

Computer Application in Government aided College Libraries in Birbhum District, West Bengal : A Study.

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Abstract

Introduction :

Computer has an outstanding efficiency, performance and ability to handle large volumes of data and for this reason it is gaining popularity in the fields of library and information services. The usage of IT for better relationship of information in various libraries has filled fundamentally lately. This expansive usage of IT in libraries endlessly out influences all pieces of the consistent library environment.

Objectives of this study :

This study has been under taken to explore the use of computer in under graduate college libraries operations and services in the Bolpur Sub-Division under Birbhum District. To find out their present status and conditions, what are the problems they are facing in their day to day library management and services and the measure would be useful for the betterment of academic library development ? The objectives of this study is to know the application & progress of computer in college libraries and to identify the provision of infrastructure in college libraries.

Methodology :

To conduct of this study a large variety of data-gathering and analysis techniques have been adopted such as surveys, interviews, observations, documentary analysis in college libraries in Birbhum District, West Bengal to collect the primary data.

Scope & Limitation :

This study is based on 5 (Five) Government Aided Colleges Libraries of Bolpur Sub-Division under Birbhum District due to limitation of time period. The data has been collected during the period of June 2022 to August 2022.

Findings :

From the above study, it is found that three colleges have been established during the 2nd half of 20th century whereas two colleges have been established beginning of the 21st century.

In case of computer used in college library for housekeeping operation and services, it is found that Bolpur College has the highest number of computer followed by Chandidas Mahavidyalaya and Kabi Joydeb Mahavidyalaya in second position using four computers. On the other hand Sambhunath College and Punidevi Chaudhury Girls' College have three computers each for the library automation work.

For the purpose of creation of library database three colleges have KOHA software whereas two colleges have locally software. All the colleges have internet facilities for searching different information using internet.

Keyboards: College Library, Computer, Information & Communication Technology, Internet

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I. Introduction :

Computer has an outstanding efficiency, performance and ability to handle large volumes of data and for this reason it is gaining popularity in the fields of library and information services. Many library and information centers' routine works are being proficiently performed by the computers. The computer has able to attract attention and impressed the society as well as in the fields of library and library personnel have been using in library management jobs, such as acquisition, cataloguing, classification, circulation, serials control, bibliographic control and information storage and retrieval etc. Many new services, like SDI, CAS and Current Content Service etc. can also being render easily with the help of the computer. Library computerization has

become a vital issue among librarians throughout the world. The library automation runs from trumpeting automation as the beginning of a new age era of universal access and librarians become the gateway of the information age (Mendelsohn, 1997).

This is the era of 'information' and 'knowledge' and the traditional method of the academic library knowledge management have been proved inadequate and insufficient to meet the needs of the users of present days. The new trends (Use of Computer as a helping devices and related parts) are being slowly affects in the library field, because of the increases in information, requirements and awareness of computer by the users (Haridasan, 1998).

Academic library is information organization and to manage information requires four main components i.e. Structure, Library Personnel, Technology and Goal/Objectives. These components act as key factors and worked together. Among these four factors, library personnel play the significant role in library organization and dissemination of information in the skillfully. The need of effectiveness information management is mainly depends on the attitude of the library personnel and combination of technology, objectives of the organization and infrastructure. The library personnel tried to maintain objective of the organization and on that basis required for information management of the library for smooth handling (Banerjee, 2010).

The application of computer in library management and services can be fulfill these needs and upgrade with the present day's situation. Still there are many academic libraries in this district which are running with the traditional (manual) or partial automation systems to cater information to the users. The development of academic libraries acclimatized to computer environment in their housekeeping work and services (Vasishta, 2007).

A computer is capable enough in reducing the storage space and helpful in finding information in less time and which cannot be possible in traditional systems and storage and retrieve information so quickly from its memory (Neelameghan, 1996).

The automation of academic library helps to enhance the development of library services and creation of library database systems much easier and for selecting, acquiring, and processing of library materials also done scrupulously (Joshi & Singh, 2008).

The present study is focused on the use of ICT such as computers ,software (both application and operation), Communication Technology and some other related technology which may be helpful for application in college libraries routine works. The present study is to find out the present status, problems and prospect of the under graduate general degree college libraries of Bolpur Sub-Division under Birbhum District in West Bengal.

Objectives of this study:

This study has been under taken to explore the use of computer in under graduate college libraries operations and services in Birbhum District. To find out their present status and conditions, what are the problems they are facing in their day to day library management and services and the measure would be useful for the betterment of academic library development? The objectives of this study as follows:-

- To know the application & progress of computer in college libraries;
- To know the present status of library databases & software and
- To identify the problems relating to computer application

II. Methodology :

To conduct of this study a large variety of data-gathering and analysis techniques have been adopted such as surveys, interviews, observations, documentary analysis in college libraries in Bolpur Sub-Division under Birbhum District, West Bengal to collect the primary data.

Scope & Limitation :

This study is based on 5 (Five) Government Aided Colleges Libraries of Bolpur Sub-Division under Birbhum District due to limitation of time period. The data has been collected during the period of June 2022 to August 2022.

III. Literature Review :

Literature search found that there is no research had been conducted, or at least published in both local and international sources, on the application of computer in college libraries of Birbhum District. However, Library and Information Science Abstract (LISA) database search indicated that some studies have conducted elsewhere either in India or abroad on library automation. The researcher tried to collect the views of different eminent personalities in the fields of library Science and articles written by various authors in the related fields.

The present author has been handicapped by his inability to collect all the related information either in printed form or in electronic form. Under the circumstances the researcher has based his thesis on data collected from the previously mentioned sources.

As far as possible, information has been collected from leading papers on Library and Information support to the 'Application of Computer in the College Library and its related fields. In this chapter an attempt has been made to present the views, idea, and opinions of the authors as expressed in their articles or documents.

Dasgupta (1980) worked on the topic entitled 'A Notes on resource sharing in libraries' and library database can help to 27 maximum utilized of library resources. He shows the resources are the vital and the costs of the documents are increasing day-by-day and felt that the resource sharing is the done a lot in this regards.

Soni and Aggarwal (1989) made a study on the topic entitle 'Computers: systems and programming' and discussed on the aspects of computer functions and languages. They mainly discussed on the basis different courses which requires for mainly students as well as the library professionals.

Jha (1991) worked on the topics entitled 'Higher Education in Ancient India' and discussed the education system in ancient India. Discussed the scope of education in India and religious bodies had occupied and influence the education. Discussed the various methods of education and teaching in Indian education systems.

Singh and Valli(1991) studied on the topic entitle 'Challenges for academic librarianship' and discussed performing the maintenance and conservation function for learning community. The library profession keep pace with the change, reexamination its mission which is relevant in the information era. The library school should relate the education pattern with the present days need. Because higher education has been changing at a rapid pace and past efforts become outdated. The new appraisal of performance needed reevaluated.

Chakraborty (1993) made a study on the topic 'Information manpower-strategic issues for development' and describes need for planning of information manpower and the present scenario. He also discussed the rapid growth of subjects taught in LIS schools but there is no suitable approach to meet the need. In this situation LIS School have been teaching some subjects to meet the present day requirements.

Rajgopalan (1993) delivered the lecturer ILA Conference and describes his views on Indian Librarianship. 'Trends and Perspectives in Indian Librarianship', in the Presidential address in Indian Library Association's Conference in 1987.

Lathika (1995) worked on the topic entitled 'UGC Assistance for provision in computer in University and College Libraries' and discussed scope for granting assistance for setting up computer facilities in higher learning Institutional libraries. Author also describes the utilizations of information technology of computer and communication to network libraries in the country. Computer facilities established in college and university libraries can be utilized for automating their library systems also.

Nair (1995) studied on the topic entitled 'Revitalization of college libraries with computer assistance' in the document Academic library automation and describes the changing in library operation and functions. With the development of science and technology library can enjoy the benefit and provides better services to its users.

Ray (1995) worked on the topic entitle 'INFLIBNET: A discussion' and describes on the function of INFLIBNET. The author also discussed the area Network covered Research and Development Organizations, Universities, colleges and Information Centres. INFLIBNET worked in the four stage, such as national level, state level, district level and zonal level.

Panigrahi and Kanakachary (1995) studied on the topic entitled 'Automated information retrieval system for academic libraries' and discussed the information retrieval systems in library. They have emphasized the information systems, needs for library computerization, information retrieval process and creation of database. They have discussed the searching systems of information system, its speed of searching and effectiveness. Finally they have expressed their opinioned that the new technology should adopt by the library professionals.

Pillai (1995) worked on the topic entitled 'Automated information services in Cochin library' and discussed importance of information, particularly in science and technology. Author has emphasized on the technology requires to obtain the desired information and shows that how the library can dealt with the new technological environment. In spite of continuous efforts for dissemination of information effectively to the members, library faced many hindrances. However, new horizons are being opened up by the development of ICT.

Rajasekhran (1995) studied on the topics' entitled 'Computerization of Kerala Agricultural University: a proposal' and describes the development of Agricultural education and research. He has emphasized library automation for the better services rendered to its users community and attempts to solve the long sustainable problems with the help of computer uses in library. Author has described that the library can no longer be considered as a depository, but recognized as the nucleus of the academic activities, provides lifeblood of

research in any academic institution. He also describes that the effectiveness of library services will certainly improve if professional leadership and coordination of with the authority is the essential factors. Computerization of Kerala Agricultural University has discussed and their needs of computer in University Library and areas of computer application are discussed.

Ranjan (1995) studied on the topic entitled 'Information trends in library for computer professionals' and discussed on the essence of information as it is an important source for development. Author has emphasized that the research and development of computer technology is very much costly and scientific communication depends on it. Library is the main source to cater information to its users and for the purpose of service library needs computers and related devices and software.

Ravikumar (1995) worked on the topic entitled 'Software package for academic library systems' and discussed on the various library software package available in the Indian market. Author has describes the some of the library management software and their functional details, operating environment, and various fields and sub fields of the package. He opinioned that lack of finance prevent from acquiring computer systems of academic libraries in India.

Sathikumar (1995) studied on the topics entitled' Computer-Communication network of academic and Research libraries' has discussed the brief account of INFLIBNET and its objectives and functions. Author also describes the implementation of INFLIBNET can go a long way in vitalizing information transfer scenario in the country with a minimum investment, if U. G. C. (India) can strengthen our university and college libraries to enable them to participate in the programme.

IV. Data Analysis & Discussions :

Profile of the studied college libraries :

For the purpose of this study, five (5) colleges under Bolpur Sub-Division have been studied. The table-1 shows the name of colleges with its foundation year. Bolpur College, Bolpur is established in the year 1950, followed by Sambhunath College, Labpur (1963), Chandidas Mahavidyalaya, Khujutipara (1972). These three (3) colleges have been established during 20th Century. Whereas Punidevi Chaudhury Girls' College, Bolpur (2004) & Kabi Joydeb Mahavidyalaya, Illumbazar (2007) have been established beginning of the 21st century.

Table-1 Name of the studied colleges with its establishment year:

Sl.No.	Name of the Colleges	Year of Establishment
1.	Bolpur College, Bolpur	1950
2.	Sambhunath College, Labpur	1963
3.	Chandidas Mahavidyalaya, Khujutipara	1972
4.	Punidevi Chaudhury Girls'College, Bolpur	2004
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	2007

Present status of the College Libraries of Birbhum District :

Data obtained from the questionnaires, interview and survey has been analyzed the relevant part for the purpose of this study and following tables, charts and figures have been prepared.

Subjects taught in undergraduate colleges of Birbhum District :

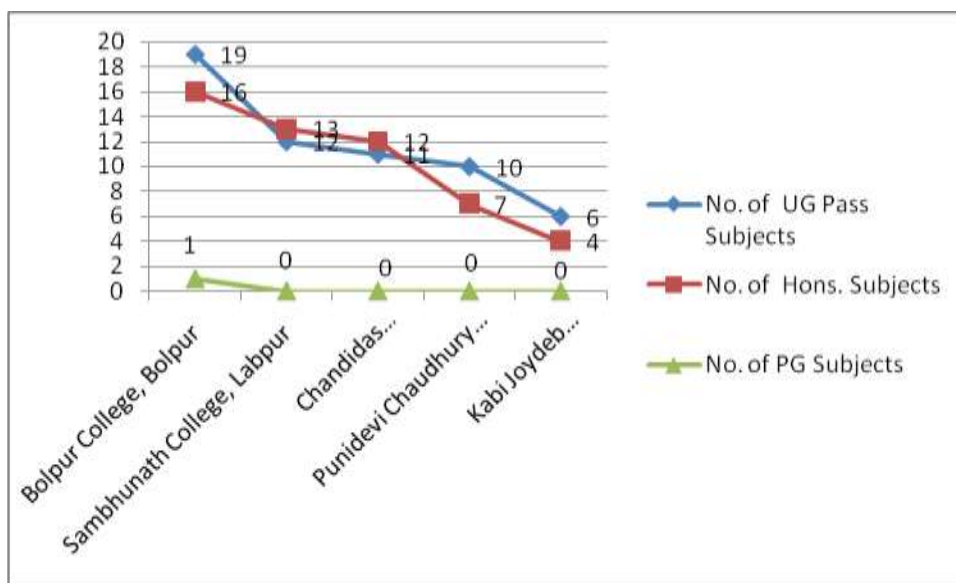
Discussed has been made on the courses offered by the studied colleges and it will determine the varieties of subjects (General, Honourse and PG Courses) are taught in studied colleges. Among the responded colleges, only one college offers Post Graduate Courses. The present position of subjects taught in these under graduate colleges as given in the table-2

Table-2 Subjects taught in undergraduate colleges of Birbhum District :

Sl. No.	Name of the Colleges	No. of UG Pass Subjects	No. of Hons. Subjects	No. of PG Subjects
1.	Bolpur College, Bolpur	19	16	1
2.	Sambhunath College, Labpur	12	13	0
3.	Chandidas Mahavidyalaya, Khujutipara	11	12	0
4.	Punidevi Chaudhury Girls'College, Bolpur	10	7	0
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	6	4	0

The table-2 reveals that the subjects approved by the universities (The University of Burdwan) and number of subjects are taught in each of the studied colleges. Highest no. of UG pass subjects (i.e. 19) and Hons subjects (i.e. 16) are offered by the Bolpur College. One PG subject is also offered by Bolpur College. Sambhunath College offers 12 UG pass subjects and 13 Hons subjects. Chandidas Mahavidyalaya offers 11 UG pass subjects and 12 Hons subjects. Punidevi Chaudhury Girls' College offers 10 UG pass subjects and 7 Hons subjects. Whereas Kabi Joydeb Mahavidyalaya offers 6 UG pass subjects and 4 Hons subjects. 2nd highest UG pass subjects and Hons subjects are offered by Sambhunath College. PG subjects are not offered by the studied college except Bolpur College. Data can be also represented by the figure-1

Figure-1 No. of Subjects taught in UG & PG levels of studied colleges in Birbhum District :



Users (Member) of the College Library of Birbhum District :

The users of the college libraries are students, teachers and non-teaching staff of the college. At present a few number of ex-students are using the Library documents and seek advice from their teachers regarding future studies, services, other academic affairs and even some

local people are use to come for using library materials by using reading room of the college library. Students is the largest part of the library users and they are usually come to library either receive books for home or reading issue. They are guided by their subject teachers and using library reading room, when their off time periods. The next bigger part of the library member is the teachers of the college and they use college library very much intensively. Non-Teaching staff of the colleges are usually issued books on novel or fiction and in some cases, they have received books from college libraries of requirements their wards or relatives on the courses studied. Usually, in the case of reading, non-teaching staff used to come to library and reads the news papers. Along with these members, local educated people, ex-students, ex-teachers are used college libraries. As they are comes to use the library off and on and only number of teaching staff, students and non-teaching staff given in the table 3 and rest part has been ignored.

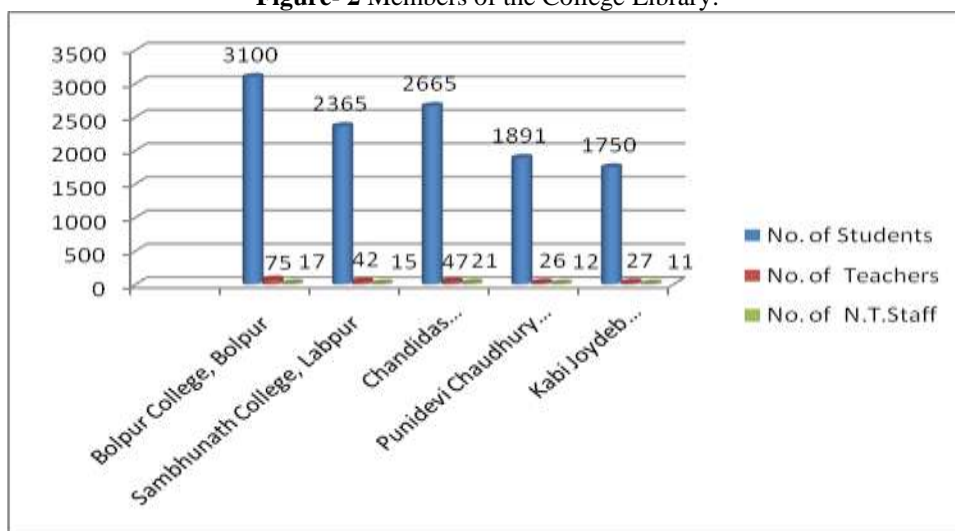
Table 3 Members of the College Libraries (Students, Teachers and Non-Teaching Staff) in Birbhum District :

Sl. No.	Name of the Colleges	No. of Students	No. of Teachers	No. of N.T.Staffs
1.	Bolpur College, Bolpur	3100	75	17
2.	Sambhunath College, Labpur	2365	42	15
3.	Chandidas Mahavidyalaya, Khujutipara	2665	47	21
4.	Punidevi Chaudhury Girls' College, Bolpur	1891	26	12
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	1750	27	11

The Table 3 indicates that Bolpur College has the highest no. of students and teachers as library members whereas Chandidas Mahavidyalaya has highest no. of non-teaching staff as library members. Chandidas Mahavidyalaya has the 2nd highest no. of students and teachers as library members followed by

Sambhunath College which is third position in case of students and teachers. Punidevi Chaudhury Girls' College & Kabi Joydeb Mahavidyalaya have the more or less equal no. of students, teachers & non-teaching staff as library members. The above table may be represented by the following figure-2

Figure- 2 Members of the College Library:



Library Automation Data:

Academic libraries primarily college and university libraries play some positive and meaningful contribution towards the quality of education and modern libraries helps its users to step into the world of adventure and learning. College and university libraries have an enormous source of learning and encourage have important task before them in education to encourage the concept of learning as a potentially enjoyable life-long process. To perform this task effectively, like any other modern library, academic libraries also badly need the help of Computer Technology in order to acquire, arrange, process and disseminate the huge amount of information and knowledge in the form of books and journals and others printed and e-format materials, produced in unimaginable large quantity after the Second World War. Traditional ways of library operations and services not able to cope up with the present situation and library computerization can help the modernized task easier. Automation in academic libraries is a challenging job due to the various natures of collection, organization and services of the libraries involved. Computerization supports the housekeeping activities of the libraries and can play a better role to manage newly challenge situation and render developed services. Library computerization has two parts, one part is hardware and other part is software.

Computer used in College Library Housekeeping and Services of Birbhum District :

Computerization of college libraries requires hardware; computer peripheral includes VDU, CPU, UPS, Printer, Scanner etc. and software. The use of computer in college libraries of the Birbhum District have been installed as the initiative and direction of the college authorities and it was installed for the purpose of library services and operations. So that it differed from one college to other college in case of software and consultation with the Professional Association and Teachers' of the Library Schools was ignored. The status of no. of computers installation and its summary shows in the table-4 & figure-3 respectively.

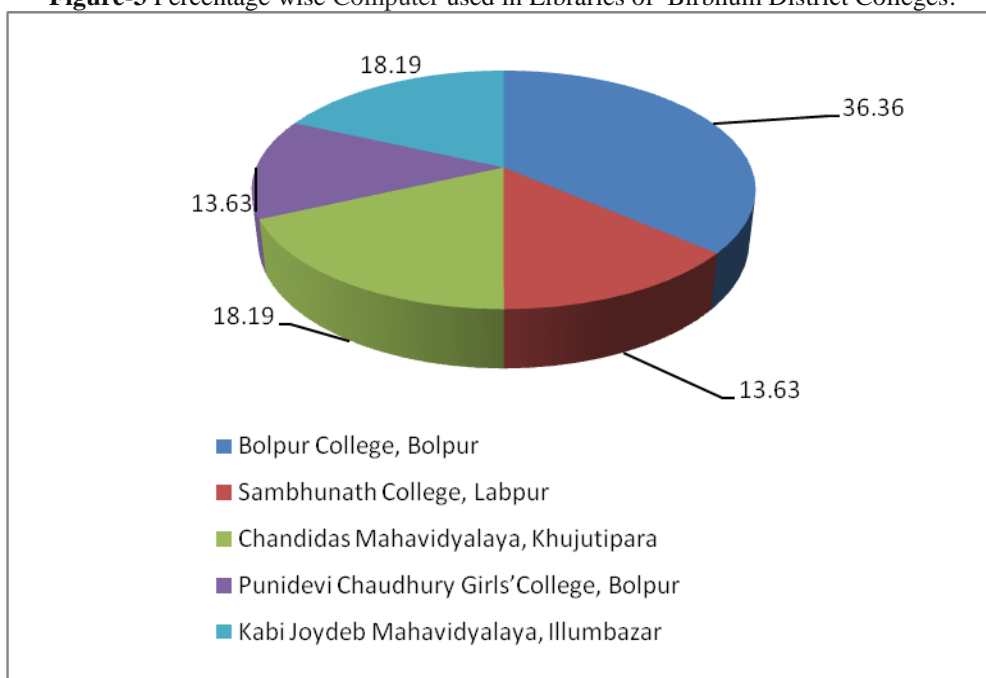
Table-4 Computer used in Libraries of Birbhum District Colleges :

Sl.No.	Name of the Colleges	No. of computer used	Percentage (%)
1.	Bolpur College, Bolpur	8	36.36
2.	Sambhunath College, Labpur	3	13.63
3.	Chandidas Mahavidyalaya, Khujutipara	4	18.19
4.	Punidevi Chaudhury Girls' College, Bolpur	3	13.63
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	4	18.19
Total		22	100

The table-4 reflects that the highest no. (8 i.e. 36.36 %) of computer has been installed at Bolpur College library followed by Chandidas Mahavidyalaya library & Kabi Joydeb Mahavidyalaya library, both the

libraries have installed 4 computers each (i.e. 18.19%) Sambhunath College library and Punidevi Chaudhury Girls' College library have installed 3 computers each (i.e. 13.63%). Percentage wise of computers may be represented by the figure-3

Figure-3 Percentage wise Computer used in Libraries of Birbhum District Colleges:



Software used by the college libraries of Birbhum District :

The next important part of library automation is the software and data of five studied libraries have been discussed. The general-degree college libraries have been using various types of library management software. Some of the college libraries have been using locally prepared software because of the less cost and some colleges are using standard library management software.

Table-5 Software installed in each college library of Birbhum District :

Sl.No.	Name of the Colleges	Name of Software	Type of Software
1.	Bolpur College, Bolpur	KOHA	Open Source
2.	Sambhunath College, Labpur	SNCLMS 1.00	Commercial
3.	Chandidas Mahavidyalaya, Khujutipara	KOHA	Open Source
4.	Punidevi Chaudhury Girls' College, Bolpur	CAMS 4.00	Commercial
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	KOHA	Open Source

The table-5 shows that three (3) college libraries use Koha software and two college libraries use locally prepared software. These two software are (i.e. SNCLMS 1.00 & CAMPS 4.00). It indicates that 40 % college libraries use commercial software whereas 60% college libraries use open source software.

Creation of Library Database and Internet connection of college libraries of Birbhum District :

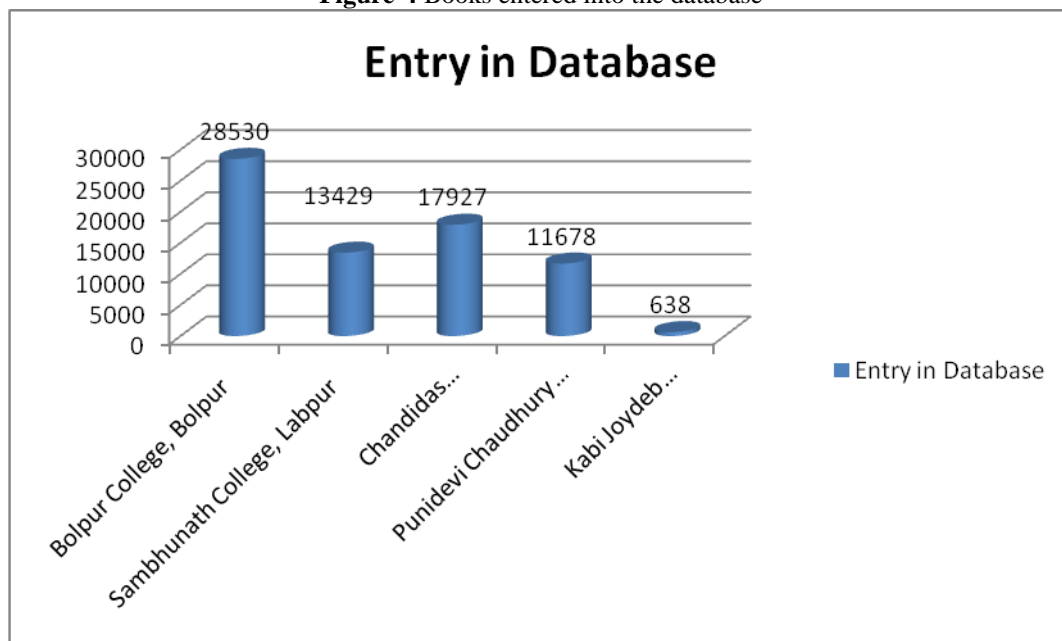
All the five studied libraries have introduced Integrated Library Management Software (ILMS) for college library management and operations. The present position of creation of library database and internet connections of college libraries of Birbhum District have given in the table-6.

Table-6 Creation of library database and Net connected college libraries of Birbhum District:

Sl.No.	Name of the Colleges	Entry in Database	Internet Facilities
1.	Bolpur College, Bolpur	28530	Yes
2.	Sambhunath College, Labpur	13429	Yes
3.	Chandidas Mahavidyalaya, Khujutipara	17927	Yes
4.	Punidevi Chaudhury Girls' College, Bolpur	11678	Yes
5.	Kabi Joydeb Mahavidyalaya, Illumbazar	638	Yes

The table-6 describes that highest no. of books has been entered into the database by Bolpur College library followed by Chandidas Mahavidyalaya library, Sambhunath College library, Punidevi Chaudhury Girls' College library and Kabi Joydeb Mahavidyalaya library. All the studied college libraries have the internet facilities to search & retrieve documents from the different databases. Entry in database may be represented by the figure-4

Figure-4 Books entered into the database



V. Findings :

From the above study, it is found that three colleges have been established during the 2nd half of 20th century whereas two colleges have been established beginning of the 21st century.

It is also found that highest number of UG pass and honours subjects are offered by Bolpur College followed by Sambhunath College, Labpur. Whereas Kabi Joydeb Mahavidyalaya, Illumbazar offers lowest number of UG pass and honours subjects. Only one PG subjects is offered by Bolpur College.

The study also finds that Bolpur College has the highest number of library members followed by Chandidas Mahavidyalaya, Khujutipara and Kabi Joydeb Mahavidyalaya, Illumbazar has the lowest number of library members.

In case of computer used in college library for housekeeping operation and services, it is found that Bolpur College has the highest number of computer followed by Chandidas Mahavidyalaya and Kabi Joydeb Mahavidyalaya in second position using four computers. On the other hand Sambhunath College and Punidevi Chaudhury Girls' College have three computers each for the library automation work.

For the purpose of creation of library database three colleges have KOHA software whereas two colleges have locally software. All the colleges have internet facilities for searching different information using internet.

At the time of survey, it is also found that there are different types of problems face by the librarian for the hassle free implementation of computer in library; these are lack of funding, lack of trained professional library staff and sometimes negative attitude of the authority, etc.

VI. Conclusion :

The use of computer and ICT in college library automation is easy to install at present and comfortable to handle. It requires managerial skill and technological knowledge.

Computer application in college libraries will create new job opportunities and higher salaries. The recognition of professional staff will lead to job satisfaction. The social cost of proposed systems will be only initial investment and annual maintenance cost and training expenditure of the library staff, but this will do a great deal in the development of college library services.

Prediction for the future is more complicated and international information sharing and collaboration are greatly facilitated with the introduction computer and communication technologies. The information and

communication technology has changed the complexion of the academic library. Librarians will have a hard task to lead and run the system without these skills.

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