

## LIBRARY AUTOMATION: A STUDY OF THE AIC, BANSDOC AND THE NATIONAL LIBRARIES OF BANGLADESH

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### Introduction

Mechanization of library house keeping operations predominantly by computerization is known as library automation. The most commonly known house keeping operations are acquisition, serial control, cataloguing and circulation control. In recent times, even the related topics such as information retrieval, semi-automatic/automatic indexing and networking of automated system are also treated as part of library automation (Rao,1996:2). Library automation may be defined as the application of automatic and semiautomatic data processing machines (computers) to perform traditional library house keeping activities such as acquisition, circulation, cataloguing and reference and serials control.(Int.lib.rev. 1989:76). Today "Library Automation" is by far the most commonly used term to describe the mechanization of library activities using the computer.

There are several reasons for computerizing library activities. A machine readable record, prepared at the time of acquisition may be used repetitively for several purposes. Thus a considerable saving in effort, time and resources involved in manual processing can be achieved. The other reasons for computerizing library activities are (Rao,1996:4)

- (a) To improve control over collection;
- (b) To have an effective control over the entire operation;
- (c) To improve the existing services;
- (d) To share effectively the resources among various libraries in a region;
- (e) To avoid duplication of work;
- (f) To use the services of the existing staff effectively;
- (g) To satisfy the users; and
- (h) To economise expenditure for library activities.

The existing position of library automation of some premier libraries, documentation and information centres of Bangladesh have been evaluated

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in this paper. These are namely Agricultural Information centre (AIC), Bangladesh National Scientific and Technical Documentation centre (BANSDOC), National Health Library & Documentation Centre (NHLDC) and the National Library of Bangladesh.

### **Agricultural Information centre**

The National Agricultural Library and Documentation Centre (NALDOC) was established in 1980 at BARC complex , Airport road, Farmgate Dhaka. NALDOC was renamed as AIC (Agricultural Information centre) in the year 1988 . AIC, sponsored by *Bangladesh Agricultural Research Council* (BARC) was placed under the Ministry of Agriculture , Government of the peoples Republic of Bangladesh . There is a strong need for such a centre in recognition of the pressing need for a national information system for effective promotion of co-operation and co-ordination in production and exchange of information in agriculture and allied sciences among the member institutes under the National Agricultural Research System (NARS)(BMA, Approved Project for NALDOC:I).

### **Aims and objectives of the AIC**

1. The main objective of the AIC is to serve as an Agricultural Information resources centre to facilitate the agricultural scientists, policy makers. Teachers and student in their research activities.
2. To establish an agricultural information network with effective linkages among NARS institutions.
3. To serve the agricultural information needs of the NARS institutions and individual scientists in their literature search.
4. To promote new and better techniques, including training for handling and disseminating agricultural information.
5. To train NARS personnel on computerized information processing, technical writing and editing etc.
6. To act as the focal point of NARS information system and to strengthen and co-ordinate the activities of NAIS.
7. To consolidate participation in the regional and international Agricultural Information system like AGRIS.

### Information resources

AIC has a good collection of books , pamphlets and journals, Table I indicates the number of information resources available at the AIC.

**Table 1: Information resources available at the AIC**

Library materials	Numbers
Books	12500
Pamphlets	5000
Bound journal	1650
Currency journal	250

The library has also a good collection of materials on irrigation and water management, consultancy reports, annual reports on agro-ecological zones (AEZ) and users manuals of land and soil resources of thanas of Bangladesh.

### Services rendered by the AIC

The following services are provided by the AIC

- (a) Technical services
- (b) users services
- (c) Information services
- (d) Document supply services
- (e) News paper indexing services
- (f) Audio-visual services
- (s) SDI services
- (h) Literature searches and
- (i) CD- ROM search

### Automation of the AIC

The centre is mainly concerned with development of collection of information materials (AIC, 1998) and their technical processing for effective and efficient use. Since 1990, the library materials are being processed in computers where a database has been created for the books, reports, etc. It has been using Universal Decimal Classification scheme for classifying library materials. The centre uses CDS/ISIS program for

creating data base. The centre has developed the following databases (AIC, 1998 : 5 ).

- a. database on AIC holdings
- b. database on National Agricultural systems
- c. database on periodicals available in the AIC
- d. database on newspaper articles published in the major newspapers of Bangladesh and
- e. data base on periodical collections of NARS institutes Library.

### **Future plan**

AIC is planning to intensify its activities in pooling information on agriculture at a national level by establishing a National agricultural Information system (NAIS) and to act as the apex body of all information cells under the NARS institutions. The centre will provide the latest data and information through computerization under broad based programmes. Dissemination of information among the NARS institutes would help to develop fisheries, forestry, livestock, crop multiplication programs and transfer of technology among them and to the grassroots level users (Ahmed, 1998: 4).

**Bangladesh National Scientific and Technical Documentation Centre (BANSDOC) :** BANSDOC, originally a branch office of the then Pakistan National scientific and Technical Documentation Centre (PANSDOC) started functioning in 1962. After the independence of Bangladesh, it was placed under the Bangladesh council of Scientific and Industrial Research (BCSIR) in 1972. As per the provisions of the National Science and Technology policy of Bangladesh, announced in 1986, the BANSDOC was placed under the administrative control of science and technology Ministry and was developed as an independent organization. The policy envisages the creation of 3-tier science and Technology information system in the country with the BANSDOC as the apex organization (1st tier) having four sectional documentation centres as the 2nd tier and the individual institutional libraries and documentation centres as the 3rd tier (LAB, 1993 : 24). BANSDOC has been designated as the national focal point of the scientific and technological information system in Bangladesh. It has also been functioning as the national focal point of many regional and

international scientific and technological information systems in the world, including the SAARC Documentation centre (SDC) established in New Delhi, India.

#### **The following are the Objective of the BANSDOC**

- a) collection, processing and storage of information and data on scientific research and experimental development in all branches of science and technology.
- b) Dissemination of such information to researchers irrespective of their affiliations whether they are engaged in research and academic institutions, planning organizations, policy making bodies and in the public and private industries sector and
- c) Assistance to researchers to make contact with researchers of other countries working in the same field of interest.

#### **BANSDOC renders following services**

- a) Document procurement service
- b) Scientific contact service
- c) Translation service
- d) Bibliography compilation service
- e) Document reproduction service
- f) Library service
- g) Computer service and
- h) Inter library lending service

#### **Automation of the BANSDOC**

**BANSDOC** library is a modern and resourceful library of scientific and technological books and journals. The library has about 16,000 books on different branches of science and technology. It subscribes to 182 titles of national and international journals. The centre introduced computer service in 1988. It has personal computers, laser and dot matrix printers, CD-ROM database on life sciences collection. At present computers are being used in data entry, in preparing card catalogue, and in all official works. It has a

database which holds 4000 records. Library personnel are well trained in computer courses. With a view to enhancing the capability of BANSDOC to provide quicker and effective services to its users, modern information systems like telex, fax and e-mail have already been installed at BANSDOC (BANSDOC, 1996 : 7)

### **Future plan**

BANSDOC has an ongoing project sponsored by the government of Bangladesh namely "Automation and Networking of Science and Technology Libraries in Bangladesh (1995-98)". With a view to providing quicker information services to the users BANSDOC is taking steps to provide on-line data base service, e-mail facility and facility for Internet connectivity.

### **National Health Library and Documentation Centre (NHLDC)**

The recognition of medical library potentials for educational research and health care purposes by our authorities coupled with a survey of the medical institutions by the Asia foundation in 1973 to assess the extent of damage inflicted on the medical institutions during the war of liberation and the requirements for their rehabilitation called for the immediate establishment of a central information agency to meet the information needs of the country's health professionals (BMH, 1980 :1). As a result of this the National Health Library and Documentation centre was established in 1974 at Mohakhali, Dhaka, based on an agreement between the Asia foundation and the Government of Bangladesh. The British Council also presented some Biomedical books and journals of British origin on several occasions under the ODA Book presentation Programme (LAB 1993 : 26). The library provides bibliographical and documentation services to the biomedical and related professionals who are directly or indirectly engaged in teaching. It has been declared as National focal Point of Health Literature Library and Information Services (HELLIS) Network of WHO/SEARO. Under this network activities, the library procures photocopies of journal articles for the users free of cost from regional sources and extra regional sources. (NHLDC MANUAL, 1991 : 13)

### Objectives of the NHLDC are

- a) To collect, organize and preserve all health science literature issued in the country and abroad and promote their use.
- b) To establish national standards and criteria for health science library activities.
- c) To provide leadership among the health science libraries of the country for planning developing and promoting information services.
- d) To conduct training courses for librarians and library users.
- e) To conduct research on the development of sound library and information systems and services.
- f) To provide leadership in the national programmes for co-operative acquisitions of foreign materials.

### It renders the following services

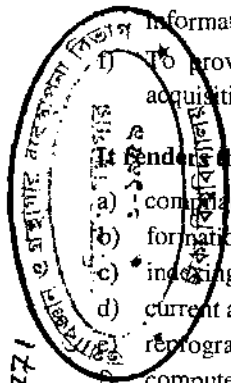
- a) compilation of bibliographies
- b) formation of union catalogue
- c) indexing and abstracting services
- d) current awareness service
- e) reprographic service and
- f) computerized services for the readers.

### Automation of the library

NHLDC has a collection of 15000 books and 16000 bound journals. It receives 141 foreign journals as subscription and 85 indigenous journals (90% on complimentary basis). It has also 5000 microfiches, 150 motion pictures and 18 CD-ROM disks. (NHLDC, official record, 1998). Step by step the library has started computerizing its activities and MEDLINE searches were also started from the year 1990. The centre has prepared a union list of periodical holdings of libraries participating in the HeLLIS network. It provides literature searches through MEDLINE databases on CD-ROM available at the library.

### Future Plan

Currently NHLDC is working as the national focal point for the HeLLIS network. All the health Libraries of Bangladesh have been brought under



this network. The centre is now planning to establish network system with other foreign health libraries in the world. To give better services to the users, the centre will introduce e-mail and Internet facilities.

### **National Library of Bangladesh**

The Directorate of Archives and Libraries was a department under the Ministry of Education and Scientific research of the then central government of Pakistan with its headquarters in Karachi. During Pakistan times only a small office was established in 1968, in a hired accommodation in Dhaka in order to collect published materials under the Copyright Act and the provincial Government used to look after the Public library affairs. The national archival functions were performed by the Directorate partially without any legal basis.

Originally a part of a province of British India before 1947, Bangladesh became a part of a country (Pakistan) and remained to be so till 1971 after which it has emerged as an independent country on 16<sup>th</sup> December, 1971 after waging a war of liberation. Since its emergence as an independent country, the development of national institutions viz. museum, library, archives, art gallery etc, as symbols of national culture, identity and glory has been taking place gradually. (NLB, 1991). After the independence of Bangladesh, it was established in Dhaka as the National library of the country. The plan for the construction of National Library building was approved in the country's 2<sup>nd</sup> Five year plan. In the year 1985, the national library has been shifted to its own building at Sher-e-Bangla Nagar, Dhaka (Ahmad, 1994 : 81). The directorate of Archives and Libraries, headed by a director, consists of the National Library of Bangladesh and the National Archives of Bangladesh. It is attached to the Ministry of Cultural Affairs of the Government of Bangladesh. The library is responsible mainly for the collection and conservation of the whole of the country's book production and all other printed materials concerning the country, no matter where they are published, for the benefit of the people of the country in general and for future generation in particular. (BCA, 1974).

### **Services rendered by the National Library**

The following services are provided by the National library.

- a) Bibliographical service
- b) Research service



- c) International loan service
- d) International book exchange and
- e) Readers services.

### Library automation

The National Library of Bangladesh has a collection of 2,00,000 books, 3000 bound journals and 1000 newspapers (LAB, 1993). The library has started to use computers in official activities. It has two databases which are developed by using CDS/ISIS program. In the two databases there are 500 journal records and 500 book records. For speedy and quick bibliographical services, the library has been started to use computers in compiling bibliographies.

### Future Plan

The national library of Bangladesh will assume the responsibility for initiating and promoting cooperation between itself and other libraries in the country. To provide better services to the users, it will start e-mail, CD-ROM and Internet facilities as soon as possible.

### Comparative Feature of the use of computers

Although BANSDOC first entered into the computer era in 1988 but the automation of the library activities is still now in preliminary stage. The same can be said about the AIC, NHLDC and also the National Library of Bangladesh. It is encouraging that all of these institutions are preparing themselves with modern information technology to face the challenges of 21<sup>st</sup> century.

The number and type of computers are shown in the table 2 :

**Table 2: Number and type of computers.**

Name of the library	Total no. of computers	IBM PC	Others
BANSDOC	20	03	17
AIC	09	05	04
National Library	06	06	---
NHLDC	07	02	05

### **Problems of Library automation**

There are several problems which create obstacles in the gradual development of Library automation in BANSDOC, AIC, NHLDC and in the National Library of Bangladesh.

#### **These are as follows**

- a) Lack of technically trained staff.
- b) Lack of financial support by the government and concerned authorities.
- c) Lack of regular and comprehensive training program in the areas of Library automation.
- d) Improper physical facilities in the Library.
- e) Lack of communication and cooperation among the various institutions engaged in automation and
- f) Lack of prior studies before embarking upon automation.

#### **Suggestions**

- a) The government of Bangladesh should allocate sufficient funds for purchasing adequate number of computers for the above libraries.
- b) Each of the above libraries should organize special training programmes for the library staff on the use of computers in libraries.
- c) The library associations of Bangladesh with the initiative of above libraries should organize seminars, workshops etc. to create awareness among the librarians about the advantages of library automation.
- d) A detailed system analysis and design project should be undertaken before implementing any library automation programme.

#### **Conclusion**

It is a recognized fact that the coming century is going to rely heavily upon information. The AIC, BANSDOC and the National libraries of Bangladesh will, therefore have to play an increasingly important role in order to meet the challenges of the 21<sup>st</sup> century. Modern information technologies like e-mail, Internet and online information retrieval systems must be introduced in their operations without any delay for speedy and better services to the users.

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