

An Evaluation of ICT Infrastructures and Services in Selected College Libraries of Hooghly District Affiliated to The Burdwan University in West Bengal

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Abstract:

This paper studied twenty (20) degree college libraries of Hooghly District under Burdwan University in West Bengal State. This study attempt to evaluate the present condition of ICT infrastructure, e-resources and services in these college libraries. College library plays an important role in higher educational institutions. Degree college libraries have been neglected for a long time, now it is the time to revive these colleges libraries to give its best to the users. The present study evaluates the various aspect of ICT Infrastructure, e-resources, collection and services. The study also highlighted the issues and challenges in implementation of ICT. The present study found that there is a negligence from the higher authorities for ict implementation. Lack of human resources, lack of funds from authorities, Proper ict implementation policy of library, proper ict trained staff are the important issues and challenges facing by the college library.

Keywords: ICT Infrastructure, College library, Hooghly District, Resources, Services. Evaluation.

1. Introduction:

College libraries play an important role in the academic development of the college. Library play crucial role in fulfilling the information needs of the users. College library is regarded as the centre of learning community providing academic space for the students, faculty members and researcher to acquire knowledge. Library of the higher educational institutions has to be active, dynamic and changing in nature with passage of the time. College library provides various type of services related to the curriculum and extra curriculum activities. Due to the rapid advancement of ICT users demand in the library are changing day by day. To fulfil the user demand college are adopting new strategy of ICT based services to the users. In the new education policy of 2020 government of India has emphasis more on the use ICT in higher educational institutions. Government directly or indirectly encouraging university and colleges to

adopt ICT based teaching and learning facilities with high-speed internet connectivity to spread the knowledge to the remote corner of the country.

2. Review of Literature:

Subhas, Shamiksha and Das, Subarna Kumar (2019) Highlighted the present condition of ICT infrastructure in college library of Darjeeling district. Study shows that libraries in Darjeeling district are in different stage of development. Lack of fund from authority, lack of human resources and insufficient hardware and software are the primary issues. **Boachie, FK (2018)** Shows that lack of ICT infrastructure, reliable supportive ict platform, skilled staffs, are the major challenges in the developing countries in 21st century. To overcome the issues of developing countries assistance from the global agencies is necessary. **Sarmah, Mukut (2017)** Evaluate the ict infrastructure and its application in selected

college library of coacher district of Assam. Study highlighted that most of the college libraries is in the developing stage of ICT implementation. Lack of human resource, financial shortage, proper trained staffs are the important issues and challenges. **Tiwari and Sahoo (2013)** Revealed that ICT infrastructure is in the developing stage in university libraries in Rajasthan. Lack of human resource management, negligence of higher authorities, trained staffs on ICT are the major issues in university libraries in Rajasthan. **Sinha, Manoj Kumar (2012)** Studied ICT infrastructure for computerization of college libraries in Assam. Study highlighted that present infrastructure, e-resources, and role of Infilbnet in modernization of college libraries in Assam state. Study revealed that status of ICT infrastructure in college libraries in Assam is in the developing stage. Situation of the college in Assam are changing gradually with the application of ICT. **Dhanavandan (2011)** Examine the ICT infrastructural facilities in self-financial college libraries in Tamil Nadu state. Study finds out that among 140 sample half of the college is accredited by ISO and NBA. Almost all college libraries have basic ICT facilities. Windows operating system is most preferred software among the college library followed by linux.95% college use library application software. Lack of financial assistance is the main constrain for developing in the library.

3. Objective of the study:

- To evaluate the status of ICT infrastructure, application and services in selected college libraries of Hooghly District under Burdwan University.
- To identify the availability of resources and services in college libraries of Hooghly District
- To know the status of ICT implementation and ICT based services offered by the college libraries of Hooghly District.
- To know the manpower capacity in these college libraries.

- To know the ICT skills of the library staffs.

4. Limitation of the study:

- Geographical coverage is limited to the Hooghly District in WB
- Only Government and Govt. aided degree colleges which are affiliated to the Burdwan University are included in this study, private colleges are excluded from this study.

5. Methodology:

The present study is descriptive in nature. Survey and interview techniques are used for the present study. Structured closed ended twenty (20) questionnaires were distributed among the librarian of twenty college libraries of Hooghly District under Burdwan University. The response rate is 100 percent. The researcher personally visited the college libraries under this study. Excel and SPSS Software are used for analysis of collected data from survey.

6. Hooghly District

Hooghly District with its Headquarters located at Chinsurah town is within the Burdwan Division of the State of West Bengal. So far history goes, the name "Hooghly" is derived probably from the 'HOGLA', a tall reed, which grows in abundance on the riverbanks and in the marshy low lands below them. At dawn of history this part of the country was probably included in the territory held by the Suhmas, a tribe mentioned in juxtaposition with the Angas, Vangas and Pund. The district is 40 km north to the state capital Kolkata. The district is divided into four subdivisions i.e. Chinsurah Sadar, Srirampore, Arambagh, Chandannagore. The total population as per 2011 census of the area is 5,519,145. Total area is 3,149km², literacy rate is 82.55 percent. It is one of the most advance districts in West Bengal economically. Hooghly is the hub of the jute industry. Jute industry is located along the bank of Hooghly River. Tarakeswar temple is the major pilgrimage site in the district.

7. Data analysis and interpretation

7.1 College name, website and NAAC accreditation.

Table -1

Sl No	Name of the College	Website	NAAC Accreditation
1	Hooghly Mohsin College (Estd.1836)	https://hooghlymohsincollege.ac.in	B++
2	Chandernagore Government College (Estd.1862)	https://www.chandernagorecollege.ac.in	B++
3	Bejoy Narayan Mahavidyalaya (Estd.1950)	https://www.bnmv.ac.in	B+
4	Aghorekamini Prakashchandra Mahavidyalaya (Estd.1959)	https://akpcmahavidyalaya.org/contact_us.php	B
5	Sri Ramkrishna Sarada Vidya Mahapith (Estd.1959)	https://www.srsvidyamahapitha.org	C
6	Vivekananda Mahavidyalaya, Haripal (Estd.1966)	https://vmharipal.ac.in	B
7	Rabindra Mahavidyalaya (Estd.1971)	https://rabindramahavidyalaya.ac.in	B++
8	Sarat Centenary College (Estd.1976)	https://sccollegednk.ac.in	B
9	Balagarh Bijoy Krishna Mahavidyalaya (Estd.1985)	https://www.bbkm.ac.in	C++
10	Kabi Sukanta Mahavidyalaya (1986)	https://ksmv.ac.in/About-college.aspx	B
11	Arambagh Girls College	https://www.arambaghgirlscollege.ac.in	B
12	Polba Mahavidyalaya	https://polbamahavidyalaya.ac.in	
13	Netaji Mahavidyalaya	https://www.netajimahavidyalaya.ac.in	B
14	Singur Government College	http://singurgovtcollege.org	-
15	Sree Gopal Banerjee College	https://sgbcollege.ac.in/welcome	-
16	Tarakeswar College	https://www.tarakeswardegrecollege.org	B
17	Raja Ram Mohan Roy Mahavidyalaya	https://www.rrrmahavidyalaya.edu.in	B
18	Hooghly Women's College	https://hooghlywomenscollege.ac.in	B++
19	Kabi Kankan Mukunda ram Mahavidlaya	https://www.kabikankanmukundarammahavidyalaya.org	--
20	Khalisani Mahavidalaya	https://khalisanicollege.ac.in	B++

Table 1 shows that except three colleges almost all colleges are NAAC accredited. Five college are got B++ grade, one college accredited with B+ grade,

eight colleges are accredited with B only, one college accredited with c++ and another one got C grade.

7.2 Questionnaire distribution and response rate

Table- 2

Questionnaire distribution	Questionnaire Received	Percentage
20	20	100%

Table 2 Put to show the questionnaire distribution and response rate .22 questionnaire were distributed among the college librarian. The receiving rate is 100%.

7.3 Location of the College

The Colleges of this study have been divided into two categories i.e. Urban and Rural

Table -3

Location	No of College	Percentage
Rural	11	55%
Urban	9	45%

Table 3 shows that out of total 20 colleges 11 colleges i.e. 55% colleges are located at rural area

while 9 colleges i.e. 45% colleges are located in urban area.

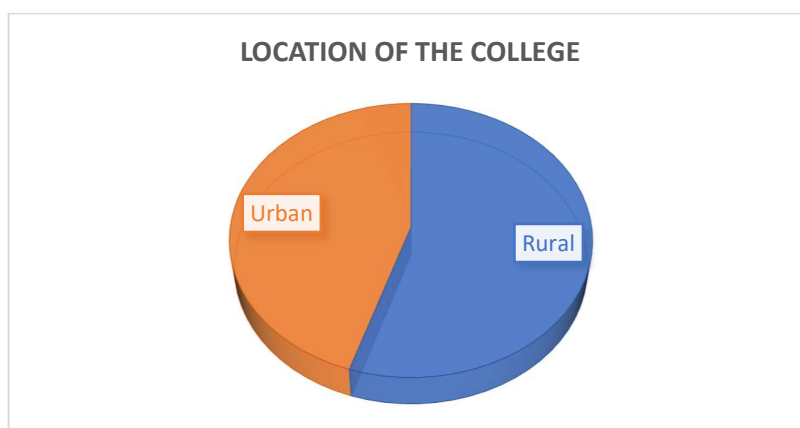


Fig.1 Location of the college

7.4 Library Collection

Table-4

Items	No of college responded Yes	Percentage	No of college responded No	Percentage
Book	20	100%	0	0
Periodical	20	100%	0	0
E-Journal	20	100%	0	0
Printed journal	20	100%	0	0
Reference book	20	100%	0	0
E-Book	20	100%	0	0
Conference Proceedings	18	10%	2	10%

The above table shows that all most all the colleges have books, periodicals, e-journal, e-books, reference book. Only two colleges responded no that they don't have conference proceedings.

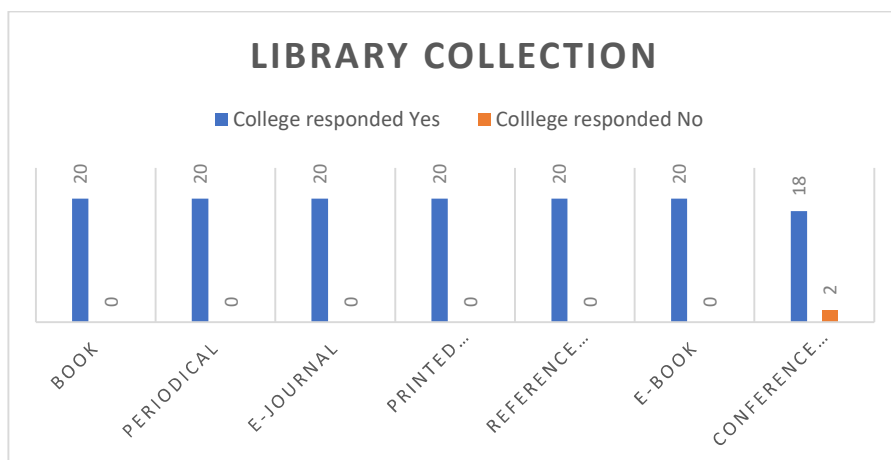


Fig.2 Library collection

7.5 Library Services

Table-5

Services	College responded Yes	Percentage	College responded No	Percentage
Circulation Services	20	100%	0	-
Reference Services	20	100%	0	-
E-Resource services	20	100%	0	-
Inter library loan	7	35%	13	65%
Current awareness services	20	100%	0	-
Reprographic services	18	90	2	10

Table 5 shows that all the library under this study offer circulation services, Reference services, e-resource services, current awareness services. Only

35% library offer inter library loan services and 90% library offer reprographic services.

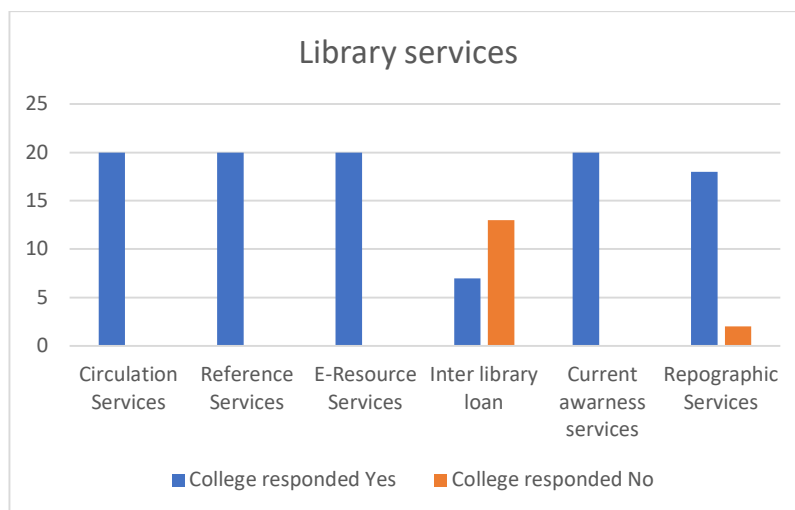


Fig.3 Library services

7.6 E-Resources of the library

Table -6

E-Resources	No of College responded Yes	Percentage	No of College responded no	Percentage
E-Book	20	100%	0	0%
E-Journal	20	100%	0	0%
E-Database	16	80%	4	20%
CD/DVD	18	90%	2	10%
Institutional Repository	6	30%	14	70%

The above table shows that out of 20 colleges 100% responded that they have e-book, e-journal. 80% colleges responded that they have e-database while 20% colleges responded negative that they

don't have e-database. 90% colleges have CD/DVD while 10% respond negative. Only 30% colleges use IR while 70% colleges don't use IR.

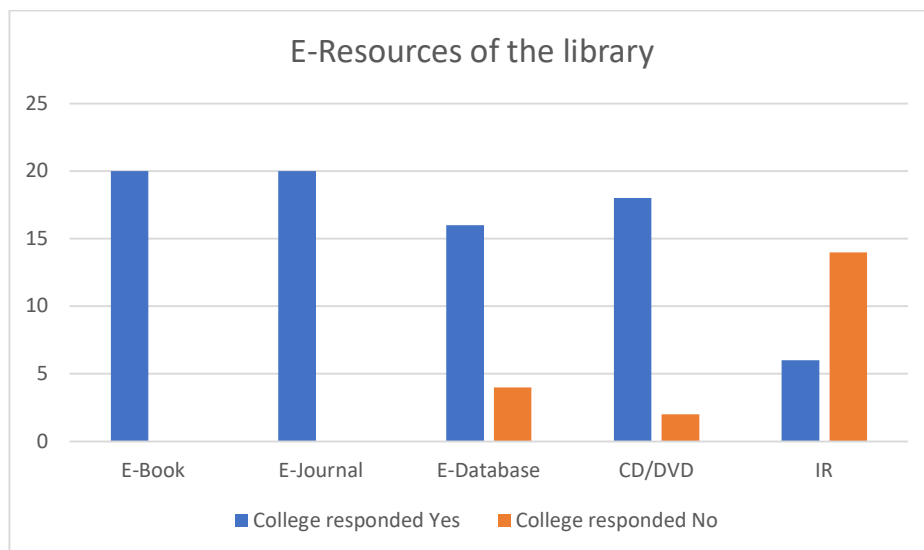


Fig.4 E-Resources of the library

7.7 ICT tools available in the library

Table -7

Tools	No of College	Percentage
Printer	20	100%
Scanner	20	100%
Xerox Machine	20	100%
CCTV	16	80%
Central UPS	15	75%
Server	16	80%

The table 7.7 clearly shows that 100% colleges have printer, scanner, xerox machine while 80% colleges

have CCTV, 75% colleges have central UPS and 80% colleges have server.

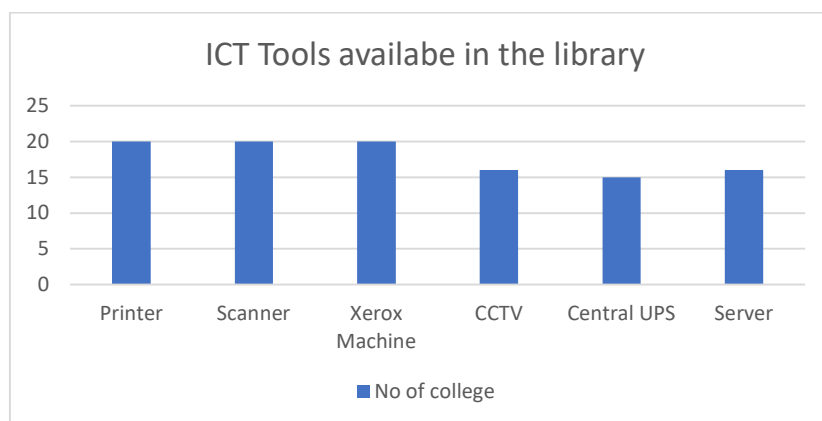


Fig. 5 ICT tools available in the library

7.8 ICT Based services offered by the library

Table-8

Services	No of college	Percentage
Computerized lending service	18	90%
Internet browsing service	20	100%
Web based service	20	100%
Printing service	5	25%
N-List service	17	85%
Digital reference service	6	30%

The table shows that 90% colleges offer computerized lending services while 100% college libraries under this study offer internet browsing services. 100% college libraries offer web-based

services, 25% college offer printing services, 85% colleges offer N-List services while 30% college libraries offer digital reference services.

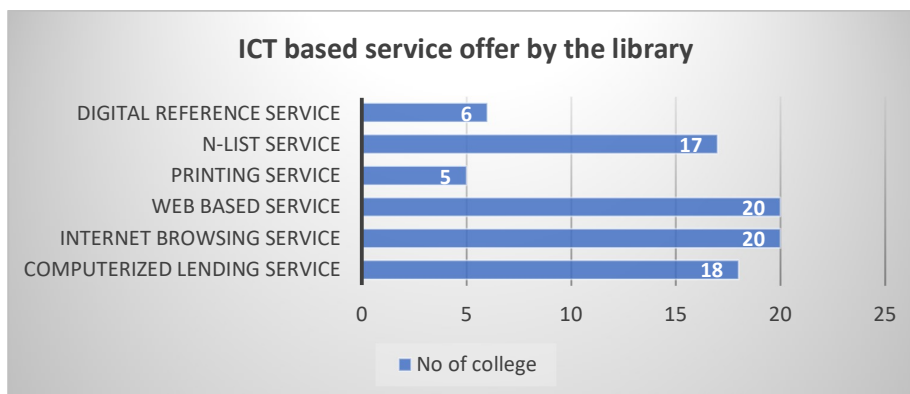


Fig.6 ICT Based service offer by the library

7.9 Status of library automation

Table -9

Stages	No of college	Percentage
Fully automated	3	15%
Partially automated	12	60%
Initial stage	3	15%
Manual	2	10%

It is shows that only 15% colleges are fully automated while 60% colleges are partially automated. 15% colleges are in the initial stage of

automation and only 10% colleges are operating through manually.

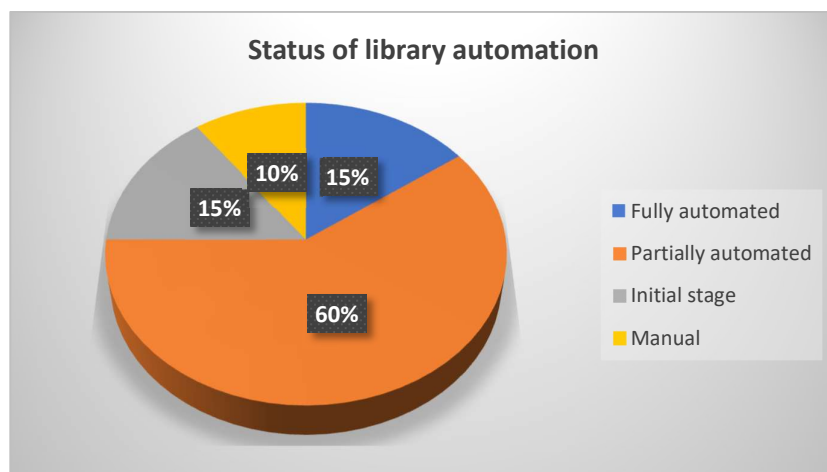


Fig. 7 Status of library automation

7.10 Automation software used for library

Table-10

Software	No of college	Percentage
Koha	18	90%
SOUL	0	0
Local software	0	0
Other software	0	0
Without software	2	10%

Table 10 shows that 90% colleges use Koha library automation software while 10% colleges work without library automation software. No library

uses SOUR or any other software listed in the above table.

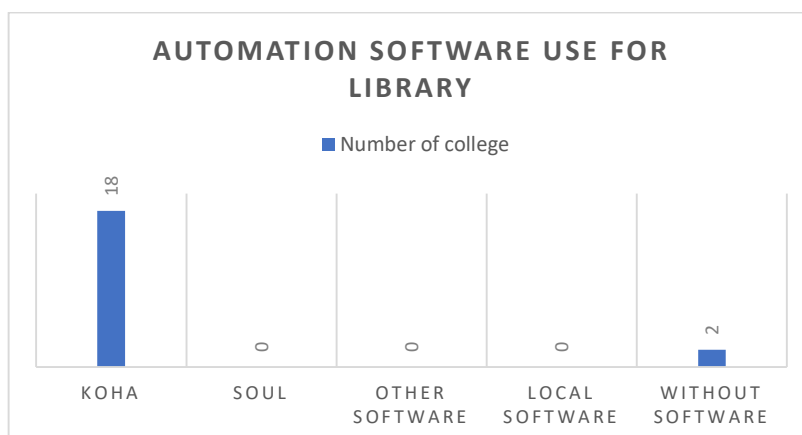


Fig.8 Automation software use for library

7.11 Human Resources in the college library

Table-11

Name of the college	Librarian	Library clerk	Library attendant/Peon	Other casual staff
Hooghly Mohsin College (Estd.1836)	1	1	2	-
Chandernagore Government College (Estd.1862)	1	2	3	-
Bejoy Narayan Mahavidyalaya (Estd.1950)	1	-	-	2
Aghorekamini Prakashchandra Mahavidyalaya (Estd.1959)	1	1	1	-
Sri Ramkrishna Sarada Vidya Mahapith (Estd.1959)	1	1	1	-
Vivekananda Mahavidyalaya, Haripal (Estd.1966)	2	1	1	-
Rabindra Mahavidyalaya (Estd.1971)	2	1	1	-
Sarat Centenary College (Estd.1976)	1	1	1	-
Balagarh Bijoy Krishna Mahavidyalaya (Estd.1985)	1	1	1	-
Kabi Sukanta Mahavidyalaya (1986)	1	-	-	2
Arambagh Girls College	1	1	1	
Polba Mahavidyalaya	1	1	1	
Netaji Mahavidyalaya	2	1	1	2
Singur Government College	1	-	1	-
Sree Gopal Banerjee College	1	1	1	-
Tarakeswar College	1	1	1	-
Raja Ram Mohan Roy Mahavidyalaya	1	1	1	
Hooghly Women's College	1	1	1	
Kabi Kankan Mukunda ram Mahavidlaya	1	1	1	
Khalisani Mahavidyalaya	1	1	1	

Table 11 put to show the strength of human of resource availability in the college libraries of Hooghly district. There are three sanction post in the college library librarian, library clerk, library attendant/peon. Three colleges have more than one librarian, rest of the colleges have one librarian. There is a provision of casual contractual staff in the library.

7.12 Network in the college library

Table-12

Type of network	No of college	Percentage
OFC	6	30%
Data cable	2	10%
WiFi	12	60%

The table shows that 30% colleges use OFC network while 10% use data cable and only 40% use Wifi network.

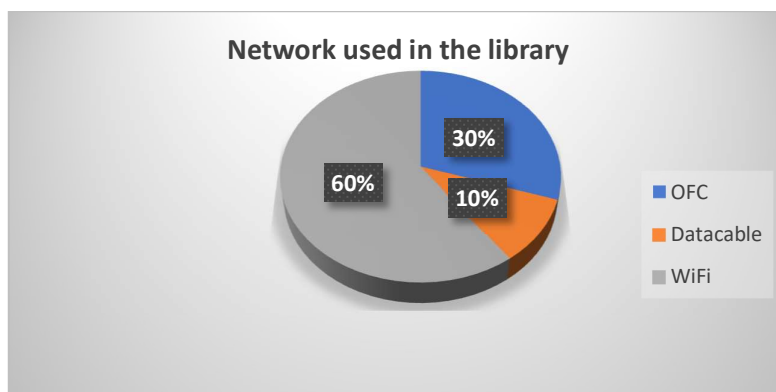


Fig. 9 Network use in the library

7.13 Computer availability in the library

Table 13

No of computer	No of college	Percentage
1-5	12	60%
6-10	6	30%
11-15	2	10%
16-20	0	0%

Table shows that 60% colleges have 1-5 no of computer while 30% colleges have 6-11 number of

computer and only 10% colleges have 11-15 no of computer.

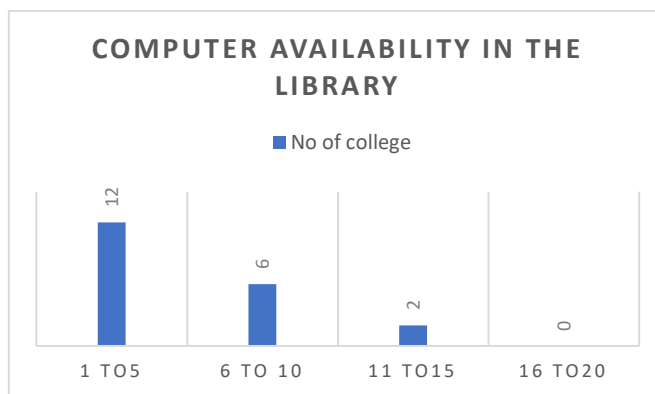


Fig.10 Computer availability in the library

8. Findings:

- All the colleges under this study have e-resources for their user.
- Most of the colleges provide post graduate course along with graduate course but with the limited subject.
- Inadequacy of human resources is common in all the colleges
- Except two all the colleges use library automation software
- KOHA is the most popular library software used by these colleges
- Majority of the college are partially automated only few colleges are fully automated.
- Most of the college are accredited by NAAC.
- All the college libraries are providing ICT based services to the users.
- All the college libraries possess various type of ICT related tools.
- Majority of the college (55%) located at rural area and 45% college located at urban area.
- Only three colleges have more than one librarian rest of the college have only one librarian
- Negligence of higher authorities for proper ICT implementation.
- Lack of proper ICT training among the staffs.

9. Suggestion:

- More staff should be recruited.
- Proper ICT implementation policy should be developed in these college libraries.

- Proper Training should be given to the staffs for handling ICT related tools and techniques.
- College authorities should pay attention for the development of ICT infrastructure in the colleges.
- Library user's orientation should be on regular basis.
- College library staffs should draft a proposal first for ICT implementation and submit it to the authority for approval.
- Library vacant post should be recruited immediately
- Many library supporting staffs are working on contractual basis for a long time, their service should be permanent for smooth function of the library.

10. Conclusion:

Thousands of students enrolled each year in these colleges for higher education but still proper library resources and services are not available. College library hold an important position in higher educational institutions. Due to the rapid growth in ICT and information explosion now it is necessary for the college to extend their ICT infrastructure and resources. College library plays an important role in fulfilling the objective of the college. In west Bengal still many degree college libraries are not sound in ICT infrastructure and e-resources. Govt. should take necessary step in this regard. Due to the several obstacles libraries are failed to fulfil the demand of the users. Both central and West Bengal Govt. already started initiatives

for the improvement of the college libraries and the situation is changing. Hope, in future the ICT infrastructure and e-resource services in degree college libraries in West Bengal would be in a sound position.

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