RESOURCE SHARING AND INFORMATION NETWORKING OF LIBRARIES IN BANGLADESH: A STUDY ON USER SATISFACTION

S.M. Mannan [1] **and Manik Lal Bose** [2]
[1] Department of Library and Information Science
University of Dhaka, Bangladesh
[2] GIS and Socio-Economic Consultant
International Rice Research Institute (IRRI)
Banani, Dhaka, Bangladesh

ABSTRACT

An analysis of 25 libraries and 100 users of different categories have been conducted to measure the satisfaction level of users on library networking and resource sharing activities among the major libraries in Bangladesh. The key variables for this study include: the existing status of infrastructures and facilities, collections, mode of subscription of journals, user's visit to the libraries, availability of services and use of databases. User's suggestions to improve the library services have also been included.

KEYWORDS: Library networking; Resource sharing: Libraries in Bangladesh; Library services; Users; Databases; User satisfaction, Users' suggestions.

INTRODUCTION

Library cooperation, resource sharing and networking are used interchangeably as synonymous terms for collaborative efforts of information exchange among libraries.

According to Kaula (1986) resource sharing is not a new concept in the field of libraries. The concept that goes by the term 'library co-operation' has been in use all along among those who had been working in libraries or had anything to do with the development of libraries. The term, however has been replaced by a new coinage —'Resource Sharing'— which sounds more attractive and makes better sense in this age of inflation and budgetary reduction. Thus resource sharing in

libraries has become a necessity, and has gained worldwide acceptance.

Networking is information/resource sharing through computers and telecommunication links which transmit information or data from one library to another. According to Smith and Parker, as quoted by Zhang (1990), "Networking is more structured type of cooperation in which definite regions or areas or definite organizations are connected by electronic or other means to promote inter-library loaning of materials, in-service training and other sharing of resources." It can be stated that library cooperation and resource sharing have been replaced by the modern term networking with the same connotation except technological application for achieving the

objectives of resource sharing. Networking has become a very powerful link in the coordination and dissemination of library resources.

Objectives of Resource Sharing and Networking*:*

The objectives of resource sharing, as seen by Kaula (1986), is to maximize the availability of material and services and to minimize expenses. In other words, the principle behind resource sharing has been the availability of maximum service at the minimum cost or the maximum service at the same cost. The objectives of resource sharing are to create an environment in which libraries can offer better services and more materials for the same cost. It aims to make the resources of one library available to users of other library and vice-versa. The main objectives, therefore, are:

— increase availability of resources
— extend the accessibility of resources
— diminish cost, and
— promote full utilization of resources

Allen Kent, Bhargava (1986) stated the objectives of resource sharing networks as: "Library user should have access to more materials or services providing level service at less cost, increased service at level cost, or much more service at less cost."

It is noticeable that many possible objectives can be identified for specific networks. These objectives can be achieved without adversely affecting the agenda of the participating libraries, although their

methods of operation must be adjusted as required. Similarly, the objectives can be realized by sharing materials and resources in a mutually beneficial way, by

— sharing of the burden of purchasing materials;
— sharing of the burden of processing the materials;
— sharing of services; and
— sharing of human expertise.

Areas of Resource Sharing:

The area and the scope of resource sharing are wide, comprising mainly people, processes, materials or any other possession of the library. All these are subject to common sharing for mutual benefits. According to Sharma (1992), some of the areas of cooperation may be enumerated as under: "shared or cooperative acquisition, storage, technical processing, lending or inter library loan, as well as any other cooperative ventures."

Essential Factors Affecting Networking/Resource Sharing:

The major factors that affect the networking of libraries are:
— availability of computerized databases;
— availability of communication facilities (computer, telephone, satellite communication, reprography, fax, e-mail, etc);
— standardization of library organizational practice;
— availability of financial resources;
— efficiency in the governance of network;
— basic agreement.

According to Unesco (1985) the major networking and resource sharing functions and activities are identified as under:

Functions: Cooperative acquisition; Assignment of specialization in material acquisition; Co-oriented subscription; Exchange of duplicate holding; Cooperative cataloguing; Inter-library loan; Reciprocal borrowing privileges; and Reference and/ or referral service.

Activities: Union catalogue of books and periodicals; Indexing and abstracting services; List of new arrivals on accessions/acquisitions list; Bibliography development; Network newsletters; Directories and inventories; Manuals; Translation service; Users interest survey; Joint research project; In-service personnel training; Workshops and meetings; Marketing of network services; Photocopying service, etc.

As to users' satisfaction, the existing status of networking and resource sharing activities among the libraries in Bangladesh is discussed below.

RATIONALE AND OBJECTIVES OF THE STUDY

It has been observed that the attitude of the information user in Bangladesh has been quite passive. There is low demand for current information and the majority of the academic community are not frequent users of information. There is no recognizable pressure from the user end on the libraries and information centers for supplying information. The demand for information among the scientific community in Bangladesh is negligible. There is, however, a need-based demand for information which is generally sought while writing a seminar or conference paper, dissertation or a research project. The concept of networking and resource sharing in Bangladesh is in its infancy and as such, it becomes imperative to know the reasons for such neglect towards this concept. This is one of the reasons that Bangladesh are much behind in developing library and information systems. With the advent of new technology, there is pressure from technological advancement to change fast in order to cope with the challenging world. There is no difference of opinion about the importance and priority of resource sharing and networking. Information revolution on the one hand, and inflation of reading materials on the other, leave no other alternative than to avail the information resources not only within the country, but globally. But there are various constraints in implementing any networking plan. In spite of the unfavorable conditions, a start has to be made so that the country does not lag behind. It needs concerted as well as integrated efforts of administrators, politicians and information professionals for planning and implementation of network plans of libraries and information centers, so that resources of one organization is accessible and available to others who need them. The ultimate aim of networking and resource sharing is to provide the right information expeditiously to the user as and when required.

Keeping all these in mind, the present study investigated the level of users' satisfaction of the libraries of Bangladesh and their networking and resource shar-ing services at the national and interna-tional levels. Specifically, the study investigated the following issues:

— The present scenario of library services to the users in Bangladesh with special reference to universities and special libraries;

— The users' perceptions about the present status of resource sharing, networking and telecommunication in Bangladesh;

— Information seeking behavior of academic community, scientists, re-searchers, and administrators; their information needs, degree of depen-dence on their institutional libraries and those outside.

METHODOLOGY

The available literature on the topic has been studied and reviewed to examine the status of library and information system and networking and resource sharing activities among the libraries in Bangla-desh. To ensure that different types of libraries (academic, special, public and national) are represented, twenty-five libraries were purposefully selected for investigation (Table 1).

To investigate the user's satisfaction, one hundred users from various groups like students, teachers, researchers, scientists and administrators have been interviewed

who are the frequent users of the sampled libraries. Information was collected us-ing two sets of structured questionnaire of which one was prepared for the survey of the sample libraries and another for the interview of the users. Both the question-naires were duly pre-tested and finally structured keeping in view the objectives of the study.

Based on random sampling, one hundred twenty questionnaires were filled-in by different categories of library users, e.g. students, teachers, researchers, scientists, administrators and others. After a quality control check, it was found that one hun-dred questionnaires were filled up properly which have been tabulated and analyzed for this study. The sample of the user is given in Table 2.

FINDINGS AND DISCUSSION

The results of the survey are presented in two broad sections: the library perspec-tives and the user's perspectives.

Library perspectives

Collection of books, periodicals and other items

It is observed that all libraries collect books and journals irrespective of their types. Among the libraries, about 64 per cent have collected thesis of postgraduate studies. Almost 32 per cent libraries own more than hundred thousand books and periodicals. The Dhaka University library possesses the highest number of books followed by the National Library of

Table 1: Libraries and Information Centers Surveyed

	Name of the library	Type of library	Year of establish-ment	Location
01	Dhaka University Library	Academic	1921	Dhaka
02	Bangladesh University of Engineering and Technology (BUET) Library	Academic	1961	Dhaka
03	Jahangirnagar University Library	Academic	1970	Savar, Dhaka
04	North-South University Library	Academic	1992	Dhaka
05	Chittagong University Library	Academic	1966	Chittagong
06	Rajshahi University Library	Academic	1953	Rajshahi
07	Shahjalal University of Science & Technology Library	Academic	1991	Sylhet
08	Khulna University Library	Academic	1991	Khulna
09	Bangladesh Agricultural University Library	Academic	1962	Mymensingh
10	Bangladesh Institute of Development Studies Library & Documentation Centre (BIDS-LDC)	Special	1974	Dhaka
11	Centre on Integrated Rural Development for Asia and Pacific (CIRDAP) Library	Special	1979	Dhaka
12	Bangladesh Academy for Rural Development Library	Special	1959	Comilla
13	Bangladesh National Scientific and Technical Documentation Centre Library (BANSDOC)	Special	(1962) 1972	Dhaka
14	Agricultural Information Centre AIC	Special	1988	Dhaka
15	Fisheries Research Institute Library and Documentation Centre (FRILDOC)	Special	1987	Mymensingh
16	Diarrhoeal Information Services Centre (DISC)	Special	(1962) 1978	Dhaka
17	Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM) Library	Special	(1956) 1975	Dhaka
18	Institute of Postgraduate Medicine and Research (IPGMR)Library	Special	1965	Dhaka
19	Bangladesh Atomic Energy Commission (BAEC) : Library	Special	1964	Dhaka
20	National Library of Bangladesh	National	1975	Dhaka
21	National Health Library & Documentation Centre (NHL-DC)	National	1974	Dhaka
22	Community Development Library	Public	1980	Dhaka
23	Central Public Library	Public	1953	Dhaka
24	The British Council Library	Public	1952	Dhaka
25	United States Information Service (USIS)	Public	1951	Dhaka

Note: Years in parenthesis indicate the year of establishment of the organisations, but the original name has been changed during the year out of parenthesis.

Table 2: Composition of Respondents

Respondent category	Number of sample
Student	15
Teacher	43
Scientist	15
Researcher	21
Administrator	06
Total	100

Bangladesh and the Rajshahi University Library. The highest number of journals is owned by the library of Dhaka University followed by the libraries of Rajshahi University and Bangladesh Agricultural University. The BIDS and BARC libraries have a rich concentration of audio-visual materials (Table 3).

Table 3: Distribution of Libraries According to their Collection of Books and Other Materials

Name of library	Collection by type			
	Books	Journal volumes	Theses	Others
Central Public Library	119,275	100,00	0	60
The British Council Library	18,000	150,00	0	2,800
USIS Library	6,500	85	0	200
National Library of Bangladesh	25,0000	5,000	200	0
Community Development Library	20,000	300	400	1,000
Dhaka University Library	550,000	69,000	2,000	500
Jahangirnagar University Library	70,000	7,000	800	50
Bangladesh Univ. of Eng. & Technology library	110,150	10,706	886	0
Rajshahi University Library	233,814	34,592	0	0
Chittagong University Library	165,209	14,361	500	0
Shahjalal University Library	103,00	288	0	0
Bangladesh Agricultural University Library	128,908	33,448	2,736	0
Khulna University Library	16,000	600	35	0
North South University Library	7,328	63	0	40
IPGMR Library	22,000	300	1,200	0
BIRDEM Library	5,000	126	58	1,200
National Health Lib. & Doc. Centre	15,000	10,500	0	50
ICDDR'B Library	10,000	18,000	40	100
AIC Library	13,000	1,650	50	0
BANSDOC Library	14,705	2,303	0	20
BIDS Library & Doc. Centre	100,000	20,000	200	25,000
CIRDAP Library	16,466	325	0	0
BAEC Library	13,000	15,000	500	20,000
BARD Library	55,000	3,600	30	0
FRI Library & Doc. Centre	2,500	31	3	2

Among the academic libraries, 70 per cent possess more than 20 thousand books. On the other hand, 80 per cent of the special libraries and 60 per cent of other libraries have less than 20 thousand books (Table 4). A similar pattern is seen for the number of journals and theses among the libraries that were surveyed. The academic libraries are very poor in their collection of audio-visual materials.

Unfortunately about 70 per cent of the academic libraries have not been provided with the above facilities.

The collection of books, periodicals and other materials of a library is usually developed for the high standard of the institution. It is also a regular source of upgrading knowledge and information both for the users and institution itself.

Table 4: Percentage distribution of libraries by type of organization and their collections

Collection by items	Type of organization (library)						Total	
	Academic		Special		Others			
	Number	%	Number	%	Number	%	Number	%
Number of books:								
<=10,000	1	10	3	30	1	20	5	20
10,001-20,000	2	20	5	50	2	40	9	36
20,001-100,000	2	20	2	20	-	-	4	16
>100,000	5	50	-	-	2	40	7	28
Total	10	100	10	100	5	100	25	100
Number of journals:								
<=1,000	4	40	4	40	1	20	9	36
1,001-10,000	1	10	3	30	2	40	6	24
10,001-20,000	2	20	3	30	2	40	7	28
>20,000	3	30	-	-	-	-	3	12
Total	10	100	10	100	5	100	25	100
Number of theses:								
0 (none)	3	30	2	20	4	80	9	36
1-100	1	10	5	50	-	-	6	24
101-500	1	10	3	30	1	20	5	20
501-1,000	2	20	-	-	-	-	2	8
>1,000	3	30	-	-	-	-	3	12
Total	10	100	10	100	5	100	25	100
Number of other libraries								
0 (none)	7	70	3	30	1	20	11	44
1-100	2	20	3	30	2	40	7	28
101-500	1	10	-	-	1	20	2	8
501-1000	-	-	1	10	-	-	1	4
>1000	-	-	3	30	1	20	4	16
Total	10	100	10	100	5	100	25	100

Various strategies can be adopted for this measure such as direct purchase, procurement through subscription, exchange and other functional issues such as cataloguing, classification and documentation.

Status of subscription for collecting journals:

All the academic libraries are subscribers of national and foreign journals. About 20 per cent of the special libraries and 40 per cent of the other libraries did not subscribe to any journals (Table 5). The academic and special libraries are very poor subscribers of inland journals compared to foreign

journal subscriptions. A similar pattern is also seen in the case of other libraries regarding the subscription of inland and foreign journals.
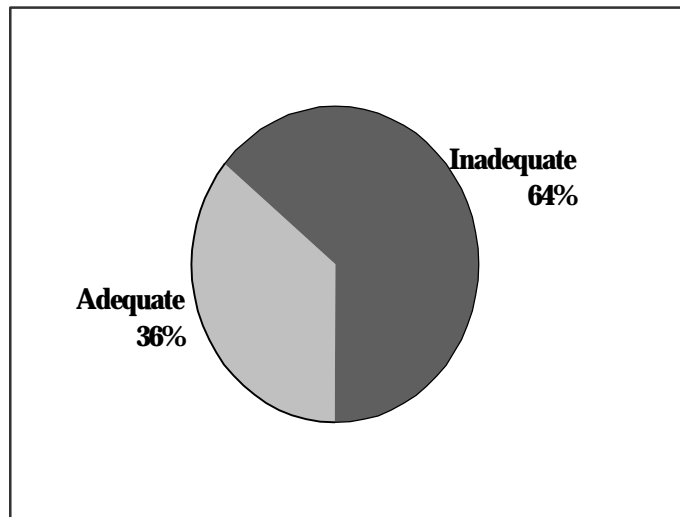
Status of collection

The questionnaire sought librarians' views regarding the status of their institution's collection in respond to the demand of books and periodicals by users and by nature of organization. Only 36 percent of the respondents felt that the status of collection is almost adequate (Figure 1). The situation indicates that almost two-third of the libraries are not able to satisfy their users because of inadequate collection.

Table 5: Percentage distribution of libraries by number of journals subscribed

| Number of journals subscribed | Type of organization (library) | | | | | | Total | |
| | Academic | | Special | | Others | | | |
	Number	%	Number	%	Number	%	Number	%
Number of inland journals subscribed:								
0 (none)	-	-	2	20	2	40	4	16
1-20	5	50	5	50	-	-	10	40
21-50	2	20	3	30	2	40	7	28
51-100	2	20	-	-	1	20	3	12
>100	1	10	-	-	-	-	1	4
Total	10	100	10	100	5	100	25	100
Number of foreign journals subscribed:								
0 (none)	-	-	1	10	-	-	1	4
1-20	2	20	2	20	2	40	6	24
21-50	1	10	2	20	-	-	3	12
51-100	1	10	4	40	2	40	7	28
>100	6	60	1	10	1	20	8	32
Total	10	100	10	100	5	100	25	100

Figure 1: Status of Collection

It can be inferred from the remarks that the libraries' status regarding collection of materials is very poor and they need some effective strategies for future improve-ment.

Collection by User Effectiveness:

The country has almost 6 million user turnover that followed and used the col-lection of books and periodicals of 25 libraries. On an average 237 thousand user turnover exists per library in a year. Among all users, over 38 percent belong to the Dhaka University Library and over 21 per cent belong to the central public library. The remaining 40 per cent users are using 80 percent of collected books and periodicals from 23 (92%) libraries. The lowest number of documents is found in the FRI Library and Documentation Centre and the highest number in the Dhaka University Library. Besides, the lowest number of users visited the CIRDAP library and the highest number used Dhaka University Library.

The highest number of documents per user (14) has been achieved by the National Library of Bangladesh though the Dhaka University Library possessed the highest number of books and periodicals; and the lowest number (0.02) is seen in the case of the North South University Library (Table 6). For the user effectiveness it is clear from the Table that very few libraries have collected adequate books and periodicals. The overall result indicates that there are 0.38 books and periodicals per user.

Table 6: Availability of books and periodicals for the user turnover in 1995-96

Name of library	Number of users and availability of books and periodicals per user in a year		
	Number of users	# of books & periodicals	Books & periodicals per user
Central Public Library	1,269,215	129,275	0.10
The British Council Library	313,000	33,000	0.11
USIS Library	21,910	6,585	0.30
National Library of Bangladesh	18,780	255,000	13.58
Community Development Library	59,470	20,300	0.34
Dhaka University Library	2,281,770	619,000	0.27
Jahangirnagar University Library	93,900	77,000	0.82
Bangladesh Univ. of Eng. & Tech.	117,375	120,856	1.03
Rajshahi University Library	500,800	268,406	0.54
Chittagong University Library	343,361	179,570	0.52
Shahjalal University Library	46,950	10,588	0.23
Bangladesh Agricultural University	104,229	162,356	1.56
Khulna University Library	60,722	16,600	0.27
North South University Library	328,650	7,391	0.02
IPGMR Library	172,150	22,300	0.13
BIRDEM Library	34,430	5,126	0.15
National Health Lib. & Doc. Centre	6,260	25,500	4.07
ICDDR'B Library	46,950	28,000	0.60
AIC Library	6,260	14,650	2.34
BANSDOC Library	14,085	17,008	1.21
BIDS Library & Doc. Centre	31,300	120,000	3.83
CIRDAP Library	3,130	16,791	5.36
BAEC Library	9,390	28,000	2.98
BARD Library	23,475	58,600	2.50
FRI Library & Doc. Centre	15,650	2,531	0.16
Average for a library	236,928	89,777	0.38

Figure 2 shows the proportion of different categories of users who used the libraries' collections. The highest proportions of users are undergraduates followed by postgraduates. Other 5 categories show only about 10 percent of total users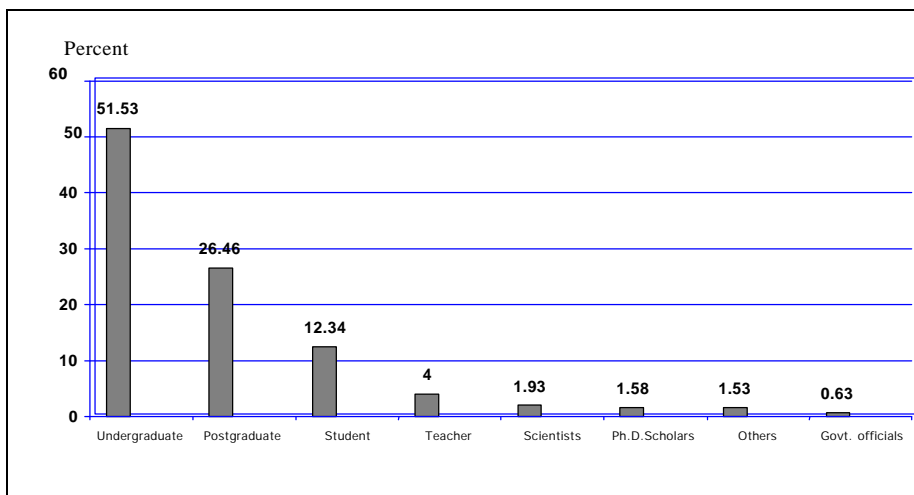, namely teachers, Ph.D. scholars, scientists, government officials and others from different segments of the population.

Adequacy of facilities:

About 24 per cent of the libraries indicate that their facilities are almost adequate. Twenty per cent of the libraries indicate

Figure2: Proportion of Different Category of Users

Percent

60

51.53

50

40

30
26.46

20

12.34
10
4
1.93   **1.58**   **1.53**
0.63
0

Undergraduate   Postgraduate   Student   Teacher   Scientists   Ph.D.Scholars   Others   Govt. officials

that their facilities are much inadequate. As a result, 76 per cent of the libraries face inadequacy in respect of their available facilities (Figure 3). It is observed that most of the academic libraries are very weak in terms of their available facilities.

Figure 3: Adequacy of hardware/software facilities

Inadequate 52%

Almost adequate 24%

Much inadequate 20%

77
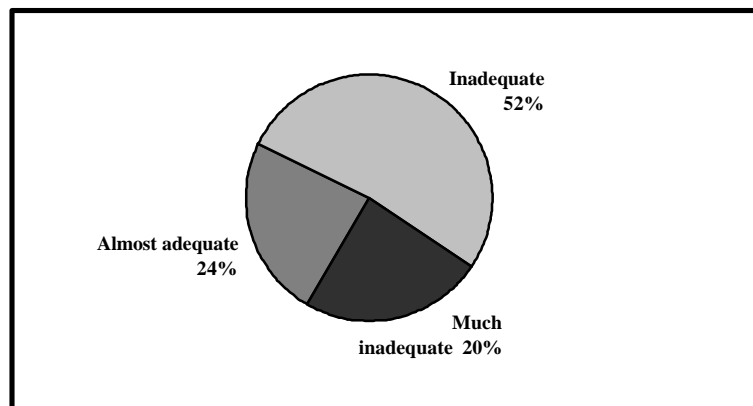
According to the users' interest, the service providers invariably collect mate-rials from other libraries. After obtaining the material from other libraries, most of the readers felt 'happy and satisfied' about the service they received from the librarian. Only two libraries, BUET and Khulna University mentioned that they were also 'almost satisfied' about the services they had received.

Users' perspectives

All the users were asked as to the frequency of their library visit, availa-bility of services they requested, whether they get help from the library personnel in order to collect materials/information, and availability of national and international databases in respect of the degree of usefulness. For further improvement of

the library services, suggestions were also sought from the users.

Selected Characteristics of the user

Information on users' characteristics was collected only for gender, category they belong to and their area of specialization. A total of 73 per cent of users surveyed were male and the rest female. Among the respondents interviewed 15 per cent were students, 15 per cent scientists, 21 per cent researchers, 43 per cent teachers and 6 per cent administrators (Table 7). The aim was to evaluate the status of network-ing and resource sharing among the libra-ries in Bangladesh. Each category have been divided into two groups i.e. low and high, based on professional skills denoted by C_1 and C_2. The low group consisted of 27 per cent and the high group 73 per cent.

Table 7: Professional characteristics of the user by status

Category of user	Status of user				Total	
	C_1 = low status		C_2 = high status			
	N	Row %	n	Row %	n	Col %
Student	3	20.0	12	80.0	15	15.0
Scientist	9	60.0	6	40.0	15	15.0
Researcher	12	57.1	9	42.9	21	21.0
Teacher	3	7.0	40	93.0	43	43.0
Administrative	-	-	6	100.0	6	6.0
All	27	27.0	73	73.0	100	100.0

Note for user status:
Student: C_1 = Postgraduate C_2 = M.Phil./Ph. D.
Scientist: C_1 = Junior C_2 = Senior
Researcher: C_1= Junior C_2 = Senior
Teacher: C_1 = College C_2 = University
Administrative: C_1= Low level C_2 = High level

The maximum number of users interviewed were from the high group because of their better understanding about the library. Although different segments of the users differ in their opinion, the importance of information as expected got preference in the modern world to the higher segment of the academic group, businessmen and researchers in Bangladesh. The following 29 areas of specialization were found among the users:

01. Rural sociology
02. Economic development
03. Community development
04. Liberation movement
05. Anthropology
06. Land distribution
07. Contemporary Marxism
08. Biotechnology
09. Biochemistry
10. Nuclear physics
11. Civil engineering
12. Agricultural engineering
13. Agricultural extension
14. Plant breeding
15. Plant pathology
16. Fisheries management
17. Aqua culture
18. Shrimp culture
19. Medicine
20. Cardiology
21. Diabetes & endocrinology
22. Nutrition
23. Population control
24. Trade
25. Advertising
26. Information science
27. Automated indexing
28. Computer information system
29. Socioeconomic information system

### *Status of the user's visit to the Library*

The frequency of visit by the users in their parent (institutional) library and other than parent library was collected using a 5 point scale i.e. always, frequently, occasionally, rarely and never. Table 8 presents a visit matrix of the users according to their parent and other library. About 91 users always visited their parent library and among them 55 users frequently visited, while in 27 cases users visited the library occasionally.

Only 91 per cent users reported that they always visited both their parent library and other libraries. Nine per cent respondents did not always visit their parent library but most of them always visited other libraries. It is interesting to observe that none of the libraries were fully equipped to satisfy their users. As a result, most of the users frequently visited other libraries for their information need. Another analysis shows that 15 per cent users visited only one library other than the parent library, 40 per cent visited two libraries and 45 per cent visited more than two libraries to fulfil their information needs (Figure 4).

Table 8: Visitation matrix of the user between parent and other library

Number of user visited parent library	Number of user visited other library			Total
	Always	**Frequently**	**Occasionally**	
Always	9	55	27	91
Frequently	3	0	0	3
Occasionally	3	3	0	6
Total	15	58	27	100

Figure 4: Number of libraries visited by the user
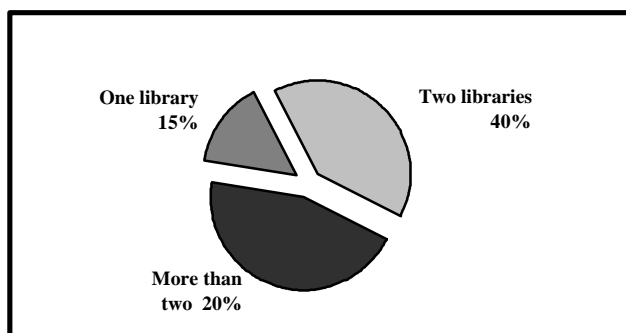
Extent of user satisfaction:

It is interesting to note that none of the users was completely satisfied with one library! Although there is no standard barometer for scientific measurement of human interest on satisfaction level, most of the libraries (78%) 'moderately' satisfy the need of the users. Only 22 per cent respondents said that they are partially satisfied in terms of their needs (Figure 5).

The users' responses indicate that they took six alternative measures when they did not get materials/information that they were looking for in the parent library. The

responses have been cross-checked with their satisfaction levels. Most of the 'moderately satisfied' respondents said that they requested the librarian to cater to their desired information/ materials in fa-vour of them. Over 46 per cent of the same group either visited other libraries or took assistance from the senior colleagues to satisfy their needs (Table 9). On the other hand, most of the 'partially satisfied' users reported that they took assistance from the senior colleagues (73%), went to other libraries (55%) and requested the librarian to get the desired information/ materials (46%). The other three alterna-tive ways of the users to fulfil their needs
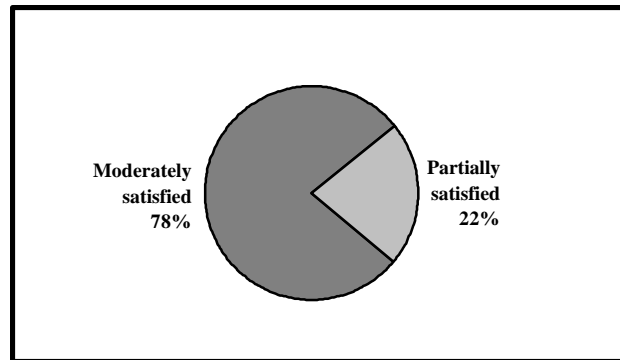
Figure 5: Extent of user satisfaction

Table-9: Measures taken by the user to satisfy his need

Measures taken by the user (multiple answer)	Extent of satisfaction (level)				Total	
	Moderately satisfied		Partially satisfied			
	n	Col %	n	Col %	N	Col %
Visit to other libraries	36	46.2	12	54.5	48	48.0
Request librarian for collection	63	80.8	10	45.5	73	73.0
Take assistance from colleagues	36	46.2	16	72.7	52	52.0
Contact other information centers	6	7.7	0	0	6	6.0
Search substitute information	15	19.2	3	13.6	18	18.0
Leave the search	0	0	3	13.6	3	3.0
All	78	78.0	22	22.0	100	

includes: contacting international information centers, searching substitute information/materials, and leave the search. The response results demonstrate the weakness of the existing library services in Bangladesh.

A detailed analysis of the query — 'request the librarian to get the desired information/material' was carried out to see the performance of the librarians. The result shows that about 84 per cent users obtained relevant information/material from the librarian. Most of them, however, did not receive the information timely. The overall result depicts that about 73 per cent of the total respondents requested the librarian to do so. Among them only 16 per cent received their requested materials in time, about 80 per cent received too late and 4 per cent reported that it was not cost-effective (Table 10).

Table 10: Users' responses about the request to the librarian for collection of materials

Appropriateness of collected materials	Status of service paid by librarian						Total	
	Timely received		Received too late		Service was expensive			
	n	Row %	n	Row %	n	Row %	n	Col %
Relevant	12	19.7	46	75.4	3	4.9	61	83.6
Almost relevant	-	-	12	100.0	-	-	12	16.4
Total	12	16.4	58	79.5	3	4.1	73	100.0

It is observed that the user satisfaction from both parent and other libraries is not highly appreciable. The major libraries are not able to satisfy the users with their own resources. Therefore, a very unsatisfactory situation is prevailing in the other minor libraries in Bangladesh also. The libraries themselves need further improvement according to their category of users in regards to collection and availability of materials and services. Modern library and information science management needs to be introduced in the libraries to hasten their activities and easy-going procedures. This measure should be taken immediately in order to raise the existing poor information services to any international standard.

Availability of services and use of data base:

The respondents were asked whether they used any national or international database available in Bangladesh. Out of total respondents, 48 per cent replied that they used national/international databases while 52% reported never using. Of the users of databases, most opined that they were very useful for their purpose. None of the

database users, however, reported that it was not useful. This is a good indicator of measuring the degree of usefulness and modern library facilities in Bangladesh. It is found that altogether 13 databases are available in different libraries under survey. The major portion of users indicated that AGRIS, ICLARM, DEVINSA, MEDLINE and IDS are mostly used in the libraries (Table 11).

Table-11: Degree of usefulness of national and international databases

Name of national and international databases	Degree of usefulness	
	Most useful	Useful
DEVINSA	6	12
IDS	3	12
CIRDAP	-	6
CAS	-	6
CABI	-	6
AGRIS	27	24
ICLARM	12	6
AIS	3	9
BIOSIS	9	9
MEDLINE	6	-
POPLINE	3	-
DEVLINE	6	-
DEVSIS	6	-
N=48	45	42

The frequency of availing library services numbering 9 from the parent and other libraries was categorized as, *frequently*, *sometimes*, *rarely* and *never*. The mean result of scale by individual service availed to the respondents is presented in Table 12. The information in the table shows that the lower the value, the higher is the frequency of use and vice-versa. According to the mean value in Table 12, the users frequently or sometimes borrowed books from the library followed by photocopying of articles from journals and book materials. Similarly, the other libraries indicate that the users frequently or sometimes photocopy articles from journals followed by book materials. All other services were availed 'rarely' or 'never' from the parent or other libraries.

The availing services have been further analyzed by cross tabulating method on the 4 scales for individual services. The result shows that 88 per cent of users frequently borrowed books from the parent library and 24 per cent from outside libraries (Table 13). In the case of inter-library loan, 36 - 39 per cent rarely and 49 per cent never availed services respectively from either of the libraries. About 73 per cent users frequently photocopied books from parent libraries and 55 per cent from other libraries. A similar trend is seen for the photocopying of articles from journals. The translation service was never received by 94 per cent of the users from any of the sources. In the case of CD-ROM service, 70 per cent of the users never availed the service from the parent library and 52 per cent from the other libraries. The on-line service was never enjoyed by 70 per cent of the users from both the sources and only 9 per cent sometimes used this service from the parent library or other libraries. In the case of using in-house databases, only 3 per cent users frequently used databases from both parent and other libraries. As to other services the users generally declined to accept services from the libraries.

Table-12: Mean responses of the frequency of availing services

Name of Services	Parent Library	Other library
Borrowing of books	1.21	2.17
Inter-library loan	3.31	3.20
Photocopying book materials	1.63	1.70
Photocopying articles from journals	1.45	1.51
Translations	3.94	3.85
CD-ROM search	3.40	3.19
On-line access	3.79	3.61
In-house database	3.40	2.98
Any other services	3.73	3.73

Table-13: User matrix of availing parent and outside library services

Services	Using outside library ⟍ Using parent library	Frequently	Sometimes	Rarely	Never	Total
Borrowing books & others:	Frequently	24	39	9	16	88
	Sometimes	0	3	0	0	3
	Rarely	0	9	0	0	9
	Never	0	0	0	0	0
	Total	24	51	9	16	100
Inter-library loan	Frequently	6	0	0	0	6
	Sometimes	0	6	0	0	6
	Rarely	0	0	27	12	39
	Never	0	3	9	37	49
	Total	6	9	36	49	100
Photocopying books	Frequently	49	21	0	3	73
	Sometimes	0	3	0	0	3
	Rarely	6	3	3	0	12
	Never	0	0	0	12	12
	Total	55	27	3	15	100
Photocopying articles	Frequently	58	18	0	0	76
	Sometimes	0	9	0	0	9
	Rarely	6	0	0	3	9
	Never	0	0	3	3	6
	Total	64	27	3	6	100
Translation service	Frequently	0	0	0	0	0
	Sometimes	0	3	0	0	3
	Rarely	0	0	0	0	0
	Never	3	0	0	94	97
	Total	3	3	0	94	100
CD-ROM service	Frequently	9	0	0	0	9
	Sometimes	0	3	3	6	12
	Rarely	0	0	9	0	9
	Never	0	12	12	46	70
	Total	9	15	24	52	100
On-line service	Frequently	0	0	0	0	0
	Sometimes	0	3	0	0	3
	Rarely	0	0	15	0	15
	Never	0	6	6	70	82
	Total	0	9	21	70	100
In-house database	Frequently	3	0	0	0	3
	Sometimes	0	18	3	3	24
	Rarely	0	0	3	0	3
	Never	6	15	3	46	70
	Total	9	33	9	49	100
Any other service	Frequently	0	0	0	0	0
	Sometimes	0	3	0	0	3
	Rarely	0	0	21	0	21
	Never	0	0	0	76	76
	Total	0	3	21	76	100

Users' suggestions to improve library services:

As library and information users, all the respondents were asked to give their suggestions for future improvement of the library services, keeping in mind the present status of the library service in the country. All the respondents have given only one response although this question was open-ended. Among the users, 57 per cent have given emphasis on establishing library networking and resource sharing system (Table 14). The second highest response was to install modern technological facilities in the library. The other suggestions made by the users were**:** professional skills and specialization on subject of the librarian need to be developed; specialized library should be developed properly; library budget need to be increased for the improvement of the library systems; libraries should be computerized immediately; professional and qualified library staff should be appoint-

ed; and a good environment need to be created in the library for better service.

CONCLUSION

The overall results suggest that the existing library and information services are below the expectation level of users despite quite a good number of rich academic and specialized libraries in the country. However, as noted earlier, to improve the prevailing poor services, care should immediately be taken to provide efficient resource sharing systems among the libraries through better management and use of modern technological facilities.

A fundamental obstacle to the attainment of this objective in Bangladesh is the lack of resources. Library collections are inadequate in most of the libraries and even where collection is adequate it remains underused. Lack of qualified staff prevents the proper development, either of docu-

Table-14: Suggestions of the users for improving library services

Suggestions of the users	Per cent response
Library networking and resource sharing system should be established	57
Specialized library should be developed properly	6
Skill development & professional efficiency of library personnel need improvement	9
Library must be computerized immediately	3
Library budget need to be increased to improve users' facilities	6
All modern technological facilities should be installed in the library	13
Professional and qualified library staff should be appointed	3
Reader - friendly environment in the library should be maintained in the library	3
N	100

ment collections or of user education programs, and even where this is not a problem, librarians often have to struggle with inadequate finance, cumbersome organizational structures and a lack of basic legislative support. The lack of resources, far from encouraging sharing, often produces the opposite effect. Therefore, it is necessary to cooperate in improving existing library resources, either in quality, or quantity or both and it is important to develop programs for the shared use of available library resources. But the lack of authentic data on the present library situation of the country is one of the main obstacles to effective planning, whether of library development in general, or of resource sharing programs in particular. However, it is clear from the findings that the condition of the libraries of the country regarding their resources and services is in its infancy. Thus, it is important to take necessary measures to establish an efficient net-working and resource sharing system among the libraries for providing better services to the users of the country.

REFERENCES

Bangladesh National Commission for Unesco. 1993. *Sixth session for economic planning in Asia and Pacific (MINEDAP-VI),* Kuala Lumpur.

Bhargava, G.D. 1986. Library resource sharing network, an evaluation. *Planning in library resource sharing*, edited by. A.S. Chandel & Veena Saraf. Lucknow: Print House: 17-26.

Bangladesh. 1997. *1996 Statistical yearbook of Bangladesh*. Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning: Bangladesh.

Kaula, P.N. 1986. Towards resource sharing in libraries. *Planning in library resource sharing*. edited by A.S. Chandel & Veena Saraf. Lucknow : Print House: 1-15.

Sharma, Pandey SK. 1992. *Libraries and society*. New Delhi: Ess Ess Publications.

UNESCO. 1985. *Information networking in population education*. Bangkok: Unesco.

Zhang, Qiaoqiao. 1990. *Agricultural libraries and information centres in China: cooperation, resource sharing and networking*. (Ph.D.dissertation). London: The City University.