-	-	1	-
IEEE	-	-	1	-
JoVE	-	-	1	-
J-Gate	-	-	1	-
Ebsco	-	-	1	-
Proques	-	-	1	-
Dissertation & Thesis Abstracts	-	-	1	-
Times of India online	-	-	1	-
Districts of India	-	-	1	-
Through Consortia INFLIBNET / INDEST/Any other	INFLIBNET	INFLIBNET	UGC-INFONET	INFLIBNET

Mode of availability Subscribed by University: Punjab Agriculture university has mode of availability as Business Source Elite, CAB Abstracts, Commodities Database, Consortium for e-Resources in Agriculture, FSTA (Food Science & Technology Abstracts), Indiastat, Krishiprabha, PAU Theses, INFLIBNET, SciFinder Scholar, MathScinet, Royal Society of Chemistry, web of Science etc.

Punjabi University has mode of availability as INFLIBNET, SciFinder Scholar, Royal Society of Chemistry and web of Science etc

Punjab University has mode of availability as Indiastat, Science Direct, Scopus, West Law, IEEE, JoVE, J-Gate, Ebsco, Proques, Dissertation & Thesis Abstracts, Times of India online, Districts of India where as Punjab Technical university has INFLIBNET.

Conclusion:

It can be inferred that sample respondents ranking on the Library Physical Infrastructure is more or less identical across all the academic university namely IKGPTU, Punjab Agriculture University and Punjab University, Chandigarh. It is interesting to note that Punjab Technical University focused more on Physical access to our library is easy. Whereas other three university stressed more on “Our library building is modern looking, Spacious, equipped with comfortable furniture, proper lightening”.

It can be inferred that the sample respondents ranking order is not identical in all the universities. However, Punjab University, Punjab Agriculture University and Punjab University, Chandigarh have ranked on “library has Comprehensive print resources like books, journals other material at highest order.

University libraries of Punjab have a good collection of e-resources. E-resources are the wave of future and e-collection offers possibilities for expending access as well as changing learning behavior and academic research trends. All the responding University libraries have access to e-resources such as e-books, e-journal, e-theses and other on-line and standalone information resources indexing and distracting services.

References

1. Chhatwal, Anita¹ and Mahajan, Preeti (2014). Availability of ICT Infrastructure Facilities to Access E-resources among the University Libraries of Punjab and Chandigarh- A Study, *Asian Journal of Multidisciplinary Studies* 2(7), July 2014, pp.73-77. Available online at www.ajms.co.in 73
2. Shokeen and Kaushik. (2013). Emergence of digital resources and university libraries in Delhi and Haryana. In *Electronic information environment and library services; a contemporary paradigm (48th ILA Conference Papers)*, edited by Pandey S K Sharma, 57-32. Delhi: ILA.

